Approaches to implementation of cultural safety in the training and education of health professionals

in Canada, Australia, New Zealand and the United States of America

Literature Review

About the artist

Sarah Richards is a Ngyiampaa woman born on Gadigal land (Sydney), raised on Wiradjuri (Griffith) and Yugambeh (Gold Coast) Country before moving down to Ngunnawal country in 2012. From a young child Sarah had always loved to paint and has been painting consistently since, using knowledge from her commerce degree to turn her passion from a hobby into her small business, Marrawuy Journeys. Having a creative outlet has allowed Sarah to undergo a journey of healing and, through Marrawuy Journeys she wants to create an opportunity for others to be able to experience the same. Sarah believes that we all have something to heal from and if we can heal as individuals, it will contribute to the healing as a country.

Artwork story

Step in the right direction was created to represent the journey Australian Pharmacy Council (APC) is on to embed cultural safety into pharmacy education programs in Australia, and thereby contributing to a culturally safe workforce. Starting at the bottom of the piece, the footprints represent APC through the literature review, getting the current lay of the land and seeing who is doing what with respect to recognising Indigenous health issues in education programs. The footprints at the top part of the painting again represent APC but post the literature review. They're moving forward, applying the findings to develop appropriate curricula and assessment to ensure their graduates are able to practice in a culturally safe way and support improved health outcomes of First Nations people. This positive impact on health outcomes for First Nations people is represented by the ripples (white dots).

Acknowledgment of Country

We gratefully acknowledge the Ngunnawal people, the traditional owners of the land on which the APC is based. We pay our respects to the Ngunnawal people and recognise their deep connection to this incredible place we now share.

We also pay our respects to the resilience, strength and wisdom of Aboriginal and Torres Strait Islander Elders, past, present and emerging across the nation.

We recognise First Nations people's vast knowledge in native plants and their uses. Indigenous Australians were our first pharmacists. Country has provided medicines and healing throughout history. We acknowledge this important connection to Country and the impacts colonisation continues to have on this integral practice.

Canberra means meeting place in Ngunnawal, and is a place where people have been meeting, living and learning for thousands of years. We hope to continue this tradition as we work toward our vision of collaborative, committed and safe pharmacy practice.

Indigenous Health Strategy Group

We give a special thanks to our Indigenous Health Strategy Group (IHSG) for their contribution towards this review and our shared vision of transformational change.

IHSG members include:

- Associate Professor Faye McMillan AM, a Wiradjuri yinaa (woman).
- Associate Dean Māori Leanne Te Karu, a Muaūpoko / Whanganui Ngāti Rangi, Ngāti Kurawhatia, Ngāti Patutokotoko woman.
- Mr John Briggs, member of the Yorta Yorta and Gunnai nations.
- Ms Chastina Heck, a Nywaigi, Mamu, Bidjara woman.
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Author

We would like to thank the primary author of this review, Dr Erica Sainsbury, for her work in researching and producing this Literature Review report.

Dr Sainsbury is a non-Indigenous woman who was born and raised in a colonial setting. The majority of the research and writing of this review was undertaken on the traditional lands of the Darramuragal people of the Cammeraigal nation, under the auspices of the Australian Pharmacy Council whose office is located on the traditional lands of the Ngunnawal people. We acknowledge, honour and pay our respects to all elders, past, present and emerging, who are the original custodians of these lands and waters.

In keeping with the principles outlined and promoted in this review, a deliberate attempt has been made to frame the discourse in ways which acknowledge and respect both Indigenous and non-Indigenous perspectives.

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Executive Summary

Despite the 1946 WHO declaration that enjoyment of the highest attainable standard of health is a fundamental human right of all people, significant health disparities and inequities remain the rule rather than the exception in the 21st century. Of particular concern is the level of inequality experienced by Indigenous/First Nations peoples in comparison with their non-Indigenous counterparts in parts of the world where Western settlement and colonisation has occurred, including Australia, Aotearoa/New Zealand, Canada and the United States of America (the CANZUS countries).

Many factors have contributed to the inequalities and disparities experienced by Indigenous peoples over many years, and a number of strategic, targeted and integrated approaches are necessary to address and redress their causes and effects. One critical strategy is the creation of a culturally capable, safe and sensitive health workforce, and the institutions responsible for educating health professionals therefore have a central role in this regard.

In this review, we examine health professional education programs and curricula in the CANZUS nations, with the objective of identifying approaches to enhancing the cultural capability education of Australian pharmacy students so that on graduation they are both committed to improvement of the health and wellbeing of Indigenous peoples, and capable of practising in ways that are culturally safe, sensitive and responsive.

The prevalence of substantial health disparities and significantly poorer health outcomes for Indigenous peoples is well described in the research literature, and encompasses higher rates of disease, co-morbidities, hospitalisation and mortality. Given the robust evidence that Indigenous peoples have demonstrated very long histories of good health and resilience prior to Western settlement, the current situation can be primarily attributed to historical, political, cultural and social determinants which have impacted negatively on the ability of Indigenous peoples to practise their culture, resulting in disruptions to cultural identity, family and community connectedness, access to country, and participation in traditional and cultural activities.

Critically, holistic conceptions of health held by Indigenous peoples, including the social, emotional and cultural wellbeing of the whole community in which each individual is able to achieve their full potential as a human being, thereby bringing about the total wellbeing of their community, have rarely been acknowledged. Indigenous ways of knowing and being have often been devalued and disregarded as inferior to Western approaches, which has engendered understandable distrust and reluctance to engage.

The creation of a culturally safe space for health care provision is central to efforts to improve the health of Indigenous individuals and communities. As recently described by Curtis et al (2019):

> *"Cultural safety requires healthcare professionals and their associated healthcare organisations to examine themselves and the potential impact of their own culture on clinical interactions and healthcare service delivery. This requires individual healthcare professionals and healthcare organisations to acknowledge and address their own biases, attitudes, assumptions, stereotypes, prejudices, structures and characteristics that may affect the quality of care provided.*
>
> *"In doing so, cultural safety encompasses a critical consciousness where healthcare professionals and healthcare organisations engage in ongoing self-reflection and self-awareness and hold themselves accountable for providing culturally safe care, as defined by the patient and their communities, and as measured through progress towards achieving health equity. Cultural safety requires healthcare professionals and their associated healthcare organisations to influence healthcare to reduce bias and achieve equity within the workforce and working environment" (p. 16).*

Key elements of this definition include that:

- cultural safety is defined by the care recipients not the provider
- both health care professionals and organisations are responsible for creating and maintaining culturally safe spaces
- cultural safety is predicated on both individual self-awareness and collective social accountability
- cultural safety is promoted when participants demonstrate cultural humility and respect
- the presence and impact of intergenerational trauma as a result of individual and community experiences of discrimination, racism, dispossession and humiliation must be acknowledged and redressed

Considerable research has been conducted into the impact of including initiatives designed to improve Indigenous health outcomes into the education of future health practitioners. With a small number of exceptions, overall published evidence for the efficacy of cultural competency or safety education in improving the health outcomes of Indigenous recipients of health care is scarce.

A 2014 Cochrane review of cultural competence education for health professionals concluded that the quality of evidence was low, and "insufficient to draw generalisable conclusions, largely due to heterogeneity of the interventions in content, scope, design, duration, implementation and outcomes selected" (Horvat et al, 2014, p. 2). In contrast, most published outcomes describe the impact on student self-awareness, changes in their perceived understanding and competence, and willingness to be involved in Indigenous health care in their later practice.

Several studies have focused on identifying barriers and enablers to creating meaningful curriculum change. Critical barriers include the dearth of Indigenous teachers and role models, which exacerbates the self-identified ignorance of non-Indigenous academics who are also often apprehensive about causing unintentional offence. As a consequence, Indigenous content may be integrated into curricula, but taught in modes which are based on Western pedagogies. Nakata (2007) highlights the incongruence of this approach when he states:

> *"Indigenous knowledge systems and Western knowledge systems work off different theories of knowledge that frame who can be a knower, what can be known, what constitutes knowledge, sources of evidence for constructing knowledge, what constitutes truth, how truth is to be verified, how evidence becomes truth, how valid inferences are to be drawn, the role of belief in evidence, and related issues" (p. 8).*

Other critical barriers include the tendency to perceive Indigenous cultures and knowledges from a deficit discourse, and a failure to recognise the influence of the hidden curriculum upon what is valued and learned by students.

External accreditation of health professional degree programs can theoretically be harnessed as a driver of change, and recent changes in Australia have acknowledged the centrality of cultural safety in the education of an increasing range of registered health professions.

Further, the publication of the *Aboriginal and Torres Strait Islander Health Curriculum Framework* in 2014 has acted as an enabler for those professions and higher education institutions which have chosen to adopt and/or modify it. In and of themselves, however, there is little evidence of substantial impact on reducing health disparities and improving health and wellbeing of Indigenous individuals, families and communities as a consequence of these initiatives.

Recommendations for addressing the current situation include:

- focusing on learning as a means of promoting *individual and collective transformation*
- creation of partnerships built on a *genuine and respectful collaboration* of equals
- ensuring students are sensitised to their responsibilities as both *advocates and agents of change*
- *decolonisation and indigenisation* not only of curricula but also of the environment in which learning takes place
- *alignment of the hidden curriculum* with the formal and informal curricula
- *challenging the deficit discourse* to acknowledge and value "the strength, resilience and value of the oldest living, continuous cultures of the world, their languages and spiritual relationships with the land and waters" (Dudgeon et al, 2016, p. 9).
- adopting a *social accountability lens* to decision-making, implementation and evaluation

What is abundantly clear is that a concerted, coordinated and committed approach is necessary if long term, sustainable improvements in Indigenous health care, outcomes and wellbeing are to be achieved. Strategic initiatives such as implementation of the *Aboriginal and Torres Strait Islander Health Curriculum Framework* are central to this goal.

Although evidence is currently limited, there is likely to be a good argument for modifying the original Framework to suit the specific contexts of specific health professions. However, the simple addition of Indigenous content is unlikely to be effective. Attention will need to be given to respecting the concept of a cultural interface where both Western and Indigenous perspectives are evaluated and implemented as appropriate.

In addition, Indigenising the content will not be sufficient without also Indigenising the processes of learning. Further, such initiatives must be seen as only a part of the solution, and unlikely to be effective without change in individuals, communities, institutions and the broader society to acknowledge, listen to, understand, respect and care for "every human being without distinction of race, religion, political belief, economic or social condition." (WHO, 2020, p. 1).

Abbreviations

Abbreviation	Meaning
ACT	Assessment Criteria Template
ADC	Australian Dental Council
AHMAC	Australian Health Ministers Advisory Council
Ahpra	Australian Health Practitioner Regulation Agency
AI/AN	American Indians and Alaskan Natives
AIHW	Australian Institute of Health and Welfare
AIPEP	Australian Indigenous Psychology Education Project
AMA	Australian Medical Association
AMC	Australian Medical Council
ANMAC	Australian Nursing and Midwifery Accreditation Council
APAC	Australian Psychology Accreditation Council
APC	Australian Pharmacy Council
CALD	culturally and linguistically diverse
CanMEDS	Canadian Medical Education Directives for Specialists
CANZUS	Canada, Australia, New Zealand, United States
CATSINaM	Congress of Aboriginal and Torres Strait Islander Nurses and Midwives
CCEA	Council on Chiropractic Education Australasia
CCMT	Cultural Capability Measurement Tool
CDAMS	Committee of Deans of Australian Medical Schools
DCNZ	Dental Council of New Zealand
HWA	Health Workforce Australia
IGA	Indigenous Graduate Attribute
IHF	Indigenous Health Framework
LINMEN	Leaders in Indigenous Nursing and Midwifery Education Network
MDANZ	Medical Deans Australia and New Zealand
MSF	Māori Strategic Framework
NACCHO	National Aboriginal Community Controlled Health Organisation
NATSIHC	National Aboriginal and Torres Strait Islander Health Council
NCAI	National Congress of American Indians
NSW	New South Wales
NZMA	New Zealand Medical Association
OCANZ	Optometry Council of Australia and New Zealand
QUT	Queensland University of Technology
REM	Respect, Engagement and Sharing, and Moving forward together
RN	Registered Nurse
R-TACCT	Revised Tool for Assessing Cultural Competence Training
UA	Universities Australia
UBC	University of British Columbia
USA	United States of America
USC	University of the Sunshine Coast
UTS	University of Technology Sydney
WHO	World Health Organisation

Introduction

The Constitution of the World Health Organisation (WHO), first adopted in 1946, states that

> *"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.*
>
> *The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition." (WHO, 2020, p. 1).*

In 2021, more than 70 years later, universal achievement of this fundamental human right to the "enjoyment of the highest attainable state of health" remains an aspirational goal only. Disparities in health standards are evident throughout the world, and within nations and communities. Of particular concern is the level of inequality experienced by Indigenous/First Nations peoples in comparison with their non-Indigenous counterparts in parts of the world where Western settlement and colonisation[1] has occurred, including Australia, Aotearoa/New Zealand, Canada and the United States of America (USA). Australia's first Aboriginal and Torres Strait Islander Social Justice Commissioner, Mick Dodson[2], noted in 1994 that

> *"The gap between the numbers of our people who live and the number who should be alive is one measure of the inequality we have endured. The gap between the numbers living a healthy, socially-functional life and those living a life of pain, humiliation and dysfunction is another measure. They are both measures of our loss of elementary human rights. There should be no mistake that the state of Indigenous health in this country is an abuse of human rights. A decent standard of health and life expectancy equivalent to other Australians is not a favour asked by our peoples. It is our right – simply because we too are human" (quoted in Calma, 2005, p. 11).*

Australia's second Aboriginal and Torres Strait Islander Social Justice Commissioner, Tom Calma[3], reflected in 2005 that "addressing health inequality is not insurmountable, although it will require long term action and commitment" but warned that "history shows us that an absence of targeted action and a contentedness that we are 'slowly getting there' is not going to result in the significant improvements in health status that Aboriginal and Torres Strait Islander peoples deserve – simply by virtue of the fact that we are members of the human race and of the Australian community" (Calma, 2005, p. 6).

1 In the context of this article, colonisation refers to the period of European expansion from the 1500s to the 1900s (Sherwood, 2013).

2 Professor Mick Dodson is a member of the Yawuru peoples, the Traditional Aboriginal Owners of land and waters around Broome, Western Australia.

3 Professor Tom Calma is an elder of the Kungarakan people and member of the Iwaidja people, whose traditional lands are south-west of Darwin and on the Cobourg Peninsula in the Northern Territory.

Many factors have contributed to the inequalities and disparities experienced by Indigenous peoples over many years, and a number of strategic, targeted and integrated approaches are necessary to address and redress their causes and effects. One critical strategy is the creation of a culturally capable, safe and sensitive health workforce (West et al, 2017), and the institutions responsible for educating health professionals therefore have a central role in this regard. The health workforce encompasses many professions, including pharmacy, with pharmacists able to contribute knowledge and expertise with the potential to make significant contributions to improved health outcomes.

In this review, we examine health professional education programs and curricula in Australia, Aotearoa/New Zealand, Canada and the USA (the CANZUS nations), with the objective of identifying approaches to enhancing the cultural capability[4] education of Australian pharmacy students so that on graduation they are both committed to improvement of the health and wellbeing of Indigenous peoples, and capable of practising in ways that are culturally safe, sensitive and responsive.

Indigenous history and health - CANZUS nations

Aboriginal and Torres Strait Islander people are the Indigenous or First Nations peoples of Australia. In 2020, it was estimated that approximately 864,000 people identified as Indigenous Australians, with over 90% identifying as Aboriginal, 5% as Torres Strait Islander and 4% as both. They comprise hundreds of nations and groups, with distinct languages, cultures and histories, and they live in all parts of Australia. Over 80% live in urban and regional areas, with fewer than 20% living in remote or very remote regions. The age distribution is significantly younger than non-Indigenous Australians, with approximately one-third under the age of 15 (18% of non-Indigenous) and only 5% over the age of 65 (16% of non-Indigenous). (AIHW, 2020a).

The Indigenous peoples of Aotearoa/New Zealand are the Māori, who arrived over a period of 500 years between 800 and 1300 (Broughton, 2010) and built a society based on *whānau* (family), *hapū* (subtribe or clan) and *iwi* (tribe). In 2020, the estimate of the number of Māori people living in New Zealand was greater than 850,000 (17% of the population). The median age of Māori individuals is approximately 11 years less than that of their non-Māori counterparts (Stats New Zealand/Tatauranga Aotearoa, 2020).

In Canada, three groups of Indigenous peoples are recognised: the First Nations, Inuit and Métis (Swidrovich, 2020). The term First Nations replaced the older term Indian, which was considered to be offensive. The Inuit peoples live in the high Arctic regions of Canada, Alaska, Russia and Greenland. The Métis people trace their origins to the intermarriage of First Nations women and European men in the seventeenth century.

Many different nations make up the Indigenous peoples of the USA. The National Congress of American Indians (NCAI, 2020) note the definitions of American Indians and Alaskan Natives (AI/AN) as “Persons belonging to the tribal nations of the continental United States (American Indians) and the tribal nations and villages of Alaska (Alaska Natives)” (p. 11), and identify the existence of 574 sovereign tribal nations which have a formal government-to-government relationship with the government of the USA.

4 Cultural capability is used in this paper as an umbrella term for a wide range of concepts including cultural awareness, competence, humility, safety, respect, responsiveness etc. For more detailed definitions of cultural terminology, see Tervalon & Murray-Garcia (1998); Hart-Wasekeesikaw (2009); Isaacson, 2014; Isaacs, Raymond, Jacob, Jones, McGrail & Drysdale (2016); AHMAC (2016); West, Wrigley, Mills, Taylor, Rowland & Creedy (2017); Curtis, Jones, Tipene-Leach, Walker, Loring, Paine & Reid (2019); Francis-Cracknell, Murray, Palermo, Atkinson, Gilby & Adams (2019); Medel (2019).

Australian Indigenous cultures are generally regarded as the oldest living cultures in the world (Dudgeon, Darlaston-Jones, Phillips, Newnham, Brideson, Cranney, Hammond, Harris, Herbert, Homewood & Page, 2016). Aboriginal and Torres Strait Islander peoples have therefore demonstrated considerable success in maintaining the health and wellbeing of their communities over many millennia. They have survived, adapted and thrived during both abundance and challenging circumstances, and their cultures are characterised by strength and resilience.

As expressed by Professor Ngiare Brown[5],

> *"We represent the oldest continuous culture in the world, we are also diverse and have managed to persevere despite the odds because of our adaptability, our survival skills and because we represent an evolving cultural spectrum inclusive of traditional and contemporary practices. At our best, we bring our traditional principles and practices – respect, generosity, collective benefit, collective ownership – to our daily expression of our identity and culture in a contemporary context. When we are empowered to do this, and where systems facilitate this reclamation, protection and promotion, we are healthy, well and successful and our communities thrive" (Commonwealth of Australia, 2013, p. 9).*

Notwithstanding this long and successful history, there is now overwhelming evidence that current Indigenous health outcomes are worse than those of non-Indigenous Australians. As one example among many, in 2015, the Australian Institute of Health and Welfare (AIHW) reported that Indigenous Australians experienced the following greater rates of morbidity and mortality than those of non-Indigenous Australians:

- hospitalisation for mental health issues – 2 times the rate
- suicide in the 15–19 years age group – 5 times the rate
- hospitalisation for respiratory disease – 2.4 times the rate
- cardiovascular disease – 1.2 times the rate
- diabetes – 3.3 times the rate
- chronic kidney disease – 3.7 times the rate
- cancer death rates – 1.2 times the rate
- hospitalisation for injury or poisoning – 1.9 times the rates (AIHW, 2015)

Bazen, Paul and Tennant (2007) reported that Indigenous Australians also experienced poorer oral health outcomes, including a higher dental caries rate among Indigenous children, and greater tooth loss among Indigenous adults. They noted that these were contributors to poorer general health outcomes including cardiovascular, endocrine, and respiratory diseases, arthritis and cancer. Indigenous adults also experienced greater levels of blindness and impaired vision than non-Indigenous adults, with eye problems the most frequently reported chronic condition by Indigenous people (OCANZ, 2020).

5 Professor Ngiare Brown is a Yuin nation woman from the south coast of NSW. She graduated from medicine in 1992 as the first identified Aboriginal doctor from NSW, and has worked in Aboriginal and Torres Strait Islander health, research, policy, politics and advocacy at a national and international level. Ngiare is a Commissioner with the National Mental Health Commission; a founding member of the Close the Gap initiative; has been a representative to the United Nations Permanent Forum on Indigenous Issues for the past 10 years; and is a clinician with the NRL Medical team for the Koori Knockout and regional sports carnivals, as well as a volunteer surf life saver. Her efforts have created pathways for other Aboriginal and Torres Strait Islander people to pursue their personal and professional aspirations. https://www.women.nsw.gov.au/news-and-events/women-of-the-year/nsw-aboriginal-woman-of-the-year (last accessed 25 July 2020)

Disparities are also observed for First Nations/Indigenous peoples in the other CANZUS countries (Hart-Wasekeesikaw, 2009; Broughton, 2010; Walton, 2011; Ewen, Mazel & Knoche, 2012a; Health Council of Canada, 2012; Shah and Reeves, 2015; Jamieson, Chen, Murphy, Maracle, Mofina & Hill, 2017; Lewis and Prunuske, 2017; Pitama, Beckert, Huria, Palmer, Melbourne-Wilcox, Patu, Lacey & Wilkinson 2019) although Sherwood (2013) suggests that the health of Indigenous Australians is generally worse than their counterparts in other nations.

It is generally suggested that many (if not most) of these observed health disparities are socially determined. Social determinants of health are defined by the WHO as "the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The social determinants of health are mostly responsible for health inequities – the unfair and avoidable differences in health status seen within and between countries" (WHO, 2019).

Social determinants of health commonly include factors related to income, education, employment, housing, social support and inclusion, early life experiences, transportation, environmental context and access to health services. Social factors which are considered as undermining Indigenous health in Australia include poverty, lower levels of education, unemployment, inadequate housing and uneven access to health services (Commonwealth of Australia, 2014).

For Indigenous peoples, however, historical and political determinants are often more significant through their negative impact on the ability of Indigenous peoples to practise their culture, resulting in disruptions to cultural identity, family and community connectedness, access to country, and participation in traditional and cultural activities (AIHW, 2020b).

It is also increasingly acknowledged that Indigenous cultures and ways of being have been disrupted, devalued and denied since European settlement and colonisation of Australia began in the 18th century (Sherwood, 2013; Gracey, 2014; Forsyth, Irving, Tennant, Short & Gilroy, 2017; Wolfe, Sheppard, Le Rossignol & Somerset, 2018) and that colonisation of Canada, the USA and Aotearoa/New Zealand has resulted in similar outcomes in those jurisdictions (Hart-Wasekeesikaw, 2009; Allan and Smilie, 2015; Lewis and Prunuske, 2017; McDonald, Browne, Perruzza, Svarc, Davis, Adams & Palermo, 2018; Jones, Crowshoe, Reid, Calam, Curtis, Green, Huria, Jacklin, Kamaka, Lacey, Milron, Paul, Pitama, Walker, Webb & Ewen, 2019; Pitama et al, 2019; Curtis et al, 2019).

Sherwood[6] (2013) briefly summarises the impact of Western colonisation of Australia as encompassing multiple arms, including:

- the dispossession of Indigenous lands through the concept of *terra nullius*
- epidemics of Western diseases leading to widespread population declines
- nutritional declines resulting from reduced access to ancestral lands and foods
- perceptions of Indigenous people as sub-human, primitive or inferior
- conflict and violence leading to inhumane treatment
- protectionist policies which resulted in total control over where and how Indigenous communities lived.

6 Juanita Sherwood is a descendant of the Wiradjuri Nation.

Legislation sanctioning the removal of children from their families created the Stolen Generations and engendered significant intergenerational trauma. Unequal access to the rights and services open to non-Indigenous Australians compounded the effects of dispossession, disease and protectionist policies, leading to sustained health and wellbeing disparities, and institutionalised racism and discrimination remain evident to the present day.

Sherwood argues that

> *"just as taking a history of an individual patient is essential to understanding the circumstances and needs of that patient, in the same way establishing the colonial, political, social and economic histories which have impacted Indigenous peoples and communities is critical for articulating the context and establishing the most appropriate and effective ways to move forward."*

Lewis and Prunuske (2017) echo the above findings in relation to the USA, where they describe the impact of historical policies of assimilation, bias and racism, broken treaties and genocide on a complex society where the Indigenous peoples comprised a large number of diverse nations. NCAI (2020) trace the history of allotment and assimilation, removal and reservation, termination and reorganisation, and self-determination and self-governance, and outline some of the political, economic, social and health consequences of this history for American Indians and Native Alaskans.

Allan and Smilie (2015) describe the impact of colonisation on the Indigenous (First Nation, Inuit and Métis) peoples of Canada as resulting from "acts of racial discrimination, including violence, cultural genocide, legislated segregation, appropriation of lands, and social and economic oppression" (p. 1) underpinned by race-based ideas and beliefs about the inferiority of Indigenous peoples, and systemic forms of racism and discrimination which have produced significant detriments to their health, education, employment, housing and food security, child welfare and criminal justice.

They describe the impacts of the *Indian Act* (1876) on the identities of First Nations peoples, together with the effects of the removal from land and creation of reserves on their traditional ways of knowing and practices, and the long-term intergenerational trauma of the removal of children from their families into residential schools and through cross-cultural adoption. They further describe the forced removal of the Inuit peoples into the most remote regions and the disruption to their family and social structures through the introduction of Western norms, and the exclusion of the Métis people from formal recognition as Indigenous for many years.

Hart-Wasekeesikaw[7] (2009) concurs, and notes that while initial interactions between the Indigenous peoples and Western settlers were respectful, with maintenance of social, cultural and political diversity, subsequent events led to significant deterioration in relationships, and to similar outcomes as in other colonised cultures. She describes the destruction of economic, political, health, judicial and education systems, together with the trivialisation of Indigenous spirituality and cultural practices, the labelling of Indigenous peoples as primitive, and the introduction of western lifestyles and diseases which reduced the health and wellbeing of previously healthy peoples.

7 Fjola Hart-Wasekeesikaw is from the Fisher River reserve in Manitoba

She highlights five aspects of the Cree concept of *kitimakisowin* (poverty) to summarise the impact of colonisation:

1. "The poverty of participation because of marginalization.
2. The poverty of understanding arising from poor education.
3. The poverty of affection resulting from lack of support and recognition.
4. The poverty of subsistence in light of inadequate resources.
5. The poverty of identity given the imposition of alien values, beliefs and systems on local and regional cultures." (p. 7)

In Aotearoa/New Zealand, initial immigration by Western settlers resulted in the enactment of a treaty in 1840, the Treaty of Waitangi (*Te Tiriti o Waitangi*), which formalised the relationship between the Māori and the British Crown. Although the Treaty nominally guaranteed Indigenous peoples the same privileges and rights as British subjects, together with the right to self-determination (*tino rangatiratanga*), vastly increased Western immigration in the second half of the 19th century had a devastating effect on their wellbeing and health. Curtis et al (2019) describe "a violent colonial history that resulted in decimation of the Māori population and the appropriation of Māori wealth and power" (p. 2), and an ongoing institutionalised racism. Aspden, Butler, Heinrich, Harwood and Sheridan (2017) point out that despite the enshrinement of the Treaty in law, "the obligations of the Crown … are not always observed" (p. 44). Orange (2010) points out that from the beginning there was confusion and therefore misunderstanding between the British and the Māori about the meaning of the words that were used, since most Māori leaders signed a version in the Māori language which "failed to convey the meaning of the English version, and the Treaty negotiations failed to clarify the difference" (p. vii).

The introduction of diseases from which the Māori had previously been isolated, together with the loss of many lives during the land and tribal wars of the 1880s, combined with the "abandonment of many of the social structures and practices which for hundreds of years had been used to promote and protect Māori health", (Kingi, 2007, p. 5) resulted in a dramatic decline in Māori population, culture and health.

The impact of European colonisation on Indigenous culture, history and wellbeing has resulted in a profound impact on Indigenous health in Australia as it has in other countries.

While the statistics quoted above represent one means of evaluating health, it is essential to understand that Indigenous health is more holistic than can be represented quantitatively.

As expressed in the *National Aboriginal and Torres Strait Islander Health Plan 2013–2023* (Commonwealth of Australia, 2013),

> *"'Aboriginal health' means not just the physical wellbeing of an individual but refers to the social, emotional and cultural wellbeing of the whole Community in which each individual is able to achieve their full potential as a human being, thereby bringing about the total wellbeing of their Community. It is a whole-of-life view and includes the cyclical concept of life-death-life" (p. 9).*

It is linked to spirituality, connection to land, individual and community physical, social, cultural and emotional wellbeing, dignity, self-esteem and justice (AHMAC, 2016).

In 2019, in an acknowledgement of this profound impact of colonisation on the health and wellbeing of Indigenous peoples, not only in Australia but in other parts of the Western world, a consortium of experts from Australia, Aotearoa/New Zealand, Canada and the USA published an international consensus statement on *Educating for Indigenous Health Equity* (Jones et al, 2019).

This statement, which was derived from a synthesis of evidence from extensive experience and research, "describes foundational processes that limit Indigenous health development in medical education and articulates key principles that can be applied at multiple levels to advance Indigenous health equity" (p. 512). The primary principle articulated in this statement is that:

> *"Colonization is a fundamental determinant of Indigenous health. Medical education institutions must acknowledge their historical and contemporary role in the colonial project and engage in an institutional decolonization process" (p. 516).*

The authors argue that the interdependent concepts of colonisation, racism and privilege have long been embedded into societal norms, values and structures, and comment that they have often previously been manifest, perhaps unintentionally, in medical education. As a consequence, past educators and educational programs have been complicit in maintaining the status quo without necessarily demonstrating a deliberate intent to do so. However, the authors also argue that

> *"there is now sufficient understanding and acknowledgement of these critical determinants of inequity that there is no longer any justification for accepting their continued influence, and that both decolonisation[8] and Indigenisation[9] of health curricula are essential for the improvement of Indigenous peoples' health and wellbeing."*

Indigenous health and cultural safety

In order to reduce and ultimately eliminate health disparities between Australians, the provision of health care must recognise, respect and address the material determinants of health. For Indigenous Australians, this must specifically include social, cultural, political and historical determinants.

It has been proposed that adopting a framework which prioritises the creation of a culturally safe space for the provision of health care is likely to improve both access to and the quality of health care, which is then likely to improve health outcomes and help to address health and wellbeing disparities between Indigenous and non-Indigenous Australians (AIHW, 2020c). A culturally safe environment is also critical because a lack of awareness about Indigenous cultures, life experiences, understandings of wellness and illness, communication preferences, and the importance of family and country can lead to care that is discriminatory, resulting in significant fear and mistrust of, and reluctance to engage with the health care system (Shahid, Finn & Thompson, 2009).

8 Defined as "dismantling colonialism as the hegemonic basis of society's values, practices, and institutions. It is a tool for reclaiming Indigenous ways of knowing, doing, and being, and for Indigenous peoples to reassert self-determination over our futures" (p. 514).

9 Defined as "creating a space where Indigenous knowledges and ways of being coexist with Western worldviews. This requires partnerships with Indigenous communities, explicit recognition of the value of Indigenous epistemologies and knowledges, and a commitment to embracing Indigenous ways of working" (p. 514).

The concept of cultural safety originated in Aotearoa/New Zealand in the context of the provision of nursing and midwifery care, and emerged from work in 1989 which related to the recruitment and retention of Māori nurses (Nursing Council of New Zealand, 2011). In 1992, the Nursing Council of New Zealand (*Te Kaunihera Tapuhi O Aotearoa*) approved cultural safety (*kawa whakaruruhau*) guidelines developed by Dr Irahapeti Ramsden, and these have been progressively amended and refined.

The current definition of cultural safety in Aotearoa/New Zealand nursing is

> *"the effective nursing practice of a person or family from another culture, and is determined by that person or family. Culture includes, but is not restricted to, age or generation; gender; sexual orientation; occupation and socioeconomic status; ethnic origin or migrant experience; religious or spiritual belief; and disability. The nurse delivering the nursing service will have undertaken a process of reflection on his or her own cultural identity and will recognise the impact that his or her personal culture has on his or her professional practice. Unsafe cultural practice comprises any action which diminishes, demeans or disempowers the cultural identity and well-being of an individual" (Nursing Council of New Zealand, 2011, p. 7)*

Under these guidelines, development of cultural safety is considered to be approached through a process involving the development of cultural awareness and cultural sensitivity, and "is underpinned by communication, recognition of the diversity in worldviews (both within and between cultural groups), and the impact of colonisation processes on minority groups" (Nursing Council of New Zealand, 2011, p. 8) as outlined in Figure 1 below.

Figure 1: Adapted from Nursing Council of New Zealand (2011, p. 8)

Definitions of cultural safety vary between jurisdictions. In Australia, the Australian Health Ministers' Advisory Council (AHMAC) highlights the essential feature as the fact that its presence or absence must be determined not by the care provider but by the experience of the recipient in terms of the care they are given, their ability to access services, and the opportunities to raise their concerns. Elements of cultural safety include awareness of one's own culture, recognition of cultural differences, and an appreciation of the socio-political and historical context and the impact of colonisation and racism on Indigenous peoples' past and current wellbeing.

In summary, "health consumers are safest when health professionals have considered power relations, cultural differences and patients' rights. Part of this process requires health professionals to examine their own realities, beliefs and attitudes" (AHMAC, 2016, p. 18).

The Australian Health Practitioner Regulation Agency (Ahpra, 2020) has defined the concept, principles and application as follows (Figure 2):

Principles	Definition	How to
The following principles inform the definition of cultural safety: Prioritising COAG's goal to deliver healthcare free of racism supported by the National Aboriginal and Torres Strait Islander Health Plan 2013-2023 Improved health service provision supported by the Safety and Quality Health Service Standards User Guide for Aboriginal and Torres Strait Islander Health Provision of a rights-based approach to healthcare supported by the United Nations Declaration on the Rights of Indigenous Peoples Ongoing commitment to learning, eduction and training	Cultural safety is determined by Aboriginal and Torres Strait Islander individuals, families and communities Culturally safe practice is the ongoing critical reflection of health practitioner knowledge, skills, attitudes, practising behaviours and power differentials in delivering safe, accessible and responsive healthcare free of racism	To ensure culturally safe and respectful practice, health practitioners must: a. Acknowledge colonisation and systemic racism, social, cultural, behavioural and economic factors which impact individual and community health; b. Acknowledge and address individual racism, their own biases, assumptions, stereotypes and prejudices and provide care that is holistic, free of bias and racism; c. Recognise the importance of self-determined decision-making, partnership and collaboration in healthcare which is driven by the individual, family and community; d. Foster a safe working environment through leadership to support the rights and dignity of Aboriginal and Torres Strait Islander people and colleagues.

Figure 2: Ahpra approach to cultural safety (Ahpra, 2020)

Francis-Cracknell et al (2019) discussed Coffin's (2007) three-domain learning theory, involving cultural awareness, cultural safety and cultural security. "The first level, cultural awareness, is the ability to explain, interpret and remember information for working with Indigenous people. The next level is cultural safety where learners can apply this information into real contexts and the third level, cultural security, involves embedding this into a systems level of health service delivery." (Francis-Cracknell et al, 2019, p. 526).

Curtis et al (2019) undertook a comprehensive review of the interpretations of cultural competence terminology, including cultural safety. Importantly from the perceptive of authenticity, the review was undertaken in a manner aligned to *Kaupapa Māori* research practice. They outline their rationale for the adoption of cultural safety as the critical principle, offer a new definition, and describe the most important underlying principles. Based on a rationale of acknowledging the inherent power imbalances involved, rejecting the idea that it is sufficient merely to learn about other cultures, adopting a decolonising perspective, and allowing the patient to determine whether a clinical encounter is safe, their definition states:

> *"Cultural safety requires healthcare professionals and their associated healthcare organisations to examine themselves and the potential impact of their own culture on clinical interactions and healthcare service delivery. This requires individual healthcare professionals and healthcare organisations to acknowledge and address their own biases, attitudes, assumptions, stereotypes, prejudices, structures and characteristics that may affect the quality of care provided.*

"In doing so, cultural safety encompasses a critical consciousness where healthcare professionals and healthcare organisations engage in ongoing self-reflection and self-awareness and hold themselves accountable for providing culturally safe care, as defined by the patient and their communities, and as measured through progress towards achieving health equity. Cultural safety requires healthcare professionals and their associated healthcare organisations to influence healthcare to reduce bias and achieve equity within the workforce and working environment" (p. 16).

The underpinning principles relate to the goal of achieving health equity and the framing of cultural safety as a means of:

- addressing historical and social power relationships and inequities
- a focus on critical consciousness and self-awareness
- the implementation of cultural safety at both an individual and institutional level and across all training/practice environments and contexts
- the development of attitudes and skills which lead to effective addressing of biases and stereotypes.

Cultural safety is a foundation for creating a health care system which is free from racism, defined by the United Nations High Commission on Human Rights in 1969 as "Any distinction, exclusion, restriction, or preference based on race, colour, descent, or national or ethnic origin which has the purpose or effect of nullifying or impairing the recognition, enjoyment, or exercise, on equal footing, of human rights and fundamental freedoms in the political, economic, social, cultural, or any other field of public life" (cited in Awofoso, 2011, p. 2).

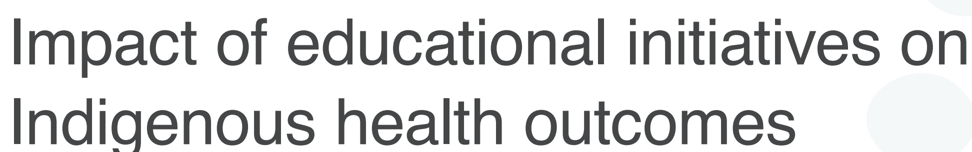
Racism has been identified in the *National Aboriginal and Torres Strait Islander Health Plan 2013–2023* (Commonwealth of Australia, 2013) as a critical social determinant of the health of Indigenous Australians, where experiences of discrimination have been linked with distress, anxiety and depression together with increased likelihood of engaging in risky behaviours. These personal experiences have been compounded by the legacy of previous governmental discriminatory policies, leading to intergenerational trauma and disadvantage (Commonwealth of Australia, 2013).

The provision of care in a culturally safe environment is facilitated where all stakeholders and participants in care share a commitment to cultural respect. AHMAC has developed a *Cultural Respect Framework for Aboriginal and Torres Strait Islander Health* (AHMAC, 2016). Cultural respect is defined as "recognition, protection and continued advancement of the inherent rights, cultures and traditions of Aboriginal and Torres Strait Islander people" (p. 1), and the vision of the Cultural Respect Framework is that "The Australian health system is accessible, responsive and safe for Aboriginal and Torres Strait Islander people where cultural differences and strengths are recognised and incorporated into the governance, management and delivery of health services." (p. 4).

The Cultural Respect Framework is built around six Domains:

1. Whole-of-organisation approach and commitment: Systemic approaches to cultural responsiveness and safety are reflected across governance, leadership, investment, policy and accountability.
2. Communication: Effective communication with Aboriginal and Torres Strait Islander consumers is the foundation for the delivery of accessible, culturally responsive and safe health care.
3. Workforce development and training: Health services and organisational culture support and promote building a workforce that is appropriately skilled, supported and resourced to influence and provide accessible, culturally responsive and safe services for Aboriginal and Torres Strait Islander people and communities.
4. Consumer participation and engagement: Health care and health services and systems are informed by active and meaningful partnerships and engagement with Aboriginal and Torres Strait Islander health consumers, families, and communities.
5. Stakeholder partnerships and collaboration: Respectful and effective partnerships and collaboration between Aboriginal and Torres Strait Islander stakeholders and health care providers are key elements to supporting accessible, responsive and culturally safe services.
6. Data, planning, research and evaluation: Health services and systems are evidence-based and informed by research and evaluation that reflect Aboriginal and Torres Strait Islander values and principles. Participation and leadership in research activities and planning by Aboriginal and Torres Strait Islander people are essential. Research knowledge is transferred back to the organisation and communities in ways that are appropriate, meaningful and useful to improving service delivery and planning (AHMAC, 2016, pp. 12–17).

The current review is primarily located in Domain 3 and relates to processes for creating educational pathways for the development of culturally safe, respectful and responsive health care workers. It is critical to acknowledge however that such endeavours must take place in an environment where the principles of all six Domains are considered, respected and enacted.



Impact of educational initiatives on Indigenous health outcomes

Considerable research has been conducted into the impact of including initiatives designed to improve Indigenous health outcomes into the education of future health practitioners. While not the primary focus of this article, a brief discussion is included.

Ewen, Paul and Bloom (2012b) evaluated the impact of including Indigenous health into the curricula of university health professional programs. Of the 36 relevant articles published between 1999 and 2011, all but 2 described Australian and/or New Zealand initiatives, with most focusing on medical, nursing, pharmacy and dental education. Two key drivers of including Indigenous content were identified as improving Indigenous health outcomes (35/36) and improving students' knowledge, skills and attitudes (31/35). The authors noted that, while all the latter did evaluate student outcomes, none of the former actually measured the impact on patient outcomes. They acknowledged the challenges of attempting to generate evidence linking health outcomes to curriculum, noting that it is a particularly complex process, but cautioned that the attempt needs to be made, since "if outcomes are not measured it is impossible to determine the effectiveness of the teaching and to identify where changes to the curriculum are required" (Jones, Pitama, Huria, Poole, McKimm, Pinnock & Reid, 2010, p. 117).

Francis-Cracknell et al (2019) noted the critical importance of identifying high quality evidence for strategies to improve health professional graduates' preparedness to contribute effectively to Indigenous health care. They reviewed 17 studies for the purpose of examining the impact of including Indigenous health care into the curriculum on the preparation of entry-level health care professionals to deliver equitable health care. They concluded that most research had focused on recall, some level of understanding, self-awareness and perceived learning, with minor evidence of the application of this learning. Relating their findings to Coffin's (2007) domains, they further concluded that there was little evidence of cultural safety or security, with most results consistent with a degree of cultural awareness. This translates into a paucity of research evidence regarding the likelihood of entry-level health professionals possessing the capabilities to provide culturally secure health care when working with Indigenous communities and individuals.

McDonald et al (2018) reviewed the impact of rural and remote placements in Aboriginal health settings on the self-perceptions of student skills and career aspirations. Following the placement, which ranged in duration from 1 week to 24 weeks, students self-reported increased understanding and awareness of Indigenous culture, increased awareness of everyday racism towards Indigenous people, a deeper understanding of the complex nature of determinants of health, and an interest in working in Indigenous health settings. However, again, there was little evidence of a long-term effect on Indigenous health outcomes.

Forsyth et al (2017) carried out a review of cultural competence interventions in the teaching of undergraduate dentistry and dental hygiene with the aim of increasing the teaching of Australian Indigenous content. Of the 12 articles reviewed (published between 2004 and 2015), all were from North America, with 11 from the USA. The authors noted the significant influence of accreditation standards on the inclusion of cultural competency training in the USA.

Beach, Price, Gary, Robinson, Gozu, Palacio, Smarth, Jenckes, Feuerstein, Bass, Powe and Cooper (2005) concluded from a review of 34 studies published between 1980 and 2003 that good evidence existed for the effectiveness of cultural competence training in improving the knowledge, skills and attitudes of health professionals, but that there was little or no evidence of a relationship with improved health outcomes for patients. This review covered not only Indigenous cultures, but cross-cultural competency more broadly across a range of racial and ethnic communities.

Jongen, McCalman and Bainbridge (2018) concluded from a review of 16 publications that the most commonly measured outcomes of cultural competency education included changes in knowledge (cultural factors, Indigenous health issues), attitudes (perceptions of different cultures, readiness to work in different cultural settings), and confidence (ability to interact with different cultural groups). They highlighted the need to expand these types of evaluations to include the effect on patient outcomes, including satisfaction and perceived safety, and improved health.

Medel (2019) undertook a review of quantitative evaluations of cultural safety education across CANZUS nations between 2009 and 2019. She found that the majority of evaluations related to culturally-safe understandings and practices of students, including:

- knowledge
- attitudes and perceptions
- self-perceived cultural competency/capability/desire/confidence
- communication and collaboration
- engagement.

Few studies involved a longitudinal design to allow evaluation of the longer-term impact of cultural safety education on clinical practice. Further, she identified only one study which included the recognition that students felt that they had more to learn.

Pitama, Palmer, Huria, Lacey and Wilkinson (2018) reviewed 23 publications relating to the incorporation of indigenous health into the curricula of medical, nursing and allied health professional degree programs in Australia, Aotearoa/New Zealand, Canada and the USA. They noted the increasing incorporation of Indigenous perspectives, particularly highlighting the emergence of guidelines for the development and evaluation of core Indigenous components. They further commented that these guidelines generally did not address factors which facilitated or constrained the effectiveness of these curriculum initiatives, and suggested that structural and systemic biases may have a significant impact on outcomes.

A number of factors were identified as drivers of positive change, including increasing the contributions of Indigenous leaders and participants in curriculum design, and adopting a decolonised approach to content which re-presented the sources and causes of health inequities from Indigenous perspectives, and challenged the hidden agenda of negative stereotyping and a deficit discourse.

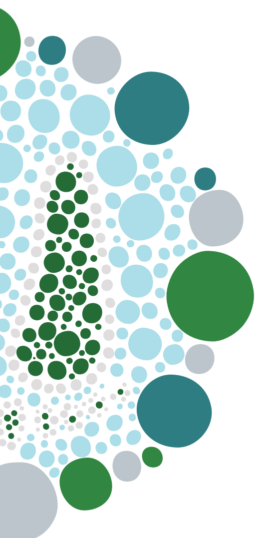
They also identified a number of systemic and institutional barriers to the effective implementation of Indigenous health perspectives into curricula, including the complexities associated with being an emerging curriculum area, and therefore needing to negotiate and compete for resources. The majority of studies indicated that external imperatives including program accreditation and governmental directives were significant motivators for including Indigenous content, and could lead to hidden agendas and curriculum vulnerabilities. Evaluations of curricula were generally focused on their acceptability to students and changes in student knowledge and attitudes, rather than on the impact on Indigenous health outcomes.

They concluded that "the current expectations that cultural competence curricula should improve practitioners' knowledge, skills and behaviour, which in turn can influence patient outcomes and address health equity, are unlikely to be achieved unless significant challenges to institutional investment are addressed" (Pitama et al 2018, p.906).

Disappointingly, the authors concluded that "there was no evidence that the growing recognition of and support for cultural competence by accreditation bodies were visibly transferred to the resources required to deliver a comprehensive indigenous health curriculum within most institutions" Pitama et al (2018, p.905).

It is clear that there is an imperative to ensure that health professional education not only includes Indigenous health content, but that it is effective in improving patient outcomes for indigenous peoples.

In Australia, the development of Indigenous health curriculum frameworks has been identified as one means of addressing and enhancing cultural safety and improved health outcomes.



Indigenous Health Curriculum Framework development in Australia

CDAMS Health Curriculum Framework

The *CDAMS Indigenous Health Curriculum Framework* (CDAMS framework) was first published in August 2004 by the VicHealth Koori Health Research and Community Development Unit of the University of Melbourne on behalf of the Committee of Deans of Australian Medical Schools (Phillips, 2004). Development of the CDAMS framework was driven by the need for a set of guidelines for Australian medical schools to develop, implement and deliver appropriate Indigenous health content within their curricula. Eight content areas were suggested for inclusion in the curriculum, together with ten pedagogical principles regarded as the most likely to underpin appropriate curriculum content and delivery (Appendix A). Critically, the impact of colonisation and subsequent political and social factors was openly acknowledged as a significant determinant of Indigenous health, and the concept of Indigenous health as "not just the physical well-being of the individual, but the social, emotional and cultural well-being of the whole community" (p. 7) was also recognised and emphasised.

Cultural safety was identified as an important component of the CDAMS framework, and defined as "ensuring that those individuals and systems delivering health care are aware of the impact of their own culture and cultural values on the delivery of services, and that they have some knowledge of, respect for and sensitivity towards the cultural needs of others" (p. 8). However, the understanding of what constituted cultural safety was less well developed than in the contemporary context, being regarded as one of a number of "slightly different but related terms, such as 'cultural security', 'culturally appropriate', 'culturally aware', 'culturally valid', and 'culturally competent'" (p. 8).

The Aboriginal and Torres Strait Islander Health Curriculum Framework

While the CDAMS framework was an important step in encouraging the incorporation of Indigenous health perspectives into medical curricula, increasing recognition of the need for all health professionals to be culturally capable provided the stimulus for the development of a new and more all-encompassing framework. Groundwork for the *Aboriginal and Torres Strait Islander Health Curriculum Framework* was provided by publication of *A Blueprint for action: Pathways into the health workforce for Aboriginal and Torres Strait Islander peoples* (NATSIHC, 2008) which recommended that a culturally inclusive Indigenous health curriculum be developed through a partnership between Indigenous communities and educational institutions.

This was endorsed by a 2010 Indigenous Health Workforce Forum, which suggested that an Indigenous health curriculum package could be integrated into all health professional degree programs. A third stimulus was provided in the form of the 2011 report by Health Workforce Australia entitled *Growing Our Future: Final Report of the Aboriginal and Torres Strait Islander Health Worker project* (HWA, 2011), which recommended embedding mandatory cultural competency learning into the curricula of health professional tertiary and vocational education programs.

The *Aboriginal and Torres Strait Islander Health Curriculum Framework* (Commonwealth of Australia, 2014), was therefore published in 2014 for the primary purpose of supporting the inclusion and implementation of Indigenous health into the curricula of health professional degree programs in Australia. The aim was "to prepare graduates across health professions to provide culturally safe health services to Aboriginal and Torres Strait Islander peoples through the development of cultural capabilities during their undergraduate training" (p. 1–4). The fundamental premise was that, for Indigenous individuals and communities to be offered optimal health care and wellbeing support, health practitioners needed to be both clinically and culturally capable (Commonwealth of Australia, 2014).

The Framework was developed in a number of steps, including:

- an environmental scan of curricula for entry level health professionals and the accreditation and professional practice/competency standards associated with the professions
- interviews with key informants
- a literature review of the critical elements underpinning the development of the Framework
- stakeholder consultations both online and through face-to-face workshops
- in-depth evaluation of selected exemplars showcasing best practice.

The Framework is intended not to be prescriptive, but rather as a map to assist higher education providers to implement Indigenous health curricula in a manner which is appropriate to their local context.

The Framework comprises four Elements:

1. *Principles of the Framework*: eight critical guiding principles for the overall Framework
2. *Graduate capabilities for culturally safe Aboriginal and Torres Strait Islander health care*: five interconnected global capabilities against which curriculum content and learning outcomes are mapped
3. *Primary learning outcomes to develop graduate cultural capabilities*: 51 outcomes, articulated at the levels of Novice (17), Intermediate (17) and Entry-To-Practice (17)
4. *Curriculum content, learning outcomes and assessment map*: 17 core curriculum themes which are mapped to the three-tiered learning outcomes and aligned with suggested assessment approaches

A brief overview of these elements is included below, with a more detailed summary found in Appendix B.

Principles of the Framework

The eight principles (see Appendix B for details) are designed to provide the context for development of curriculum, and to guide the conceptual design and implementation model.

Graduate cultural capabilities

Five interconnected graduate cultural capabilities (Respect; Communication; Safety and quality; Reflection; Advocacy, Figure 3) are articulated through 13 key descriptors (Table 1).

Figure 3: adapted from Graduate Cultural Capabilities (Commonwealth of Australia, 2014)

Capability	Descriptors
Respect	Historical context Cultural knowledge Diversity Humility and lifelong learning
Communication	Culturally Safe Communication Partnerships
Safety and quality	Clinical presentation Population health
Reflection	Cultural self and health care Racism White privilege
Advocacy	Equity and human rights Leadership

Table 1: Graduate Cultural Capabilities – key descriptors (Commonwealth of Australia, 2014)

Primary learning outcomes

Underpinning the graduate cultural capabilities are 51 primary learning outcomes, 17 articulated at each of the three levels of progression from Novice through to Entry To Practice, achievement of which must be demonstrated by students. Each learning outcome may be associated with one or more graduate cultural capabilities.

Curriculum content, learning outcomes and assessment map

The 17 core themes around which curriculum is created are listed in Appendix B. In recognition of the interconnectedness of the graduate cultural capabilities, learning outcomes and curriculum content, the Framework also includes a map of curriculum content themes as they relate to the full suite of graduate capabilities.

	Curriculum Content Themes																	
Capability	**Key Descriptor**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
Respect	Historical content	•	•	•		•	•			•								
	Cultural knowledge	•	•	•		•			•	•								
	Diversity		•	•	•	•	•		•									
	Humility and lifelong learning		•	•	•		•		•									
Communicate	Culturally safe communication	•	•	•	•	•	•	•	•				•	•			•	
	Partnerships	•	•	•					•	•	•							
Quality and safety	Clinical presentation										•							
	Population health									•	•							
Reflect	Cultural self and health care				•	•	•					•	•	•	•			
	Racism			•						•		•	•	•	•	•	•	
	White priviledge											•	•	•	•			
Advocate	Equity and human rights	•		•		•		•	•	•	•		•	•	•	•	•	•
	Leadership					•		•	•	•	•	•	•	•	•	•		•

Figure 4: Curriculum map (Commonwealth of Australia, 2014)

Additional sections of the Framework document outline detailed guidance to education providers and accreditation authorities regarding the use of the Framework in program implementation and accreditation.

Modifications of the Framework: Nursing and Midwifery and Optometry

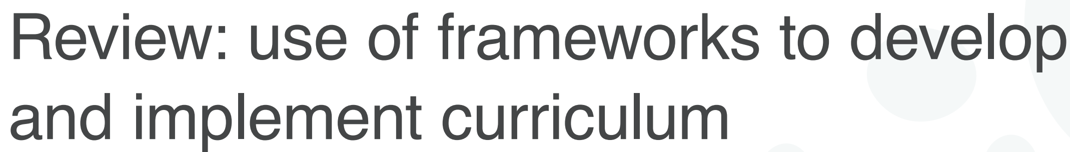
While the Framework was comprehensive and provided significant information to assist education providers to implement Indigenous health and cultural safety into their curricula, a number of organisations have adapted and simplified the Framework for better application to the context of their specific professions.

The Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM) published an adaptation of the Framework in 2017 (CATSINaM, 2017) which was designed to tailor the Framework to the professions of nursing and midwifery. The Optometry Council of Australia and New Zealand (OCANZ) built on the CATSINaM work and published a tailored version for optometry (OCANZ, 2020). Both organisations adopted similar approaches in terms of the aspects of the original Framework which were retained or modified, but the resulting documents were slightly different from each other, reflecting the specific contexts of the professions. The major differences from the original Framework and between the two adaptations of it are illustrated below (Table 2).

Both adapted frameworks retain the overall suite of graduate cultural capabilities, but significantly simplified curriculum content themes and learning outcomes. The OCANZ framework also includes a map of the modified curriculum themes to those of the original Framework.

	Original Framework	CATSINaM framework	OCANZ framework
Curriculum content themes	17 (See Appendix B)	4	3 (original Framework themes)
		1. Cultural safety	1. Integrating cultural safety into reflective practice and professionalism (5–7, 11, 13–16)
		2. History and diversity of Aboriginal and Torres Strait Islander peoples, the post-colonial experience and implications for population health and health care practice	2. History and diversity of Aboriginal and/or Torres Strait Islander peoples, the post-colonial experience and implications for population health and health care practice (1–3, 7, 10)
		3. Partnerships with Aboriginal and Torres Strait Islander health professionals, organisations and communities	3. Delivery of culturally safe eye health care in partnership with Aboriginal and/or Torres Strait Islander health professionals, organisations and communities (4, 8, 9, 12, 17)
		4. Clinical practice, service delivery and achieving culturally safe health care systems	
Number of learning outcomes	Total 51 Novice 17 Intermediate 17 Entry to Practice 17	Total 20 Novice 6 Intermediate 7 Entry to Practice 7	Total 24 Novice 9 Intermediate 8 Entry to Practice 7

Table 2: Modifications of the Framework by CATSINaM and OCANZ



Review: use of frameworks to develop and implement curriculum

In light of the critical importance of ensuring all health professionals are equipped with the knowledge, skills, attitudes and behaviours necessary to work with indigenous individuals and communities towards improved health outcomes, the Australian Pharmacy Council (APC) as the accreditation authority for pharmacy in Australia, is seeking to investigate the possibility of making a similar adaptation of the Framework for the education of pharmacists. This project was designed in a number of phases, including a review of the existing situation, consultation with stakeholders, and development of a modified framework.

A review of the literature was therefore undertaken to investigate how cultural capability education has been approached and implemented by universities responsible for educating health professionals in the CANZUS countries. The two objectives of the review were to

1. identify the extent to which the development and implementation of cultural capability curricula for health professions were based on specific frameworks or principles
2. identify and evaluate barriers and enablers to the development and implementation of these curricula

The review was designed to explore CANZUS initiatives as jurisdictions with similar colonial histories to Australia, and in the sixteen health professions currently regulated in Australia through National Boards and the Australian Health Practitioner Regulation Agency (Ahpra).

Search strategy and results

An initial search was undertaken from 2010 to the current time of the following databases: Embase; CINAHL; PubMed; PSYCINFO; AIATSIS; APAIS-ATSIS; ERIC; and A+ Education. Search terms included cultural, competenc$, safety, humility, health, curriculum, education, indigen$, first nation$, "Aboriginal and Torres Strait Islander Health Curriculum Framework". A total of 2,246 results were returned. Manual searches of the journals *Higher Education Research and Development* (from 2000 to current) and the *Australian Journal of Indigenous Education* (from 2000 to current) yielded a further 585 results. Initial screening based on the exclusion criteria and removal of duplicates removed 2,767 results. Application of the inclusion criteria and perusal of reference lists resulted in a total of 26 articles

Inclusion criteria

Articles were included if they were written in English, and included a description or discussion of the development of curriculum incorporating cultural competency or safety or humility (or other closely related terms), and the curriculum was delivered:

- to health professional students, either undergraduate or postgraduate coursework
- in Australia, Aotearoa/New Zealand, Canada or the United States of America.

Exclusion criteria

Articles were excluded if:

- the curriculum had no specific focus on indigenous cultural competency/safety/humility (eg described a generic multicultural or cross-cultural curriculum, or the indigenous focus of the curriculum was only incidental)
- the curriculum was only delivered to students other than from the specified health professions
- the article described evaluations of the curriculum without describing the framework or principles underpinning it
- the curriculum was predominantly intended to be delivered to Indigenous students
- the curriculum was not delivered in a tertiary education setting
- the curriculum was offered only to already practising health professionals (eg as part of continuing professional development or education)

The first exclusion criterion was based on the work of Ewen, Pitama, Robertson and Kamaka (2011), who emphasise the importance of recognising Indigenous cultural safety and awareness as a distinct area of education, and that a general approach to multiculturalism is not sufficient.

Results

Six articles specifically described the use of the Aboriginal and Torres Strait Islander Framework, while a further six described the use of the precursor CDAMS framework and two outlined the implementation of the modified version developed by CATSINaM. Both the CATSINaM and OCANZ frameworks have been published very recently, and the paucity of publications based on either framework is therefore unsurprising. The remaining twelve articles describe or discuss the use of other frameworks or approaches to the embedding of Indigenous perspectives into the curricula of health professional students.

Explicit use of the Aboriginal and Torres Strait Islander Health Curriculum Framework

Recent changes in accreditation standards for a number of regulated health professions in Australia have increased the prominence of cultural safety and capability as drivers of health professional education. Most notably, the two most recent iterations of the Registered Nurse Accreditation Standards (ANMAC, 2012, 2019) have mandated the inclusion of a stand-alone subject covering Indigenous history, culture and health, as well as Indigenous health content embedded throughout the curriculum. As a consequence, nursing programs feature strongly among published literature regarding the use of the Framework (and the adapted CATSINaM framework) in curriculum design.

Monash University nursing and midwifery

Wilson, Heinrich, Heidari and Adams (2020) used a series of action research cycles to evaluate the implementation of a standalone first year Indigenous health unit in the nursing and midwifery curricula at Monash University (Victoria). The unit was delivered in an online format, using five modules each of which covered the content associated with one of the Framework's graduate cultural capabilities (Table 1). Each module comprised a series of elements including short sections of information, images, interactive activities and video. Content was linked to practice in that information on a particular topic was followed by suggestions on how students could improve their practice, and an Aboriginal Health Worker avatar was created as an online guide.

Students' knowledge was tested before and after the unit using multiple choice questions based on the five graduate capabilities, and questions were also asked to assess students' attitudes, confidence and commitment. Completion of the unit was observed to result in improved student performance in all four aspects.

In contrast to the experience of Griffith University (Zimmerman, Stringfellow, Rowland, Armstrong and West, 2019), Wilson et al (2020) noted that learning had been demonstrated across the three levels of the Framework, Novice, Intermediate and Entry-to-Practice, despite the unit being situated in a first-year unit, suggesting "that the taxonomy of the Framework does not necessarily align with the reality of learning and teaching particularly as it is quite common for first year students to be analysing case studies and suggesting solutions" (p. 9).

Further, they argued that the learning demonstrated by students undertaking this unit was similar to that described from cultural immersion placements, and that the online unit in fact had a number of benefits over such immersion activities. They contend that settings where cultural immersion takes place do not always demonstrate good practice, and that there is also a risk that such activities can become merely "colonial tourism, whereby the physical proximity of close encounters with exoticised Indigenous peoples promotes an ideological position of superiority whereby non-Indigenous privilege, power and prestige is affirmed" (p. 10).

Interestingly these conclusions echo those of the much earlier work of Paul, Carr and Milroy (2006) who comment that "we have shown that providing students with information and experiences that allow them to become better informed and challenge stereotypical attitudes and understandings does not require rural immersion" (p. 525).

Flinders University nursing and midwifery

Sivertsen, Lawrence and McDermott (2017) describe the use of the Framework in the design of a first-year unit in the undergraduate nursing degree at Flinders University (South Australia). The unit was developed jointly between the Poche Centre for Indigenous Health and Well-Being and the School of Nursing and Midwifery at Flinders University, and adopted a decolonising, strengths-based approach. Little detail about the unit was provided but it is described as innovative in terms of classroom engagement strategies and assessments.

Griffith University nursing program – alignment of existing curriculum

Zimmerman et al (2019) reviewed the undergraduate nursing curriculum at Griffith University (Queensland) against the Framework to elucidate the degree of alignment between the two. Using three primary data sources, an audit of course profiles and content, survey of course convenors and follow-up interviews, the authors identified four key findings and a number of enablers and barriers to implementation and alignment.

Firstly, the audit of course profiles and content identified that nine of the thirteen key descriptors (see Table 1) associated with the five graduate cultural capabilities in the Framework were addressed in the curriculum, and all were associated with the Novice level of primary learning outcome. Historical context, Humility and lifelong learning, Racism and White privilege were not apparent in the curriculum, and there was no evidence of materials or learning congruent with either the Intermediate or Entry-to-Practice levels.

Secondly, the survey revealed that staff were not confident that their course was particularly effective in contributing to culturally capable graduates, nor that they were themselves confident in teaching culturally safe health care for Indigenous people.

Thirdly, convenors self-reported very low levels of inclusion of material congruent with the thirteen key descriptors in their courses. Fourthly, awareness and familiarity with the Framework was not widespread among the convenors, of whom none identified as Aboriginal and Torres Strait Islander and only 20% indicated that they had completed the university's First Peoples' online education module.

Key enablers identified in the interviews included:

- the potential availability of room in the curriculum for including scaffolded reflection by both staff and students
- prior exposure and engagement by staff with Indigenous content and clinical experience
- co-teaching between Indigenous and non-Indigenous staff
- the availability of a dedicated unit (the Griffith University First Peoples' Health Unit)
- resources being directed to the employment of appropriate indigenous staff
- increased availability of placements in Indigenous communities.

Critical barriers identified by staff included:

- the lack of awareness of the Framework
- competing curriculum priorities and a lack of awareness about what was included in other parts of the curriculum
- a lack of staff confidence in teaching Indigenous curriculum, particularly because of their own limited understanding and fear of giving offence
- the presence of few Indigenous staff
- a lack of resources more generally.

The authors noted that the nursing program at Griffith University met the accreditation requirements of the Australian Nursing and Midwifery Accreditation Council (ANMAC), but concluded that the Aboriginal and Torres Strait Islander health content within the program was nevertheless "fragmented and inconsistent" (p. 446). Strategies to improve this situation included focusing on the potential enablers identified in the study, and fostering a strength-based partnership approach to curriculum development, delivery and assessment.

Griffith University – development of an assessment tool

In order to evaluate the outcomes of integrating the Framework into curricula, it is critical to use authentic and appropriate tools. A full review of this aspect is outside the scope of this review, but it is worth noting the comments of Medel (2019) who reflected that most assessment of cultural safety education was lacking in this regard. The development of evaluation tools which are grounded in the Framework will be necessary to evaluate the effectiveness of the curriculum initiatives which are undertaken. One example of this approach is outlined in this section.

Following their evaluation of the alignment of the Griffith University nursing curriculum with the Framework (Zimmerman et al, 2019), a third-year First Peoples' health unit was redesigned to align more closely (West et al, 2017).

The authors drew on the five core capabilities of the Framework to develop and pilot an assessment tool (the Cultural Capability Measurement Tool (CCMT)) with third year midwifery students undertaking this redesigned unit. The authors observed that previously available assessment tools tended to focus on attitudes, knowledge and misconceptions about Indigenous individuals and cultures, whereas little was available to assess behaviours which were reflective of cultural capabilities, and few assessment tools had been created with Indigenous leadership of the process and focusing on Indigenous knowledges.

The CCMT comprised a 22-item questionnaire which factored to five components which corresponded closely with the Framework (respect, communication, safety and quality, advocacy and reflection).

The authors demonstrated the construct validity and reliability of the tool and concluded that it was suitable for use with midwifery students, while acknowledging the need for validation with larger and more diverse cohorts.

Critically, the tool development and piloting was undertaken in a manner which was centred on Indigenous knowledges and led by Indigenous academics and non-academics through all stages of the process – item generation, determination of content validity, survey administration and psychometric assessment. The authors specifically acknowledged that the traditional process of tool development and validation was an inherently Western scientific approach, and they sought to challenge the paradigm by privileging Indigenous knowledges, values and practices, and by recognising the responsibility to ensure participation by and benefit to Indigenous communities.

Indigenous ownership of the research was reflected in the naming of the project by local Elders as *Gau remala migun yabruma* (translated as Teaching, Knowing, Doing) to emphasise "the process of teaching students, so that they may move beyond knowledge and understanding, to the transformation of their practice in becoming culturally capable health practitioners" (West et al, 2017, p. 239). The five factors were described in terms of Indigenous perspectives and outcomes. For example, the Safety and Quality element requires that student midwives recognise the existing strengths and resources of Indigenous women, including the importance of giving birth on country, support from family and communities, sharing of knowledge with other women, and cultural practices which are critical aspects of the process, in order to be able to provide culturally safe and appropriate care.

The authors indicate that this tool is the first of its kind to be articulated, particularly in relation to Australian Indigenous health curricula, and strongly affirm that "it is imperative that evaluative processes are both grounded in First Peoples' knowledge and measure the impact of educational interventions on cultural capabilities in professional practice settings" (West et al, 2017, p. 243). Validation of the CCMT with a large cohort of nursing and other health professional students by the same research team (West, Mills, Rowland & Creedy, 2018) demonstrated that it was valid and reliable for that cohort, and confirmed the factor analysis.

University of Technology Sydney – development of an assessment tool

Virdun, Gray, Sherwood, Power, Phillips, Parker and Jackson (2013) described a collaboration between Indigenous and non-Indigenous academic staff leading to the development of a Graduate Attribute for the University of Technology Sydney (UTS) (NSW) which would be a foundational statement for embedding Indigenous content through health curricula.

They identified that the critical features of this endeavour were establishing a truly collaborative environment, through effectual leadership and facilitation, development of a shared vision and joint ownership of the process, and the creation of safe places for individuals to express their own fears and perceived inadequacies.

Power, Virdun, Gorman, Doab, Smith, Phillips and Gray (2018) outline the development of an Assessment Criteria Template (ACT) based on the development and implementation of this Faculty-wide Indigenous Graduate Attribute (IGA) at UTS.

The ACT was designed to facilitate assessment of Indigenous cultural respect across the entire nursing curriculum and was based on the principles adopted for the development of the IGA: Respect, Engagement and sharing, and Moving forward together (REM) (Power, Virdun, Sherwood, Parker, Van Balen, Gray and Jackson, 2016).

The REM principles served as a framework for scaffolding the development of the assessment criteria, which involved iteration and vertical integration. Indigenous stakeholder forums complemented internal university working groups, and the resultant ACT underwent several revisions before finalisation. Key challenges which were identified and addressed included the essential conflict between Western approaches to assessment and the nature of indigenous ways of knowing, and concerns associated with the capability of non-Indigenous staff to assess Indigenous cultural respect. However, the university was committed to the concept that Indigenous health and wellbeing was the responsibility of all staff, and a significant staff development program was therefore implemented. This latter program not only involved Indigenous content, but was structured to utilise Indigenous learning processes such as yarning circles. The value of staff capabilities was emphasised by the inclusion of Indigenous Cultural Engagement as a staff performance benchmark.

Use of the precursor CDAMS framework

A 2012 review of the use of the CDAMS framework reported that the framework had been generally well received, that all medical schools in Australia had incorporated some aspects of it and included more Indigenous content into their curricula as a result, and that more culturally appropriate educational approaches had also become more evident (Medical Deans Australia and New Zealand and the Australian Indigenous Doctors' Association, 2012).

However, the framework itself was reported as being difficult to implement, as it was perceived as too broad and lacking in specificity, potentially resulting in a superficial approach. Additional barriers to its effective integration into medical curricula included:

- a lack of leadership and prioritisation within medical schools
- insufficient time in the curriculum for additional content and difficulties with both horizontal and vertical integration
- limited capacity to provide quality clinical Indigenous health experiences
- limited understanding of intercultural sensitivities and their implications, often resulting in the promotion of a deficit model.

The review made ten recommendations for more effective implementation of Indigenous health initiatives and recruitment/retention of Indigenous students. Of interest was that cultural safety was not mentioned in these recommendations. A lack of cultural safety within the medical program learning environment was discussed in the report as a barrier to effective recruitment and retention of Indigenous medical students, but was not identified as an issue with the curriculum framework.

University of Western Australia dentistry program

A more positive experience with the CDAMS framework was described by Bazen et al (2007) where an Indigenous Oral Health Curriculum Framework was integrated into the Bachelor of Dental Science curriculum at the University of Western Australia. While based on the CDAMS medical framework (Phillips, 2004) the tailored framework was specially adapted to meet the needs of dental education and improving Indigenous oral health.

The philosophy underpinning the work was to ensure dental graduates were equipped with appropriate knowledge, skills and attitudes to allow them to provide culturally secure oral health care for Indigenous Australians. In order to achieve this, graduates would need to demonstrate a fundamental understanding and appreciation of Indigenous history, culture and social experiences, and the impact of these on both oral and general health.

A critical element of the process was the engagement of a wide range of key stakeholders in the curriculum development group. This group was driven by two university Centres devoted to the improvement of rural, remote and Indigenous dental health, but also included representatives from relevant State and Commonwealth departments and agencies, the National Aboriginal Community Controlled Health Organisation (NACCHO), Indigenous health and medical services, and the Justice Department.

Creating the framework required a re-evaluation of the graduate outcomes of the degree, and also of the year-by-year outcomes, teaching methods and assessments. Two new graduate outcomes were articulated, and two existing ones were modified, and were included into two of the program's four streams: Fundamentals of Clinical Dentistry, and Personal and Professional Development. Year level outcomes focused on both horizontal and vertical integration, with the inclusion of Indigenous perspectives into existing units and revisitation at higher levels of complexity in later years.

Bond University medical program

In response to the publication of the CDAMS framework, and to accreditation imperatives from the Australian Medical Council, Queensland's Bond University introduced new Aboriginal and Torres Strait Islander content throughout the five-year undergraduate medical curriculum commencing in 2012 (Smith, Wolfe, Springer, Martin, Togno and Bramstedt, 2015; Smith and Springer, 2016). The revised curriculum was developed and implemented with the advice of an Indigenous advisory group, and based on professional and accreditation standards and guidelines.

An extensive mapping of content and learning outcomes was carried out and resulted in the specification of nine content areas:

- History
- Diversity and culture
- Social determinants of health
- Communication
- Clinical presentations/treatment/disease
- Multidisciplinary team
- Prevention/health promotion
- Population health/epidemiology/systems
- Health care services/primary health care/community control/models.

Particular approaches were identified for the first three years. In first year, the focus was on building awareness, second year on respecting difference and third year on building resilience. The final two years of the curriculum are essentially clinical and were therefore expected to provide opportunities for application of what had been learned in the initial years of the program.

Learning activities included eight problem-based learning cases across the three years which focused on or incorporated Indigenous aspects, and an immersion experience in the second semester of first year.

The cases incorporated both clinical and sociocultural aspects of health and well-being, and the immersion camp provided opportunities for students to engage with Indigenous culture in workshops and cultural activities. Evaluation of the immersion camp suggested that it had been effective in promoting increased cultural awareness among the participants, particularly with respect to knowledge acquisition, retention and dissemination (Sargeant, Smith and Springer, 2016). Longitudinal evaluation of the impact of the Aboriginal and Torres Strait Islander content was foreshadowed in the work of Smith and colleagues (Smith et al, 2015; Smith and Springer, 2016; Sargeant et al, 2016).

Queensland University of Technology nursing – the Yapunyah Project

Nash, Meiklejohn and Sacre (2006) reported on the Yapunyah Project, which referenced the CDAMS Framework. This project involved the design of curriculum to embed Aboriginal and Torres Strait Islander perspectives into the nursing curriculum at Queensland University of Technology (QUT). The authors state that their aim was to "prepare nursing students educationally to practice with evidence-based transcultural nursing knowledge based on culture care values, beliefs, and traditional lifeways of Indigenous people of Australia... [and] contribute to the improvement and promotion of the health and well-being of Indigenous Australians in culturally and ethnohistorically meaningful ways" (p. 296). Critically, the Yapunyah Project was underpinned by the involvement, guidance and direction of Indigenous staff, practitioners, consultants and stakeholders.

Nash et al (2006) used an approach which melded cultural safety and cultural competence as the basis for their work, arguing that while cultural safety was critical, it could only be determined by the experience of the individual who was actually receiving the care, and was thus less amenable to objective assessment. They suggested that safety was only achievable by competent individuals and therefore that assessment of the achievement of identified competencies was a critical aspect of cultural safety.

A key outcome of the Yapunyah Project was to articulate an Aboriginal and Torres Strait Islander Perspectives in Curriculum (PC) Strategy which took a 'whole of course' approach, and which replaced a 'good citizenship' perspective with the demonstration of competence.

Descriptors for three levels of the QUT Graduate Capability *Social and ethical responsibility, understanding of indigenous and international perspectives* were developed, together with a set of core concepts and underpinning principles to create a curriculum framework which was used to embed content into units across three years of the nursing curriculum. The authors commented that these steps were considerably more time-consuming than originally anticipated.

In order to embed the core curriculum, the 'renovated' units (authors' description) included clearly defined learning outcomes, streamlined/integrated learning activities, newly-developed media-based resources, integrated assessments and experiential activities, and opportunities for critical self-reflection.

Importantly, the Project involved specific and intensive staff development through a series of workshops which permitted staff to reflect on their own pre-conceptions, and engage in structured theoretical and practical activities.

Use of the modified Framework for nursing and midwifery (the CATSINaM framework)

Following the publication of the *Nursing and Midwifery Aboriginal and Torres Strait Islander Health Curriculum Framework* (CATSINaM, 2017), a number of schools of nursing and/or midwifery have indicated that they are considering or planning its use as the basis for revision of their curricula, including the University of Wollongong (NSW) (Middleton, Stephens & Mackay, 2017) and the University of the Sunshine Coast (USC) Queensland (Stuart[10] and Mason, 2019). Middleton et al (2017) reflect on the implications of the CATSINaM framework for curriculum renewal, while Stuart and Mason (2019) describe how the CATSINaM framework has been used to complement the USC's overall framework for embedding Indigenous perspectives into all curricula at the university.

The undergraduate nursing program includes a scaffolded approach with a standalone foundational unit in first year and embedded Indigenous health content in subsequent units. A capstone Indigenous health and cultural safety course draws together Indigenous history, culture, contemporary health issues and cultural safety.

The authors list a number of enablers and barriers to the success of the initiative, and recommend four specific measures to expedite the process:

- a mandatory, Indigenous-led, face-to-face unit focusing on cultural safety
- tenured Indigenous academic positions
- Indigenous-led, face-to-face cultural awareness/safety education for non-Indigenous academic staff
- the Head of School to maintain affiliate membership of CATSINaM and LINMEN (Leaders in Indigenous Nursing and Midwifery Education Network).

Development of other frameworks – case studies

While only a limited number of articles have been published which relate to the Australian frameworks, a further 12 articles were identified which describe or discuss the use of other frameworks or approaches to the embedding of Indigenous perspectives into the curricula of health professional students. These articles cover the professions of medicine (4), nursing (1), pharmacy (1), dentistry (3) and psychology (3), and relate to programs delivered in Australia (5), Aotearoa/New Zealand (5) and Canada (2). These initiatives are described in the following section.

Aotearoa/New Zealand – University of Auckland pharmacy program

In Aotearoa/New Zealand, all health practitioners are legally required to demonstrate that they are able to practise in a culturally competent manner. The Pharmacy Council of New Zealand (*Te Pou Whakamana Kaimatu o Aotearoa*) defines cultural competence as being "the ability to interact respectfully and effectively with persons from a background different from one's own. It goes beyond an awareness of or sensitivity to another culture, to include the ability to use that knowledge in cross-cultural situations" (Pharmacy Council of New Zealand, 2011, p. 2, cited in Aspden et al, 2017).

10 Lynne Stuart (Mandandanji) is an Indigenous RN working at USC as Senior Lecturer in Nursing, and Lead for the Indigenous health and cultural safety course in the School of Nursing, Midwifery and Paramedicine undergraduate nursing program. Lynne is leading embedding the Indigenous health content in SoNMaP at USC.

Aspden et al (2017) undertook a series of semi-structured interviews to explore and inform the design and implementation of a cultural competence framework for pharmacy education in New Zealand. Interviewees included pharmacy, medical and nursing academics and practitioners, with interest and expertise in teaching Hauora Māori and/or working in culturally diverse environments. To ensure the analysis of interviewee responses was robust and valid from Māori perspectives, a Māori researcher was intimately involved in the data analyses.

The authors identified seven key themes relating to curriculum content and delivery, and enablers and barriers to the development of a cultural competency stream in pharmacy curricula in Aotearoa/New Zealand.

Critical curriculum areas identified by the interviewees included:

- inequalities and disparities in health and their determinants
- self-awareness of, and reflection on personal culture and biases
- diverse cultures but with a specific focus on Māori
- a broader definition of culture to include other groups
- communication and relational skills.

There was good agreement that the content should be integrated or embedded throughout the curriculum, rather than "something which you compartmentalise or silo off into discrete sessions or courses or blocks of teaching" (p. 46), and that multiple delivery modes, particularly informal and formal experiential learning, and the opportunity to observe or participate in activities where theory was translated in practice were crucial.

Factors which could act as either enablers or constraints included:

- the skills and credibility of teaching staff, and the authenticity and role modelling of their approaches to the curriculum
- the cultural safety of the learning environment for both students and staff
- the acknowledgment and honouring of the Treaty of Waitangi and Māori perspectives
- the nature and authenticity of the assessments and assessment processes.

Factors which were more likely to act as constraints included:

- the potential for resistance by students and/or staff to the inclusion of the content in curriculum, which could manifest either actively or passively
- the perception of cultural competence as a status to be achieved and "ticked off" rather than a complex and dynamic process of continual learning.

Interviewees were divided on whether Hauora Māori should be taught as part of the overall cultural competency stream or as primarily standalone, and how Māori involvement and collaboration was most appropriately and effectively employed in practice.

Importantly, the significance of engaging in critical reflection was consistently articulated as a means of transformation in thinking, and of learning to acknowledge the unique circumstances of each person rather than stereotyping individuals as exemplars of a particular "culture". The authors concluded that their findings were consistent with other research into the education of other health professions as well as pharmacy, while acknowledging the specific context of Hauora Māori.

The authors noted the importance of "personalising" the reflection process by using prompts such as "What would you do?" or "How would you feel?", and identified as potentially pertinent a model which includes a six-step cycle of emotional reaction, description, internal examination, critical analysis, evaluation and planning new action (Tashiro, Shimpuku, Naruse, Matsutani & Matsutani, 2013).

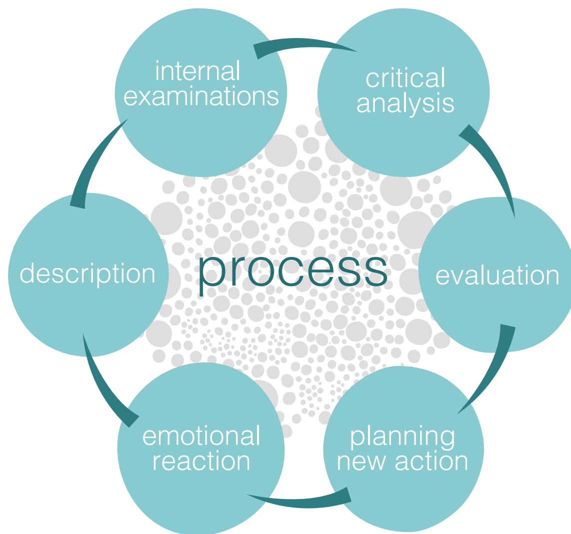


Figure 5: Adapted from Circular processes of reflection (Tashiro et al, 2013, p. 174)

A secondary purpose of the research was to identify whether an inventory developed for the evaluation of the extent to which cultural competence was included in USA medical curricula could be used with pharmacy education in Aotearoa/New Zealand. This inventory, the Revised Tool for Assessing Cultural Competence Training (R-TACCT) (Lie, Boker, Crandall, DeGannes, Elliott, Henderson, Kodjio & Seng, 2008), includes 42 content items under five broad domains of cultural competence. Interviewees reported that the tool was a useful starting point for evaluating whether a curriculum adequately covered the range of knowledge, skills and attitudes of importance to pharmacy students in Aotearoa/New Zealand, but recommended changes to the focus of some objectives to reflect the local context.

Aotearoa/New Zealand – medical programs

Jones et al (2010) outlines the ways that Hauora Māori was incorporated into medical programs at both the University of Auckland and University of Otago as a discrete curriculum thread. Building on principles outlined in the CDAMS framework but focusing on the perspective of Māori as *tangata whenua*, the indigenous population, the two universities adopted graduate attributes and learning outcomes as the basis for curriculum development and implementation. While differing in detail, the graduate profiles of the two universities were consistent, focusing on historical, political and social influences on health disparities including racism, appropriate communication with Māori patients, whānau and communities, and cultural safety and sensitive practice.

The Indigenous Health Framework (IHF), developed by the University of Otago, underpins medical education in the final years of their degree program (Pitama, Huria & Lacey, 2014). Building on prior models of Māori health, including *Te Whare Tapa Wha*, the IHF combines the Hui process and the Meihana model to create an approach which can be used by health practitioners to improve health services to Māori peoples and their whānau (support network). The Hui process contains recommendations for optimising the Māori-doctor relationship through appropriate initial greetings (*mihimihi*), making of connections (*whakawhānaungatanga*), attending to the main purpose of the session (*kaupapa*), and closing the encounter (*poroporaki/whakamutunga*).

The Meihana model outlines how a deeper understanding of *Te Ao Māori* (Māori world view) can be applied to history taking in order to ensure that the breadth of information required to understand a Māori patient's health status is considered. Using the analogy of a Māori *waka hourua* (twin-hull canoe), the model describes the interrelationships between the patient, their whānau, physical health (*tinana*), psychological and emotional health and wellbeing (*hinengaro*), beliefs, values and spirituality (*wairoa*), physical environment (*taiao*), and their access to care and support services (*iwi katoa*). It explores the health of Māori peoples in historical, political and social context, focusing on the effects of colonisation, racism, migration and marginalisation (the four winds or *Nga Hau e wha*). It also explores how patient and whānau priorities and preferences, cultural beliefs and expectations, relationships and roles, and connection with land are significant in determining what constitutes culturally safe and appropriate care.

Al-Busaidi, Huria, Pitama and Lacey (2018) describe a case where the University of Otago IHF was used explicitly by a non-Māori medical intern in the treatment and discharge of a three-year old Māori boy following an appendectomy. The authors concluded that familiarity with, and use of, the IHF

> *"broadened the [intern's] knowledge of certain aspects of Māori health and enabled him to address existing disparities in Māori health through effective communication and a clear structure of how to implement cultural competency into his practice through the Meihana Model. Early in the interview, [he] was able to establish Whakawhānaungatanga and engage with the patient and his whānau; and appropriately identify and explore values and experiences of importance to the patient and their whānau member. The use of Te Reo during the encounter, and the sharing of personal information related to their experiences during the Whakawhānaungatanga process contributed immensely in connecting with the patient and his family at a personal level. Establishing a therapeutic relationship as well as being equipped with Māori health information related to surgical hospital readmission influenced the way the [intern] approached this case. In addition to providing optimal inpatient care, the appropriateness of discharge back to the community was assessed and measures were put in place to prevent hospital readmission." (p. 92)*

This specific model is of relevance only to Aotearoa/New Zealand, however it clearly demonstrates that an appreciation of the social, historical, political and cultural factors which shape a patient's experience of health care, and a willingness to incorporate them into care, can result in improved patient outcomes and wellbeing.

Aotearoa/New Zealand – University of Otago dental program

In 2009, the University of Otago Faculty of Dentistry published a Māori Strategic Framework (MSF) based on the University's overall Māori strategic vision. The MSF was based on three foundations:

- acknowledgement and respect of Māori aspirations, beliefs and values in dental scholarship, teaching and research
- application of the Principles (partnership, protection, participation) of the Treaty of Waitangi
- upholding the Memorandum of Understanding between the University of Otago and *Te Rūnanga o Ngāi Tahu* (the main South Island Māori tribe) (Broughton, 2010).

The second foundation, explicit reference to and application of the Treaty of Waitangi, was intended to provide "a significant and appropriate process for the development of both Māori oral health services and oral health services for Māori for the improvement of Māori oral health" (p. 226).

Goal 5 of the MSF relates to the quality of degree programs, and promotes the development and integration of "*Te Ao Māori* (The Māori World), *te reo Māori* (Māori language) and other robust *kaupapa Māori* (Māori philosophy) options" (p. 225). This is achieved by embedding relevant learning outcomes (knowledge, skills and attitudes) into the curriculum, and is supported by the establishment of a Māori dental clinic within the Faculty which allows students to engage with Māori patients on a regular basis. Framing the curriculum under the umbrella of the Treaty of Waitangi also ensures that it addresses social, historical, political and cultural determinants of oral and general health.

Canada – nursing

Hart-Wasekeesikaw (2009) describes a framework for nursing education in Canada built around four guiding principles which arise from First Nation, Inuit and Métis ways of knowing and being. Education should acknowledge and demonstrate:

1. respect for the cultural integrity of First Nation, Inuit and Métis peoples, and the values embedded in their expressions of knowledge
2. relevance to the perspectives and experiences of First Nations, Inuit and Métis peoples
3. reciprocity in relationships between First Nation, Inuit and Métis and non-Indigenous peoples, acknowledging the rich traditions of Indigenous ways and knowledge of healing
4. responsibility through creating better pathways for participation by First Nation, Inuit and Métis peoples

Canada – medical

The *First Nations, Inuit and Métis Health Core Competencies for Continuing Medical Education* was published in 2009 (Indigenous Physicians Association of Canada (Association des Médecins Indigènes du Canada) and the Royal College of Physicians and Surgeons of Canada (Le Collège royal des médecins et chirurgiens du Canada), 2009).

Grounded in the cultural safety paradigm and based on the CanMEDS framework (Frank, 2005), this document identifies seven roles and key competencies for medical practitioners to develop in order to provide culturally safe care: medical expert, communicator, collaborator, manager, health advocate, scholar and professional (details of the key competencies are included in Appendix C). It is intended that these core competencies are incorporated into the undergraduate and postgraduate curricula of all Canadian medical programs.

University of South Australia – psychology program

Ranzijn, McConnochie, Day, Nolan and Wharton (2008) described an approach to undergraduate psychology curriculum design at the University of South Australia based on cultural competence theory. They noted that little had been published in the way of guidance for design of such curricula and chose to form an advisory group of health professionals with experience in working with Indigenous individuals and communities. This group, 60% of whose members were Indigenous, developed a consensus position regarding the content, pedagogical issues, principles and strategies underpinning the development of curriculum, and organised staff development workshops to support curriculum implementation and delivery.

Subsequently, a consortium of Australian Universities, the Australian Psychological Society, and the Western NSW Local Health District carried out a project titled "*Curricular approaches to increasing cultural competence and Indigenous participation in psychology education and training*" with funding from the Australian Government Office for Learning and Teaching. This Australian Indigenous Psychology Education Project (AIPEP) used a multi-pronged research approach to developing curriculum guidelines, best practice exemplars, and effective professional development strategies. The AIPEP Curriculum Framework (Dudgeon et al, 2016) was a critical outcome of the project, and was designed to inform and support education providers in their approaches to increasing the capacities of their graduates. The original Framework was closely aligned with the Australian Psychology Accreditation Council Accreditation Standards (APAC, 2010). Two authors of Ranzijn et al (2008) were members of the National Reference Committee which supported the AIPEP (Wendy Nolan and Rob Ranzijn).

The purpose of the AIPEP Curriculum Framework is to "ensure Aboriginal and Torres Strait Islander knowledges are embedded within undergraduate and postgraduate level psychology education" (Dudgeon et al, 2016, p. 12), and to complement the other two arms of the Project, which are to improve psychology workforce capabilities for more effective work with Indigenous peoples, and to increase the recruitment and retention of Indigenous students into psychology. Two other publications, the *AIPEP Guidelines for Increasing the Recruitment, Retention and Graduation of Aboriginal and Torres Strait Islander Psychology Students*, and the *AIPEP Workforce Capabilities Framework*, support these arms.

The AIPEP rationale for the embedding of Indigenous knowledges into psychology curricula is twofold. On one hand, it acknowledges the well-documented higher mental health burden experienced by Aboriginal and Torres Strait Islander individuals and communities. Perhaps more importantly, it recognises that the oldest living cultures in the world have demonstrated strength and resilience throughout their history, and therefore have much to teach non-Indigenous students and practitioners about health, wellness, survival and sustainability.

The latter rationale is addressed through the use of a conceptual model and pedagogical framework developed by and from the work of Dr Tyson Kaawoppa Yunkaporta[11] (2009), *8ways*. *8ways* is grounded in the understanding that Indigenous perspectives are to be found in processes rather than content, and therefore focuses on 8 Indigenous ways of learning to inform pedagogy and curriculum: story-sharing, learning maps, non-verbal learning, symbols and images, land links, non-linear processes, deconstruct/reconstruct, and community links[12].

The AIPEP Curriculum Framework also identifies the critical role of Indigenous governance in the design, implementation, evaluation and review of curriculum, and offers a range of practical suggestions for accomplishing this effectively. Additional guidance is provided for the adaptation of existing curricula with little or no Indigenous content to a create a curriculum with a more embedded approach. Further details are available from the Curriculum Framework (Dudgeon et al, 2016).

An example of the implementation of the AIPEP Curriculum Framework in an undergraduate psychology program in Western Australia is described by Dudgeon, Darlaston-Jones and Bray (2017). The authors highlight two complementary approaches which create an authentic expression of the Framework.

The first involves embedding Indigenous knowledges and practices within all units in the degree, encompassing not only Indigenous content but also using Indigenous ways of learning rather than relying on the Western paradigm.

The second approach is the use of Cultural Interface Theory (Nakata[13], 2007) as the basis for promoting changes in perceptions and understandings. The authors argue that "it is at the interface, the coming together of two groups/persons, that opportunities exist. Once the hidden 'truths' are made visible, and the false foundation that these 'truths' have been created upon is available to be contested, it is possible to move into a third space (Dudgeon & Fielder, 2006) based on mutual respect, understanding and a recognition of the shared history as well as the differential outcomes of that shared history" (p. 141).

Questions regarding whose voice is being heard, what recognition there is of different knowledges, and how individuals examine and reflect upon their own cultural norms are used to deconstruct and reconstruct the curriculum and its constituting activities. At the interface between two spaces, "you can see both sides better than if you were in the middle of either one" (Fadiman, 1997, cited in Warner, 2002, p. 187).

11 Tyson Kaawoppa Yunkaporta is a member of the Apalech clan in far north Queensland.

12 Full details are beyond the scope of this review, and can be found at https://www.8ways.online/ [last accessed 23 June 2020].

13 Martin Nakata is a Torres Strait Islander man.

University of Sydney – dental program

Forsyth, Short, Gilroy, Tennant and Irving (2020) outline a comprehensive approach to the process of developing an Indigenous cultural competency model for dental education at the University of Sydney. Using four data sources, including literature review, surveys and interviews, they identified an initial model which was successively refined as more data were gathered. Critically, they interviewed academic staff to determine their perceptions of Indigenous content and delivery in their programs, to identify barriers and facilitators for student learning, and to explore possible strategies to improve the cultural competence of graduates (Forsyth, Irving, Tennant, Short & Gilroy, 2019).

From these interviews, they concluded that "Increasing Indigenous cultural competence of dental students requires an educational and philosophical shift that incorporates the social determinants of health into curricula, whilst maintaining the strengths of the biomedical foundations of dental care. It requires the inclusion of an informed history of Indigenous Australians with Indigenous peoples sharing their experiences, immersion within Indigenous communities to gain insight into diversity within Indigenous culture and reflection upon these experiences to identify inaccurate stereotypes and increase cultural competence of academics and students" (p. e42).

The model articulated in Forsyth et al (2020) comprised three interdependent elements or themes as illustrated in Figure 6.

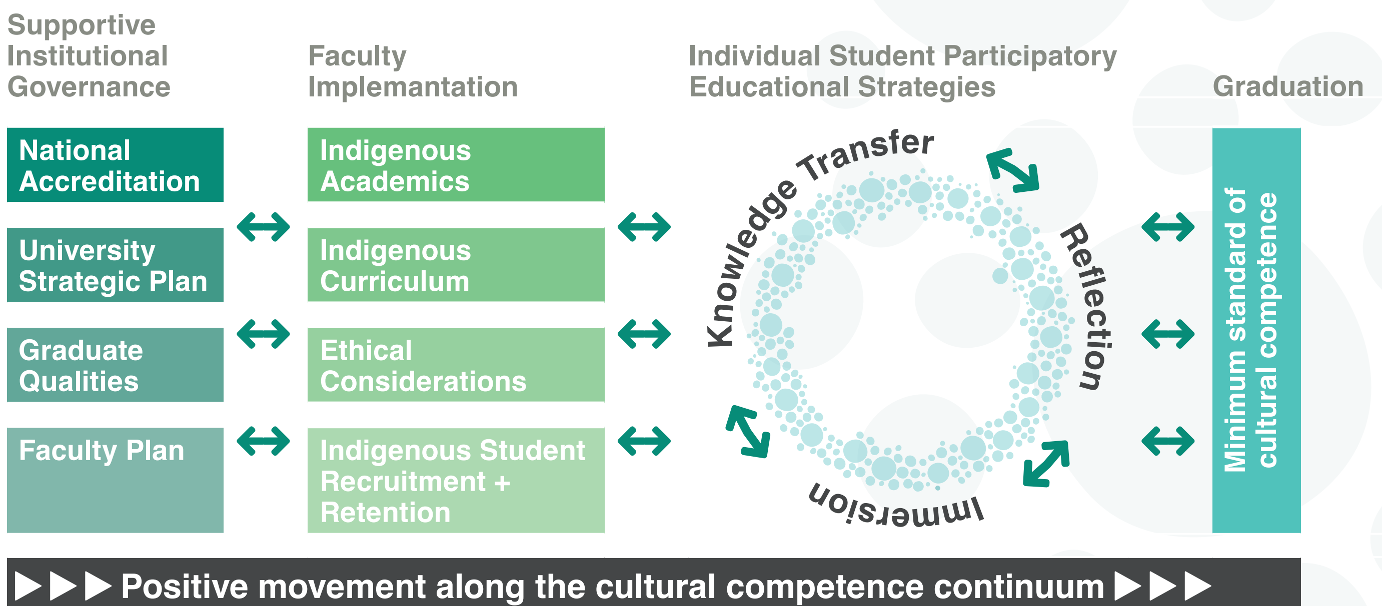


Figure 6: Adapted from Indigenous Cultural Competence Model for Dentistry Education (Forsyth et al, 2020)

Supportive institutional governance creates an environment in which regulatory policies and requirements (including external accreditation, University strategic plans and graduate outcomes) promote and enforce the inclusion of Indigenous cultural competence. At the level of Faculty, the model articulates the need for recruitment of Indigenous staff and students as well as the implementation of an overtly Indigenous curriculum based on cultural respect. Finally, the model recognises the importance of appropriate educational practices and strategies, including classroom, online, immersion and reflective activities.

Creating and sustaining constructive alignment between supportive institutional governance, Faculty implementation, and individual student participatory educational strategies is intended to produce graduates with increased awareness and openness, a greater sense of their responsibilities to care for all individuals and communities, and a greater preparedness to engage in culturally responsive ways with Indigenous peoples and act as advocates and agents of their health and wellbeing. This reflects the approach of Goercke and Kickett[14] (2013), who argue that a critical factor for promoting the development of Indigenous cultural competence in Australian university graduates is an authentic learning environment where the desired attributes are exhibited, modelled and valued. They further argue that this is achieved though alignment between policies, plans, practice, curriculum and professional staff development.

Pedagogical and philosophical principles

A number of additional publications identified in the literature review did not specifically articulate a framework for their curriculum development, but did articulate the pedagogical principles which formed the basis. The most frequently mentioned pedagogical approach was that of learning as transformation, while the principles of decolonising and Indigenising the curriculum were also promoted as a consequence of transformation.

Learning as transformation

Transformative learning is an approach which focuses on changing the frame of reference with which an individual views the world, and within which beliefs, values, knowledge and understanding are located (Jackson, Power, Sherwood & Geia, 2013). Transformative learning requires a willingness to be open to alternative perspectives, to listen without judgement, to engage with respect, and to change one's attitudes, beliefs and views. Many studies refer to Mezirow's theory of transformative learning (for review see Mezirow, 2000; Bullen and Roberts, 2019) which posits that transformation is significantly mediated and facilitated by critical reflection in the context of a disorienting or uncomfortable dilemma which challenges previously held conceptions, understandings, beliefs or values.

The centrality of transformation as a key outcome of health professional education in relation to Indigenous health, culture and cultural safety was highlighted by Mills, Creedy and West (2018). They noted that students often hold negative preconceived ideas and stereotypes about Indigenous peoples, and may demonstrate resistance (manifest anywhere on a spectrum from disengagement to hostility) to considering issues such as the impact of colonisation, racism and inequity.

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14 Professor Marion Kickett is a Noongar leader from the Balardong language group, born in York, Western Australia. She shares her story at https://www.sharingculture.info/marions-story.html (last accessed 21 September 2020).

Stereotypes may have developed as a result of prior education, the influence of family, friends and the media, a lack of exposure to Indigenous cultures and peoples, and many other sources. To address and overturn these entrenched views, a fundamental change in underlying assumptions must occur, brought about by personal discomfort with the dissonance between what is believed and what is observed or presented.

Bullen[15] and Roberts (2019) explored the mechanisms which facilitate transformative learning, and concluded that not only is the extent to which students engage in critical reflection central to the transformation process, but that the extent of critical thinking and reflection is significantly influenced by the learning environment.

In particular, critical reflection is facilitated by the creation of a sense of community within the classroom, and strong rapport between staff and students. They concluded that "students benefit from tutors' ability to develop rapport and classroom community, leading to greater capacity for student CR [critical reflection]. This in turn promotes transformative learning possibilities within the Indigenous studies learning environment" (p. 12).

Prout, Lin, Nattabi and Green (2014) described the use of transformative education as a theoretical basis for the design of an interprofessional cultural immersion experience for nursing and allied health students in rural Western Australia, intended to explore rural and Aboriginal health. In this model, learning is conceptualised as a change in the way that an individual perceives the world, or how meaning is made within the world.

Three elements of the model underpin the development of the immersion experience:

- The first element is articulation of the individual's current understandings, perceptions and expectations – a 'self-awareness' stage.
- Secondly, students are exposed to critical or 'activating' events, which challenge their current understandings and preconceptions, creating feelings of discomfort (eg shame, anger, fear, cognitive dissonance or conflict).
- The third element is critical reflection to enable, articulate and consolidate any transformative learning that has occurred.

These elements do not necessarily occur in a linear fashion, but often involve a cyclical pattern. The authors indicated that the approach appeared to be successful in engendering transformation such that many students appeared better equipped to develop into culturally effective health practitioners.

Jackson et al (2013) also used transformative learning theory to design a full day workshop for postgraduate nursing and midwifery students. The workshop was intended to engage the students with their own perspectives and challenge them to appreciate Australian Indigenous ways of knowing, being and doing, with the aim of integrating the latter into their future practice. Academic content was designed to ensure that it honoured the lived experiences of individuals and their communities, and included personal stories, autobiography, film, reflection and interactive experiences. As with Prout et al (2014), the authors note the criticality of creating emotional discomfort in triggering changes in perspective.

The workshop was facilitated by an Indigenous teaching team of academics and practitioners, who co-created an emotionally and culturally safe space for all participants.

15 Jonathan Bullen is an Indigenous man with Bibbulman/Wadarndi and Yamatji heritage.

The authors note the critical importance of the team approach, since it models and emphasises the diversity of Indigenous cultures rather than perpetuating a notion that a single Indigenous person is an 'expert' in all Indigenous matters. It also reduced the vulnerability that is often experienced by a sole Indigenous teacher with a large cohort of non-Indigenous students. Further, all team members engaged in all of the day's sessions, thereby not only providing cultural support for each other, but also modelling for students the process of transformative learning as they engaged with, and developed deep respect and relationships with each other.

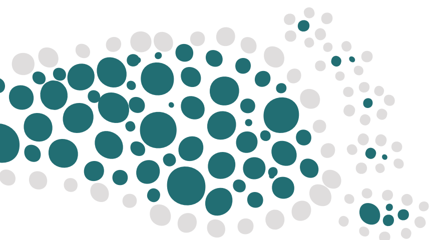
Decolonising and Indigenising the curriculum

Transformative learning is primarily focused on how an individual responds to the challenge of engaging with a different worldview. However transformation of the curriculum or indeed of the higher education context in which the curriculum is situated, involves a more holistic approach.

A number of authors have highlighted entrenched issues with the prevailing system in Western societies, and have advocated for decolonisation and Indigenisation approaches and strategies to be implemented, both within programs and more widely across institutions.

Swidrovich[16] (2020) defines decolonisation as a "multilateral process of understanding and unpacking the central assumptions of domination, patriarchy, racism, and ethnocentrisms that continue to glue the academy's privileges in place" (p. 239), and Indigenisation as "the transformation of the existing academy by including Indigenous knowledges, voices, critiques, scholars, students and materials as well as the establishment of physical and epistemic spaces that facilitate the ethical stewardship of a plurality of Indigenous knowledges and practices so thoroughly as to constitute an essential element of the university. It is not limited to Indigenous people, but encompasses all students and faculty, for the benefit of our academic integrity and our social viability" (p. 239).

He argues that there is little documented evidence of approaches to pharmacy education in Canada that reflect decolonisation and Indigenisation of curricula, and comments that, despite the requirements of the Canadian Truth and Reconciliation Commission to include Indigenous education in all health professional programs, "while concepts related to cultural competency and cultural safety can be found within the learning outcomes and accreditation standards set for Canadian pharmacy programs, such concepts are subject to being taught and learned without any reference to Indigenous Canadians, the intergenerational effects of colonization, or to the landscape of Indigenous health in Canada" (p. 238).



16 Jaris Swidrovich is a Salteaux First Nation pharmacist and educator from Saskatchewan, and Canada's first self-identified First Nations Doctor of Pharmacy.

Swidrovich in particular highlights colonisation approaches evident in Canadian pharmacy education such as:

- devaluing Indigenous knowledges and approaches to medicines (including labelling them as Complementary and Alternative Medicines) – “operating from, and teaching with, the understanding that Western medicines and health practices are superior to other methods” (p. 239)
- adopting a compartmentalised model of health knowledge rather than an integrated and holistic approach
- failing to acknowledge Inuit and Métis peoples as distinctive and differentiated from First Nations peoples
- demonstrating resistance or hesitance to employ Indigenous staff
- using Faculty curriculum development, delivery and review processes that privilege Western models

Following a review of approaches undertaken in other health professions in Canada, he suggests a number of practical strategies which could be adopted by Canadian pharmacy schools. A philosophy of “nothing about us without us” is suggested as the basis for approaching decolonisation and Indigenisation. Where difficulties in finding Indigenous staff are encountered, he suggests seeking the assistance of experts in Indigenous recruitment and retention. Similar strategies are recommended to increase the engagement of Indigenous students together with careful consideration of admissions policies.

Classroom practices should be designed to honour Indigenous cultures, languages and worldviews, and include activities which respect Indigenous learning styles. The Faculty environment should honour and acknowledge the traditional land which it occupies, particularly though visual means such as art, to create spaces which are welcoming and inclusive. Pete[17] (2016) provides further suggestions and strategies for Indigenising health curricula, many of which are relevant for pharmacy.

Swidrovich further points out the need for future research into the ways that decolonisation and Indigenisation of pharmacy curricula might improve health outcomes and engagement of Indigenous Canadians with the health care system. He also points out the irony, however, that “turning to published literature to better understand decolonization and Indigenization in health professions education is a colonized way of engaging in decolonization” (p. 242), and encourages greater exploration of Indigenous research methods and ways of conceptualising and validating knowledge.

17 Shauneen Pete is from the Little Pine First Nation of Saskatchewan, and the Executive Lead for Indigenisation at the University of Alberta, Canada.

Lewis and Prunuske (2017) outline an approach to Indigenous health curriculum design to be included in a medical program in Minnesota. The curriculum was founded on three principles:

- cultural humility
- decolonising methodologies
- region-specific Indigenous lifeways.

Their rationale for cultural humility was that the concept of cultural competence implied a false ability to know and understand another culture to the point of not needing to learn further, whereas humility reinforced the need to keep learning and reflecting on personal beliefs and biases.

Cultural humility also promoted a focus on health inequities and social justice as drivers of curriculum design. The use of decolonising methodologies allowed Indigenous culture to guide discussions, rather than processes being shaped primarily by Western theories and approaches. This was critical because historical experiences had led to distrust of Western approaches by Indigenous peoples.

Finally, by investing in local Indigenous communities, students were enabled to learn through participation rather than theoretical or classroom-based activities only. This paper reported on the development process and the initial inclusion of a short block on Indigenous health in the first year of the program, with suggestions for future steps including further collaboration with Indigenous community members and design of experiential learning opportunities. They conclude that the process of "Indigenising the process", and not just Indigenising the content, was central to creating an effective curriculum which could lead to the possibility of reduced health disparities and improved outcomes.

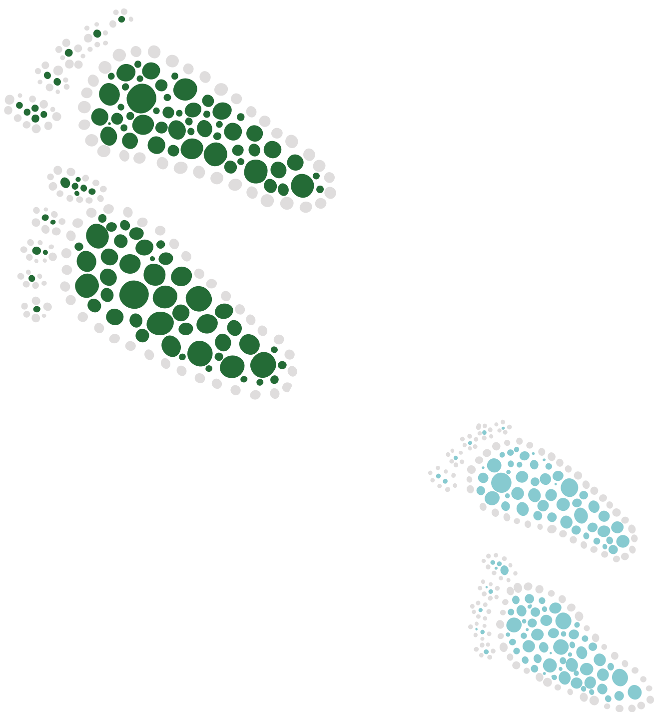
Jamieson et al (2017) describe a brief introduction to cultural safety and Indigenous health in a first-year occupational therapy program in Canada. Core competencies as identified by the Indigenous Physicians of Canada framed a series of modules outlining Indigenous concepts of healing and health, together with the political, social and historical effects on health, and the impacts of past and present government policies and practices on the determinants and outcomes of health.

Bullen and Flavell (2017) highlight the difficulties in Indigenising the curriculum through a discussion of the tension between Western and Indigenous approaches to evaluating the quality of learning and teaching. They argue that the use of Western quality metrics for Indigenising the curriculum (including the numbers of units in which Indigenous content is taught, student survey results, ratings of self-perceived achievement of cultural competency and other quantitative measures) is incompatible with Indigenous ways of knowing and being. As Nakata (2007) points out, "Indigenous knowledge systems and Western knowledge systems work off different theories of knowledge that frame who can be a knower, what can be known, what constitutes knowledge, sources of evidence for constructing knowledge, what constitutes truth, how truth is to be verified, how evidence becomes truth, how valid inferences are to be drawn, the role of belief in evidence, and related issues" (p. 8).

As a consequence, “it is not possible to bring in Indigenous knowledge and plonk it in the curriculum unproblematically” (p. 8). Rather he advocates the concept of the cultural interface which is a contested and complex space between the two knowledge systems. The interface is the space where neither knowledge system is privileged at the expense of the other, and where transformational learning can occur.

It is worth noting that Nakata does not endorse a purely Indigenous approach, but rather comments that at the interface “things are not clearly black or white, Indigenous or Western” (Nakata, 2007, p. 9). He concludes that “in the higher education sector we must maintain focus on a flexible approach to gaining the best fit between students, learning, teaching, and future professions, and allow ourselves liberties to use everything at our disposal to achieve the best result for our students. It is radically dumb to discard or not explore things that we know to work but not use them because they come from white traditions” (Nakata, 2007, p. 13).

As one example of the complexity of the cultural interface, Bullen and Flavell (2017) identify the use of student satisfaction survey scores as a measure of teaching and learning quality. At the cultural interface, and as a stimulus to transformative learning, students may feel uncomfortable with ambiguity or negative emotions, and thus provide a low rating of satisfaction in a survey. This may be interpreted as reflecting poor quality since the Western paradigm normally correlates higher student satisfaction scores with higher quality. In reality, if the teaching was designed to provoke student dissatisfaction with their current understanding but failed to do so, it is possible that high satisfaction may in fact be a sign of low quality, and vice versa.



Discussion

Shortcomings of current research

With a small number of exceptions, overall published evidence for the efficacy of cultural competency or safety education in improving the health outcomes of Indigenous recipients of health care is scarce.

A 2014 Cochrane review of cultural competence education for health professionals concluded that the quality of evidence was low, and "insufficient to draw generalisable conclusions, largely due to heterogeneity of the interventions in content, scope, design, duration, implementation and outcomes selected" (Horvat, Horey, Romios & Kis-Rigo, 2014, p. 2). This review focused on any CALD (culturally and linguistically diverse) populations, and did not draw specific conclusions about Indigenous cultural competency. However, these findings are consistent with the research described in the current review, which has found little systematic research into the relationship between Indigenous cultural competency/safety education and patient outcomes.

In contrast, most published outcomes describe the impact on student self-awareness, changes in their perceived understanding and competence, and willingness to be involved in Indigenous health care in their later practice.

In addition, most studies are short term, and usually reflect the impact of a short period of training within the formal curriculum. Few studies have investigated the extent to which any initial change is maintained or enhanced, and little if any research has been conducted which relates the education received to longer term impacts on knowledge, behaviours, readiness to work with Indigenous communities and individuals, or longer-term health outcomes. There is a suggestion that early educational initiatives may be effective in preparing for later learning, and that the absence of such early intervention may lead to greater resistance amongst students. Paul et al (2006) found that "An evaluation of the impact of integrated Aboriginal health curriculum initiatives on medical students at the University of Western Australia, also found that while changes in self-perceived levels of knowledge, skills and attitudes were possible, the process of building a culturally secure health care workforce remained a challenging and complex endeavour" (Thackrah, Thompson & Durey, 2015, p. 7).

However, in cases where an early intervention has been followed by longitudinal evaluation, the results are not promising. For example, Thackrah et al (2015) found that the highest self-reported student knowledge (adequacy) and attitudes (positive) were found immediately following completion of the first-year unit in which the Indigenous content was situated, and declines were observed over the rest of the three-year degree program. They highlighted the importance not only of introducing Indigenous content early in the program, but also of reinforcement through vertical integration in order to consolidate the learning and attitudinal changes observed following participation in the initial unit.

Enablers and barriers to change

Given the complexities that are evident in creating educational programs to develop health practitioners who are able to provide culturally safe care to Indigenous individuals and communities, it is critical to consider enablers and barriers to the changes which are necessary to create circumstances where Indigenous health outcomes may be improved.

Rowan, Rukholm, Bourque-Bearskin, Baker, Voyageur and Robitaille (2013) surveyed the Directors and Deans of Anglophone Schools of Nursing across Canada to ascertain the extent to which cultural competence and/or safety in relation to First Nations, Métis and Inuit peoples had been integrated into nursing curricula. Of the 38 Schools represented (of 82 invited), all reported some form of integration.

The authors identified 4 categories of influences on the nature and extent of integration, namely contextual, structural, process and outcome. The most significant contextual factors driving integration were external requirements such as accreditation, and strong positive leadership. Structural facilitators included the presence of a champion, and strong partnerships with key stakeholders. Structural constraints included a lack of dedicated funding, difficulties in recruitment of appropriate staff, and insufficient time to devote to the process. Process factors included staff familiarity with cultural competence and safety frameworks for the education of nurses, and committee decisions on how to integrate Indigenous perspectives (embedding, use of common threads, stand-alone) and to deliver the content. A common challenge was identified in relation to measurement of the outcomes of integration, with student self-reports the most common, and the absence of assessment tools highlighted as a disadvantage.

The authors concluded that integration is most likely to be facilitated by:

- a supportive environment with strong focused leadership effective policies, partnerships and decision-making procedures
- targeted support for faculty and students
- appropriate valid measures of the impact on learning and subsequent behaviours.

As pointed out by Bullen and Flavell (2017) creating a curriculum which is able to address the experiences of Indigenous communities is an extremely difficult endeavour, in large part as a consequence of the ignorance on the part of non-Indigenous academics about Indigenous ways of knowing and being. They argue that it is necessary to move from a transactional to a transformative approach, and for significant unlearning to occur in order to allow for the development of the capacity to appreciate diversity and pluralism.

Nakata (2007) concurs and adds that most of the development by students (and academics) of their understanding of Indigenous knowledges, traditions and practices occurs by means of interpretations and representations of it through a Western lens and in the English language. However, he notes that

> *"Indigenous knowledge systems and Western knowledge systems work off different theories of knowledge that frame who can be a knower, what can be known, what constitutes knowledge, sources of evidence for constructing knowledge, what constitutes truth, how truth is to be verified, how evidence becomes truth, how valid inferences are to be drawn, the role of belief in evidence, and related issues" (p. 8).*

Further, he points out that Indigenous knowledge is embedded in and cannot be separated from the knower, the community and the locality without affecting the integrity of the knowledge itself. He uses the concept of a cultural interface to describe the complex intersection between different systems of knowledge, experiences, histories, practices and discourses where both Indigenous and non-Indigenous ways can be acknowledged and valued. He points out that creation of an effective cultural interface is a complex and difficult challenge.

Kuokannen (2007) goes even further by arguing that in the main, universities are poorly prepared for acknowledging multiple ways of knowing and being (epistemic and ontological pluralism). Speaking from her perspective as a Sami woman, she suggests that Western universities are in general unable or unwilling to hear or recognise discourses or philosophies other than those grounded in Western traditions, and unless this blind spot is addressed, Indigenous voices will continue to be misunderstood or undervalued, and Indigenous knowledges confined to specific spaces (such as Indigenous studies or Indigenous health curricula). In particular she highlights that Indigenous knowledges are grounded in individual and collective experiences and practices which have accumulated over, and been communicated between, many generations.

In contrast, she argues, Western paradigms tend to downplay the concept of experience as knowledge and this approach has become privileged and dominant. Kuokkanen offers as an alternative "the idea of bringing various, even opposing discourses together in such a way that they critically interrupt one another. With this approach, we aren't required to keep one discourse and throw out the others" (p. xiv), but can work towards the creation of a relationship "characterised by reciprocity and by a call for responsibility toward the 'other.'" (p. 2) This closely mirrors Nakata's (2007) concept of a cultural interface and suggests directions for increasing understandings to underpin curriculum design into the future.

Power et al (2016) describe "a collaborative and deeply respectful process of Indigenous and non-Indigenous university staff collectively developing a model that has framed the embedding of a common faculty Indigenous graduate attribute across the curriculum" (p. 439). They point out that there are a number of factors underlying the significant lack of understanding of Indigenous perspectives and circumstances, even among non-Indigenous academics who recognise and aspire to reduce and remove the inequities and disparities experienced by Indigenous communities. These factors include prior education grounded in the Western tradition leading to a lack of appreciation of the ongoing and pervasive effect of colonisation, coupled with limited exposure to Indigenous communities in their own locations and contexts.

The authors outline a process whereby a working group of Indigenous and non-Indigenous staff articulated the principles of Respect, Engagement and Sharing, and Moving forward together (REM) as the basis for the development of cultural competence, and modelled the principles in their own collaboration. They also, critically, outline the support that was made available to non-Indigenous staff to enable them to understand and engage with Indigenous ways of knowing, being and doing, in order to reduce any fear of inadvertent disrespect or misrepresentation of Indigenous perspectives. Web-based supporting materials were developed, reviewed and approved by Indigenous staff for authenticity and relevance, but more importantly Indigenous ways of learning were introduced into staff interactions.

Through yarning circles in particular, Indigenous staff shared their stories and experiences with non-Indigenous staff in ways which reflected not only the content but the process of Indigenous teaching. Recognising and valuing both Indigenous and non-Indigenous pedagogies, and thus viewing Indigenous culture from a perspective of strengths rather than deficits, were identified as essential for moving forward together to improve Indigenous experiences and health outcomes through the creation of a more culturally competent workforce.

The hidden curriculum

Many of the identified barriers to the implementation of curricula which promote culturally safe practice can be summarised under the umbrella concept of the hidden curriculum, which has been described by Pitama et al (2018) as responsible for reinforcing colonial agendas, racism and negative stereotypes, and seeking to blame individuals for poor health choices rather than acknowledging underlying systemic issues.

Ewen et al (2012a) highlight developments in curriculum designed to improve Indigenous health outcomes, but note that these have been largely restricted to the formal curriculum, and have generally focused on students learning about Indigenous issues and reflecting on their preconceptions and potential biases.

They point out that there is little evidence of improved Indigenous health outcomes resulting from improved understanding of Indigenous issues, and argue that acknowledgement of the impact of the hidden curriculum on educational outcomes is critical. They describe the hidden curriculum as “the set of influences that function at the level of organizational structure and culture” (p. 201), which mediate between what is taught through the formal curriculum and what is really learned by students. These influences are tacit and unwritten, but powerful in that they shape the way students interpret their education and are enculturated into their professions (Paul, Askew, Ewen, Lyall & Wheeler, 2018).

The hidden curriculum is evident in the attitudes, beliefs and values of an educational institution as manifest in its policies and systems of reward. For example, students who may themselves value Indigenous rights to culturally safe health care may determine that the university is more likely to reward behaviours which are opposed to their beliefs. As a consequence, they may choose conformity with the institutional culture and dominant values over actions which are consistent with their own values in order to ensure their personal academic success.

Ewen at al (2012a) identified four critical areas where an institution’s tacit values were revealed, namely institutional norms, evaluation activities, resource allocation and institutional language. Institutional policies, structures, modes of operation and communication approaches reflect the dominant values and culture of the institution, and provide insight into the level of commitment to Indigenous health. Activities and criteria associated with evaluating Faculty and staff performance also reveal those elements which are particularly valued by the institution and those which are not. How and where limited institutional resources are allocated sends a powerful message to staff and students about the importance of particular endeavours, perhaps more so than does the institution’s mission and values statements. Institutional language, or more specifically its “slang’’, also reveals the attitudes and behaviours which are valued. Positively, careful attention to inclusive and respectful language can increase the likelihood of creating a culturally safe space. Negatively, language can reinforce stereotyping and bias, and result in marginalisation and exclusion.

In order to evaluate the hidden curriculum, Ewen et al (2012a) encourage universities to undertake an analysis of their practice through use of the Indigenous Health Project Critical Reflection Tool (MDANZ, 2007).

Ewen and his colleagues (Askew, Ewen & Paul, 2017; Paul et al, 2018) also describe a case study in which the hidden curriculum was deliberately aligned with the formal and informal curricula in an immersion clinical experience for medical students in a South-Eastern Queensland Indigenous Health Service. This Health Service was notable for its high levels of community involvement and patient attendance, and positive outcomes for patients, suggesting that it was considered to be a culturally safe space by the community.

The authors noted that initially all participants espoused a holistic approach to health care, but that the immersion experience changed their appreciation of what actually constituted a holistic approach, and transformed theoretical understanding into clinical practice. In addition to becoming more "aware of differences, self and power in their relationships with their patients—a care approach that is imperative to culturally-safe cross-cultural practitioner–patient relationships" (Paul et al, 2018, p. 6), it was also apparent that students experienced significant transformations in their relationships with Indigenous patients and their own professional identities as doctors.

Accreditation as a driver of change

Many sources (eg Beach et al, 2005; Nash et al, 2006; Ranzijn et al, 2008; Duthie, King & Mays, 2013; Jackson et al, 2013; Rowan et al, 2013; Smith et al, 2015; Dudgeon et al, 2016; Aspden et al, 2017; Forsyth et al, 2017; Lewis and Prunuske, 2017; Pitama et al, 2018; Francis-Cracknell et al, 2019; Medel, 2019) identify the need to comply with external accreditation standards as a driver for embedding cultural capabilities within health professional education programs. Within the last decade, Australian accreditation standards have increasingly made explicit the need not only for broad cultural capabilities, but also for graduates to be able to provide culturally safe care for Aboriginal and Torres Strait Islander peoples. A 2018 review noted that accreditation standards for 14 of the 16 regulated health professions in Australia included a standard relating to cultural awareness or sensitivity (APC, 2018).

Beginning in 2016, a new generic model of Accreditation Standards has been adopted by most Australian health profession accreditation bodies, with primacy accorded to the general principles of public safety and social accountability. Integral to this approach is an increasing recognition of, and commitment to, the embedding of cultural capabilities into the curricula of education programs. Some examples of accreditation criteria are presented in the following Table 3.

Profession	Year	Criteria	Reference
Optometry	2017	3.10 Cultural competence is appropriately integrated within the program and clearly articulated as required disciplinary learning outcomes: including an emphasis on Aboriginal, Torres Strait Islander, Māori and Pasifika cultures.	OCANZ (2017)
Chiropractic	2018	3.5 Cultural awareness and competence are integrated within the program and clearly articulated as required disciplinary learning outcomes.	CCEA (2018)
Psychology	2019	3.8 Cultural responsiveness, including with Aboriginal and Torres Strait Islander cultures, is appropriately integrated within the program and clearly articulated as a required learning outcome.	APAC (2019)
Nursing (RN)	2019	3.7 The program's content and subject learning outcomes embed principles of diversity, culture, inclusion and cultural safety for all people. 3.10 The program includes: a. Aboriginal and Torres Strait Islander peoples' history, culture and health taught as a discrete subject and based on the Nursing and Midwifery Aboriginal and Torres Strait Islander Health Curriculum Framework; b. content relevant to health outcomes of Aboriginal and Torres Strait Islander peoples is embedded throughout the program.	ANMAC (2019)
Pharmacy	2020	1.1 The program promotes the development by students/interns of knowledge, skills, behaviours and attitudes congruent with a commitment to public service and safety; cultural safety, respect and responsiveness; equity, diversity and inclusiveness; person-centred care; reduction of disparities in health care; and addressing community aspirations for health. 3.4 Program design, content, delivery and assessment specifically emphasise and promote Aboriginal and Torres Strait Islander cultures, cultural safety and improved health outcomes in the Australian setting, and Māori cultures, cultural safety and improved health outcomes in the New Zealand setting. Aboriginal and Torres Strait Islander people (Australia) and Māori people (New Zealand) should have direct input into curriculum design and content, and where possible should be involved directly in delivery and assessment.	APC (2020)

Table 3: Accreditation standards for cultural capabilities

Most recently, the Australian and New Zealand Dental Councils revised their 2014 Accreditation Standards for implementation from 1 January 2021, and included an additional domain devoted specifically to cultural safety. The standard states that "The program ensures students are able to provide culturally safe care for Aboriginal and Torres Strait Islander Peoples" and encompasses six criteria covering program and curriculum design and management, recruitment of indigenous students, appropriate partnerships with indigenous stakeholders, and the maintenance of a culturally safe learning environment. The graphic developed by the ADC to represent their Accreditation Standards highlights that all activities within education programs are encompassed within public and cultural safety (ADC/DCNZ, 2020).

Figure 7: Adapted from Accreditation Standards model for dentistry education in Australia and New Zealand (ADC/DCNZ, 2020)

Despite these initiatives, however, little evidence is available of the effect of accreditation imperatives on patient outcomes, although clearly the majority of health education programs in Australia have been evaluated as compliant with their respective Accreditation Standards. A 2018 systematic review of the implementation and impact of Indigenous health curricula noted that there was "no evidence that the growing recognition of and support for cultural competence by accreditation bodies were visibly transferred to the resources required to deliver a comprehensive Indigenous health curriculum within most institutions" (Pitama et al, 2018, p. 905). These findings may perhaps be at least partly attributed to the hidden curriculum previously discussed.

Challenging the deficit discourse – social accountability

The construction of Indigenous health and wellbeing from the perspective of a deficit model has been highlighted a number of times in this review. Sherwood (2013) in particular argues that even the social determinants of health model is a Western one, and promotes an Indigenous deficit model by failing to acknowledge and take account of the underlying issues for Indigenous peoples, namely the historical and political legacy of colonisation leading to social disadvantage (Virdun et al, 2013; Jackson et al, 2013).

Nakata (2006) identifies as a significant problem the tendency to use “an impoverished and codified representation of Indigenous culture” as the lens by which health and wellbeing are viewed. This representation leads to and reinforces negative stereotypes such as regarding Indigenous cultures as primitive or inferior, resulting in the privileging of Western worldviews and the devaluing of others.

Adopting a deficit discourse also fails to acknowledge and value “the strength, resilience and value of the oldest living, continuous cultures of the world, their languages and spiritual relationships with the land and waters” (Dudgeon et al, 2016, p. 9). Dudgeon and colleagues also point out, with a degree of understatement, that

> *“the capacity and resilience of Aboriginal and Torres Strait Islander peoples’ knowledges and values is evident from over 60,000 years of survival. Clearly the oldest living cultures in the world have something to share with non-Indigenous societies about survival, sustainability, wellness and health” (Dudgeon et al, 2016, p. 13).*

Power et al (2016) comment that “Empowering non-Indigenous health professionals to not only understand this concept but to also view Indigenous culture from a strengths rather than a deficit stance is necessary if we are ever to have true health equality in Australia” (p.443). While a number of possibilities exist for this transformation, the use of a social accountability lens has been suggested as a promising approach.

Jarvis-Selinger, Ho, Lauscher, Liman, Stacy, Woollard and Buote (2008) outline the approaches adopted at the University of British Columbia (UBC) in Canada to enact social accountability in their health and other education programs, and the specific application in the development of an interprofessional unit in Indigenous health. Recognising that social accountability involves the setting of priorities through social partnerships to create a health system that is responsive to the needs of individuals and communities, they identify a pentagram of partnerships between communities, health professionals, academic institutions, health administrators and policy makers. Their objective was to create “opportunity for students to engage in truly patient-centred care by understanding Aboriginal health as the collective interplay between patients’ social-historical background, open and honest communication about cultural beliefs and values which include the recognition of differences in perspectives, and the unique expertise offered by individual health disciplines” (p. 66).

While only delivered on a small scale, the program was considered to be successful in building appropriate partnerships between stakeholders. Not unexpectedly, challenges were initially observed as a result of a lack of appreciation by the university of the significance of historical and political factors. More surprisingly, they observed that unacknowledged or unanticipated differences between health professional disciplines *within* the university (in terms of language, knowledge beliefs, and approaches) created similar challenges.

The international consensus statement published in 2019 on educating for Indigenous health equity (Jones et al, 2019) is closely aligned with the principles of social accountability in medical education (Pitama et al, 2019). The latter authors describe their evaluation of the Hauora Māori health curriculum of the medical program at the University of Otago, and highlight the use of both a Kaupapa Māori research framework and a social accountability lens to analyse and interpret the findings. They identified three key themes supporting their beliefs about the social accountability of the curriculum.

The first theme related to *horopaki* (context), and identified those aspects of the curriculum which were conducive to creating and maintaining a socially accountable space, including advocacy, stakeholder investment and institutional support. The curriculum was perceived as creating opportunities for advocating for Māori rights more broadly than in relation to their health, and also for developing meaningful relationships among all stakeholders. These relationships were facilitated by the increased number of Māori leaders and workers in the health care system. This allowed for greater participation in the design, development, implementation and review of the curriculum, and for justification of the resources necessary to deliver the curriculum.

The second theme, *mihini* (mechanisms) related to any enabler within the process which strengthened social accountability relationships. These included the curriculum, the teaching team and clinical relevance. An engaging curriculum which triggered student interest led to them perceiving the value of what they were learning and a better understanding of their social responsibility in advancing Māori health. The experience of being taught by a Hauora Māori team increased engagement with the curriculum as well as providing opportunities to hear and appreciate Māori perspectives first hand. All stakeholders emphasised the critical importance of clinical relevance, with students identifying the increased confidence they felt when engaging with Māori patients, and Māori patients acknowledging the responsiveness of the curriculum to their concerns.

The third theme, *tukunga iho* (outcomes), identified those *tukunga iho* which validated the social accountability of the curriculum, including transformations in practice, increasing advocacy for Māori health, and the potential for future developments. Māori patients indicated that students were putting the Hauora Māori curriculum into practice which made them feel more comfortable and respected, and students were able to identify when using the Hauora Māori curriculum led to more accurate diagnosis and treatment. Students were also able to articulate situations where their deeper appreciation of Hauora Māori enabled them to intervene on behalf of a Māori patient with more senior clinicians.

Māori patients confirmed that the Hauora Māori curriculum was able to create a safe space for them, and thus contribute to both social accountability and cultural safety. The authors argued that this curriculum model was more effective than other models based on social accountability in that it did not privilege the input of the medical school over that of other stakeholders, and therefore resulted in effective integration of biopsychosocial and cultural paradigms which produced favourable outcomes for all stakeholders. They conclude that "the Hauora Māori curriculum enables the medical school to be part of a socially accountable community that advocates for social justice through Māori health equity" (Pitama et al, 2019, p. 69).

Jones (2019) goes even further by arguing that medical education and the institutions which provide it are socially accountable to play a role more broadly in addressing health inequities as a human right. He maintains that there are three broad categories of health care inequity determinants: health system factors, health professional factors, and patient or population factors. While medical education is primarily concerned with the second of these, Jones contends that creating a culturally safe health workforce is highly problematic if the system in which practitioners operate is culturally unsafe and inequitable.

Further, he maintains that without systemic change, culturally safe practice may benefit an individual's experience of health care but this will not be translated into more widespread experiences.

Therefore, while an educational institution may develop and implement policies, processes and curricula which address, legitimise and value Indigenous perspectives, he claims that it must also acknowledge and seek to be proactive in social and political advocacy for Indigenous rights and equity. That this is a legitimate action of the medical profession is articulated by both the AMA and NZMA (Jones, 2019) and included in Accreditation Standards for Australian medical education (AMC, 2012). It means that outcomes of medical degrees, and by extension other health professional degrees, must include elements related to advocacy for individuals and communities. Jones concludes that

> *"Indigenous health education cannot simply be about ensuring that health professionals are culturally safe in clinical interactions with Indigenous patients and families. It must also be about developing learners as agents of change, and ensuring that our institutions are agents of change at both the health system and societal levels. These transformative outcomes cannot occur without transforming medical education institutions themselves." (p. 9).*

In its *National Best Practice Framework for Indigenous Cultural Competency in Australian Universities* (UA, 2011), Universities Australia clearly acknowledged the role that universities have as agents of change. They state:

> *"Clearly, as the sector responsible for educating the next generation of professionals across a range of disciplines, universities have a significant role and responsibility in shaping the culture, paradigms and practices of those professions. Universities have a major responsibility to provide the next generation of professionals with knowledge and understanding of Indigenous cultures, histories and contemporary contexts and equip graduates with culturally appropriate skills and strategies to prepare them for working effectively with Indigenous clients and/or communities. This education should engage students in a critical inquiry into the nature of their profession – its history, assumptions and characteristics, its role in structuring Australian society, and its historical and contemporary engagement with Indigenous communities and Indigenous people. These professional characteristics need to be examined and understood if professionals are to develop an understanding of the social and political contexts of Indigenous people's lives and communities and the roles of the professions in shaping those contexts to become agents of change (p. 19)."*

Tom Calma, former Aboriginal and Torres Strait Islander Social Justice Commissioner, goes further however, declaring that "Indigenous people feel that education is relevant when higher education institutions reflect, value and incorporate our knowledges in the curriculum and the teaching methodologies" (Calma, 2009), that "Indigenous Knowledges are integral to your learning irrespective of what course you are studying" and that "ultimately we need to respect and promote Indigenous knowledges and perspectives. They have much to offer all Australians. Tertiary education institutions exercise cultural leadership when they offer courses that are enriched by Indigenous knowledges and perspectives."

Conclusions

This paper has described a number of approaches to integrating Indigenous perspectives and concerns into the education of health professionals across four countries with a predominantly Western focus and colonial background. As such, it provides some guidance for educators and their institutions about effective and less effective ways to approach the goal of addressing health and wellbeing disparities between non-Indigenous and Indigenous peoples and communities through the initial education of health practitioners. The task is a particularly challenging one and it is not possible to articulate a one-size-fits-all approach which can be universally implemented, however a number of conclusions can be drawn about the features of the context and environment which are more likely to promote better achievement of the goal.

Transformational collaboration

Firstly, it is critical for all stakeholders in the education and training of health professionals to acknowledge that a truly collaborative approach is essential to finding ways to move forward. This means not simply the creation of committees with representatives from different stakeholder groups, but a more fundamental, genuine desire to understand each other, and respect all perspectives. It requires a willingness to become aware of, and explore one's own worldview, values, beliefs, assumptions and ways of being and doing in order to identify any conscious or unconscious biases, racism and stereotypical thinking. It requires cultural humility, and a readiness to listen to and learn from others whose knowledges and practices arise from a different worldview. It requires a commitment not simply to embedding cultural respect and safety into curricula, but also to modeling them in educational practice. It is grounded in respecting all cultures but not privileging one at the expense of others. It requires openness to personal transformation rather than simply to curriculum change.

Addressing colonisation

Secondly, the consequences of past and ongoing social, political and historical events and decisions must be honestly acknowledged and believed. The evidence of the impact of colonisation is overwhelming, and is central to understanding how current outcomes have emerged. Creating culturally safe spaces for Indigenous health care will require targeted and intentional actions arising from a well-informed perspective, and a commitment to addressing the fundamental causes of inequity and health disparities.

Agency and advocacy

Thirdly, it must be recognised that the contemporary political and societal context of health care may either reinforce or undermine the efforts of educators in seeking to bring about effective and lasting change in health outcomes, and that educational institutions have a critical role to play in advocating for and leading systemic change. Foundational to this role is ensuring students are sensitised to their responsibilities as both advocates and agents of change, but the institutions themselves must ensure that their espoused goals and values are clearly aligned with their policies and practices, particularly their reward systems. Both staff and students will be able to discern where a disconnect between formal and hidden agendas and curricula exists, and to privilege the approaches and strategies which they perceive as expected and rewarded. The consequence of this may lead to superficial change which has little real impact on Indigenous health and wellbeing.

Social accountability

Finally, adopting a social accountability lens may foster a holistic approach to health professional education, as a means of promoting the sustainable "enjoyment of the highest attainable standard of health… of every human being" (WHO, 2020, p. 1). As expressed by the Australian Pharmacy Council (APC, 2020):

> *"Social accountability in pharmacy encompasses a willingness and ability on the part of pharmacists to deliver culturally safe and responsive person-centred care; address the health care needs of individuals and the wider society; assume responsibility for the sustainable use of health care resources; and contribute to the ongoing improvement of individual and societal health outcomes, and the obligation of education providers to provide education and training programs leading to provisional and/ or general registration which promote the development of socially accountable pharmacists; undertake research and service activities targeted towards addressing the current and future priority health concerns of society; and advocate for, contribute to, and lead practice change for the ongoing improvement of individual and societal health outcomes" (p. 28).*

What is abundantly clear is that a concerted, coordinated and committed approach is necessary if long term, sustainable improvements in Indigenous health care, outcomes and wellbeing are to be achieved. Strategic initiatives such as implementation of the *Aboriginal and Torres Strait Islander Health Curriculum Framework* are central to this goal. Although evidence is currently limited, there is likely to be a good argument for modifying the original Framework to suit the specific contexts of specific health professions. However, the simple addition of Indigenous content is unlikely to be effective; attention will need to be given to respecting the concept of a cultural interface where both Western and Indigenous perspectives are evaluated and implemented as appropriate. In addition, Indigenising the content will not be sufficient without also Indigenising the processes of learning. Further, such initiatives must be seen as only a part of the solution, and unlikely to be effective without change in individuals, communities, institutions and the broader society to acknowledge, listen to, understand, respect and care for "every human being without distinction of race, religion, political belief, economic or social condition." (WHO, 2020, p. 1).

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Appendix A — CDAMS Indigenous Health Curriculum Framework

Ten pedagogical principles regarded as the most likely to underpin appropriate curriculum content and delivery

1	Educating medical students about the health of Aboriginal and Torres Strait Islanders is unique among teachings about the health of other Australians, and we can teach medicine in a way that enhances students' understanding of Indigenous experiences and world-views.
2	Indigenous health is an integral part of medical education.
3	Teaching from a positive strengths-based model, rather than a deficit model, is more likely to encourage effective learning environments and attitudes.
4	Planning vertical and horizontal integration is important.
5	Indigenous staff are key curriculum developers and enhancers.
6	The attitudes of all teaching, clinical and administrative staff counts towards effective learning.
7	In order to facilitate the most effective learning possible, partnerships with local Indigenous individuals, organisations, and communities will need to be developed.
8	It is important to teach Indigenous cultural safety/awareness separately to multicultural awareness.
9	Students can be important curriculum enhancers if effectively supported and encouraged, but they should not be expected or relied upon to perform this function.
10	Multi-disciplinary collaboration is likely to enhance learning outcomes.

Appendix B — Aboriginal and Torres Strait Islander Health Curriculum Framework

8 principles of the Framework

1	Leadership at all levels is key to supporting effective implementation of Aboriginal and Torres Strait Islander health curricula
2	Respectful partnerships and collaboration with shared responsibility between Aboriginal and Torres Strait Islander and non-Indigenous people are required in curriculum design and implementation
3	The process of learning is equally as important as content
4	Self-reflexivity and humility develop respectful health care practice
5	Holistic health service delivery is essential
6	Local context and diversity must be recognised
7	Development of intercultural capabilities is a lifelong learning journey
8	Ongoing professional development and professional support for Aboriginal and Torres Strait Islander and non-Indigenous educators is essential

Curriculum content themes

1	History of Aboriginal and Torres Strait Islander peoples and the post-colonial experience
2	Aboriginal and Torres Strait Islander culture, beliefs and practices
3	Diversity of Aboriginal and Torres Strait Islander cultures
4	Humility and Lifelong Learning
5	Cultural Safety in health care: terminology and definitions
6	Culturally safe communication
7	Strengths-based knowledge and communication
8	Partnerships with Aboriginal and Torres Strait Islander health professionals, organisations and communities
9	Clinical presentations
10	Population health
11	Self-reflexivity
12	Culture of Australian health system
13	Racism and anti-racism in health practice
14	White Privilege
15	Equity and Human Rights in health care
16	Social determinants
17	Leadership, advocacy and effecting change

Appendix C — First Nations, Inuit and Métis Health Core Competencies for Continuing Medical Education

Key competencies

Role	Key competency
Medical expert	Physicians will demonstrate the knowledge, skills and behaviours necessary to providing compassionate, culturally safe, relationship-centred care for First Nations, Inuit and Métis patients, their families or communities. Physicians will apply lifelong learning skills to enhance areas of professional competence especially as it relates to cultural competence.
Communicator	Physicians will demonstrate effective and culturally safe communication with First Nations, Inuit and Métis patients, their families and peers.
Collaborator	Physicians will use effective collaboration with both Aboriginal and non-Aboriginal health care professionals in the provision of effective health care for First Nations, Inuit and Métis patients/populations.
Manager	Physicians will be able to develop and implement approaches to optimizing the health of First Nations, Inuit and Métis communities through a just allocation of health care resources, balancing effectiveness, efficiency and access, employing evidence-based and Indigenous best practices.
Health advocate	Physicians will be able to identify the key determinants of health of First Nations, Inuit and Métis populations relevant to the specialty and use this knowledge to promote the health of individual First Nations, Inuit or Métis patients and their communities.
Scholar	Physicians will be able to contribute to the development, dissemination and critical assessment of new knowledge/practices related to the improvement of First Nations, Inuit and Métis health in Canada.
Professional	Physicians will demonstrate a commitment to the improvement of First Nations, Inuit and Métis health by increasing personal and professional awareness and insights of First Nations, Inuit and Métis culture and health practice.

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