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A strong start for every Indigenous child

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Hilary Smith,
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Rowena Phair

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A Strong Start for Every Indigenous Child

OECD Education Working Paper No. 251

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Abstract

This Working Paper was developed to assist policy makers, education and Indigenous leaders, as well as education practitioners, to better support Indigenous children's early learning and well-being. The paper focuses on early years policies and provision in Aotearoa New Zealand, Australia and Canada. It sets out a synthesis of evidence on children's early development, with a particular focus on the conditions and approaches that support positive outcomes for Indigenous children. The Working Paper then outlines a set of promising initiatives that seek to create positive early learning environments for Indigenous children. Drawing on the available evidence and promising approaches, the paper presents a framework for strengthening Indigenous children's early learning and well-being.

Table of contents

Acknowledgements	3
Abstract	4
Introduction	8
Early learning and well-being are critical for all children Children's brains develop rapidly in the first few years of life Early learning predicts school success and later life outcomes Safe nurturing environments best support children's early development Support for children and their families can make a positive difference A holistic approach to development is key In summary	10 10 11 12 12 13 15
Colonisation has negatively affected Indigenous people's well-being Colonisation processes have undermined the well-being of Indigenous peoples Aotearoa New Zealand Australia Canada Growing populations Aotearoa New Zealand Australia Canada Fragile languages Aotearoa New Zealand Australia Canada In summary	16 16 17 18 19 19 20 20 21 22 23 25
International and national policy frameworks emphasise Indigenous children's development International instruments recognise children's rights Responsibility for Indigenous children's early learning outcomes is not always clear Objectives for change Early learning frameworks Aotearoa New Zealand Australia Canada	26 26 27 27 28 28 29

6 | EDU/WKP(2021)8

Building high quality provision and support	32
Evidence to improve and track progress	33
Aotearoa New Zealand	33
Australia	33
Canada	34
In summary	34
Early years provision for Indigenous children is expanding	35
Diverse provision	35
Aotearoa New Zealand	35
Australia	35
Canada	36
Some provision specifically targets Indigenous children and their families	36
Aotearoa New Zealand	36
Australia	37
Canada	40
Access and participation rates are growing, although gaps remain	41
Aotearoa, New Zealand	41
Australia	42
Canada	42
Funding mechanisms can inhibit access	43
Aotearoa New Zealand Australia	43 44
Canada	44
Workforce challenges	44
Aotearoa New Zealand	44
Australia	45
Canada	45
In summary	46
A 1114114 1 C11 T11141	47
A limited evidence base, for and by Indigenous communities	47
Quality is contextual	47
Improved evidence, by and for Indigenous peoples	50
In summary	52
Promising examples of early years provision for Indigenous children	53
Promising example 1: Families as First Teachers – Indigenous Parenting Support Services Prog	ram,
Northern Territory	53
Promising example 2: World Vision Early Childhood Care and Development, Kimberley, West	ern
Australia	54
The key to success: community-led service delivery.	54
Promising example 3: Niitsitapi li tass ksii mat tsoo kop (Niitsitapi Learning Centre), Alberta	
Canada	55
Promising example 4: Mowanjum Parent Early Learning Centre, Kimberley, Western Australia	56
Promising example 5: The Ngaanyatjarra Early Years Program, Warburton, Western Australia	57
Promising example 6: Child and Family Centre, Maningrida, Northern Territory, Australia	58
Promising example 7: Strong early development and learning in Manitoba	59
In summary	60

Framework for strengthening Indigenous children's early learning an	.d
well-being vell-being	62
Partnership is fundamental	63
A holistic approach to achieve child and family well-being	64
Early support for children and families	66
Culturally responsive policies and practices	67
Confident, capable early years educators	69
Bridging children's home languages	70
Broad, strengths-based assessments	70
Child-ready schools	72
In summary	72
References	74
Tables	
Table 1. Increased Māori participation in early childhood education and care	42
Figures	
Figure 1. Risk and protective factors affect development trajectories	11
Figure 2. Early development predicts later life outcomes	11
Figure 3. Predicted percentage effects on adult earnings of early childhood programmes, based on test score	
adult outcomes	13
Figure 4. Key focus areas of early learning for Indigenous children Figure 5. Gains in language development	15 60
Figure 6. Framework for strengthening Indigenous children's early learning and well-being	62
Boxes	
Box 1. Indigenous Languages	21
Box 2. Dene Suline transitional immersion programme, Saskatchewan, Canada	24
Box 3. Te Whāriki, Aotearoa New Zealand	29
Box 4. Indigenous Early Learning and Child Care (ELCC) Framework – development process Box 5. First Peoples Principles of Learning	31 31
Box 6. Home Interaction Programme for Parents and Youngsters (HIPPY), Australia	38
Box 7. Early Years Centres (EYC), Queensland	39
Box 8. First Nations and Inuit Child Care Initiative	40

Introduction

"Every child needs at least one person who is crazy about [them]" (Bronfenbrenner, 1979), but one person is not enough. In addition to having one person who is "crazy about them", children also need to feel that they are supported, that they are valued and that they belong — as do their parents, their families and expectant parents. They need a service system and broader sociopolitical environment that supports and facilitates positive parent-child interactions and attachments, high-quality care and learning experiences in all environments and timely, appropriate and effective support when problems arise. (Goldfeld et al., 2016[1])

This Working Paper focuses on Indigenous children's early learning and well-being in three OECD countries: Aotearoa New Zealand, Australia and Canada.

Indigenous communities in Aotearoa New Zealand, Australia and Canada share a legacy of colonisation and assimilation. The detrimental effects of early settler-colonial policies are still evident today in many families and communities. With the reclaiming of cultural identity and sovereignty from the late 20th century, Indigenous communities around the world have focused on the next generation to keep languages and cultures strong. This places a particular focus on early years policies as a locus for utilising Indigenous cultural knowledge frameworks and strengthening Indigenous communities.

Having a strong early start matters for all children and for Indigenous children it is a matter of urgency. Long-term inequality, discrimination and poverty have created structural deficiencies that have led to Indigenous peoples around the world being over-represented in their need for health and other services. Health and education indicators reflect the cumulative effects of pervasive poverty and social exclusion. Indigenous children are at a higher risk of living in poverty and encountering other obstacles that impede optimum development. Finding ways to overcome these challenges is crucial.

One important way of reducing inequities during early childhood is through the provision of high-quality early childhood education and care (Heckman, 2017_[2]). Longitudinal studies from targeted early childhood education and care (ECEC) programmes have shown significant positive impacts for children's outcomes throughout schooling and into adulthood (Shuey and Kankaraš, 2018_[3]). These effects include better education achievement, employment and earnings, and health and social outcomes (OECD, 2020_[4]). Thus, investing in high-quality ECEC programmes for Indigenous children is critical to redressing socio-economic imbalances. Yet the evidence indicates that Indigenous children have lower access to such programmes than their non-Indigenous counterparts (OECD, 2017_[5]).

This Working Paper identifies the importance of high-quality early years learning programmes (Heckman, 2017_[2]; Hutchins, Saggers and Frances, 2009_[6]; Sims, 2011_[7]; Sylva, 2010_[8]) for Indigenous children. The knowledge, skills and strategies acquired by Indigenous children in these important formative years set the foundation for how they navigate complex and dynamic cultural worlds, multiple languages, and shifting national and global contexts as they transition through childhood to adulthood.

The paper identifies the importance of holistic, strengths-based approaches to programme development, design and control, respect for Indigenous languages and cultures and close consultation with Indigenous communities to ensure that programmes reflect their cultural views and priorities. A child-centred, holistic approach recognises that children's learning takes place in dynamic interaction with what is happening in their families, communities, environments and societal contexts, and over time.

A holistic approach also acknowledges the complex interplay of factors that lead to successful child outcomes. Thus, the effectiveness of early years programmes for Indigenous children should be measured not only by individual child outcomes, but also by the degree to which programmes meet the aspirations of Indigenous families and communities. This approach draws explicit attention to the cultural and historical context of children's learning within the family and community.

The paper concludes with a recommended framework for strengthening Indigenous children's early learning and well-being. The framework has eight pillars:

- 1. Partnership between Indigenous communities and education agencies as a fundamental platform for strategies and polices affecting Indigenous children and their families
- 2. A holistic approach to achieve child and family well-being, addressing the range of needs that affect children's development
- 3. Early support for children and families, where additional assistance is beneficial
- 4. Early years policies that are culturally responsive, meaning these are led and developed with the Indigenous communities the policies are intended to support
- 5. Confident, capable Indigenous and non-Indigenous early years educators, with skills and knowledge in local Indigenous cultures and languages, and in early years pedagogy
- 6. Bridging children's home languages, to strengthen children's overall development and language learning
- 7. Broad, strengths-based assessments to track child development and well-being, and to reflect local priorities such as language and cultural knowledge
- 8. Child-ready schools, to manage smooth transitions for children's entry to school.

Early learning and well-being are critical for all children

We begin this Working Paper by outlining the evidence base underpinning the benefits of positive early years' development for all children.

It is now better understood that:

- Biology and a child's environment work together in the early years to influence ongoing well-being and other outcomes
- Positive early life experiences benefit children, families and communities
- Developing strong early skills is important as a predictor of later school success and lifetime productivity
- Children's home environments are the most powerful determinant of children's early learning and well-being
- High-quality early childhood education and care programmes can enhance the lives of children and their families, and deliver significant long-term benefits (OECD, 2020_[4]).

Children's brains develop rapidly in the first few years of life

New brain and life course development research has helped us to understand a lot more about children's early growth, development and learning, and the ways that biology and the environment work together in the early years to shape a person for their lifetime. We now understand that the first 5 years of a child's life is a crucial period for brain plasticity and the development of cognitive and social-emotional processes. From a neurological perspective, early childhood experiences have a decisive impact on the architecture of the brain (Tarlov and Debbink, 2008_{[91}).

Moreover, the first 1 000 days after conception (i.e. to age 2) is further highlighted as a critical period for development. This is because early life experiences become built into the body and brain (hard-wired) with lifelong effects on health and well-being (Australian Medical Association (AMA), 2013_[10]).

The window for positive early learning closes when children are about 7 years old, due to a sharp decrease in brain malleability at this point (Stiles and Jernigan, 2010_[11]). Protective factors that support children's development during this phase include regular, warm, stimulating interactions with their parents and other caregivers. Risk factors that impede development include exposure to stresses, such as violence in the home and poor nutrition.

Children who experience supportive early learning environments develop rapidly, establishing a sound base for ongoing learning and achievement. Children who do not have a good start, however, can still be assisted through well-targeted, early supports that increase the balance of protective factors over risk factors. Thus, interventions are most effective during the early childhood years when the brain is most malleable, enabling development to accelerate and shaping children's long-term ability to learn, as illustrated in Figure 1.

Optimum Recovery Below potential Protective factors > risk factors Behavioural competence trajectories Reduction in risk factors, increase in protective factors, or intervention during a sensitive period Risk factors > protective factors Brain function Prenatal Infancy Early childhood Adolescence Adulthood

Figure 1. Risk and protective factors affect development trajectories

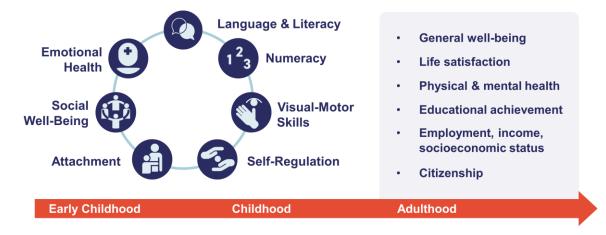
Source: Adapted from (Walker et al., 2011[12]), "Early Childhood Benefits Adult Competence and Reduces Violent Behaviour", https://doi.org/10.1542/peds.2010-2231

Early learning predicts school success and later life outcomes

There is a growing body of evidence showing that children starting strong in their learning and well-being will have better outcomes when they grow older (OECD, 2020_[4]). Positive early child development (before age 5) has been found in longitudinal studies to be linked with better educational attainment, physical and mental health, socio-economic outcomes, self-reported life satisfaction and well-being (Health Canada and Public Health Agency of Canada, 2017[13]).

The early development that relates to these later positive outcomes is holistic, and includes a child's attachment to their parents/caregivers, social and emotional well-being, critical early cognitive skills such as language development, and self-regulation, as set out in Figure 2.

Figure 2. Early development predicts later life outcomes



The most effective investment governments can make to enhance education and later life outcomes is to provide a strong start in children's early years. Seeking to ameliorate individual or systemic learning issues at later ages is less successful and more costly than doing so earlier (Phair, $2021_{[14]}$).

Safe nurturing environments best support children's early development

Study findings from Silburn et al. (2018_[15]) demonstrate the extent to which socio-cultural and economic circumstances influence all children's early health, development and learning. They highlight the extent to which children's development and school learning is underpinned by their health status – particularly in early life and throughout childhood.

Research has converged around the fundamental conditions that need to be in place for children to get the best start in life and how early life experiences influence individual health and life outcomes. These essential baseline conditions include:

- Adequate ante-natal care and maternal nutrition
- Secure and stable housing
- Sound and appropriate nutrition
- Stable and nurturing relationships
- Safe and supportive communities (Center on the Developing Child, 2010_[16]).

Early skill development starts primarily in the home, building on early attachment, with activities between children and their parents and/or caregivers being the main determinant of early learning (OECD, 2020_[4]). Therefore, improving Indigenous children's early learning outcomes requires a focus not only on early support for Indigenous children but also for their families and communities (Sims, 2011_[7]).

Young children benefit from developing cognitive and social-emotional skills that help them thrive every day. When young children are nurtured within a stimulating and supportive environment, they are more likely to develop an extensive range of positive personal, social and intellectual traits, including self-confidence, mental health, motivation to learn and the ability to control aggression, solve conflict in nonviolent ways and develop and sustain friendships (Tarlov and Debbink, 2008_[9]).

Support for children and their families can make a positive difference

Extensive research has shown that targeted investments during the early years can promote healthy development in both children and families, counteract stressors and deprivations that can erode opportunities for optimal health and development, and make a significant contribution to educational achievement, economic success and subsequent parenting of the next generation (Phair, 2021_[14]).

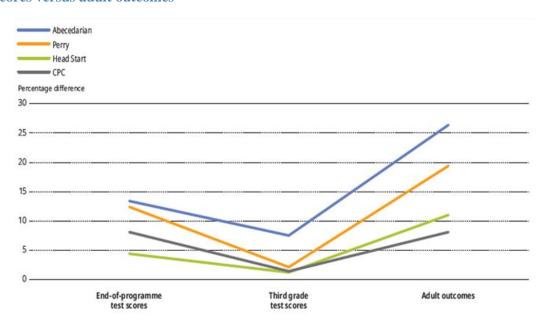
One of the most cited studies on return on investment in this field is the HighScope Perry Pre-school Program, a 50-year longitudinal study on the effect of early childhood programming on children from low-income families in the United States (Heckman, 2017_[2]). The study demonstrates the major impact that participation in early childhood development programming can have on both educational and life outcomes.

The size of early learning effects on adult outcomes is significant. As set out in Figure 3, four key longitudinal studies have found effect sizes on adult earnings ranging from 10% to 25%.

An argument against early years investment, however, has been that early skills fade out in primary school. While this is the case, longitudinal studies show that the impact of positive early learning re-emerges later

in schooling and continues into adulthood. In fact, children's test scores at the age of 5 better predict adult outcomes than those in primary school. Thus, strong early learning acts as a foundation or reserve capacity that, once consolidated during early schooling, then provides a protective and fertile base for greater skill development during the remaining school years and into adolescence and adulthood (Staudinger et al., 1993).

Figure 3. Predicted percentage effects on adult earnings of early childhood programmes, based on test scores versus adult outcomes



Note: Adult earnings effects are shown as predicted average percentage increase in earnings due to the programme, compared to expected earnings if the person had not participated in the programme. CPC refers to Chicago Child-Parent Center Program. Source: (Bartik, 2014[17]), From Pre-school to Prosperity: The Economic Payoff to Early Childhood Education, W.E. Upjohn Institute

The Effective Pre-school and Primary Education study (Sylva E. et al., 2010[18]) found that duration of ECEC participation is an important factor on children's early development. Findings from this study show that pre-school programmes are more effective where children participate for around two years before starting school, compared with shorter periods of participation.

While findings on the optimal hours per week of early education and care are not fully conclusive, reviews of the international evidence have concluded that a minimum of 15 hours, and possibly more, is required for at least two years before formal schooling to improve learning outcomes (Pascoe and Brennan, 2017[19]).

A holistic approach to development is key

Children's early development is gaining currency as a viable strategy to close the learning gap and improve equity in achieving lifelong learning and full developmental potential among young children. However, UNICEF notes that any definition of early development or school readiness must:

... understand the child, family and school as embedded within social, cultural and historic influences. Rather than seeing culture as a correlate of school readiness, this definition

takes a more cultural perspective in which school readiness is understood within the broader, more dynamic socio-cultural context. By acknowledging the diversity in defining childhood as well as in child contexts, the role of culture is seen as a powerful influence on the school readiness paradigm (UNICEF, 2018_[20]).

Moyle argues that "school readiness" has generally been defined within a Western worldview, and that there is an inherent assumption within the literature that school readiness includes the capacity or preparedness of Indigenous children to adapt to and fit in with non-Indigenous school systems (Moyle, 2019_[21]). Others point to additional difficulties with identifying and evaluating the important factors that foster successful transitions for Aboriginal and Torres Strait Islander children. McTurk et al. (2008_[22]) conclude that there is a distinctive lack of rigorous research addressing the extent to which "models of school readiness accord with Indigeneity". They call for culturally-appropriate methods and measurements of Indigenous school readiness needs and in particular Indigenous language skills that they considered were being "inappropriately assessed or are seldom employed effectively as an assessment tool".

"Cultural learning" embraces the notion of preparing the child for membership of, and participation in, the family and community, and a developmental trajectory into multiple cultural worlds. Associated with this is language learning, an important and often neglected issue for many Indigenous children whose home language(s) are not those of formal learning environments.

In Australia, the *Longitudinal Study of Indigenous Children* (LSIC) – a nationally representative study of Aboriginal and Torres Strait Islander children – presents insights into the learning aspirations Aboriginal and Torres Strait Islander families have for their children. Data from a LSIC study found that while Aboriginal and Torres Strait Islander parents and carers view education as a significant contributor to their child's success in mainstream culture, they also suggest that "growing up strong requires a balance between this and cultural learning, understanding and identity" (SNAICC, 2013_[23]).

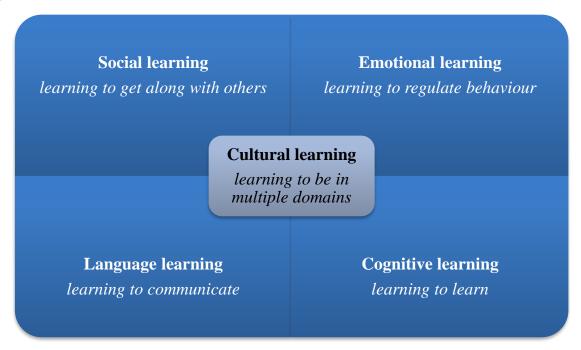
Continuity is another dimension that is important for young children's development. The concept of "continuity" includes consistency of children's experiences across diverse care and education settings as they grow up. It also includes the co-ordination of services and agencies affecting children at any given point in time. This horizontal continuity includes policies and systems for consultations, referrals, and follow-up. It encompasses the need for communication and collaboration among care providers; early educators; health care providers; community support agencies; and, when the need arises, social services and mental health professionals. It also extends to communication and collaboration with families concerning the needs of the child and the services that are provided so that there is alignment in understanding the child's needs, and the practices of professionals and families are complementary. Shared knowledge among these service sectors and between providers and families enables co-ordination (Institute of Medicine, National Research Council, 2015_[24]).

Kearney et al. (2014_[25]) discuss discontinuity challenges that many Indigenous children encounter at the "cultural interface" as they enter school.

Indigenous children who navigate both the community and the school contexts are sometimes faced with conflicting developmental, social and cultural expectations of their capabilities and capital. These conflicting expectations can lead to misunderstandings, feelings of shame, and quite often, negative experiences of schooling (Kearney et al., $2014_{\{25\}}$)

Children's early learning is critical for the development of language skills, social-emotional skills such as self-regulation and getting along with others, and for learning cultural norms and practices. We posit, in Figure 4, a broad framework of early learning for Indigenous children; one that incorporates social, emotional, cognitive, language *and* cultural learning.

Figure 4. Key focus areas of early learning for Indigenous children



OECD countries that are the focus of this Working Paper have already come some way towards officially recognising the importance of cultural learning for Indigenous children's identity and well-being. For example, the Aotearoa New Zealand's national Māori education strategy Ka Hikitia (New Zealand Ministry of Education, 2020₍₂₆₎ identifies two key factors for success; [high] quality provision and strong engagement. This strategy embraces Ako - a two-way teaching and learning approach where identity, language and culture underpin practice.

In summary

Children's early years are critical for their current and future development and well-being. Support for children's early development is more effective when it embraces the holistic needs and well-being of the child's family. Support is also more effective when it is targeted at the earliest point possible in a child's life.

Colonisation has negatively affected Indigenous people's well-being

In this section, we briefly outline the colonial backgrounds of Aotearoa New Zealand, Australia and Canada that provide a context for the experiences Indigenous peoples in these three countries face today. We also outline demographic trends and a snapshot of linguistic information from each country.

Colonisation processes have undermined the well-being of Indigenous peoples

Indigenous peoples are diverse within and across the three countries addressed in this paper. What they do share is a legacy of colonisation by the British Empire (Prochner, 2004_[27]) impacting on language, culture, identity and well-being in various ways. Prior to colonisation, Indigenous children spent their lives with their extended family who assumed a shared responsibility for their upbringing. In this environment children received the language, values and knowledge needed to survive in life and on the land. While traditional child-rearing practices are still being used in many Indigenous families, colonisation and social change have disrupted these practices to a greater or lesser extent in most families and communities, and the legacy of colonisation has rippled through Indigenous societies up to this day.

Colonial governments drew on a set of common principles in relation to their interactions with Indigenous peoples. Indigenous peoples experienced these interactions differently across nations and jurisdictions. For some groups, remoteness was a factor that protected their languages, cultures and ways of being for longer, while for groups in more settled regions, the impact of settler-colonialism was extreme. Despite these variations, the aim and form of colonial education for Indigenous children was fairly similar across the British Empire. An early focus on protection and Christian conversion was replaced by policies that were aimed at assimilation. Schools were used as an instrument to assimilate Indigenous children into the values and practices of settler-colonial societies. Over time most families lost the autonomy to determine what, how and where their children should learn.

Across Aotearoa New Zealand, Australia and Canada many Indigenous people's previous (and sometimes current) negative experiences of schooling (Kearney et al., 2014_[25]; Hare, 2012_[28]); has led them to regard educational institutions with caution.

Aotearoa New Zealand

The first settlers to arrive in Aotearoa New Zealand were ancestors of the Māori who are thought to have arrived from Polynesia between 1200 and 1300 AD. The first European to arrive in Aotearoa New Zealand was the Dutch explorer Abel Tasman in 1642, followed 127 years later by Captain James Cook in 1769.

At Waitangi on 6 February 1840, William Hobson, Aotearoa New Zealand's first Governor, invited assembled Māori chiefs to sign a Treaty with the British Crown in which Aotearoa New Zealand became a British colony. The Treaty was then taken around the country to enable other tribal chiefs to sign. Eventually, more than 500 chiefs signed the Treaty, now known as the Treaty of Waitangi (*Te Tiriti o Waitangi*). The Treaty set out the rights of Māori and non-Māori, and is widely accepted as the country's founding document, in lieu of a constitution.

The history of colonisation in Aotearoa New Zealand has been framed by this Treaty of settlement. Mission schools in the period of early contact were well attended by Māori adults and children and there was

considerable literacy in both Māori and English in the 19th century (McRae, 1997_[29]). A later wave of assimilationist legislation and policy then swept aside any notion of protecting the rights of the Indigenous people to their language, culture, and prestige (Rau and Ritchie, 2011_[30]).

The Waitangi Tribunal, established as a form of government commission to investigate historical grievances due to breaches of the Treaty, confirmed that the Māori language was an item of value, a *taonga katoa*:

The Tribunal not only condemned the education system's failure in regard to the protection of the taonga of the language. They went further in proclaiming that "Maori children leave school uneducated by normal standards, and that disability bedevils their progress for the rest of their lives". They further considered that "instruction in Maori should be available as of right to the children of parents who seek it" (Waitangi Tribunal, 1986_[31]; Rau and Ritchie, 2011_[30]).

The 1986 Tribunal findings were seminal in leading to innovations in education for Māori children, including the early childhood curriculum *Te Whāriki*. However, as Pence and Pacini-Ketchabaw reflect, the story starts earlier with the "focus on social changes that helped transform key Aotearoa New Zealand opinion leaders' understandings of their country from that of a relatively narrow Anglo/Western identity, to a multicultural, multi-lingual identity" (Pence and Pacini-Ketchabaw, 2010_[32]).

Nonetheless, an analysis by the Ministry of Health for the Waitangi Tribunal in 2019 showed that Māori tended to be less advantaged than non-Māori across a range of socio-economic indicators in 2013, including: school completion; unemployment; income; welfare dependency; living in a household without telecommunications, Internet access or motor vehicle access; living in rented accommodation; and household crowding. Māori are also more likely than non-Māori to live in the most deprived neighbourhoods (New Zealand Ministry of Health, 2019_[33]).

Australia

Aboriginal and Torres Strait Islander peoples have lived on the land and islands of Australia for over 50 000 years. There were approximately 600 distinct Indigenous nations in Australia when, in the late 18th century, the British established colonies. No legal treaties were ever negotiated with Indigenous Australians. As non-Indigenous settlers moved into Indigenous regions, Protection Acts were enacted by state governments to regulate the lives of Indigenous Australians. In settled areas of Australia, thousands of Aboriginal children, the "stolen generation" were removed from the care of their families well into the 20th century (Human Rights, 1997_[34]). Colonial policies related to education were aimed at conversion and assimilation. Education was mostly initiated by Christian groups whereas the State was slow to take responsibility for the education of Indigenous children (Kral, 2012_[35]; Lee et al., 2015_[36]).

A plethora of early childhood programmes was established for Indigenous children from the 1960s. Most of these efforts aimed to assimilate Indigenous children into Anglo-Australian society. The 1970s then saw the introduction of a policy of Indigenous self-determination, and later self-management, which led to a new focus on Indigenous education provision, including bilingual education programmes. Through bilingual language programmes, literature production centres and early childhood programmes, employment pathways for Indigenous educators were established (Anderson et al., 2018_[37]).

Nonetheless, almost all trends pertaining to child health and well-being in Australia are worse for Indigenous Australian children (Wise, 2013_[38]). In addition, a clear gradient is evident of increasing disadvantage the further children live from major cities (Bankwest Curtin Economic Centre, 2017_[39]).

Australia's low population density, across a vast geography, makes the equitable supply of educational and social services particularly challenging across the diverse regions. Indigenous Australians experience

significant health, education and employment disadvantage through lack of access and opportunities afforded through government-sponsored services and a negligible labour market in remote regions. Those living in regional and remote areas typically have lower levels of access to education, care and health services and facilities than those living in major cities and urban areas. Aboriginal and Torres Strait Islander children in remote Australia are more likely to experience a lack of access to appropriate services, known to mediate the impact of adversity in early childhood (SNAICC, 2020_[40]).

Canada

From the late 15th century, French and British expeditions explored, colonised, and fought over land occupied by many Indigenous peoples in what constitutes present-day Canada. France ceded nearly all its North American possessions to the British in 1763 after they were defeated in the Seven Years War. A series of eleven Post-Confederation Treaties were signed between the First Nations, one of three groups of Indigenous peoples in Canada, and the then reigning British monarchs of Canada between 1871 and 1921. Commencing in the 1830s, "paternalistic policy reflected the priorities of protection and assimilation rather than partnership" (Prochner, 2004_[27]). Attention turned to children and assimilation through schooling, especially removal to residential schools. For the Indigenous peoples of Canada,

... the detrimental impact that the forced residential school system had on life, culture and language cannot be overstated. Over 150 years, Indian residential schools affected the lives of more than 150 000 children, who were often forced to live away from home communities for long periods of time and to give up the use of their language and culture ... The impact has only now begun to be acknowledged politically... (Jung M. Klein and S. Stoll, 2018_[41]).

The 2015 Truth and Reconciliation Commission confirmed the widespread neglect and abuse that Indigenous children were subjected to in residential schools, causing high death rates among the children and severe trauma, enduring across generations.

The legacy of colonisation and residential schools is evident in a range of outcomes in Indigenous communities, including health, education, employment, income and overall well-being. This legacy also includes a lack of trust in education institutions, especially in relation to younger children.

In 1969, the Federal Government assumed control of education for Indigenous children, which saw the establishment of elementary schools on reserves. This included federal control of the curriculum, in addition to the provision of funding.

By 1996, the critical role of language and culture in early childhood education was acknowledged. In its report, the Royal Commission on Aboriginal Peoples stated that "Aboriginal people ... see early childhood education as a means of reinforcing Aboriginal identity, instilling the values, attitudes and behaviours that give expression to Aboriginal cultures". The Royal Commission recommended that early childhood education services and programmes: be extended to all Aboriginal children regardless of their residence; foster the physical, social, intellectual and spiritual development of children; and maximise Aboriginal control over service design and administration (Royal Commission on Aboriginal Peoples, 2015_[42]).

In 2007, the Declaration on the Rights of Indigenous Peoples affirmed recognition of "the right of Indigenous families and communities to retain shared responsibility for the upbringing, training, education and well-being of their children, consistent with the rights of the child" (United Nations, 2007_[43]).

And in 2015, the Truth and Reconciliation Commission reinforced these principles and rights through a number of calls to action (recommendations) relating to revitalisation of Aboriginal cultures and languages. The Commission recommended the "develop[ment of] culturally-appropriate early childhood education programs for Aboriginal families" and was explicit that "there is also a need to maximise Aboriginal

control over Aboriginal education, and to facilitate instruction in Aboriginal cultures and languages". The Commission further stated that "[t]hese educational measures will offer a realistic prospect of reconciliation on the basis of equality and respect" (Truth and Reconciliation Commission of Canada, 2015[44]).

Growing populations

Aotearoa New Zealand

Māori are the only Indigenous peoples in Aotearoa New Zealand, although there are also three island groups with Indigenous populations in the Realm of Aotearoa New Zealand: Tokelau (non-self-governing dependent territory), Niue and Cook Islands (self-governing associated states). Their self-governing status means that they are not included in discussions of the Aotearoa New Zealand Indigenous population.

In the 2018 Census, the percentage of the population who self-identified as Māori was 16.5% (Statistics New Zealand, 2020_[45]). The Māori population has a younger age structure than the non-Māori population, with a median age in 2015 for Māori of 24, compared to 40 for non-Māori (Statistics New Zealand, 2018_[46]). Most Māori live in the northern regions of the North Island of Aotearoa New Zealand. In 2015, the greatest number was in Auckland (142 767), followed by Waikato (83 742). A significant Māori population is also spread across Australia with the largest number in Queensland (53 634) (Te Puni Kokiri, 2017[47]).

Australia

The estimated resident Aboriginal and Torres Strait Islander population of Australia as at the 2016 Census was 798 400 people, or 3.3% of the total Australian population. This population estimate represents a 19% increase from the estimate of 669 900 at 30 June 2011. In 2016, the largest populations of Aboriginal and Torres Strait Islander Australians lived in New South Wales (265 700 people) and Queensland (221 400 people). The smallest population lived in the Australian Capital Territory (7 500 people). Western Australia had an estimated population of 100 512 and Northern Territory had 74 546. Significantly, Aboriginal and Torres Strait Islander Australians comprised 30% of the population of the Northern Territory, the highest proportion of any state or territory (Australian Bureau of Statistics, $2018_{[48]}$).

Aboriginal and Torres Strait Islanders are spread across urban, regional and remote Australia. Most (81%) were living in non-remote areas at the time of the 2016 Census. The more remote the area, the greater the proportion of Aboriginal and Torres Strait Islander persons.

The Aboriginal and Torres Strait Islander population at 30 June 2016 had a younger age structure than the non-Indigenous population, with larger proportions of young people and smaller proportions of older people, reflecting higher fertility rates as well as higher mortality rates than the non-Indigenous population. The median age of the Aboriginal and Torres Strait Islander population at 30 June 2016 was 23.0 years, compared to 37.8 years for the non-Indigenous population (Australian Bureau of Statistics, 2018_[48]).

Aboriginal and Torres Strait Islander children account for 44% of all children in remote areas in Australia, despite making up less than 6% of all children in Australia and are 12 times as likely as non-Indigenous children to live in remote areas (SNAICC, 2020[40]).

Canada

The Canadian Constitution recognises three groups of Indigenous peoples: First Nation or North American Indians, Métis and Inuit. Indigenous Canadians represent 4.9% of the total Canadian population (Statistics Canada, 2016_[49]).

Indigenous people live across Canada's 13 jurisdictions – 10 Provinces and 3 Territories. During 2006-2011, they were among the fastest growing population segments in Canada, growing at nearly four times the pace of the non-Indigenous population (increase of 20.1% compared to 5.2%). By 2016, the Indigenous population in Canada had seen 43% growth over ten years: 1 673 780 compared with 1 169 435 in 2006. The highest rate of growth was among Métis people (51.2%), followed by First Nations (39.3%) and Inuit (29.1%) people. While some of this growth was due to an increase in the number of people newly reporting their identity as Indigenous in the Census, higher fertility rates also contributed to this growth (Halseth and Greenwood, $2019_{[50]}$).

Indigenous peoples are also the youngest growing segment of Canada's population. According to the 2016 Census, children under 5 years of age comprised a larger proportion of the Indigenous population than the non-Indigenous population. While children under age 5 comprised 5.3% of the total non-Indigenous population, they comprised 9.5% of the First Nations population, 7.2% of the Métis population, and 11.3% of the Inuit population (Halseth and Greenwood, 2019_[50]).

Fragile languages

Across the world many young children speak with their families in languages other than the dominant national language(s) typically used in formal education contexts. Multilingualism is the norm in many countries and Indigenous communities alike.

Young Indigenous children in Aotearoa New Zealand, Australia and Canada may speak:

- traditional Indigenous languages are the original languages that have been spoken since before European colonisation, where inter-generational transmission of the languages has been maintained and children continue to learn and speak the languages;
- new Indigenous languages are languages that have been formed since colonisation by language
 contact between speakers of an Indigenous language and other language, such as English and
 French. These contact languages include various creoles and mixed languages. New Indigenous
 languages may be spoken almost exclusively by some Indigenous peoples, for instance in some
 parts of northern Australia. These languages have influences from a number of different
 language sources.
- an Indigenised variety of English, with features that make them sound different from the more standard varieties but are largely mutually comprehensible. Child speakers of an Indigenised variety of English may be misconstrued as not being able to speak (the standard language) properly.
- a standard variety of the national language, such as English and/or French.

The home languages for Indigenous children may be any of these language types, learned from birth, used as the main everyday form of communication within families and communities. It instances where inter-generational transmission of traditional or new Indigenous languages has been broken, Indigenous peoples may be learning or reviving a traditional language.

Indigenous children's language situations are highly diverse across Aotearoa New Zealand, Australia and Canada. Children's learning is best supported when they are able to maintain and build on their home language. Other languages can be supportively introduced through age-appropriate second language practices suited to the child's proficiency level.

Source: (Angelo et al., 2019_[51]), Well-being & Indigenous Language Ecologies (WILE): A strengths-based approach. Literature Review for the National Indigenous Languages Report, Pillar 2, https://openresearch-repository.anu.edu.au/handle/1885/186414 (accessed on 20 July 2021).

Aotearoa New Zealand

Aotearoa New Zealand is home to *te reo Māori*, "the Māori language". Historically, *te reo Māori* was spoken by Māori throughout Aotearoa New Zealand, although with some recognisable differences associated with different regions and/or *iwi* "tribes" (Keegan, 2017_[52]). Inseparable from the language are the *tikanga*, the belief systems and cultural practices that underpin enactment of "being Māori." (Rau and Ritchie, 2011_[30]). A major indicator of Māori well-being is the ability to use the Māori language (Durie, 2006_[53]).

From the 1960s, Aotearoa New Zealand policy focused on revitalising *tikanga* (culture/customs) Māori and *te reo* (language). As part of a 1970s Māori renaissance, and in response to a survey (Benton, 1979_[54]), which showed the decline of the language, Kōhanga Reo (language nests) were established by communities on their *marae* (tribal meeting grounds), so that the Elders could pass on Māori language and culture to their grandchildren. Education, culture and language are intertwined.

Māori leader Sir James Henare articulates the importance of the revitalisation of the Māori language for Māori people:

The language is the core of our Maori culture and mana. Ko te reo te mauri o te mana Maori (The language is the life force of the mana Maori). If the language dies, as some predict, what do we have left to us? Then, I ask our own people who are we? (Waitangi Tribunal, $1986_{[31]}$).

Te reo Māori was made an official language of Aotearoa New Zealand in 1987 alongside New Zealand Sign Language. Although English is the most widely spoken language it does not have status in law as an "official language".

According to the 2013 Census, people who identified as Māori comprised 84.5% of those who described themselves as conversationally proficient speakers of *te reo Māori*. And 148 400 people (or 3.7% of the total Aotearoa New Zealand population) reported that they were able to hold a conversation in Māori. Proficient speakers of *te reo Māori* are not distributed evenly throughout Aotearoa New Zealand, but are more concentrated in areas of the North island.

Hana O'Regan has been an advocate of language revitalisation, particularly of the Ngāi Tahu dialect of Māori in the South Island. She says knowing her dialect has made her feel more connected to her *iwi* (tribe): "It's been important for me to try and establish a *tūrakawaewae* [place with rights to stand] within our community within our *whenua* (land)." She says her daughter is now the first native speaker of *Ngāi Tahu reo* (language) in her *whānau* (family) and uses it effortlessly (Radio New Zealand, 2018_[55]).

Māori early childhood researcher Cheryl Rau, with Jenny Ritchie states:

A Māori worldview recognises the central importance of te reo (the Māori language) as the source and mechanism for reflecting and transmitting tikanga [right way of doing things]. Valued and gifted from one generation to the next, te reo imprints Te Ao Māori [the Māori World] philosophy, weaving values and beliefs through metaphors, proverbs, and traditional stories (whakatauki, whakatauākī, pūrākau, pakiwaitara, and kōrero). Te reo is therefore critical to shaping Māori ways of knowing, doing, and being in articulations that are tika (right) [...] Māori, as a metaphoric people, view te reo as he taonga tuku iho nō ngā tūpuna – the language is considered to be a treasure handed down from the Elders to the mokopuna (grandchildren) (Rau and Ritchie, 2011_[30]).

In 2016 the Māori Language Act established *Te Mātāwai* as a representative of *iwi* and Māori for the revitalisation of the language, with a partnership between *iwi* and Māori and the Crown represented by two *Maihi* (barge boards) framing a traditional Māori house. The Maihi Māori language strategy 2017-2040 focuses on language revitalisation within communities and families, and the *Maihi Karauna* 2018-2023 is the Crown's strategy for revitalisation and use in wider society. This includes increasing the number of children learning in *te reo Māori* (Te Puni Kōkiri, 2019_[56])

Australia

There is diversity among Aboriginal and Torres Strait Islander peoples in Australia, with varying cultures, customs, and languages. Many Indigenous communities in remote Australia are multilingual. Traditional languages are those that were spoken prior to European colonisation and which continue to be spoken by children today. Of the at least 250 distinct languages spoken at colonisation, under 20 are still spoken today by children as their mother tongue. Of these the main Traditional Languages include the Western Desert dialect chain (from areas of Western Australia and into the Northern Territory and South Australia, including Pitjantjatjara, Ngaanyatjarra and Pintupi), the Arandic languages, Warlpiri, Murrinh Patha, Tiwi

and some Yolngu languages from Arnhem Land, as well as some Bininj Gunwok, Burarra, and Anindilyakwa.

In addition, there are the "New languages", "Contact languages", or Kriols (systematic mixes or blends of a Traditional Language with elements from a creole or English that have formed since colonisation). The two large creoles are Kriol and Yumplatok spoken in northern Australia and Torres Strait Island. Commonly in Australia, the term "Indigenous languages" does not differentiate between the Traditional Languages and the New Languages. In the parts of Australia that were first settled, movements have also arisen for reawakening Traditional Languages that for many decades have not been spoken as first languages.

In 2005, the 145 Indigenous languages still spoken in Australia, 110 were considered critically endangered (Australian Institute of Aboriginal and Torres Strait Islander Studies; Federation of Aboriginal and Torres Strait Islander Languages, 2005_[57]).

In the 2016 Census, 64 762 Aboriginal and Torres Strait Islander people responded that they speak an Indigenous Australian language, although it cannot be determined exactly how many speak Traditional or New languages. Of these, fewer than 40 000 self-reported as speaking a Traditional Language at home, at the same time almost 15 000 people reported that they speak a New Indigenous Language at home (Angelo et al., 2019_[51]).

People living in Very Remote Australia were much less likely to speak English as their main language at home than people living in major cities (32% compared to 94%) and much more likely to speak an Australian Indigenous language at home (58% compared to 1%) (Australian Bureau of Statistics, 2018_[48]).

Canada

From a cultural perspective, Indigenous people in Canada comprise over 50 distinct and diverse groups, each with its own distinct language and traditional land base (Ball, 2014_[58]). Canada is a bilingual country with English and French as the two official languages, but jurisdictions may give official status to Indigenous languages. The Yukon Territory, for example, has its own Official Languages Policy that recognises eight Indigenous languages in addition to French and English. As result, all public schools have Indigenous language programming, from kindergarten upwards. All students – Indigenous and non-Indigenous – take the Indigenous language class in kindergarten. These classes help First Nations children's transition to public schooling (Meek, 2018_[59]).

Of the 329 languages that we know were spoken at the time of contact on the North American continent, fewer than 50 continue to be acquired as a mother tongue by children (Goddard, $1996_{[60]}$). The largest languages are Atikamekw (Cree/Algonquian), Innu/Montagnais (Cree/Algonquian), and Inuktitut (Inuit language family), Athapaskan and Ojibway (Statistics Canada, $2016_{[49]}$). For the most part, North American languages are no longer transmitted to children or used as the everyday language of communication. There are exceptions, for example Dene Suline (formerly known as Chipewyan) an Athapaskan language is still spoken in Saskatchewan, the Northwest Territories, Manitoba and Alberta.

Box 2. Dene Suline transitional immersion programme, Saskatchewan, Canada

Dene Suline, a language spoken in north-western Saskatchewan, is maintained as the mother tongue with young children. Children are monolingual when entering the school system. Clearwater River Dene School introduced a Dene Suline transitional immersion programme in 2007. In Clearwater River children older than three are accepted in the Head Start class, children in the nursery class are at least 4 years old and in kindergarten at 5 years old. All subjects in the Aboriginal Head Start and nursery classes are taught in the Dene language, then in pre-school, kindergarten and grades 1 and 2 the children transition into English with half the subjects still taught in the Dene language. Furthermore, all teachers and professional staff members in the K-3 classes are fully bilingual, mother tongue speakers of Dene, fluent in English and literate in both languages.

The children are expected to be bilingual and academic success is expected. Provincial testing was implemented in 2007, when students had been taught in English only until that time. The second test was administered 4 years later in 2011, and the students who participated were the first to come out of the Dene Suline immersion programme. There was significant improvement between 2007 and 2011:

2007: 0% of students scored at adequate level in reading (grade 4); and 5% of students scored at adequate level in mathematics (grade 5).

2011: 47% of students scored at adequate or proficient level in reading [in English] in all areas tested (grade 4); and students scored at or above their provincial counterparts in all areas of the mathematics test (grade 5).

This success was attributed to the introduction of mother tongue education combined with a transitional bilingual programme.

Further positive and important outcomes included:

- Students more confident and student effort had improved
- Opportunities to celebrate Dene culture had increased
- Parent/guardian support for language programmes.

Challenges included:

- Expanding the programme into higher grades and finding sufficient number of adequately trained staff
- Providing sufficient written language resources
- Diversity of orthographic representations of written language
- Diversity of Dene Suline dialects and varieties
- Questions regarding necessity for literacy in Dene Suline.

Source: (Jung M. Klein and S. Stoll, 2018_[41]), "Language transition(s): School responses to recent changes in language choice in a Northern Dene Community (Canada)", *Language Practices of Indigenous Children and Youth: The transition from home to school*, https://doi.org/10.1057/978-1-137-60120-9 3.

In 2016, in the Canadian Census of Population, 260 550 Indigenous people (15.6% of the total Indigenous population) reported being able to conduct a conversation in an Indigenous language. While the percentage of the Indigenous population with conversation-level skills declined between 2006 (21.4%) and 2016, the proportion of the Indigenous population who reported being able to speak an Indigenous language

increased by 3.1%, exceeding the number who reported an Aboriginal language as the first language learned at home in childhood and still understood. The trend is important for language revitalisation as it suggests that many people, especially young people, are learning Indigenous languages as second languages (Statistics Canada, 2016_[49]).

Indigenous language speakers are dispersed over Quebec (19.3%), Manitoba (15.5%), Saskatchewan (14.5%), Alberta (13.8%), and Ontario (12.7%). Knowledge of Indigenous languages and participation in traditional activities varies widely across First Nations, Inuit and Métis children. More than half (65.2%) of Inuit children aged 0-14 could conduct a conversation in an Indigenous language, compared to 15.8% of First Nations children and 1% of Métis children in this age range (Statistics Canada, 2016_[49]). Jeremy Dutcher, member of the Tobique First Nation and award-winning musician talking about his mother, stated that until she was 6 years old the only language she spoke was Wolastoqey and when she went into day schools [then] she carried a lot of shame around her language:

When she was growing up, everybody in our community spoke the language, now there are less than 100 fluent speakers left. [...] We need to start recognising that when we're losing language, we're not losing words. We're losing entire worldviews and ways of seeing the world and ones that are so connected to this particular place, wherever this place happens to be. What's in those languages is medicine, and it's what's actually going to help us move forward (Statistics Canada, $2016_{[49]}$).

In summary

From the 1950s a growing Indigenous rights movement in these three nations began to influence Indigenous policy, and in turn education. This has led to a convergence of Indigenous policy and early childhood policy and we now see a recognition of the importance of early years learning and well-being for life outcomes for Indigenous children in all three countries, as outlined in the following section.

International and national policy frameworks emphasise Indigenous children's development

In this section we begin by detailing international policy frameworks that are designed to achieve population-level improvements in health, education and human capability. We then provide an overview of the regulatory and policy contexts for Indigenous children's early development in Aotearoa New Zealand, Australia and Canada. We also comment on the data gathering processes that provide the evidence base for policy development and implementation.

International instruments recognise children's rights

Governments around the world are seeking better ways to meet the needs of children in order to bring about population-level improvements in health, education and human capability. Globally there has been an emerging consensus among education leaders, practitioners and researchers that the greatest gains in overcoming disadvantage are likely to be achieved through interventions that give children a better start in life. Key international instruments include the Convention on the Rights of the Child (United Nations, 1989_[61]), the Declaration on the Rights of Indigenous Peoples (United Nations, 2007_[43]) and the Sustainable Development Goals (United Nations, 2015_[62]).

The Convention on the Rights of the Child states that all children have the right to an education that lays a foundation for the rest of their lives, maximises their ability, and respects their family, cultural and other identities and languages. The Convention also recognises children's right to play and be active participants in all matters affecting their lives (United Nations, 1989_[61]).

Sustainable Development Goal 4 focuses on education to: "Ensure inclusive and quality education for all and promote lifelong learning opportunities". Early childhood development is crucial to achieving the Sustainable Development Goals. Target 4.2 states that, by 2030, all children should "have access to quality early childhood development, care and pre-primary education". Target 4.5 focuses on "equal access to all levels of education" and explicitly refers to Indigenous peoples (United Nations, 2015_[62]).

Aotearoa New Zealand, Australia and Canada are signatories to the Declaration on the Rights of Indigenous Peoples. The Declaration requires the development of Indigenous capacities in the free pursuit of self-determination (Article 3) and of Indigenous autonomy and self-government (Article 4). Article 14.1 provides rights for Indigenous peoples "to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning" and, in Article 15.1, "to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information" (United Nations, 2007_[43]).

Responsibility for Indigenous children's early learning outcomes is not always clear

Aotearoa New Zealand has an integrated early childhood education and care (ECEC) system under one lead Ministry with an aim to provide holistic child development. Since the 1990s, Aotearoa New Zealand has put great effort into national curricula for ECEC. This has provided government support and infrastructure, while also giving ECEC higher priority.

Education policy for Māori in Aotearoa New Zealand is organised centrally or in conjunction with relevant *iwi* (tribes).

In contrast, responsibility for Aboriginal and Torres Strait Islander children's early development sits with the Federal Government, as well as with state or territory governments. Federal funding to reduce social inequality includes a focus on lifting the pre-school participation rates of Indigenous children, a significant proportion of whom live in regional and remote areas.

States and territories have responsibility for the provision of pre-school or kindergarten in their own jurisdiction. The Federal Government's funding contribution through the National Partnership on Universal Access to Early Childhood Education (also known as the Universal Access National Partnership or UANP) supports states and territories to increase participation rates in pre-school and ensure national consistency in the number of hours available.

Early childhood education and care in Canada reflects its composition as a federation and its history and social values about the roles and responsibilities of families and governments with respect to children. Canadian early childhood education and care programmes generally fall under provincial/territorial jurisdiction.

Responsibility for social programmes for Indigenous communities on-reserve lies with the Government of Canada, while social programmes for Indigenous people living off-reserve may be either a federal or a provincial responsibility.

The allocation of federal funding for early years provision, as designated by the Multilateral Early Learning and Childcare Framework and the jurisdictional Bilateral Agreements requires each province and territory to design its own "Action Plan" in relation to its particular challenges and goals. As Pasolli (2019_[63]) points out, this creates a situation where approaches and implementation of plans will and do vary significantly across Canada. This extends to Indigenous early learning programmes.

Objectives for change

In Aotearoa New Zealand, the Government aimed for 98% of children starting primary school to have participated in quality early childhood education. This target was discontinued in 2018 in favour of a focus on quality improvements in the *He Taonga te Tamaiti - Every Child a Taonga: Early Learning Action Plan 2019-2029* (Ministry of Education, 2019_[64]).

In Australia, the National Indigenous Reform Agreement (*Closing the Gap*) initiative in 2008 introduced an ambitious long-term framework that committed the federal, states and territory governments to new investments to "close the gap" in Indigenous outcomes. Indigenous early childhood development is one of the strategic platforms in the *Closing the Gap* initiative. This includes a target to achieve the enrolment of 95% of all Indigenous four-year-olds in early childhood education by 2025 (SNAICC; ECA, 2019_[65]).

As recently reflected on by the Secretariat of National Aboriginal and Islander Child Care and Early Childhood Australia:

... some of these commitments are 10 years old, and with a "refresh" currently underway, it is time to reflect on current strategies with renewed energy and focus, to ensure that talk

leads to outcomes and that equality is achieved for Australia's First Peoples. Improving outcomes in the early years is foundational for this to happen (SNAICC; ECA, 2019_[65]).

Early learning frameworks

Aotearoa New Zealand

In Aotearoa New Zealand, the national early childhood education curriculum is expressed through *Te Whāriki a te Kōhanga Reo* and *Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa*. The principles and strands of *Te Whāriki* provide a framework for defining two distinct curriculum pathways – one bicultural and one Indigenous – each with its own pedagogy. *Te Whāriki* recognises Māori as *tangata whenua* and assumes a shared obligation for protecting Māori language and culture, and for enabling Māori to enjoy educational success as Māori. *Te Whāriki* is firmly integrated into Māori values and all early learning services are expected to include *te reo* and *tikanga* Māori in the curriculum. *Te Whāriki a te Kōhanga Reo* was created by and for use within *kōhanga reo*.

Te Whāriki provides a framework for continuous child development through the use of one national framework for early childhood education; putting the community at the centre of the curriculum; strongly focusing on well-being and learning; ensuring age-appropriate content; emphasising the importance of tolerance and respect for cultural values and diversity. The early childhood and primary school curricula are aligned around this framework (Taguma, Litjens and Makowiecki, 2012_[66]).

The curriculum framework *Te Whāriki* promotes the inclusion of Māori children's language and culture, not only for Māori but for all children.

Its philosophy of teaching recognises both the socially constructed nature of knowledge and the co-constructive process of ako (teaching/learning). Young children are viewed as potentially competently proactive in applying learning dispositions of inquiry and collaboration with the support of the people and cultural tools that are available to them. Instead of seeing their role as one of transmitting to children a predetermined package of knowledge and skills, educators apply the Te Whāriki principles (of whakamana [empowerment], kotahitanga [holistic development], whanau tangata [family and community] and nga hononga [relationships]), which serve as a philosophical framework from which to "weave" a centre curriculum. This approach is grounded in the recognition of the centrality of relationships and culture as the primary milieu for children's interests and dispositions for learning, requiring educators to enact a disposition of respect for children and their families. In intercultural settings, co-constructed learning should value the meanings and practices of all cultures present, including those of the Tiriti o Waitangi partners, Maori and Pakeha (Ritchie, 2010_[67]).

Te Whāriki is the curriculum for early childhood care and education in Aotearoa New Zealand. As with all major policy documents in Aotearoa New Zealand, it has a Māori name in recognition of the place of Māori as the Indigenous people of the country. The early childhood curriculum has been envisaged as a *whāriki*, or mat, woven from the principles, strands and goals defined in the document. The *whāriki* concept represents the weaving together of a curriculum by teachers, children and community, and is also a metaphor for the dimensions of the child's development (Ministry of Education, 2017_[68]).

Te Whāriki is framed in bicultural terms, offering not only authentically "multicultural" dimensions, but also a variety of types of childcare and early education to meet the family circumstances of its users, including home-based services and "language nests" ($K\bar{o}hanga\ Reo$) for immersion in Māori language (Carr and Rameka, $2010_{[69]}$).

Te Whāriki was highly innovative when it was launched in 1996, as it was established on Māori terms and perspectives, and has been internationally acclaimed and acknowledged (Olsen and Andreassen, 2017_[70]). Innovative curricula such as *Te Whāriki* build on the values of families and communities, and support children's transition from home to schooled knowledge (Taguma, Litjens and Makowiecki, 2012_[66]). Te Whāriki is a bicultural approach to early childhood education that includes Māori immersion curriculum as a "distinctive context" that "protects Māori language and *tikanga* (cultural practices), Māori pedagogy, and the transmitting of Māori knowledge, skills and attitudes through using Māori language" (Ministry of Education, 2017_[68]).

The curriculum is founded on clear aspirations for children: that children grow up as competent and confident learners and communicators, healthy in mind, body and spirit, secure in their sense of belonging and in the knowledge that they make a valued contribution to society. These aspirations are evident in the curriculum content, through the five strands of the curriculum which have dual Māori and English names, which "while closely related, different cultural connotations mean the two are not equivalents": well-being/mana ātua, belonging/mana whenua, contribution/mana tangata, communication/mana reo, and exploration/mana (Ministry of Education, 2017_[68]).

Australia

In recent years Australia has embarked on reforms to enhance the quality of early childhood education and care services. *Belonging, Being and Becoming: The Early Years Learning Framework for Australia* (EYLF) has a strong focus on Indigenous children. Moreover the EYLF was developed to be inclusive of Australia's Indigenous people, and acknowledges Australia as a diverse multicultural society.

The EYLF takes a child-focused and holistic approach to children's development and learning recognising their physical, personal, social, emotional and spiritual well-being by giving attention through specific learning outcomes to children developing a strong sense of identity. Respect for cultural diversity is also a major EYLF principle and educators are expected to be culturally competent, that is they need to "respect multiple cultural ways of knowing, seeing and living, celebrate the benefits of diversity and have an ability to understand and honour differences" (Australian Government Department of Education, 2009_[71]).

Several jurisdictions have developed frameworks to more closely reflect local conditions and priorities. For example, the *Marrung Aboriginal Education Plan* 2016-2026 in Victoria, seeks to provide Koorie children with early learning experiences that set them up for life. The Plan was developed in conjunction with the Victorian Aboriginal Education Association and through a state-wide network of 30 Local Aboriginal Education Consultative Groups. The Plan includes targets for Aboriginal children's participation in ECEC as well as a set of initiatives to better support Koorie families as their children's

30 | EDU/WKP(2021)8

first educators and to increase Aboriginal families' access to culturally responsive, high quality services (Department of Education and Training Victoria, 2016_[72]).

Canada

With the release of the national *Multilateral Early Learning and Child Care Framework* in 2017, the Canadian Federal Government proposed the development of the parallel *Indigenous Early Learning and Child Care Framework* (Government of Canada, 2018_[73]). This is a means to provide federal funding to provinces and territories to increase child care services and improve data on ECEC provision. The Framework also responds to the Truth and Reconciliation Commission of Canada's Call to Action #12 to develop culturally-appropriate early childhood education programmes for Indigenous families.

The Indigenous Early Learning and Child Care Framework sets out a shared vision, principles and a path forward for Indigenous early learning and child care – a Canada where all Indigenous children have the opportunity to experience high quality, culturally rooted early learning and child care programming (Government of Canada, 2018_[73]). The framework was co-developed with Indigenous partners following a comprehensive national engagement process during 2017. Through this process, thousands of Indigenous people provided their vision of early learning and child care for their children, families, communities and cultures. (See Box 4, below).

The Early Learning Framework in British Columbia (2019_[74]) was revised through a collaborative process that included Elders, early childhood educators, primary teachers, Indigenous organisations, academics and other professionals. The revised Framework:

Strives to contribute to lasting reconciliation with Indigenous people, which is anchored by the province's cross-government commitment to fully adopt and implement the United Nations Declaration on the Rights of Indigenous People and the Calls to Action of the Truth and Reconciliation Commission. Recognising and acknowledging how Euro-Western practices are embedded in mainstream educational pedagogy, this framework's intention is to contribute to reconciliation through implicitly and explicitly honouring Indigenous authorities in education (British Columbia Ministry of Education, 2019_[74]).

- In 2017, First Nations conducted a comprehensive engagement across the country at the
 direction of AFN Resolution 39/2016, First Nations National Working Group on Early Learning
 And Child Care (ELCC). The recommendations that emerged from this engagement process
 informed the First Nations ELCC framework, developed by the National Expert Working Group
 on First Nations ELCC.
- The First Nations framework was endorsed by the AFN Chiefs-in-Assembly through AFN Resolution 83/2017, Support for the National First Nations Early Learning and Child Care Policy Framework, and was submitted to the Government to support the national Indigenous ELCC Framework. Canada and the AFN worked together to co-develop a new National Indigenous ELCC Framework, which includes the First Nations framework.
- The National Indigenous ELCC Framework was released jointly by the Government of Canada and First Nations, Inuit and Metis Nation leadership in September 2018. The Framework creates an historic opportunity to establish a comprehensive, coordinated, regional First Nationsdeveloped and -led ELCC system that is responsive to First Nations, their communities and families.

Source: (Assembly of First Nations and Employment and Social Development Canada, 2018_[75]); *Indigenous Early Learning and Child Care (ELCC) Framework*,

https://www.afn.ca/uploads/sca-2018/Documents/Dialogue%20Sessions/Day%202%20-

%20December%205%2C%202018/04%20Early%20Learning%20%26%20Child%20Care/03%29%20ELCC%20Background%20and%20Messages%20final.pdf (accessed on 21 July 2021).

The Framework incorporates the First Peoples Principles of Learning (see Box 5) that were developed through a partnership between the First Nations Education Steering Committee and the British Columbia Ministry of Education. The Framework emphasises the value for all children when Indigenous content and worldviews are shared in early learning settings in a meaningful and authentic way.

Box 5. First Peoples Principles of Learning

- First peoples learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.
- Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).
- Learning involves recognising the consequences of one's actions.
- Learning involves generational roles and responsibilities.
- Learning recognises the role of indigenous knowledge.
- Learning is embedded in memory, history, and story.
- Learning involves patience and time.
- Learning requires exploration of one's identity.

• Learning involves recognising that some knowledge is sacred and only shared with permission and/or in certain situations.

Source: Adapted from The First Nations Education Steering Committee (FNESC), *First People's Principles of Learning*, http://www.fnesc.ca/wp/wp-content/uploads/2020/09/FNESC-Learning-First-Peoples-poster-11x17-hi-res-v2.pdf (accessed on 20 July 2021).

Building high quality provision and support

The Teaching Council of Aotearoa New Zealand sets standards for all registered early childhood, primary and secondary school teachers (Education Council New Zealand, 2017_[76]). The first of the five standards is a recognition of the partnerships between Māori and non-Māori reflected in *Te Tiriti o Waitangi* (Treaty of Waitangi), which requires that teachers;

- understand and recognise the unique status of tangata whenua (Indigenous people) in Aotearoa New Zealand
- understand and acknowledge the histories, heritages, languages of partners to Te Tiriti o Waitangi (the Treaty of Waitangi)
- practise and develop the use of te reo and tikanga Māori (Māori language and cultural practices).

In addition, the Education Review Office in Aotearoa New Zealand has published revised indicators of quality for early childhood education. *Te Ara Poutama* includes outcome and process indicators (Education Review Office, 2020_[77]). The five outcome indicators are based on the early childhood curriculum *Te Whāriki*: well-being/mana ātua, belonging/mana whenua, contribution/mana tangata, communication/mana reo, and exploration/mana aotūroa. The process indicators describe the conditions (practices, systems and processes) that contribute to the provision of high-quality education in five domains:

- He Whāriki Motuhake: the learner and their learning
- Whakangungu Ngaio: Collaborative professional learning and development builds knowledge and capability
- Ngā aronga whai hua: Evaluation for improvement
- *Kaihautū*: Leadership fosters collaboration and improvement
- Te Whakaruruhau: Stewardship through effective governance and management.

The National Quality Framework (NQF) in Australia aims to bring all states and territories into alignment and ensure high-quality care for children throughout Australia, regardless of location, cultural diversity or the type of service available to families.

The NQF introduced a new quality rating system to ensure Australian families have access to transparent information relating to the quality of early childhood education and care services. The National Quality Standard is a key aspect of the NQF. It sets a national benchmark for the quality of education and care services, based on seven key quality areas that are important to outcomes for children: Educational programme and practice; children's health and safety; physical environment; staffing arrangements; relationships with children; collaborative partnerships with families and communities; and leadership and service management (Warren, 2016_[78]).

Evidence to improve and track progress

Aotearoa New Zealand

The *Growing Up in New Zealand* study tracks the lives of a sample of Aotearoa New Zealand's young people, following them from before birth until they are young adults. A key strength of this longitudinal study is the diversity of children being followed, as well as the families, households and neighbourhoods in which the children/young people are growing up, recognising that children develop in dynamic interactions with their families, communities, environments and societal contexts over time. The study indicates that, of the 6 156 children who completed the *Growing Up in New Zealand* data collection wave at age 4 years, one in four cohort children is identified as Māori by their mother, one in five as Pacific and one in six as Asian and more than half the children are reported as identifying with more than one ethnicity (Morton et al., 2017_[79]).

The study provides insights on early risk factors for children, such as maternal well-being, housing conditions, and access to health and early childhood education services. Māori children were found to have a greater number of risk factors than European children, but fewer risk factors than children from Pacific families.

A series of evaluations of the implementation of *Te Whāriki* were carried out by the Education Review Office between 2017 and 2019. The 2019 review (Education Review Office, 2019_[80]) found that around half of the services had taken some steps to engage with *Te Whāriki*, and around half the services struggled to design a local curriculum. While leaders and teachers in most services had positive relationships with parents and families, the review found that these were not always learning-focused partnerships. The review recommended that the Ministry of Education provide more resources, guidance and exemplars for services to develop local curricula and support the success of Māori children (Education Review Office, 2018_[81]).

In her review of *mātauranga* and *tikanga whakaako* (Māori pedagogy), Māori researcher Lesley Rameka noted:

It is clear from the research that the majority of Kaiako [teachers] do not have a good understanding of the tamaiti [child] as Māori, and despite the best intentions they do not have the skills and knowledge to support tamariki [children] to succeed as Māori. Lacking the appropriate cultural references they find it hard to connect to Māori values, understandings, and – in their true sense – concepts such as mana, mana atua, mana whenua, mana tangata, mana reo and mana aotūroa. As a consequence, services tend to offer a cultural veneer, overlay, or nice-to-have gloss, rather than embed te ao Māori [the Māori world] in all their teaching and learning (Rameka, 2018_[82]).

Australia

In Australia, the national population-level assessment of young children's development in their first year of school, the Australian Early Development Census (AEDC), has provided a wealth of data on child outcomes showing many Indigenous children to be "developmentally vulnerable", particularly those experiencing multiple risk factors (Guthridge et al., 2016_[83]). However, some critics point to limitations in the Census data and call for a more strengths-based approach to determining children's early learning outcomes.

Every three years teachers use the Census checklist to measure five key areas or domains when a child starts full-time school; physical health and well-being; social competence; emotional maturity; language

34 | EDU/WKP(2021)8

and cognitive skills (school-based); and communication skills and general knowledge (Australian Early Development Census, 2014_[84]).

The extent to which the Census provides an accurate reflection of the developmental progress of Aboriginal and Torres Strait Islander children, free from bias or discrimination, has been broadly questioned (SNAICC; ECA, 2019_[65]). Taylor (2011_[85]) recommends caution in the interpretation of this data, suggesting that the Census does not take cultural factors into account, relies on the child being proficient in standard Australian English and that the assessment is drawn from usually non-Indigenous teachers' reflections on children's development.

A parallel Indigenous-specific study to the Australian Early Development Census, *Footprints in Time, The Longitudinal Study of Indigenous Children* (LISC) was developed, focusing more on profiling Indigenous children within their families and education settings than mapping their vulnerabilities. The *Footprints in Time* data have been collected annually since 2008 from two birth cohorts of Indigenous children (1 759 children in total) and their parents and teachers. The LSIC survey collects a comprehensive range of information on the child's family, home learning environment and the child's development trajectory (Australian Government Department of Social Services, 2016_[86]).

Canada

In Canada, the Early Development Instrument (EDI) measures child development outcomes. In addition, the Aboriginal Children's Survey is a national measure of child development incorporating data on developmental milestones for Inuit, Métis and off-reserve First Nation children under 6 years of age, based on developmental domains inclusive of education and health factors.

Around half of the parents and guardians responding to the survey expressed satisfaction with their communities' schools and early childhood education programmes and with the adequacy of children's facilities. However, most of the learning about traditional and cultural values and customs happened in the family, although Inuit children were in child care arrangements that provided more opportunities for learning Inuit customs, values and language than was found for either Métis or First Nations children.

In summary

Aotearoa New Zealand has been, as Pence and Pacini-Ketchabaw (2010_[32]) reflect, "a leader amongst Anglo/Western countries in embracing an agenda of change" evident in the early development of policy and curriculum that takes seriously the educational, linguistic and cultural needs of Māori.

Over recent decades, in recognition of the growing understanding of the importance of children's early development, the national policy focus on early years policies has increased in all three countries. This progress better reflects the clear and strong international framework to progress the rights of children and their ability to realise their potential.

In addition, each country has made clear efforts to recognise and respond to the needs and aspirations of Indigenous children and their families. A critical challenge for early learning systems, however, is in how well jurisdictional frameworks translate to the supports and services Indigenous children and their families actually experience.

Early years provision for Indigenous children is expanding

In this section we describe the types of early years provision in the three countries, including programmes specifically targeting Indigenous children and their families. While provision for Indigenous children is generally expanding in three countries, we outline some of the key constraints on this growth.

Diverse provision

Aotearoa New Zealand

There are two main types of early childhood services provided in Aotearoa New Zealand.

1. Teacher-led services

- kindergartens usually enrol children from 2-5 years of age. These services are owned by community-based associations and are staffed with 100% qualified and registered teachers
- education and care services usually enrol children from birth to 5 years. They are run by private or community-based groups that may have specific approaches e.g. Puna Reo (Māori immersion), Rudolph Steiner or Montessori, and with at least 50% of staff who are qualified and registered teachers
- home-based education and care for children from birth to 5 years of age in the educator's or child's home, with educators belonging to a home-based network that provides support through a qualified and certified coordinator
- *Te Aho o te Kura Pounamu* (the Correspondence School) provides services for children aged 3-5 years of age who are unable to attend other early childhood education services.

2. Whānau (family)-led services

- *Te Kōhanga Reo* are Māori immersion services owned by a community-based trust, with family responsibility and decision-making. These services usually enrol children from birth to school age
- Playcentres are community-owned and co-operatively run by parents and family members, including those in teaching roles. Playcentres enrol children from birth to school age
- Playgroups are regular sessions of no more than four hours per day, often in community halls, with caregivers receiving training and support from the Ministry of Education. Playgroups include Puna Kōhungahunga, focusing on Māori language, culture and custom.

In 2019, 17% of Māori children attended a *Kōhanga Reo*, 14% attended kindergarten and 60% were in other education and care facilities, 6% were in home-based care; and 3% attended play centres (Ministry of Education, 2019_[87]).

Australia

In Australia, pre-school or kindergarten is available to most children from around age 4, with some variation on the starting criteria. The early childhood education and care sector is usually described using two classifications that are associated with the age of the children attending:

- 1. Pre-school services, including kindergarten, which provide play-based learning programmes for children in the one to two years prior to them commencing full-time schooling with a wide range of enrolment age requirements across Australian states and territories
- 2. Childcare services, which provide care to children aged 0-12 within a range of service types, excluding pre-school. Childcare services include long day care, which is the main source of formal early childhood education for children under school age, with about 45% of children at age 2-3 years in long day care, and about 30% of 1-year-olds and 4-year-olds also in long day care (Australian Institute of Family Studies, 2015_[88]).

Pre-school programmes may be delivered in standalone pre-schools, centre-based services or school settings and is primarily funded and delivered by governments through the schooling sector, or subsidised by governments and delivered by non-government agencies that are regulated as part of the child care sector (Australian Institute of Family Studies, 2014_[89]).

Canada

Generally, regulated child care in Canada includes centres, nursery schools, and regulated home (family) child care that are governed under the same legislation within the province or territory. All jurisdictions have public kindergarten for age-eligible children (Friendly et al., 2018_[90]).

Kindergarten for 5-year-olds is Canada's only universal early years programme and the only pre-school programme most children will experience. Although voluntary in all jurisdictions with the exception of Prince Edward Island, Nova Scotia and New Brunswick, 95 percent of eligible children across the country attend. ... In 2016, 40 percent of 4-year-olds attended a no fee, school-provided pre-school program. ECE in schools accounts for much of the increase in ECE participation and builds on the infrastructure that exists in public education (Akbari and McCuaig, 2018[91]).

Some provision specifically targets Indigenous children and their families

Aotearoa New Zealand

In Aotearoa New Zealand language and culture are at the heart of *Kōhanga Reo* the Māori model of early childhood education. *Kōhanga Reo* were established through Māori community efforts and play a key role in the revitalisation of the Māori language. *Kōhanga Reo* philosophies and practices reflect the important role of *whānau* (family) in the growth and development of children. The *Kōhanga Reo* concept was developed to provide the following benefits to children and their families and communities;

- ensure the survival and revival of the Māori language
- affirm the identity, language and culture of learners and their families
- immerse children and their families in the principles of Māori child-rearing practices, through the medium of te reo Māori me ona tikanga (customary practices)
- develop and upskill families (OECD, 2017_[5]).

During their schooling years, children can continue their Māori medium education in *kura* and *wharekura* (primary and secondary Māori medium schooling). The first *kura kaupapa Māori* opened in 1985 and since then, a nationwide network of Māori medium *kura* has developed. As with *Kōhanga Reo* they all began as Māori community initiatives to ensure that Māori language and Māori culture survived.

Australia

Aboriginal Child and Family Centres (CFC) exist throughout Australia and were initially established as part of the National Partnership Agreement on Indigenous Early Childhood Development from 2008 onwards. The Centres increase the provision of ante-natal care, pre-pregnancy and teenage sexual health, and maternal and child health services (Wise, 2013_[38]; Kellard and Paddon, 2016_[92]).

The flexible, inclusive and community-based approach of Child and Family Centres has been successful in facilitating the participation of Indigenous children to access high-quality early childhood education programmes, many for the first time.

As a trusted "one-stop shop" for Aboriginal and Torres Strait Islander families who would otherwise be unlikely to access any other service supports, CFCs have a significant impact in improving the safety, health and well-being of families and communities. CFCs are uniquely placed in their delivery of culturally strong services designed, where a focus on the employment and training of local Aboriginal and Torres Strait Islander staff further facilitates the sustainability and empowerment of local communities (SNAICC, 2018_[93]).

Another major countrywide programme in Australia is Multifunctional Aboriginal Children's Services (MACS), a comprehensive child development service funded by the Federal Government. MACS have as one of their goals the preparation of children for school. Some centres offer long day care plus at least one additional child care service – for example, outside school hours care, playgroups, nutrition programmes and/or parenting programmes based on local need. MACS centres were established to give Indigenous communities an opportunity to design and operate their own child care services. Another rationale for the development of MACS centres was premised on the fact that Indigenous children have a right to conditions that are culturally appropriate and a system that can monitor them as they progress through their education (Department for Communities, 2012_[94]).

Box 6. Home Interaction Programme for Parents and Youngsters (HIPPY), Australia

In 2009, the Australian Government implemented the HIPPY programme for socially disadvantaged communities across Australia (Australian Government Department of Social Services, 2015_[95]). HIPPY aims to support parents in their role as their child's first teacher, so that their child starts school on an equal footing to that of their more advantaged peers (Barnett, Roost and McEachran, 2012_[96]). Half of the government funding provision focuses on Aboriginal and Torres Strait Islander communities (Kellard and Paddon, 2016_[92]).

Parents and carers complete the programme over a two-year period before children attend the first compulsory year of schooling. The programme involves parents and carers delivering learning in their own home, in their own time, progressing through workbooks and activities at their own pace. Service providers felt the in-home delivery of this programme was particularly significant for Indigenous families, who may have issues with trusting the care of their children to anyone other than family members. Additionally, parents have the opportunity to learn the skills to be able to deliver the programme at home by attending regular meetings with other HIPPY parents and Home Tutors. HIPPY parents are encouraged to become home tutors themselves, working in their community with their peers and gaining valuable skills and work experience to enter the labour market on completion of their two-year tenure.

So, while the programme was aimed at child development and readiness for school, it was reported that Indigenous families involved in the programme developed confidence and gained a sense of achievement through becoming embedded in their child's learning and development, and witnessing the tangible and intangible benefits to their child (Kellard and Paddon, 2016_[92]).

While only one evaluation of its initial effectiveness with Aboriginal families has been conducted thus far, the HIPPY programme has been expanded to various Aboriginal communities – urban, rural and remote – throughout Australia. The evaluation noted initial positive outcomes for Aboriginal people across the five evaluation sites in New South Wales, Queensland and the Northern Territory, including improved parenting skills, parents feeling more confident in teaching their children, increased insight regarding school expectations, and children feeling more confident with completing homework (Liddell et al., 2011_[97]).

Support for home literacy in Indigenous Australian communities can be found through the Australian Readers Challenge literacy backpack book supply to remote communities; "Let's Read"; "Books in Homes" and the State Library of Western Australia's "Read to Me I Love it" and Better Beginnings Program for remote Aboriginal communities.

In addition, a number of programmes support the development of early years literacy in local languages. The Indigenous Literacy Foundation has, for example, supported the Ngaanyatjarra Early Years Program with a range of high-quality early childhood books translated into the local language Ngaanyatjarra. Aboriginal language centres and libraries in remote Australia have produced early years literature in local languages for families. In Kununurra, Western Australia, the Mirima Dawang Woorlab-gerring Language and Culture Centre has produced talking books in local languages that are available at the local library.

For many Indigenous families, book-gifting programmes and home learning support are an important contribution to early literacy development, especially when purchasing expensive children's books is prohibitive and library access is difficult (Bat, 2005_[98]).

Box 7. Early Years Centres (EYC), Queensland

In Queensland, Early Years Centres are funded by the Queensland Government's Office for Early Childhood Education and Care (OECEC). The Benevolent Society runs three of the four Early Years Centres, covering nine locations plus mobile outreach. The Centres are staffed through partnerships between The Benevolent Society, Queensland Health, Aboriginal and Torres Strait Islander social service providers, the Creche and Kindergarten Association, and other local service providers.

Each Centre is located in a socio-economically disadvantaged area with high numbers of children who are developmentally vulnerable on one or more domains of the Australian Early Development Census. Their objective is to provide a more integrated early childhood service delivery system and support the health, well-being and safety of families who have young children aged 0-8 years and, in particular, clients who identify themselves as Aboriginal and/or Torres Strait Islanders, culturally and linguistically diverse, children with a disability and other vulnerable families.

In line with the latest research evidence and best practice, the Centres provide a mix of programmes and services, ranging from universal services for everyone through to more targeted specialist supports, including:

- informal, relatively unstructured groups focused on social connection and attachment
- child health and development consultations
- ante- and post-natal support
- health screening, assessments and immunisations
- playgroups and supported playgroups
- parenting information, education and support groups
- family support programmes including home visiting and counselling
- quality early childhood education and care services (including providing and/or facilitating access to kindergarten programmes)
- pathways to education and employment initiatives
- referrals and support to access other programmes and specialist services.

Evaluation findings highlight many ways in which the Centres are successful. In particular, they offer a diverse range of universal and specialist services to address families' needs, and demonstrate best practice characteristics of effective integrated services. Effective partnerships have been established that facilitate seamless service delivery as well as engagement of hard-to-reach families. In addition, the programmes and services the Centres provide appear to match local area needs and are effective in supporting the development of parenting knowledge and practices that have been empirically shown to contribute to improved learning and child development outcomes over the longer term.

The success of Early Years Centres in reaching their intended clients is likely to be due in part to the considerable use of outreach programmes, such as mobile playgroups, to access families who may not traditionally attend centre-based services. Each of the centres has also developed solid partnerships with Aboriginal and Torres Strait Islander community partners (Department of Education, Training and Employment, Queensland, 2013[99]).

Canada

In 1995, the Canadian Federal Government established the First Nations and Inuit Child Care Initiative, which sought to establish community-based childcare programmes for young children on reserve so that parents could pursue work or further education. This was followed the next year by the Aboriginal Head Start Urban and Northern Program (AHSUNP), an early intervention programme aimed at meeting the needs of Indigenous children living in large, urban and northern communities by offering enriched preschool programming. This programme was extended to on-reserve communities in 1998 (Halseth and Greenwood, 2019_[50]).

Box 8. First Nations and Inuit Child Care Initiative

Since the First Nations and Inuit Child Care Initiative was established in 1995, leaders in Inuit Early Childhood Development have outlined a strong vision for high-quality Inuit early childhood programming. This includes the right of Inuit children to access culturally and linguistically appropriate child care that incorporates the values and traditions of their parents and communities. The Inuit Early Childhood Development Strategy, developed by the Inuit Early Childhood Development Working Group envisions Inuit early childhood development as encompassing "Inuit culture, Inuit language and ways". The framework for the Initiative in Inuit Nunangat is built on Inuit sustaining full ownership of early childhood programming grounded "in Inuit knowledge, cultures, languages and involvement of Elders" (Inuit Tapiriit Kanatami, 2014_[100]).

An evaluation undertaken by Inuit Tapirit Kanatami in 2014 highlights the impact that this initiative has had in Inuit Nunangat. The evaluation found that the initiative has been vital to child care programmes across Inuit Nunangat and has positively contributed to families, communities and regional economies. Specifically, the programme funded the construction of childcare centres in every region of Inuit Nunangat, increasing the accessibility of Inuit children and families to childcare centres and creating opportunities for many Inuit parents to participate in the labour force. It has contributed to local economies both directly and indirectly in the form of wages and salaries for employees in the childcare centres, as well as through increasing the proportion of the Inuit population in the work force (Inuit Tapiriit Kanatami, 2014_[100]).

A further example of a First Nations and Inuit Child Care Initiative service is the British Columbia Aboriginal Childcare Society, established in 1996 to administer British Columbia's share of the Initiative. The non-profit organisation works to help First Nations communities in British Columbia develop high quality, integrated, culturally-appropriate community childcare services to promote First Nations children's development.

The Aboriginal Childcare Society undertakes community outreach, education, research and advocacy on behalf of Indigenous children in British Columbia to provide enriching, culturally relevant and high-quality ECD (Early Childhood Development) services, resources, and training workshops in partnership with a variety of stakeholders. They are also the host agency for two urban Aboriginal Head Start preschools in Vancouver, and have developed the Moe the Mouse® speech and language development programme, a resource for Indigenous children, parents and early childhood educators that uses Indigenous toys and stories to enhance language development in children ages 3-5 (Halseth and Greenwood, 2019_[50]).

Aboriginal Head Start (AHS), building on the earlier model from the United States, is the most extensive and culturally based early childhood development initiative for Indigenous pre-school children and

families in Canada, which has led to growth of capacity in First Nations, Métis, and Inuit people to deliver culturally based ECEC in their communities (Ball and Lewis, 2014_[101]; Halseth and Greenwood, 2019_[50]). Importantly, although a national programme, individual communities have been able to tailor the programme to meet local needs.

The Aboriginal Head Start programmes:

- offer culturally-focused early childhood education centred on fostering the spiritual, emotional, intellectual and physical growth of both on- and off-reserve Indigenous children, and supporting parents and guardians as their primary teachers; and
- reflect the population being served by hiring Indigenous staff.

Programmes are designed by communities. Each programme focuses on the needs and desires of individual communities, enabling them to emphasise their own distinct culture, language and identity to empower children and strengthen their pride in themselves and their community. Ensuring the programmes are culturally appropriate and safe, and engaging parents in the education and care of their children helps to overcome any concerns or mistrust Indigenous parents/caregivers may have about education stemming from their history with the residential school system (Halseth and Greenwood, 2019_[50]).

Aboriginal Head Start in Urban and Northern Communities (AHSUNC) promotes Aboriginal language and culture, as does Aboriginal Head Start on Reserves. An evaluation of AHSUNC (2011-2012 to 2015-2016) found that,

Indigenous culture and language is of particular importance for Indigenous children, their families, and the community because it focuses on helping children have a positive view of themselves as Indigenous people, and to have pride in themselves and their culture. Sites integrate Indigenous culture and language widely into their programming, as this is one of the most important and unique features of the program (Health Canada and Public Health Agency of Canada, 2017_[13]).

The *Kōhanga Reo* language nests approach from Aotearoa New Zealand has also been established in British Columbia and the North West Territories. Language Nests operating in the North West Territories provide varying degrees of language immersion opportunities for young children. The levels of immersion within a programme are relative to the availability of early childhood educators who are fluent in their Indigenous language and the availability of language speakers in the community to participate in the programme (Departments of Education, Culture and Employment, and Health and Social Services, North West Territories, 2013_[102]).

Access and participation rates are growing, although gaps remain

Aotearoa, New Zealand

Aotearoa New Zealand has achieved increasing participation rates in early childhood education and care over a number of years (Table 1).

While the number of early learning services has grown significantly, there are still some areas where there is insufficient local provision of the service types valued by parents and *whānau*, including language pathways for Māori and Pacific children (State Services Commission, 2018_[103]).

Table 1. Increased Māori participation in early childhood education and care

Year	Indigenous participation rate %	Total participation rate %	Gap (percentage points)
2000	83.1	90.0	6.9
2004	87.5	93.0	5.5
2008	88.7	93.6	4.9
2012	91.3	94.9	3.6
2016	94.9	96.6	1.7
2020	95.3	97.1	1.8

Source: (Education Counts, New Zealand, n.d.[104]), ECE Participation,

https://www.educationcounts.govt.nz/statistics/participation (accessed on 20 July 2021).

Australia

In Australia, there has also been a steady increase in access to ECEC services for children aged birth to 5 years over the past ten years, from just below 35% in 2009, to nearly 45% in 2018. The states and territories where Aboriginal and Torres Strait Islander children are provided free or near-free access to preschool from age 3 tend to achieve the national "Closing the Gap" target of 95% enrolment of Indigenous children in the year before school, whereas this is not achieved in states where such provision is not made (Early Childhood Australia., 2019_[105]).

Nationally in 2018, 91.0% of all Australian children were enrolled in a pre-school programme in the year before full-time schooling, whereas 86.4% of the estimated population of Indigenous children were enrolled in early childhood education programmes (the year before full-time school). This was higher than the agreed trajectory point for 2018 to reach the target by 2025 (Department of the Prime Minister and Cabinet, 2020_[106]).

Children in rural and remote areas of Australia and children of Aboriginal and Torres Strait Islander background are less likely to attend pre-school than other Australian children. In some cases, services in Indigenous or remote areas do not exist, while in others transport or distance may be a significant barrier to attendance (Warren, $2016_{[78]}$). Other barriers that have been identified include: cost, administrative complexity, lack of confidence in early education services and fear of racism and judgment (Department of the Prime Minister and Cabinet, $2020_{[106]}$).

Canada

In Canada, as Ball (Ball, 2014_[58]) observed, Indigenous children are less likely to attend early childhood education programmes compared to non-Indigenous children. Although data are difficult to source across the jurisdictions it appears that participation rates have not greatly improved in recent years.

Limited access to licensed child care is an issue in many First Nations communities. A 2018 report found that in First Nations communities, 28.9% (nearly one-third) of First Nations children age 0 to 4 years are in regular childcare (First Nations Information Governance Centre, 2018_[107]). Of those, more than two-thirds (67.1%) were in formal care arrangements (e.g. day care centres or before- and after-school programmes) compared to nearly one-third (32.9%) who were in informal care arrangements (e.g. cared for by a relative or in a private home care). This is "considerably lower than the 52% of First Nations children living off-reserve (Findlay and Kohen, 2010_[108]), and 46% of children in the general Canadian population, reported to be using some type of child care".

An evaluation of Aboriginal Head Start in Urban and Northern Communities (AHSUNC) programmes highlighted barriers to access. Primarily, these programmes were unable to extend their reach over the five-

year evaluation period as a result of a number of factors, including demographic changes, geographic location, static funding levels, transportation and limited capacity to serve special needs children:

In 2015/16, 40% of AHSUNC sites had waiting lists ... The capacity of these sites to meet the demands for services has been decreasing since the program's inception in 1995. Funding has not kept pace with the rapidly growing Indigenous population and the costs of operating the sites has increased, particularly for training and resources for children with special needs such as autism, attention deficit hyperactivity disorder, speech and language difficulties, FASD [fetal alcohol spectrum disorders], developmental delays and mental health issues (Halseth and Greenwood, 2019_[50]).

According to Pasolli (2019_[63]), early learning and child care "in Canada is in a perpetual state of crisis. Numerous studies and assessments paint a nationwide picture of a severe shortage of spaces, unaffordable fees, poor working conditions for early childhood educators, service gaps that have led to the expansion of for-profit services, and programmes of questionable quality [with the exception of Quebec]" (Pasolli, 2019_[63]).

On 19 April 2021 the Federal Government of Canada announced *A Canada-wide Early Learning and Child Care Plan*, to support more equitable child development. The Plan is supported by new funding of nearly 30 billion USD over five years to improve the accessibility and affordability of high-quality childcare, including 2.5 billion USD to meet the needs of Indigenous families. The Plan also notes the need to "build a strong baseline of common, publicly available data on which to measure progress, report to Canadians, and help (to) continuously improve the system".

Funding mechanisms can inhibit access

Aotearoa New Zealand

In 2005, in Aotearoa New Zealand, the Government established the Childcare Subsidy for low- to middle-income families to utilise formal pre-school childcare. This subsidy was used by 32% of Pacific, 27% of Māori, 17% of Asian, and 15% of European pre-school children in formal care (Mitchell and Meagher-Lundberg, 2017_[109]).

In 2007, the Government implemented "20 Hours ECE (Early Childhood Education)", which entitles all 3- and 4-year-old children to 20 hours of subsidised early childhood education participation per week in approved formal childcare centres. Children of European ethnicity were most likely to use the 20 hours ECE while enrolled in formal care, with 94% of all European 3- and 4-year-old children claiming some of the free hours, followed by Asian (89%), Māori (83%), and Pacific children (80%) (Statistics New Zealand, 2018_[46]).

Childcare subsidies are also available to parent-led services, such as Play centres. This funding subsidy is currently available for up to 30 hours of childcare per week. In addition, specific grants are provided, including Equity Funding for community-based services, to reduce barriers to participation for groups under-represented in early childhood education.

¹ https://www.budget.gc.ca/2021/home-accueil-en.html

Australia

In 2018, the Federal Government in Australia introduced the *Jobs for Families* Child Care Package. The reform package represents the Government's response to recommendations from the Productivity Commission Inquiry into Child Care and Early Childhood Learning, which took into account a wide range of input from families, service providers, early childhood education professionals and businesses (Kellard and Paddon, 2016_[92]). The key elements of the Package are the Child Care Subsidy, replacing the Child Care Benefit and Child Care Rebate with a single, means-tested payment, and the targeted Child Care Safety Net.

Because of the known benefits of high-quality early childhood education, particularly for disadvantaged children, there are additional entitlements to pre-school education for Indigenous children and those living in low-income households. These entitlements vary across states and territories, for example:

- New South Wales subsidises early access to community pre-school for 3-year-old Aboriginal children and 3-year-old children from low-income families
- In Victoria, Aboriginal and Torres Strait Islander children and children known to child protection are eligible for free kindergarten through Early Start Kindergarten funding if they are aged 3 by 30 April of the year in which they are enrolled
- South Australia provides early access to Department funded pre-school for children who are Aboriginal or under the Guardianship of the Minister after their 3rd birthday
- Northern Territory provides early access to pre-school for children living in remote areas. (Warren, 2016_[78]).

Canada

Currently, "most Canadian families with children are benefiting from a relatively generous new Child Care Benefit; however, the most marginalised and low-income families find the programme's bureaucratic requirements too onerous to manage. Low-income, Indigenous, immigrant and newcomer families are markedly disserved by the socio-economic gradient of childcare and family policy" (Prentice and White, 2019_[110]).

In 2019, the Government of Canada announced a new, co-developed policy and funding approach to support the educational needs of First Nations students living on reserves. The approach replaced proposal-based programmes for elementary and secondary education with formula-based regional funding models in line with the base funding for students enrolled in provincial education systems. Following consultation that showed "language and culture are critically important for the successful development, education and well-being of First Nations students", the Government also committed to provide "First Nations schools with 1 500 USD per student, per year, to support language and culture programming" and provide new resources to support full-time kindergarten in every First Nations school for children aged 4 and 5 (Government of Canada, 2019_[111]).

Workforce challenges

Aotearoa New Zealand

Cultural education is a central tenet of *Kōhanga Reo* in Aotearoa New Zealand and is reflected in the criteria for selecting staff. This immersion-based approach to language development depends on older language speakers spending time with children in the programme, thus enabling inter-generational language transfer to occur. Accordingly, this necessitates the employment of educators or Kaiako who are fluent speakers and the availability of other fluent speakers to participate in the programme.

For teachers who are not in *Kōhanga Reo* and who are not fluent in te reo Māori, Te Ahu o te Reo Māori is a programme to improve their language proficiency. The programme is designed to help teachers to confidently teach Māori language and incorporate Māori identity and culture in the day-to-day practices of education services. During the pilot in 2020, prior to national roll-out in 2021, providers reported that the programme had helped them to build stronger connections with local *iwi* (tribes) and engage better with Māori families.

Australia

In Australia, a shortage of qualified Indigenous educators and difficulty in accessing training, particularly for educators in remote areas, are significant constraints. Most Indigenous children are taught by non-Indigenous educators who need specialist training in cultural awareness and knowledge of Indigenous ways of being and relating to others (Kitson and Bowes, 2010_[112]).

To address workforce needs, Australian states and territories have implemented a range of strategies to address workforce needs. In Victoria, the Department of Education and Training's Koorie Education Workforce provides strategic advice to education providers and teachers on improving outcomes of Koorie learners. Koorie Education Co-ordinators, who are located across the State, manage teams of Koorie Engagement Support Officers providing assistance to early childhood education services and schools.

Canada

In Canada, the paucity of Indigenous early childhood educators has been noted as a major challenge (Preston et al., $2012_{[113]}$):

Factors contributing to the shortage of qualified Aboriginal early education teachers include stringent early education licensing requirements, prohibitive costs of initiating and maintaining programs, large geographical distances between post-secondary institutes and Aboriginal communities and specialised entry requirements necessary for students pursuing post-secondary education. Early childhood education teachers are generally required to attain standardised qualifications before being considered for employment within the early childhood education sector. Furthermore, most Aboriginal early childhood programs require a formal license from provincial authorities before being funded (Preston et al., 2012_[113]).

Ball notes that "professional education to support attainment of ECE credentials for Indigenous community members working in Indigenous early childhood programmes has been a persisting gap both on reserve and in urban and northern communities" (Ball, 2014_[58]). It has been suggested that further programme funding for early childhood education training, especially in the field of special needs, would contribute to the continued delivery of high-quality services with the Aboriginal Head Start in Urban and Northern Communities programme (Health Canada and Public Health Agency of Canada, 2017_[13]).

The need for staff to be in and of the community being served, with appropriate language skills, cultural knowledge and the ability to form strong relationships with families means standard teaching qualifications are not a sufficient marker of quality on their own. While early years pedagogical skills are also important, they are not sufficient unless combined with the other measures of quality. Given the constraints faced in the three countries in this study in recruiting and retaining culturally competent and fully qualified staff, a degree of flexibility, active management and innovation is required. This is likely to mean considering staff skills as a collective, rather than requiring each staff member to have the full range of competencies required.

In summary

The provision of ECEC has been expanding over the last two decades or so, including an increase in provision targeting Indigenous children. This is particularly evident in Aotearoa New Zealand and Australia, where specific targets were set to increase participation rates by Indigenous children. Nonetheless, there remain access challenges for some Indigenous communities, notably those in remote regions. Additionally, shortages in appropriately skilled early educators, both Indigenous and non-Indigenous, continue to be reported.

A limited evidence base, for and by Indigenous communities

In this section we commence with consideration of the concept of "quality" noting that quality is contextual and the likely effectiveness of any approach cannot be based solely on evidence drawn from a different context. We also note the limited evidence base on holistic outcomes of Indigenous children and their families, recognising the limitations of applying non-Indigenous research frameworks to Indigenous communities and issues.

Quality is contextual

High-quality early childhood education can improve children's lifelong outcomes across a range of domains: education, health and well-being. However, as Indigenous scholar Krakouer (2016_[114]) asserts, child outcomes may be affected when there is a "mismatch" between the expectations children encounter at home and those determined within a mainstream learning environment. It cannot be assumed that an evidence-based, high-quality early childhood education and care (ECEC) programme developed within a mainstream, non-Indigenous context will necessarily "work" in an Indigenous context (Bowes and Grace, 2014_[115]).

Mindful of the widespread cultural diversity of Indigenous communities throughout Canada, Preston et al $(2012_{[113]})$ asserts that:

Quality Aboriginal early childhood education: a) privileges Aboriginal pedagogy, b) promotes Indigenous languages and culture, c) is adequately staffed by qualified Aboriginal educators, d) empowers Aboriginal parents and communities and e) in the case of kindergarten services, provides a full-day timetable (Preston et al., 2012_[113]).

Preston (Preston et al., 2012_[113]) later notes a lack of prioritisation of Indigenous goals for learning:

... an Aboriginal worldview, rich learning opportunities are encompassed through the promotion of observation, self-discovery, and respect for nature; in turn, this knowledge and skill is shared with families and communities, promoting holistic wellness. Within the current educational system, this type of learning is not prioritised.

She proposes an "Aboriginal holistic education and ethics" (Preston et al., 2012_[113]) stance where equal attention is given to the four aspects of Aboriginal education – Governance and Partnership; Early childhood education; Pedagogy, Language and Culture (K-12); and Post-secondary education – she considers to be essential. "If one of these aspects is not tended to, the other three features are negatively affected: the circle becomes unbalanced, skewed and imperfect" (Preston et al., 2012_[113]).

Preston envisages an "ethic space" where dialogues about different worldviews can occur to address the imbalance in the current Canadian educational system:

Ethic space is formed when two societies, with disparate worldviews, are poised to engage each other. Rich dialogue grounded in ethical space is an exciting way of examining the diverse positioning, culture, and ways of knowing imbued within Aboriginal peoples and Western society. Within this space, cultural and spiritual diversities of Aboriginal and non-

Aboriginal groups merge into an empathetic and respectful relationship (Preston et al., $2012_{[113]}$).

Indigenous families' goals for their children include a concern for their ability to live successfully in a majority world but not at the expense of their cultural identity as Indigenous children. When asked, "What is it about Aboriginal or Torres Strait Islander culture that will help your child to grow up strong?", Indigenous families that participated in the Longitudinal Study of Indigenous Children (LSIC) in Australia "identified their children's cultural identity, cultural pride, understanding of culture and a sense of belonging" (Colquhoun and Dockery, 2012[116]). What they wanted for their children in the future was to:

...have a good education, have a good career or job, be good at sports, do well at school, have lots of friends, be successful, have a better life and have kids, have time to play, be happy, healthy, confident, strong, have respect for others, learn about culture and support the family (Colquhoun and Dockery, 2012_[116]).

These bicultural aspirations are critical for programme developers, early childhood educators and administrators to understand if they are to work in true partnership to provide locally and culturally responsive programmes. Without strong relationships, this kind of information may never come to the surface or gain a foothold in the programme.

Definitions of quality should be interpreted with caution, particularly when information on the impacts on children's outcomes is not available. Grace et al. (2014_[117]) advise that "a note of caution is required about the central premise" of research that "children from disadvantaged backgrounds will all benefit from participation in an ECEC service":

While previous research shows that on average this is the case, research is increasingly showing evidence for differential benefits of exposure to ECEC services for children depending on aspects of quality within the service (Grace, Bowes and Elcombe, $2014_{[117]}$).

The urgency created around the need to address significant Indigenous disadvantage has led governments to adopt an ambitious roll-out of "best practice" early learning programmes based on mainstream models to Indigenous communities which may not be seen as best practice by Indigenous community members. In Canada, for example:

Many educators, researchers and international development specialists acknowledge the geographic and cultural limitations of the research base that informs current child development theory, learning assessment tools, and programme models. However, this recognition has not prevented the proliferation of brand-name programs touted as "best practices" based on the authority of Euro-Western science or simply on persuasive marketing of training, toys, tools and teaching techniques (Ball, 2014_[58]).

In Australia:

The Council of Australian Governments (COAG) has endorsed significant policy reforms, to improve universal access to, and participation in "quality" ECEC programs for Indigenous children, families and communities. The definition and operationalisation of "quality" however is not well specified and the conceptualisation of the way in which a "quality" program translates into a program that effectively yields outcomes for Indigenous children and families is neither detailed nor problematised (Leske et al., 2015_[118])

Australian Aboriginal scholar, Martin (2007_[119]) reflects on the lack of community control of Aboriginal early childhood services in her examination of the impact of colonial discourses of paternalism and invisibility of Aboriginal people in early childhood care and education in Australia. She shows how these discourses have shaped relationships in early childhood historically and continue to "prescribe the relationships and thus the outcomes of the education of young Aboriginal children in Australia". She argues that the discourse of paternalism continues and can be seen, for example, in an obsession with school readiness and the acquisition of English literacy and numeracy skills for Aboriginal children that has displaced and eroded previously strong and effective Aboriginal cultural education programmes.

When aiming for equitable relationships and partnerships between majority and minority groups, Dahlberg et al. (Dahlberg, Moss and Pence, 1999_[120]) emphasise a locally relevant "meaning making" process in order to more sensitively define notions of quality and success. They recommend moving away from a belief in definitions of quality that are embedded in universal approaches to early childhood and that assume these ways of working are best for all children. They promote adopting a more situated, sceptical, post-modern approach that makes space for minority views.

Most evaluations of ECEC have focused on the what; they describe quality in terms of quantifiable structural resource such as the physical space of the ECEC environment, child-staff ratios, group or class size, pedagogical materials, working conditions for staff and level of training for early educators (OECD, 2012_[121]). A smaller number of studies have focused on the interactional (or process) quality. This approach observes relationships between children and early educators, children and their peers, and families and early educators, and focuses on the early educator's pedagogical skills. One key problem of current approaches is that high levels of structural resourcing and even highly responsive interactions within the class setting do not necessarily translate to positive and mutually trusting relationships with parents that support attendance (Leske et al., 2015_[118]).

A large body of literature highlights the remarkable influence that high-quality early childhood education has on child development (Heckman, 2017_[2]). Yet, Indigenous children encounter a range of risks that can interfere with their engagement in high-quality early childhood education, including health and family issues, access and proximity to ECEC providers, and cultural safety.

From their study, Leske et al., (2015_[118]) indicate three key points of effective ECEC provision for Indigenous Australians. Effective programmes:

- 1. provide for families not just children
- 2. are physically and culturally accessible
- 3. are relationship-focused.

The Secretariat of National Aboriginal and Islander Child Care canvased four highly utilised Indigenous services for children in Australia to identify the key strategies that led to families engaging. They emphasised:

- Forming strong relationships with families through: greeting everyone by name, including siblings, aunties, uncles, grandparents; taking opportunities to hold informal conversations in and out of the service; home visiting; and the building of trust and connection to the families that use the service
- Incorporating cultural activities into the service, including teaching language, culture and dance to children starting from babies. Learning in nature, learning Aboriginal stories, learning cultural names
- Providing a bus service to increase access, including the ability of staff to have conversations with families, develop relationships with families that do not come to the service and following up with non-attending children to understand barriers to attendance

- Making culture prominent in the physical space, including Aboriginal murals created by Aboriginal
 artists, making the Aboriginal identity of the service apparent to visitors, and having lots of natural
 resources, such as a sensory garden
- Having a majority of Aboriginal and Torres Strait Islander staff, including recruiting from the local community to create those connections and acknowledging Aboriginal families "as First Nations people and as experts on their children"
- Offering additional support services, like a "community centre" rather than just a child care centre. Some offer emergency relief food while others run supportive programmes for parents, or are a hub service referring families to additional support services when needed (SNAICC, 2019_[122]).

Improved evidence, by and for Indigenous peoples

Australian Aboriginal leader and Aboriginal and Torres Strait Islander Social Justice Commissioner, Mick Dodson, notes limitations imposed on Indigenous cultures through the historical dominance of the non-Indigenous "lens" as the fundamental problem to be overcome.

The recognition and protection of Indigenous cultures has been extended from a non-Indigenous perspective. Our values have been filtered through the values of others. What has been considered worthy of protection has usually been on the basis of its scientific, historic aesthetic or sheer curiosity value. Current laws and policy are still largely shaped by this cultural distortion and fail to extend protection in terms which are defined by our perspective (Human Rights and Equal Opportunity Commission, 1995_[123]).

These limitations are evident in early childhood research and practice as well. The database of "evidence-based studies" to inform the development and improvement of early childhood programmes for young Indigenous children is inadequate with few studies that focus on Indigenous strengths or that bring Indigenous perspectives. More holistic approaches to research, led by Indigenous scholars, guided by Indigenous protocols and agenda are needed as well as collaborations with non-Indigenous scholars who are able to work in ways that are acceptable and ethical – "with" us rather than "on" or "about" us (Martin, $2008_{[124]}$)

Denzin et al $(2008_{[125]})$ list necessary qualities of critical Indigenous qualitative research that can contribute to, rather than undermine Indigenous lives.

[Research] must be ethical, performative, healing, transformative, decolonising, and participatory. It must be committed to dialogue, community, self-determination, and cultural autonomy. It must meet people's perceived needs. It must resist efforts to confine inquiry to a single paradigm or interpretive strategy. It must be unruly, disruptive, critical, and dedicated to the goals of justice and equity (Denzin and Lincoln, 2008_[125]).

Strong Indigenous voices are reconceptualising early childhood research to include the issues of key importance to Indigenous peoples for informing the development of high-quality early childhood programmes. For example, Greenwood (2009_[126]) describes the four principles that guide her research and "set the context for continuity and change" in the early childhood programmes she has worked with in Canada and Aotearoa New Zealand. Her research approach was guided by the principles of:

- Respect, which identifies the need to honour the cultural integrity of Indigenous children, families and communities, including their systems of knowledge, values and traditions;
- Relevance, which references the utility of the programme and practice to the children, their families and community;

- Reciprocal relationships, characterised as meaningful, respectful and creative, where learning opportunities are generated for all those involved; and
- Responsibility, which speaks to the ability of individuals and collectives to take control of their own lives. At the heart of responsibility is the notion of empowerment of children, their families and communities (Greenwood, 2009_[126]).

Research relevant to Indigenous children and families must reflect Indigenous worldviews and ways of being in the world. Townsend-Cross articulates an Australian Indigenous worldview:

Indigenous ways of knowing, being and doing are approached as holistic ways of life rather than particular behaviours for categorised or segmented concepts and events. These holistic cultures are based on the underlying principles of relationships and balance. Everything and everyone is connected and balanced through relationships. In contrast to Western boundaries of relatives and non-relatives, Indigenous Australian kinship systems are boundless and inclusive of the whole universe (Townsend-Cross, 2004_[127]).

Yet, Indigenous early childhood research remains a field dominated by deficit stories of disadvantage where strengths focused research is still lacking. Walter (2018_[128]) sees the Indigenous data environment in Australia as focusing on the negative, not readily accessible and not designed to build a sustainable future.

With the exception of the LSIC, which is unique in the Australian landscape in being overseen by a primarily Indigenous Steering Committee, these data are of limited use. Whether from Indigenous-specific or mainstream origins, the result is the same: a relentless descriptive tide of the various dire socio-economic and health inequalities. It can be summarised as what I have called "5D Data": data that focus on Difference, Disparity, Disadvantage, Dysfunction and Deprivation. There is no shortage of these type of statistics (Walter, 2018_[128]).

From a different perspective, Japel and Friendly emphasise that one aspect of Canada's generally indifferent approach to ECEC is the absence of reliable data needed to answer even the most basic questions (Japel and Friendly, 2019_[129]):

Although some research and data are available, much of this is developed through private initiatives by academic researchers or civil society organisations with no national data strategy or research agenda. Provinces/territories can and do provide some administrative data, but there is very little up-to-date, cross-Canada data (or even provincial/territorial data) to address some of the key questions of interest to this comparative study such as "who are the families using regulated child care?", "which families are in which type of programmes?" or even "what is the quality of regulated child care programmes?" (Japel and Friendly, 2019_[129]).

Ball (Ball, 2014_[58]) emphasises the need to invest in scheduled, contextualised, disaggregated data collection about First Nations, Métis, Inuit and urban Aboriginal children's wellness, stating that there is a need for rigorous, longitudinal research to assess the effectiveness of early childhood programmes as a strategy for improving quality of life and wellness of Aboriginal children (Ball, 2014_[58]).

From an Aotearoa New Zealand perspective, Ratima notes that although there is evidence that ECE programmes can lead to improved outcomes, what is largely missing is research on programmes that are effective for Māori (Ratima et al., 2019_[130]).

In Australia, Walter (2018_[128]) speaks of a "data paradox" in Indigenous research:

52 | EDU/WKP(2021)8

... there is an enormous body of data <u>about</u> Aboriginal and Torres Strait Islander people but almost no data <u>for</u> or <u>by</u> Aboriginal and Torres Strait Islander people (Walter, 2018_[128]).

She calls for Indigenous data sovereignty, Indigenous governance and voice in research and research approaches that reflect Aboriginal and Torres Strait Islander priorities, values, culture, life worlds and diversity.

Newer, more qualitative, Indigenous-informed methodologies are more likely to take into account power dynamics and the cultural context of the research, include "voice, worldview, and culture; issues of representation, the location of the other and other ways of knowing":

For Indigenous people to be "researched on" has proven to be an abusive process but if Indigenous people and communities are in control of research, they can navigate the dominant culture context, meet the hopes and aspirations of Indigenous people and help Indigenous communities in raising children who are strong in culture, resilient and hopeful about what the future holds (Bamblett, Harrison and Lewis, 2010_[131]).

In summary

Quality in early years provision is not an independent concept for the children and families being served by a particular form of provision. Children, families and communities are diverse, having different needs, preferences and contexts. Provision deemed to be high quality in one context may not necessarily perform as high quality in a different context. Any form of provision should be judged on the actual impact for children and their families; research and evaluation questions should also be contextually determined, as these too can be subject to bias and erroneous assumptions. The lens applied in research and evaluative studies will have a sharper focus if they are led and informed by the communities being served. Increasing the body of research led by Indigenous people will improve the relevance and usefulness of the evidence being produced.

Promising examples of early years provision for Indigenous children

In this section we present a number of promising examples of early learning provision. Some of these have been formally evaluated, others have not. We draw on the limited programme evaluation data available, and also on grey literature that records accounts of early learning programmes that display merit and have not yet been evaluated.

Some of the features of the examples described in this section include:

- Achieving successful child outcomes
- Respecting Indigenous control and agency
- Respecting language and culture
- Prioritising parent/caregiver engagement and participation
- Achieving Indigenous workforce traction
- Providing an inter-sectoral service.

Programmes and interventions may exemplify some or all of these features.

Promising example 1: Families as First Teachers – Indigenous Parenting Support Services Program, Northern Territory

The Families as First Teachers (FaFT) programme² in Australia's Northern Territory is an early learning and family support programme for remote Indigenous families. Families as First Teachers is an "evidence-based" early childhood programme that improves lifelong education, health and well-being for children (from birth to the year before school), and their families (Pascoe and Brennan, 2017_[19]).

The aim of Families as First Teachers is to improve developmental outcomes for remote Indigenous children and build mothers' confidence as their children's first teachers by working with families and children prior to school entry. The programme's early learning activities have an emphasis both on child and adult learning and are described as dual generational. The key components of dual generational early childhood learning in the programme, including the Mobile Families as First Teachers programme, are: high-quality child-centred early learning experiences; facilitated adult-child interactions through the Abecedarian Approach including conversational reading, learning games, enriched caregiving and language priority; adult learning opportunities; nutrition, health and hygiene; and linking families with support services and agencies.

Play-based programmes support families through modelling, side-by-side engagement and discussion. Resources have been developed to give families information about how young children learn and how parents can make the most of everyday learning opportunities. These resources can be used in group or individual family settings through engagement in early learning programs, home visits, family workshops or individual consultations. The

² Source: Department of Education, Northern Territory, *Families as First Teachers* (updated 2020), https://nt.gov.au/learning/early-childhood/early-childhood-support-for-remote-children-and-families

program focuses on school readiness, literacy and numeracy foundations, orientation to school programs and parent engagement initiatives ... The Families as First Teachers Indigenous Parenting Support Services Program works to strengthen positive relationships in families, promote positive behaviour in children and build confidence in parenting. This is done through modelling behaviour management at the early learning sessions, encouraging families in their interactions, group discussions, parenting workshops, home visiting and individual consultations. The programme takes a strengths-based approach to parenting. (Department for Communities, 2012_[94]).

The Families as First Teachers playgroups are staffed by a Family Educator who is an early childhood teacher, and a Family Liaison Officer who is a local Aboriginal person with early childhood experience. Programme staff work together in local implementation teams to: (1) ensure cultural competence within the teams, including local language fluency, and (2) deliver an evidence-based early educational programme that builds young children's identity, language, and cultural knowledge (Page et al., 2019_[132]).

Since Families as First Teachers has been operating, the proportion of Indigenous children in very remote communities assessed as developmentally vulnerable in one or more domains of the Australian Early Development Census fell by 5.7% (based on the 2012 results). Significant improvements were recorded in children's social competence, emotional maturity, language and cognitive skills, communication skills and general knowledge in communities where the programme had been implemented (Australian Early Development Census, 2014_[84]).

Promising example 2: World Vision Early Childhood Care and Development, Kimberley, Western Australia

In 2011 World Vision Australia³ was asked to undertake an assessment of community priorities and aspirations in four communities along the Gibb River Road near the township of Derby in the Kimberley region of northern remote Western Australia. Commencing this work was contingent upon obtaining an invitation from the communities. All four communities identified early childhood and youth programmes as key to achieving their vision. Based on the strength of relationships, and experience in early childhood, a further invitation was extended to World Vision to support the Town of Derby early years programming.

The key to success: community-led service delivery.

World Vision projects work towards children being strong in spirit, confident, healthy and developing as lifelong learners. The early years programme in Derby is based on World Vision's technical approach to early childhood care and development that has been adapted for remote Indigenous Australian communities. This programme draws on a broad evidence base of national and international research, experience working with Indigenous communities within Australia, and their international expertise in child-focused community development.

World Vision programming is place-based, which means it is tailored to the specific needs and aspirations of each community, taking into account existing service provision and local organisations. World Vision programmes aim to ensure that: communities are safe and healthy environments for children; early childhood services are integrated, co-ordinated, culturally responsive and of high quality; families are

³ Source: Early Years' Services, Kimberley, Western Australia, https://www.worldvision.com.au/docs/default-source/default-document-library/australia-program-prospectus-2016-18.pdf?sfvrsn=2

supported to care well for their children; and communities have the capability to lead their early childhood agenda and hold early childhood service providers to account.

Key features of World Vision programmes include training and brokering for effective co-ordination of education and health services, school transition programmes, place-based training and employment of local Indigenous early childhood workers, parenting support and education programmes, use of local languages, the development and ongoing support of local early childhood leadership, management and governance structures, and the development of community child safety plans.

Family participation in the Early Years' Service in Derby is now well beyond expectations. Much of this success is attributed to World Vision's commitment to partnering with the local communities, and to being prepared to go slow so that they can be led by the community.

Promising example 3: Niitsitapi li tass ksii mat tsoo kop (Niitsitapi Learning Centre), Alberta Canada

Community involvement and input were also important contributions in the design and development of the *Niisitapi li tass ksii mat tsoo kop* (Niitsitapi Learning Centre)⁴. The Elder's Advisory Council, community Elders, establishment of a community advisory team, which included numerous members of Indigenous community agencies, contributed to a design process that helped create the vision of the Niitsitapi Learning Centre.

The Niitsitapi Learning Centre focuses on early intervention for First Nation, Métis and Inuit students aged 3 to 7 years old. The Centre offers:

- An early childhood development pre-school for Indigenous children aged 3 and 4 years old
- Full-day kindergarten for Indigenous children
- Curriculum taught through a diversity of Indigenous perspectives and experiences to build a strong sense of Indigenous identity and a strong academic foundation.

By providing students the best possible start to their educational journey and supporting school-to-school transitions when students move from the Niitsitapi Learning Centre, the goal is to improve Indigenous students' long-term success in school and prepare them to live in both worlds.

Niitsitapi Learning Centre provides a strong learning environment that reflects and nurtures Indigenous identity through a holistic, strength-based, early learning approach. It is a culturally responsive, lifelong learning environment that nurtures mind, heart, body and spirit, and prepares Indigenous children to live in balance with both worlds. It is a communal place of gathering to deepen knowledge and understanding of Indigenous ceremonies, histories, cultures, contributions and ways of knowing, being and doing.

The Centre works closely with and is guided by the advice of community Elders. It also maintains and builds key partnerships to enhance educational opportunities, including providing families with opportunities to participate in events, ceremonies and Elder visits. Teachers strive to provide holistic teaching and learning experiences that focus on the Intellectual (mind), Emotional (heart), Spiritual (spirit) and Physical (body) domains.

A successful student demonstrates:

- Pride by focusing on academic, cultural and individual growth
- A desire to learn through an Indigenous lens

⁴ Source: Niitsitapi Learning Centre, https://school.cbe.ab.ca/school/niitsitapi/teaching-learning/program-approach/Pages/default.aspx

- Active participation in regular ceremonial activities
- Engagement in language learning experiences, dancing, drumming, singing and cultural arts activities.

Promising example 4: Mowanjum Parent Early Learning Centre, Kimberley, Western Australia

In 2014, caregivers within the Mowanjum Aboriginal Community in Western Australia⁵ requested an early (0–3) years' programme. The Mowanjum Early Learning Programme supports caregivers in the meaningful activity of child-care-giver play via the provision of structured activities, role-modelling and through the delineation of time for child-caregiver interactions to occur away from the home and its many associated distractions.

A study (Smith et al., 2016_[133]) was undertaken at at Mowanjum to determine the community perception of the early learning programme.

Participant service providers maintained that the programme was important in terms of helping caregivers understand the importance of early learning for their children's development. They explained that there is a widely held perception among the community members that learning does not start until children reach "big school" (Year one). By holding an early learning programme specifically for 0-3-year-olds, participant service providers maintained that it visibly demonstrates to caregivers the critical importance of having children engaged in learning activities from birth.

Participant service providers also maintained that another positive attribute of the early learning programme for both the children and caregivers is that it enabled them to feel comfortable and confident in transitioning their child into the next pre-kinder school learning environment. By teaching children basic social skills (e.g. listening to the teacher, following instructions, verbally asking for things and sharing with other children), participant service providers concluded the 0-3 programme was a much-needed and viable means of setting young children on a positive learning trajectory, and importantly demonstrating to caregivers the value of regular school attendance.

A benefit of the learning programme from caregivers' perspectives was that it gave them a supportive social environment in which they could engage with the children and embrace their (mother, father, aunty, uncle or grandparent) "parenting" role. Participant caregivers stated that learning how to engage in play with the children in the programme made them feel like they were "good" and "worthwhile" people. Participant service providers observed that once the caregivers became involved in the children's learning they developed a sense of pride in the children's mastery of the programme's various learning tasks.

Findings suggest that the potential beneficial impact of such a programme may extend far beyond "early learning". While perceived benefits for attending infants and children might have been an anticipated outcome of this study, the perception that parents and caregivers benefited themselves from the programme is noteworthy. This is due to a number of factors, including the support caregivers receive in relation to the parenting role, the provision of a safe space in which to engage in this role and time away from the demands of parenting.

⁵ Source: Smith, H., Batten, R., McDonald, H., and Taylor, M. (2018), *Caregivers and service providers' perspectives on a Western Australian Aboriginal community's 0–3 years, early learning programme*. Early Child Development and Care. Vol. 188/10, https://doi.org/10.1080/03004430.2016.1263946.

Promising example 5: The Ngaanyatjarra Early Years Program, Warburton, Western Australia

This playgroup model⁶ was developed over many years in response to the request from older women at Blackstone Community, in 1995, for assistance to help them get their children ready for school. As the facilitator of the programme, Anne Shinkfield says, "it's really hard for kids to be successful in school if they're not ready for Kindy". From 1996, Shinkfield along with her Aboriginal colleague Beryl Jennings developed a programme to support families with their children's preparation for formal schooling, with the programme extending to Warburton in 2000.

"The families are already really used to doing things with their families in their own culture, for their own lifestyle, but there's this thing called school, and how do you get kids ready for something that's not in your environment? So really playgroup is like a bridge. On that bridge they do all those things of the new environment called school...parents are teaching them in their home language in a play environment. It's not taking away from anything they've done, it's actually adding a whole new repertoire of life skills."

Playgroup targets 0-4-year-olds and operates five mornings per week for 2.5 hours a day. Children must be accompanied by a parent or adult family member in order to participate. Every playgroup day is predictable. Set routine activities appear to be one of the strengths of the model and include: Come in and play, Inside Activity, Health Time, Story Time, Morning Tea, Outside Activity and Home Time.

"It works for the people. It gives them a real security about what we're doing each time and that things aren't changing. Within this framework they have the freedom with the children to just play and learn together."

Families gather for play and learning activities that focus on skills children will need to learn before they go to school, such as how to use new and unfamiliar learning equipment and materials used in most preschools, but often not available in people's homes. Children also learn new school-like ways of doing things, such as Western ways of responding to instructions and participating as part of a group.

"A lot of the families don't have good memories of school, and yet kids have to go to school. How to get a positive link (to school) is a real problem."

Literacy activities are an important part of every playgroup day. As the playgroup developed and children got used to the activity of reading stories, this routine has continued, but with Family Story Time added from 2009. Often parents are not literate in either English or Ngaanyatjarra and, for that reason, the first picture story books used in the playgroup were written in Ngaanyatjarra by the local linguists and focused on local stories involving the plants, animals and activities familiar to everyone in the community. Englishonly story books were avoided.

"If you put English books here for people who can't read English, it disempowers the parents."

English-language story books that would be familiar to children across Australia were introduced from 2010 through the Indigenous Literacy Foundation after being translated into Ngaanyatjarra by local

⁶ Source: Shire of Ngaanyatjarraku Early Years Program Case Study, Warburton Community Playgroup, Mystery Lane Media. http://ictv.com.au/video/item/3466; Shinkfield, A and Jennings, B (2019) *Family Story Time in Ngaanyatjarra Early Years Program*, Literacy Education and Indigenous Australians, Chapter 5 https://link.springer.com/chapter/10.1007/978-981-13-8629-9 5

families, so that children would recognise them when they went to school. It was important that parents took ownership of story reading.

"Even if the parents can't read the book, it gives them the right to "talk" the book in their language and because books are part of a new world and a new culture for them, they're not in their homes."

Playgroup is also a "bridging" environment where parents remain in control in this new environment, rather than giving their children to someone else.

"(In playgroup) the parents actually keep their responsibility and ownership for getting their kids ready for school."

Playgroup is a safe place where every family is welcomed and there are no "attendance" problems.

"They must love coming because we never pick anyone up! There's no buses or anything like that. Everyone votes with their feet. There's obviously enough here for the mums and the kids so they can see some really important things for both of them."

People are seeing the impact of playgroup as children enter the school.

"They're seeing that children are ready for school, much more so than they ever have been...It's giving the children the necessary skills to be able to go to school and hopefully just keep going from strength to strength."

This playgroup model continues to be a "work in progress". It has gone through many changes and continues to be adapted to suit new community contexts and situations.

Promising example 6: Child and Family Centre, Maningrida, Northern Territory, Australia

Maningrida, a community in remote Northern Territory, is 500 km east of Darwin⁷. At the 2016 Census, Maningrida had a population of 2 308. More than 30 surrounding outstations use Maningrida as a hub community. Early childhood services in Maningrida include: a Child and Family Centre (Manayingkarirra), long day care centre, a Families as First Teachers programme, and a pre-school.

The Manayingkarirra Child and Family Centre opened in 2014 and the Families as First Teachers programme and long day care centre are located there, with the pre-school attached to the school located next door. The programme's playgroup and mobile playgroup form the foundation for a diverse range of early years, health and family support programmes, with up to 80 families per week accessing playgroup and up to 30 children attending per day. Maningrida also provides access to the Healthy Under 5 Kids Program on site with two nurses practicing preventive health care, immunisation, developmental support and referrals three to four days a week. The teams work closely together to provide an integrated service with Child and Family Centre staff and health teams collaborating to support families. Families also can access counselling and well-being programmes run by the Malabam Health Board staff. These include quitting smoking, stress release and a Strong Women Strong Babies Strong Culture programme. Having

⁷ Source: Secretariat of National Aboriginal and Islander Child Care (2018), *Aboriginal and Torres Strait Islander Child and Family Centres: Changing futures with our children and families* https://www.snaicc.org.au/wp-content/uploads/2019/03/NT ACFC Profiles Report-July 2018.pdf

an integrated approach enables streamlined support for families experiencing vulnerability, home liaison, outreach, cooking classes and child development checks.

A number of Traditional Languages are spoken in the community. These include Ndjébbana, Nakara, Gurrgone, Kunbarlang, Burarra, Kuninjku (Eastern Kunwinjku), Kune (Mayali), Rembarrnga, and Djinang. Lúrra Language and Culture Centre in Maningrida is dedicated to providing language programmes in the two largest languages Ndjebbana and Burarra, as well as Kunwinjku, Rembarrnga and Wulaki, and Djinang. The community school is also committed to providing a rich culturally-relevant learning programme.

Promising example 7: Strong early development and learning in Manitoba

A tailored early childhood education and care centre was established in a predominantly Indigenous neighbourhood in Winnipeg in 2012 to support children's early development. The centre is based on the Approach and includes a research evaluation comparing children in the programme with a control group. Approximately 80% of children at the centre are Indigenous. Each child is tracked in terms of his/her development, and continue to be tracked into their schooling years (OECD, 2017_[5]).

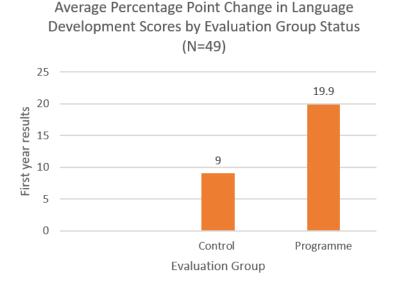
Children enter the centre at three months of age and attend five days a week, full-time, until they start school. Each child has a primary caregiver at the centre, whose role is to provide individualised, relationship-based care. The focus is on language development, which supports greater subsequent cognitive and social and emotional development.

The language-oriented Abecedarian Approach has three main pillars:

- Enriched Caregiving
- Conversational Reading
- LearningGames®.

The impact on children's language development from their first year in the programme is more than double the control group, as shown in Figure 5, below, comparing average percentage changes in language scores for both groups.

Figure 5. Gains in language development



Source: Adapted from D'Souza, M (2016) *The Abecedarian Approach in Manitoba's Early Childhood Community* Research Faculty, School of Health Sciences and Community Services Red River College, Winnipeg, Manitoba https://www.oise.utoronto.ca/atkinson/UserFiles/File/Events/20160602 SI2016/SI2016 Presentations/The Abecedarian Approach in a North Winnipeg Community - Melanie DSouza.pdf (accessed on 20 July 2021).

Engagement with children's families is also an important part of the programme, both to support parents in enhancing their children's development and learning and to address any barriers or issues that families may be facing. Engagement with families is strength-based and occurs through regular home visits, involving parents in the centre, a monthly parent support group and a co-located drop-in resource centre.

Recognition of Indigenous cultures is also a key aspect of the programme. An Indigenous Programme Co-ordinator is on-staff, and Indigenous art, knowledge and cultural practices are woven into the operation of the centre.

Staff are drawn from the local community, including Indigenous staff, which helps to strengthen the connections with families and the community and keeps staff turnover relatively low. All new staff are provided with comprehensive training (OECD, $2017_{[5]}$).

In summary

Most of the promising examples above have adopted holistic approaches to address Indigenous children's early learning needs, and they incorporate many of the factors identified as being important for promoting resilience, strong foundations for academic success and healthy child development for Indigenous children. They illustrate what "success" looks like in these contexts, given that they have engaged families and children in programmes that bring benefit to them and their communities. Strong community control over the design and nature of the programme has led many families to become involved, attend and invest in them over a period of time. Many programmes have prioritised the maintenance and promotion of local language and cultural practices and where other priorities have been more dominant, the successful programmes are those that still demonstrate respectful inclusion of local cultural ways of working. The involvement of a local workforce was important for many of the programmes and where funding and

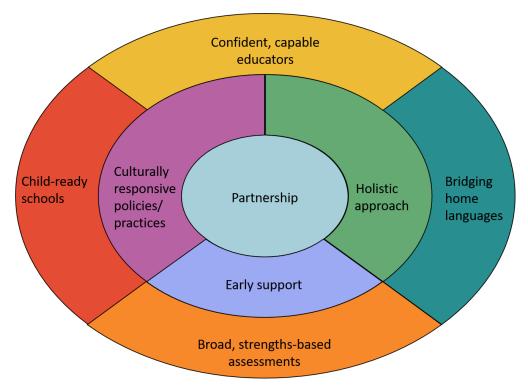
expertise was available, programmes were able to offer or support family/child access to services across the health, education and welfare sectors.

In the next section we build on the evidence presented this far to map out a framework for strengthening Indigenous children's early learning and well-being.

Framework for strengthening Indigenous children's early learning and well-being

In this section we outline a framework for strengthening Indigenous children's early learning and well-being, illustrated at Figure 6. The issues affecting Indigenous children's learning outcomes are deep and longstanding. Thus, to achieve significant and enduring positive change, education systems need to work on multiple fronts simultaneously. While it may not be possible to make systematic and concurrent progress on all eight pillars of the framework, this is nonetheless an ideal that jurisdictions should aim for to enable every Indigenous child to have a strong and equitable start.

Figure 6. Framework for strengthening Indigenous children's early learning and well-being



The framework is based on evidence on Indigenous children's early development and early learning policies and programmes that positively support young Indigenous children. The evidence we draw on includes programme evaluations and literature that records first-hand or anecdotal accounts from Indigenous parents and educators.

Partnership is fundamental

Services and supports for children and their families are more successful when these are initiated, designed and implemented in partnership with the community being served. This enables an optimal fit in terms of both what is delivered and how it is delivered. It also builds ownership and commitment in the community.

Consultation, collaboration and partnership among all participants in Indigenous children's learning is essential to ensure the quality and success of their learning experiences (Miller, $2011_{[134]}$; Preston, $2016_{[135]}$; Ritchie, $2008_{[136]}$; Rowan, $2017_{[137]}$). However, the fact that so much has been written and continues to be written about the need for strong equitable partnerships between Indigenous and non-Indigenous people suggests they do not occur regularly enough and are not that easy to achieve.

Relationships between services and Indigenous families and communities always involve issues of power and control. Indigenous families resist using services where they do not feel their views are heard or act upon.

Connections between families who do not readily engage with early childhood services and schools can only be built in the context of respectful relationships, where the strengths of individuals and families are recognised, even when challenges and other difficulties may also be evident. Family and community members will avoid interactions where they expect to be blamed, shamed, judged negatively, or their expertise and knowledge ignored. They are much more likely to engage in interactions that acknowledge their strengths, respond to their challenges and respect their knowledge (Dockett, 2007_[138]).

Having legitimate input and control over children's experiences leads to family confidence in the programmes and a likelihood that the programme will be used by families (Dockett, 2007_[138])

The most recent Australian *Closing the Gap Report* (2020_[106]) acknowledges the importance of achieving "genuine partnership" with Aboriginal and Torres Strait Islander communities as essential to delivering a successful early childhood programme:

We have seen that solutions are most successful when they are led by Aboriginal and Torres Strait Islander people. A genuine partnership with Aboriginal and Torres Strait Islander people, which values their expertise and lived experience, is integral to achieving equality in life outcomes (Department of the Prime Minister and Cabinet, 2020_[106]).

Partnering with Indigenous communities includes enabling Indigenous control over the early childhood service for their children. When Indigenous early childhood services are run by Indigenous leaders, cultural safety and cultural flexibility, respect and acceptance of Indigenous child-rearing beliefs and practice, and a sensitivity to the challenges experienced by Indigenous families are more likely to be demonstrated (Martin, 1999_[139])

Positioning families as "partners in change add(s) opportunities for connection, engagement and capacity building" (Bowes and Kitson, $2011_{[140]}$) and ensures that families receive the quality of education they want for their children (Harrison et al., $2012_{[141]}$).

Creating opportunities to negotiate what counts as important for children to do and learn is about sharing power (Ryan and Grieshaber, 2005_[142]). A holistic view of quality requires everyone to be willing to talk about differences, ask hard questions, listen, negotiate what matters most, and contribute to decisions that are mutually acceptable, leading to conditions that can improve young Indigenous children's care and learning.

Partnership requires negotiating a place for locally defined notions of quality and enabling them to be integrated with mainstream quality indicators, including local ways of doing, being and knowing (Martin,

2007_[119]). It involves recognising barriers to change as barriers that can be tackled by a whole-of-community approach. It may involve collaboration or more formal partnerships amongst service providers to ensure that the needs of the specific community are met.

Genuine partnerships require early learning programmes to appreciate and acknowledge that Indigenous communities are unique. Therefore, programmes which engage genuinely will not necessarily look the same: a no "one size fits all" approach (Sims et al., 2008[143]).

A holistic approach to achieve child and family well-being

Holistic approaches expand to include goals that go beyond the individual child. Programmes that aim to make a sustainable difference in young children's learning must make a difference in the lives of their families and communities. For this to occur involves collaboration and integration of services and organisations across a community. A holistic approach in early learning services that includes health as well as education outcomes, and family as well as child outcomes, is recommended. The concept of early childhood education can also incorporate a focus on the development of healthy mothers, healthy families and community wellness (Preston et al., 2012_[113]).

According to Rogoff et al. (2017_[144]):

... the value of early childhood services lies not only in the ways in which they support a child's learning and development, but also in the ways they support families and communities. Family engagement is therefore another key outcome to consider in an investigation of the participation in ECEC services of disadvantaged families (Rogoff et al., 2017_[144]).

Research confirms the "link between culture, child development and well-being, and demonstrates that interventions that include opportunities for the expression of cultural identities are associated with measurable improvements in the health and well-being of Aboriginal and Torres Strait Islander peoples" (SNAICC, 2019_[122]).

Early childhood programmes can become focal points in communities for the provision of a host of direct services, early identification and referrals in areas that are key contributors to outcomes, including early learning, parenting education and support, nutrition, prevention, early identification, primary health care, and clinical ancillary services for Aboriginal young children (Ball, $2014_{[58]}$).

A holistic focus becomes all the more urgent in remote Indigenous contexts where many Indigenous languages and cultural norms are under enormous pressure from poverty, overcrowded housing, food insecurity, health crises, and an assault of mainstream expectations and approaches which make them vulnerable to assimilation and erosion. Whereas many Indigenous communities around the world are introducing programmes to retrieve "sleeping" languages some of the richest repositories of Indigenous languages are languishing in vulnerable communities without resources or support. As these unsupported minority Indigenous languages disappear, so too do the knowledge systems and worldviews associated with the languages (Evans, 2010_[145]).

While non-Indigenous staff need to learn from community, family learning is also important for Indigenous people who have not had the opportunity for, or interest in, learning about Western educational goals and priorities, having become expert mainly in what counts in their own cultural contexts.

In some cases, the Indigenous caregiving generation had little involvement in Australia's formal education system themselves, potentially resulting in a limited understanding of the

contributions that early learning programmes make to children's future school success, and in counteracting the detrimental effects that negative situational circumstances (e.g. family violence and drug use) can have on child development (Smith et al., $2016_{[133]}$).

A strong conceptual argument for working with Indigenous early years services in a more holistic and integrated way is made in the literature on early childhood health and development. The argument is based on social-ecological analyses of how complex social systems affect child development and parenting. These conceptual models draw on Bronfenbrenner's (1979_[146]) ecological model of development with multiple levels of influence on children and parents (Ball, 2014_[58]).

A majority of Aboriginal and Torres Strait Islander children are thriving, with support from a unique web of family, community and culture. However, some of our First Nations children are still facing ongoing challenges that stem from colonisation and its effects, including discrimination, poverty, systemic removal, inter-generational trauma, dislocation from land and culture, and community disempowerment. Achieving equality would require redressing these challenges – In particular, persistent and ongoing trauma – through a holistic approach based on the social determinants of health (SNAICC, 2019_[122]).

Guthridge ($2016_{[83]}$) highlights findings from research in the Northern Territory revealing dire conditions – the structural risk factors – under which many young Indigenous children are living, and therefore, a need for more child services that are integrated across health, early childhood and education:

Our findings showing the extent to which early life health and socio-demographic factors are associated with children's developmental outcomes at age 5 years are of particular relevance to policy and service initiatives to improve the school education outcomes of Aboriginal children. Importantly, the preventive strategies needed to address these risks cross service sector boundaries and indicate the necessity for collaboration across health, early childhood and education services to implement strategies which optimise the developmental opportunities of children in their most formative years (Guthridge et al., 2016_[83]).

Inter-sectoral collaboration is ideally suited for early childhood development programmes and interventions because this approach recognises that the lives of young children (and those of their parents) are lived holistically and not sectorally. The factors that influence healthy child development are complex and holistic, encompassing dimensions of health, nutrition, child protection, learning, identity formation, and socialisation, among others, which are influenced by multiple factors at the level of the family, community, and the broader society.

The Secretariat of National Aboriginal and Islander Child Care strongly advocate for holistic children's services delivery models that they refer to as "integrated":

(These)...community-controlled early years education and care services are often described as "holistic, one-stop shops" providing families with access to the wraparound support services they require. These programmes include a range of services in addition to early childhood education and care, including health screening and programmes such as maternal child health, speech pathology and occupational therapy and family supports and referral pathways to specialist services (SNAICC, 2019_[122]).

Such integrated services, led by Aboriginal and Torres Strait Islander people, "are emerging as a best practice approach to engaging effectively with children and families experiencing vulnerability" and are seen to offer the greatest capacity to shift the trajectories of Indigenous children (SNAICC, 2019_[122]).

Canadian researchers (Gerlach, Browne and Suto, 2016_[147]) have reported on key findings of a critical qualitative inquiry undertaken with the Aboriginal Infant Development Program (AIDP), an Indigenous early child development programme in Canada. In-depth, semi-structured interviews were used to obtain the perspectives of Indigenous caregivers and Elders, AIDP workers, and administrative leaders. The findings centre on: (1) a relational perspective of family well-being that emphasises the inseparability between child health inequities and the impact of structural social factors on families lives, and (2) how AIDP workers enact relational accountability to families by: (a) fostering cultural connections; (b) creating networks of belonging and support; (c) responding to caregivers self-identified priorities; (d) mitigating racism in healthcare encounters, and (e) deferring an ECD agenda.

The Aboriginal Head Start in Urban and Northern Communities (AHSUNC) Evaluation also highlighted:

... benefits for parents, with at least 67% attending at least one parental activity during the year, 68% reporting improvements in their parenting skills; and 76% reporting increased knowledge about how to keep their children healthy. Additionally, the qualitative data demonstrated that parents/caregivers received social support from the AHSUNC sites on a regular basis, which was invaluable in helping them heal and become better caregivers; the relationships they formed led to reduced isolation, increased socialisation and better mental health; and the AHSUNC sites contributed to their increased self-esteem and confidence, awareness of themselves and their role in their children's lives, and understanding of parenting (Halseth and Greenwood, 2019_[50]).

Early support for children and families

Risks to children commence before they are born, resulting from the overall health of their mother, her age and the quality of care available to her. Children from low socio-economic households have a higher likelihood of low birthweight and ongoing poor health, impeding their development and well-being.

Gaps in learning between children from high and low socio-economic status families emerge early. Significant development disparities have been found among infants at 18 months of age. By 24 months, these development disparities have been found to be equivalent to 6 months of development (Fernald, Marchman and Weisleder, 2013_[148]). A study by the OECD found a 12-month development gap between five-year-olds from disadvantaged families compared to those from advantaged families. This gap was evident in children's cognitive and social-emotional development (OECD, 2020_[4]).

The quality of the relationship between a young child and his or her parents or primary caregivers is the most important factor in early development. Frequent, consistent and sensitive interactions create a secure base for the child, promoting attachment, social-emotional well-being and early learning (Burchinal, $2018_{[149]}$).

Children's home environments are thus the strongest predictors of their early development. Family socio-economic status, parents' education levels, parenting behaviours and parental well-being all contribute to the home environment children experience and thus to their well-being and early learning outcomes. For example, maternal health has been linked to children's development, especially in the development of social-emotional skills, highlighting the importance of a stable and consistent relationship with a parent that can be undermined if the parent experiences health problems that are not addressed.

Parents are children's first teachers. The activities they undertake with their children such as reading to them, engaging them in warm and responsive interactions, and the frequent use of complex adult language creates a home learning environment that supports children's development of cognitive skills, self-regulation, social-emotional skills, and their sense of well-being. Parents' early support of their child's

autonomy is also associated with positive development, particularly in the child's ability to self-regulate (Bernier, Carlson and Whipple, $2010_{[150]}$).

The Effective Pre-school and Primary Education Project in the United Kingdom also found that parental activities were significantly associated with children's later achievement in education. The Project found the combined effect of these activities on children's development was greater than the effects of parental education or family socio-economic status, although the prevalence of these activities correlated positively with both. A clear conclusion from the study is that what parents do with their children is more important than who parents are (Sylva et al., 2004_[151]). Thus, efforts to support children's early learning and well-being will be most effective when they involve supporting families to provide home environments their children will thrive in.

As noted in section one, supports for families such as high-quality ante- and post-natal care, sound nutrition, adequate housing and safe communities are critical in giving children a strong early start. In addition, child-parent attachment and the quality of children's home learning environments can be strengthened through parenting programmes and early child health and well-being initiatives (Heckman and Karapukula, 2019_[152]). One of the promising examples profiled in the previous section, from Manitoba, builds relationships with families prior to a child's birth and engages children in language-rich activities from 3 months of age. Programmes such as home visiting can assist families to better understand their young child's development and promote parents' engagement with their child through everyday activities that support the child's development and well-being.

Children's parents also largely determine whether their child participates in early childhood education and care (ECEC) and, if there is a choice, the type of setting the child attends, whether the child participates part-time or full-time, his or her starting age and whether participation is continuous over time and in the same settings. Parenting programmes, as noted above, can additionally help parents to understand the benefits of ECEC and help them to overcome barriers to their child's participation.

Culturally responsive policies and practices

Improved life-long outcomes for Indigenous people are associated with strong attachment to culture. Drawing on the Longitudinal Study of Indigenous Children, Colquhoun and Dockery (2012_[116]) analysed qualitative responses given by Indigenous Australians to two interview questions from the first wave of the research:

- What is it about Aboriginal or Torres Strait Islander culture that will help your child to grow up strong?
- Apart from health and happiness, what do you want for your child?

They found that

... what appears central to the healthy and successful development of Aboriginal and Torres Strait Islander children is learning about their culture and understanding that this culture and its connections can sit within a mainstream, western cultural context (Colquhoun and Dockery, 2012_[116]).

Early years programmes for Indigenous children have been critiqued for the continued dominance of Western ways of learning in their programmes at the expense of more balanced and culturally responsive equitable approaches.

Features of culturally safe early childhood environments include;

- welcoming human and physical environments, and active efforts to build trust and positive relationships with families
- non-Indigenous staff who are educated about cultural knowledge and are developing cultural competence in working with Indigenous children, families and communities
- programmes that welcome families and community at any time
- teachers who use Indigenous ways of knowing and learning to influence their approach to teaching and learning with all children
- Aboriginal language and culture in the curriculum (with content based on advice from the local community)
- mechanisms for two-way communication with families (Harrison et al., 2012, p. 8[141])

The clearest evidence on the impact of culturally responsive learning environments comes from Aotearoa New Zealand, where Māori children are able to participate in Māori-centred learning from the early years through to the end of school. Achievement data confirms that learners who attend $K\bar{o}hanga\ Reo$ and $Kura\ Kaupapa\ M\bar{a}ori$ (through to the end of Year 13) environments experience better outcomes in schooling and achieve consistently better school leaving qualifications than their peers in English medium schools. Additionally, there is a strong correlation between Māori medium education participation and the proportion of Māori language speakers regionally (OECD, 2017, p. $56_{[5]}$).

Positive effects are also found in Canada. The outcomes of First Nations Early Childhood Programs indicate that among children aged 2 to 4 years old, the short-term benefits of attending early childhood programmes designed specifically for First Nations children (e.g. Aboriginal Head Start On Reserve Programs) includes: greater knowledge of a First Nations language, greater ability to speak and understand the language, and greater mastery of developmental and communications milestones (First Nations Information Governance Centre, 2018_[107]).

An evaluation of the Aboriginal Head Start in Urban and Northern Communities Program, 2011-2012 to 2015-2016 (Health Canada and Public Health Agency of Canada, 2017_[13]) found significant improvements in school readiness across all measures, including language, motor and academic skills, social skills, communication, behaviour and attitudes, emotional maturity, and most children had a positive transition to school.

At the same time, the evaluation of the programme found that,

Nearly three-quarters of parents/caregivers reported that their child learned Indigenous words and 71% said their child was more aware of Indigenous cultures as a result of participating in the program. Site-specific evaluations, such as the one conducted with the Little Red Spirit [Aboriginal Head Start] Program, also showed benefits of participating in cultural activities that extended beyond the children themselves, with 62% of families doing more Indigenous and traditional activities, and 44% using their Indigenous language more often as a result of the program. Some respondents noted how this participation provided them with a sense of empowerment they did not have before (Halseth and Greenwood, 2019_[50]).

Ultimately, however, ECEC programmes are only effective when Indigenous families engage with them. The perception that an early childhood programme is culturally incongruent with home and family values can lead families to resist using or withdraw from an early childhood programme. As one Australian Indigenous scholar notes, child outcomes are affected when there is a "mismatch" between the expectations children encounter at home and within a mainstream learning environment (Krakouer, 2016_[114]).

Confident, capable early years educators

Young Indigenous children are supported to learn when educators, families, institutions and communities are able to work together effectively and respectfully across their cultural differences (Grace, Bowes and Elcombe, 2014_[117]; Miller, 2011_[134]). This ability is often called cultural competence. The operationalising of the concept is elusive and complex as research points out. Analyses of early childhood educators' understanding of cultural competence reveals differing levels of understanding, from the notion of a set of activities, skills and understandings to a more sophisticated view acknowledging the complexity and ever evolving nature of cultural competency. The process of developing cultural competence is long term and ongoing. It starts from a position of not knowing "to rethink what we think we know to transform what we do to broaden our understandings of cultural competence" (Sinclair, 2019_[153]). Developing cultural competence begins with honest and respectful engagement with families and communities where listening is more important than talking. Listening demonstrates an openness to different worldviews (Ritchie and Rau, 2006_[154]).

Capabilities and attitudes of staff toward how best to engage families also affect families' involvement. For example, educators' understanding of families' cultural norms and parenting practices, and their ability to communicate and interact effectively with people across cultures affects the connectedness families feel toward the service (Tayler, 2018_[155]).

Martin (1999_[139]) emphasises the importance of local Indigenous staff in the service to ensure cultural safety and flexibility. Concerns about cultural safety contribute to a feeling among many Indigenous families that their child is better off staying at home in the years before they start school (Bowes and Kitson, 2011_[140]). As noted by the Secretariat of National Aboriginal and Islander Child Care, the need for more investment in Aboriginal focused services and a strong Aboriginal workforce is needed to overcome the effects of effects of inter-generational trauma on young children especially in urban and regional regions.

Research has found that the presence of a pre-school worker who identifies as Indigenous, working in the area where a child lives, significantly increases attendance However, recruiting and retaining quality staff, and in particular Aboriginal and Torres Strait Islander staff, is a major difficulty in remote communities in Australia (SNAICC, 2019_[122]).

Young children need people who know them and can communicate effectively with them in their own language (Disbray, 2017_[156]). Children also have a right to be taught their own languages by people who are fluent speakers of that language. Locally recruited staff are likely to have the expert knowledge and skills that outsiders lack and find difficult to develop. In addition, they are "a key component of cultural competence/safety" because of their local knowledge and linguistic abilities (Tayler, 2018_[155]).

Non-Indigenous educators still make up the majority of the workforce in early childhood services. Educators from outside of a community can build cultural competence and expertise in teaching Indigenous children by developing close relationships with community members to enable a mutual exchange of information about the child they share. Cultural competency training, therefore, is ongoing in the community after recruitment.

It is recognised that non-Indigenous educators cannot be experts on Indigenous Australia, although they can demonstrate preparedness to understand and value cultural diversity. When doing so, educators access and make use of appropriate resources, design inclusive curricula, and engage the support and expertise of others including families and members of the local Indigenous community. Educator preparedness also relates to deep knowledge of how a person's own cultural background influences their thinking and practices, and

shapes how they view and respond to people from cultural backgrounds different from their own (Miller, $2011_{[134]}$).

Bridging children's home languages

Language continuity across home and early childhood settings is an important and often neglected issue for many Indigenous children.

It has been noted that young children especially benefit from early learning experiences made available in their first language or mother tongue. Using the mother tongue is thought to have several important benefits including improved learner engagement through being able to ask questions, clarify meaning and acquire new knowledge and skills in the language at which they are most proficient. This provision also affirms cultural identity and improves relationships between home and school (Greenwood, 2009_[126]).

Valerie Patterson, a Warlpiri language teacher from Central Australia, believes that if children learn through their mother tongue they will have a strong foundation for their schooling:

We believe that our children are happier learning first in their own language. They have more confidence in learning, in themselves and they learn more effectively. Many international and Australian reports show that it is important for children to learn in their first language. We have seen with our own eyes the benefits of teaching young children to speak, sing, read and write in their mother tongue first, before moving on to do the same in English... (Minutjukur et al., 2014_[157]).

The Early Years Learning Framework promotes the maintenance of home language and culture to build on children's knowledge, languages and understandings, to "show increasing knowledge, understanding and skill in conveying meaning in at least one language". Teachers are also advised to "encourage the use of and acquisition of home languages and Standard Australian English" (Taylor, 2011_[85]). These lofty ideals are critiqued:

While the framework makes such laudable aims explicit and provides accompanying guidelines for teachers, it is clear in the pre-primary entry/exit tests ... that multilingualism/dialectism is not taken into account let alone rewarded. School reports to parents in common use in pre-primary schools similarly do not acknowledge cross-cultural competence and, from observation, few pre-primary school teachers are aware of Indigenous language or conceptual schema or the range of values being instilled in children in Indigenous Australian homes (Taylor, 2011_[85]).

Lee et al $(2015_{[36]})$ reflects on the ongoing lack of training for educators who work with young Indigenous children in the Northern Territory of Australia who do not speak English as their first language. If children are not going to be taught by those who speak their languages, at the very least, they need educators who understand how to teach English as an additional language/dialect.

Broad, strengths-based assessments

Assessment practice is another arena where a holistic view of children's developing skills and knowledge aids in the negotiation of mutual expectations between families and services. There have been many critiques of standardised assessment practices and experiences that do not align with or take into account

the culture of the child. For example, Michele Sam, member of the Ktunaxa First Nation, discusses the Canadian Early Development Index (EDI), a rating scale of children's development conducted by their kindergarten teacher. EDI results have been used in ways that can contribute to a process of colonisation by "validating findings that minority populations are not thriving or are vulnerable" (Sam, 2011_[158]). Her research sought to introduce Indigenous communities to the EDI in ways that would decolonise the process and help them appreciate its potential usefulness to them in answering their own questions in support of their children. She advocates that EDI findings could be better interpreted "in a local, contextualised, rather than normative, comparative way" providing Indigenous families with more ownership and autonomy over the results, "rather than with a sense of disownment and dependency or helplessness".

Sam (2011_[158]) draws upon experiences of developing a collaborative research approach with which to engage Indigenous communities to appreciate, understand, and potentially use the Early Development Instrument (EDI). She discusses five core questions with regard to the validity of research on child development that utilises the EDI (from which the AEDI/AEDC in Australia was developed).

- How do Indigenous epistemologies and knowledges inform and influence research processes that utilise the EDI as a measurement tool?
- How can the EDI be used as a measurement tool within a research process that fosters the thriving of children and their families in Indigenous communities while promoting Indigenous Peoples' self-determination?
- In what ways do local, Indigenous cultural and ethical considerations inform aspects of validation research aspects pertaining to the EDI?
- How can (Western mainstream) universities build research capacity that is informed by Indigenous knowledges and ways of being, doing, and knowing?
- What are the potential consequences of using normative research tools such as the EDI as a method to build knowledge on children's development with Indigenous Peoples and Indigenous communities? (Sam, 2011_[158]).

The Secretariat of National Aboriginal and Islander Child Care (2013) also found current assessment measures of Indigenous children's preparedness to transition to school to be "culturally inappropriate" and "too narrow in their assessment criteria". She recommended a more strengths-based approach that recognises and appreciates the "qualities and skills (including language skills) that they bring to school".

... to be effective, current approaches to school transition must recognise that transition requires a multidimensional focus, with a strengths-based approach to Aboriginal and Torres Strait Islander children's development and learning, applying a cultural lens (SNAICC, 2013_[23]).

A different approach to assessment would lead us to ask how we measure the value of language and culture in terms of children's early learning? Qualitative understandings of the value of language and culture abound, however there are few quantitative measures. Yet, in a study it was noted that "First Nations parents, grandparents and Elders stressed the equal importance of children learning their Indigenous language concurrent with learning English" (Ball and Lewis, 2014[101]).

A strengths-based approach is a counter balance to the deficit model that continues to dominate descriptions of young Indigenous children's early learning and development. Relying only on deficit measures misses the positive strengths and abilities that children possess, and on which society must build to enhance child well-being (OECD, 2009_[159]).

Child-ready schools

Effective transition programmes for Indigenous children should utilise an ecological and holistic approach recognising the child, parents, families and schools (Moyle, 2019_[21]). Thus, the objective is to prepare school to be receptive, nurturing places for young children, as much as it is to prepare children and parents for the child's transition to school. Successful and effective transition-to-school programmes for Indigenous children require that, organisationally, schools are:

- flexible in their education provision, staffing and support for students and families
- collaborative and include working with community services
- culturally competent, with staff who exhibit positive attitudes towards Indigenous children and their families
- employing Indigenous staff, particularly staff from local communities
- willing to co-operate with and learn from the local community
- able to reflect on barriers to Aboriginal and Torres Strait Islander children. (SNAICC, 2014[160]).

The Secretariat of National Aboriginal and Islander Child Care's (2013_[23]) review of Australian literature on successful school transitions for Aboriginal and Torres Strait Islander children confirms that a series of key features are essential:

- relationship building and engagement with a range of stakeholders
- high-quality programmes and experiences
- strengths-based approaches
- flexibility
- cultural competence, and
- involvement of Aboriginal and Torres Strait Islander staff.

Together these elements provide a holistic foundation for children's transition to school that utilises the range of necessary supports and stakeholders that are crucial to children's early development (SNAICC, 2013_[23]).

In summary

Education systems that wish to improve education and other outcomes for young Indigenous children can only do so by improving the regular, lived experiences of those children. Any improvements will be greater and more sustained if they are made in partnership with children's families and communities.

Child development in the early years is complex and rapid, meaning that barriers that impede the early trajectory are difficult to address at later ages. Holistic approaches work best for children and their families, providing that the support is provided early and is congruent with the cultural and other contextual characteristics of the child and their family. Thus, culturally responsive policies and practices will be a cornerstone of any effective strategy, linked to a confident and capable workforce of early educators and other service support staff.

Thus, a child-centred approach is critical. For some Indigenous children, this requires the continuation of their home language/s as they enter early learning provision. The continuation of the home language provides the child with a bridge to learning the new, other language, as well as ensuring that learning does not falter or cease in an environment where the child cannot communicate or participate. A child-centred approach also points to the importance of broad, strengths-based assessments and child-ready schools.

Strategies and policies on their own are not sufficient to improve the circumstances and experiences of Indigenous children and their families. Yet, collaborative, sustained efforts that reach children early, take a holistic approach, and that empower Indigenous people can transform outcomes for young Indigenous children.

References

Akbari, E. and K. McCuaig (2018), Early Childhood Education Report 2017, http://ecereport.ca/en/.	[91]
Anderson, L. et al. (2018), We Always Stay: Stories from seven remarkable Aboriginal teachers in remote Australia, Batchelor Institute Press, Batchelor, NT.	[37]
Angelo, D. et al. (2019), Well-being & Indigenous Language Ecologies (WILE): A strengths-based approach. Literature Review for the National Indigenous Languages Report, Pillar 2, https://openresearch-repository.anu.edu.au/handle/1885/186414 .	[51]
Assembly of First Nations and Employment and Social Development Canada (2018), First Nations Early Learning and Child Care: Key Messages, https://www.afn.ca/uploads/sca-2018/Documents/Dialogue%20Sessions/Day%202%20-6%20Child%20Care/03%29%20ELCC%20Background%20and%20Messages%20final.pdf .	[75]
Australian Bureau of Statistics (2018), <i>Estimates of Aboriginal and Torres Strait Islander Australians</i> , https://www.abs.gov.au/ausstats/abs@.nsf/mf/3238.0.55.001 .	[48]
Australian Early Development Census (2014), Community story AEDC in action – Families as First Teachers Remote communities.	[84]
Australian Government Department of Education, E. (2009), <i>Belonging, Being and Becoming: The Early Years Learning Framework for Australia</i> , Australian Government Department of Education, Canberra, http://dx.doi.org/no.doi .	[71]
Australian Government Department of Social Services (2016), School/pre-school enrolment of Indigenous children, Research Summary No. 6/2016, https://www.dss.gov.au/sites/default/files/documents/08/2016/research_summary_no6/2016 - school_enrolment_of_indigenous_children05/08/2016.pdf .	[86]
Australian Government Department of Social Services (2015), <i>HIPPY Fact Sheet</i> , https://www.dss.gov.au/search/search/HIPPY .	[95]
Australian Institute of Aboriginal and Torres Strait Islander Studies; Federation of Aboriginal and Torres Strait Islander Languages (2005), <i>National Indigenous Languages Survey Report 2005.</i> , Canberra, Australia, https://aiatsis.gov.au/sites/default/files/research_pub/nils-report-2005.pdf .	[57]
Australian Institute of Family Studies (2015), <i>Childcare and Early Childhood Education in Australia</i> , <i>Fact Sheet 2015</i> , https://aifs.gov.au/publications/child-care-and-early-childhood-education-australia.	[88]

Australian Institute of Family Studies (2014), <i>Access to Early Childhood Education in Australia: Insights from a qualitative study, Research Report 28</i> , https://aifs.gov.au/sites/default/files/publication-documents/rr28.pdf .	[89]
Australian Medical Association (AMA) (2013), <i>Aboriginal and Torres Strait Islander Health Report Card 2012-2013. The Healthy Early Years—Getting the Right Start in Life</i> , https://ama.com.au/sites/default/files/documents/AMA_Indigenous_Health_Report_Card_2012_2013.pdf .	[10]
Ball, J. (2014), Improving the reach of early childhood education for First Nations, Inuit and Métis children, Moving Childcare Forward Project, Canada, http://movingchildcareforward.ca/images/policybriefs/Jessica_Ball_Improving_Reach_ECE_Aboriginal_Metis.pdf .	[58]
Ball, J. and M. Lewis (2014), "First Nations Elders' and Parents' Views on Supporting their Children's Language Development", <i>Canadian Journal of Speech-Language Pathology and Audiology</i> , Vol. 38, pp. 224-237.	[101
Bamblett, M., J. Harrison and P. Lewis (2010), "Proving Culture and Voice Works: Towards Creating the Evidence Base for Resilient Aboriginal and Torres Strait Islander Children in Australia", <i>International Journal of Child and Family Welfare</i> , Vol. 13/1-2, pp. 98-113.	[131
Bankwest Curtin Economic Centre (2017), Educate Australia Fair?: Education Inequality in Australia, Focus on the State Series. No. 5, June 2017, https://bcec.edu.au/assets/099068 BCEC-Educate-Australia-Fair-Education-Inequality-in-Australia WEB.pdf.	[39]
Barnett, T., F. Roost and J. McEachran (2012), "Evaluating the effectiveness of the Home Interaction Program for Parents and Youngsters (HIPPY)", <i>Family Matters</i> , Vol. 91, pp. 27-37.	[96]
Bartik, T. (2014), From Pre-school to Prosperity: The Economic Payoff to Early Childhood Education, W.E. Upjohn Institute, http://dx.doi.org/10.17848/9780880994835 .	[17]
Bat, M. (2005), "When you can't even buy a bedtime story", Ngoonjook: A Journal of Australian Indigenous Issues, Vol. 27, pp. 43-61.	[98]
Benton, R. (1979), <i>Who speaks Māori in New Zealand?</i> , New Zealand Council for Educational Research, Wellington, NZ, http://dx.doi.org/no doi .	[54]
Bernier, A., S. Carlson and N. Whipple (2010), "From external regulation to self-regulation: Early parenting precursors of young children's executive functioning", <i>Child Development</i> , Vol. 81/1, pp. 326-339, http://dx.doi.org/10.1111/j.1467-8624.2009.01397.x .	[150
Bowes, J. and R. Grace (2014), <i>Review of early childhood parenting, education and health intervention programs for Indigenous children and families in Australia</i> , https://www.aihw.gov.au/reports/indigenous-australians/review-of-early-childhood-parenting-education-and/contents/table-of-contents .	[115
Bowes, J. and R. Kitson (2011), Indigenous Child Care Choices Project Report.	[140
British Columbia Ministry of Education (2019), <i>Early Learning Framework</i> , https://www2.gov.bc.ca/gov/content/education-training/early-learning/teach/early-learning-framework .	[74]

Brofenbrenner, U. (1979), <i>The ecology of human development: Experiments by nature and design</i> , Harvard University Press, Cambridge, MA.	[146
Burchinal, M. (2018), "Measuring Early Care and Education Quality", <i>Child Development Perspectives</i> , Vol. 12/1, pp. 3-9, https://doi.org/10.1111/cdep.12260 .	[149
Carr, M. and L. Rameka (2010), "New Zealand: Te Whãriki", in Brooker, L. and M. Woodhead (eds.), <i>Early Childhood in Focus: Culture and Learning</i> , Milton Keynes.	[69]
Center on the Developing Child (2010), <i>The Foundations of Lifelong Health Are Built in Early Childhood</i> , https://developingchild.harvard.edu/resources/the-foundations-of-lifelong-health-are-built-in-early-childhood/ (accessed on 23 June 2021).	[16]
Colquhoun, S. and A. Dockery (2012), "The link between Indigenous culture and well-being: Qualitative evidence for Australian Aboriginal peoples.", <i>CLMR Discussion Paper Series 2012/01, Curtin University, Centre for Labour Market Research and School of Economics and Finance.</i> , Vol. 1.	[116
Dahlberg, G., P. Moss and A. Pence (1999), <i>Beyond Quality in Early Childhood Education and Care:</i> Postmodern Perspectives, https://files.eric.ed.gov/fulltext/ED433943.pdf .	[120
Denzin, N. and Y. Lincoln (2008), "Introduction: Critical methodologies and Indigenous inquiry", in Denzin, N., Y. Lincoln and L. Smith (eds.), <i>Handbook of Critical and Indigenous Methodologies</i> , Thousand Oaks, California.	[125
Department for Communities (2012), <i>Literature Review—Aboriginal Early Years Programs (0-8 years)</i> , Department for Communities Government of Western Australia. Institute for Professional Practice, Learning and Education Charles Sturt University, https://deadlychangesgoingtobigschool.files.wordpress.com/2014/09/aey-lit-review-part-b-2012.pdf .	[94]
Department of Education and Training Victoria (2016), <i>Marrung: Aboriginal Education Plan 2016-2026</i> , Melbourne, https://www.education.vic.gov.au/Documents/about/programs/aboriginal/Marrung Aboriginal Education_Plan_2016-2026.pdf.	[72]
Department of Education, Training and Employment, Queensland (2013), <i>Evaluation of the Early Years Centre Initiative Summary Report</i> , https://earlychildhood.qld.gov.au/aboutUs/Documents/eyc-summary-report.pdf .	[99]
Department of the Prime Minister and Cabinet (2020), <i>Closing the Gap Report 2020</i> , https://www.niaa.gov.au/news-centre/ Indigenous-affairs/closing-gap-2020-report.	[106
Departments of Education, Culture and Employment, and Health and Social Services, North West Territories (2013), <i>A Framework and Action Plan for Early Childhood Development in the North West Territories</i> , https://www.ece.gov.nt.ca/sites/ece/files/resources/ecd framework and action planfinal - mar 2014.pdf.	[102
Disbray, S. (2017), Why Indigenous children benefit from bilingual education, School News, June 16 2017., https://www.school-news.com.au/education/why-Indigenous-children-benefit-from-bilingual-education/(accessed May 1 2020).	[156
Dockett, S. (2007), Successful transition programs from prior-to-school to school for Aboriginal and Torres Strait Islander children. Final Report submitted to the Project Reference Group.,	[138

http://www.curriculum.edu.au/verve/ resources/ATSI Successful Transition programs Report Dec 2 007.pdf (accessed 15 March 2020).	
Durie, M. (2006), <i>Measuring Māori Well-being</i> , https://treasury.govt.nz/sites/default/files/2007-09/tgls-durie.pdf .	[53]
Early Childhood Australia. (2019), <i>Early Learning: Everyone Benefits. State of early learning in Australia 2019. Canberra, ACT:</i> , http://www.earlychildhoodaustralia.org.au/our-work/submissions-statements/state-early-learning-australia-report-2019/ (accessed December 2nd 2019).	[105
Education Council New Zealand (2017), <i>Our code</i> , <i>our standards</i> , https://teachingcouncil.nz/content/ourcode-our-standards .	[76]
Education Counts, New Zealand (n.d.), ECE participation, https://www.educationcounts.govt.nz/statistics/participation (accessed on 20 July 2021).	[104
Education Review Office (2020), <i>Te Ara Poutama: Indicators of quality for early childhood education</i> – <i>What matters most.</i> , https://www.ero.govt.nz/assets/Uploads/Te-Ara-Poutama-FInal.pdf .	[77]
Education Review Office (2019), <i>Te Whāriki: Awareness towards implementation.</i> , https://www.ero.govt.nz/assets/Uploads/ERO-Te-Whariki-Report-WEB-Updated.pdf .	[80]
Education Review Office (2018), Awareness and confidence to work with Te Whāriki., https://www.ero.govt.nz/assets/Uploads/Awareness-and-confidence-to-work-with-Te-Whariki.pdf .	[81]
Evans, N. (2010), <i>Dying Words: Endangered languages and what they have to tell us.</i> , Oxford UK and Malden MA: Wiley-Blackwell.	[145
Fernald, A., V. Marchman and A. Weisleder (2013), "SES differences in language processing skill and vocabularly are evident at 18 months", <i>Developmental Science</i> , Vol. 16/2.	[148
Findlay, L. and D. Kohen (2010), Childcare for First Nations children living off reserve, Métis children and Inuit children, Canadian Social Trends, Statistics Canada.	[108
First Nations Information Governance Centre (2018), <i>Understanding Child Care in First Nations Communities</i> . FNIGC Research Series, https://fnigc.ca/wp-content/uploads/2020/09/bd344e1dba275b7a507eec2322bce7db fnigc research series child care en final.pdf.	[107
Friendly, M. et al. (2018), <i>Early Childhood Education and Care in Canada 2016</i> , Toronto ON Canada: Childcare Resource and Research Unit, http://dx.doi.org/www.childcarecanada.org .	[90]
Gerlach, A., A. Browne and M. Suto (2016), "Relational approaches to fostering health equity for Indigenous children through early childhood intervention", <i>Health Sociology Review</i> , Vol. 27/1, pp. 104-119, http://dx.doi.org/10.1080/14461242.2016.1231582 .	[147]
Goddard, I. (1996), <i>Handbook of North American Indians</i> , vol.17: Languages, Smithsonian Institution, Washington, D.C.	[60]
Goldfeld, S. et al. (2016), "The role of pre-school in promoting children's healthy development: Evidence from an Australian population cohort", <i>Early Childhood Research Quarterly</i> , Vol. 35, pp. 40-48, http://dx.doi.org/10.1016/j.ecresq.2015.11.001 .	[1]
Government of Canada (2019), Backgrounder: New Funding and Policy Approach for First Nations Kindergarten to Grade 12 Education, https://www.canada.ca/en/indigenous-services-	[111

education.html. [73] Government of Canada (2018), Indigenous Early Learning and Child Care Framework. Canada: Government of Canada., https://www.canada.ca/en/employment-socialdevelopment/programs/indigenous-early-learning/2018-framework.html. [117 Grace, R., J. Bowes and E. Elcombe (2014), "Child Participation and Family Engagement with Early Childhood Education and Care Services in Disadvantaged Australian Communities", International Journal of Early Childhood, Vol. 46/2, pp. 271-298, http://dx.doi.org/10.1007/s13158-014-0112-y. [126 Greenwood, M. (2009), Places for the good care of children: A discussion of Indigenous cultural consideration and early childhood in Canada and New Zealand., https://open.library.ubc.ca/cIRcle/collections/ubctheses/24/items/1.0068. [83] Guthridge, S. et al. (2016), "Early influences on developmental outcomes among children, at age 5, in Australia's Northern Territory", Early Childhood Research Quarterly, Vol. 35, pp. 124-134. [50] Halseth, R. and M. Greenwood (2019), Indigenous Early Childhood Development in Canada: Current state of knowledge and future directions, National Collaborating Centre for Aboriginal Health, Prince George, BC, https://speechandhearingbc.ca/wp-content/uploads/2019/04/Indigenous-Early-Child-Developmentin-Canada-NCCAH-2019.pdf. [28] Hare, J. (2012), "They tell a story and there's meaning behind that story: Indigenous knowledge and young Indigenous children's literacy learning", Journal of Early Childhood Literacy, Vol. 12/4, pp. 389-414. [141 Harrison, L. et al. (2012), Early learning programs that promote children's developmental and educational outcomes, Australian Institute of Health and Welfare; Australian Institute of Family Studies, Resource sheet no. 15. Produced for the Closing the Gap Clearinghouse. Canberra and Melbourne, http://www.aihw.gov.au/ClosingTheGap/Publications/. [13] Health Canada and Public Health Agency of Canada (2017), Evaluation of the Aboriginal Head Start in Urban and Northern Communities Program 2011-2012 to 2015-2016, Office of Audit and Evaluation, Health Canada and Public Health Agency of Canada, https://www.canada.ca/en/publichealth/corporate/transparency/corporate-management-reporting/evaluation/2011-2012-2015-2016aboriginal-head-start-urban-and-northern-communities-program.html. [2] Heckman, J. (2017), Four big benefits of investing in early childhood development, https://heckmanequation.org/resource/4-big-benefits-of-investing-in-early-childhood-development/. [152 Heckman, J. and G. Karapukula (2019), Inter-generational and Intragenerational Externalities of the Perry Pre-school Project, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3399272 (accessed on 25 February 2020). [123 Human Rights and Equal Opportunity Commission (1995), Aboriginal and Torres Strait Islander Social Justice Commissioner, Third Report 1995. 1 July 1994 to 30 June 1995, https://humanrights.gov.au/sites/default/files/content/pdf/social_justice/sj_report95.pdf. [34] Human Rights, A. (1997), Bringing them home: National Inquiry into the separation of Aboriginal and Torres Strait Islander children from their families, Commonwealth of Australia, Sydney, https://humanrights.gov.au/sites/default/files/content/pdf/social justice/bringing them home report.pdf.

canada/news/2019/01/new-funding-and-policy-approach-for-first-nations-kindergarten-to-grade-12-

Hutchins, T., S. Saggers and K. Frances (2009), "Australian Indigenous perspectives on quality assurance in children's services", <i>Australasian Journal of Early Childhood</i> , Vol. 34, pp. 10-19, https://searchinformit-com-au.virtual.anu.edu.au/documentSummary .	[6]
Institute of Medicine, National Research Council (2015), <i>Transforming the workforce for children birth through age 8: A unifying foundation</i> , National Academies Press, Washington, D.C., https://www.ncbi.nlm.nih.gov/books/NBK310532/pdf/Bookshelf_NBK310532.pdf .	[24]
Inuit Tapiriit Kanatami (2014), Assessing the Impact of the First Nations and Inuit Child Care Initiative (FNICCI) across Inuit Nunangat	[100
Japel, C. and M. Friendly (2019), <i>Inequalities in access to early childhood education and care in Canada:</i> The equal access study. ICEC, Working Paper Series, vol. 4., Deutsches Jugendinstitut e.V., München.	[129
Jung M. Klein and S. Stoll, D. (2018), "Language transition(s): School responses to recent changes in language choice in a Northern Dene Community (Canada)", in Wigglesworth, G., J. Simpson and J. Vaughan (eds.), Language Practices of Indigenous Children and Youth: The transition from home to school, Palgrave Macmillan, London, https://doi.org/10.1057/978-1-137-60120-9 3.	[41]
Kearney, E. et al. (2014), "Building positive relationships with Indigenous children, families and communities: learning at the cultural interface", <i>Critical Studies in Education</i> , Vol. 55/3, pp. 338-352, http://dx.doi.org/10.1080/17508487.2014.914963 .	[25]
Keegan, P. (2017), "Māori dialect issues and Māori language ideologies in the revitalisation era", <i>MAI Journal</i> , Vol. 6, pp. 129-142, http://dx.doi.org/10.20507/MAIJournal.2017.6.2.2 .	[52]
Kellard, K. and H. Paddon (2016), Indigenous Participation in Early Childhood Education and Care - Qualitative Case Studies. Melbourne, Victoria: The Social Research Centre, https://docs.education.gov.au/system/files/doc/other/indigenous_participation_in_ .	[92]
Kitson, R. and J. Bowes (2010), "Incorporating Indigenous ways of knowing in early education for Indigenous children", <i>Australasian Journal of Early Childhood</i> , Vol. 35/4, pp. 81-89.	[112
Krakouer, J. (2016), Aboriginal Early Childhood Education: Why attendance and true engagement are equally important., ACER, Australia, https://research.acer.edu.au/cgi/viewcontent.cgi?article=1044&context=indigenous education .	[114]
Kral, I. (2012), <i>Talk, Text and Technology: Literacy and Social Practice in a Remote Indigenous Community</i> , Multilingual Matters, Bristol, UK, https://www.multilingual-matters.com/page/detail/?k=9781847697585 .	[35]
Lee, P. et al. (2015), Indigenous Kids and Schooling in the Northern Territory: An introductory overview and brief history of Aboriginal Education in the Northern Territory, Batchelor Press, Darwin, http://www.batchelorpress.com/docs/open/iks/indigenous-kids-schooling-nt.pdf .	[36]
Leske, R. et al. (2015), "What works and why?: Early childhood professionals' perspectives on effective early childhood education and care services for Indigenous families", <i>Australasian Journal of Early Childhood</i> , Vol. 40, pp. 109-118., https://doi-org.virtual.anu.edu.au/10.1177/183693911504000114 .	[118
Liddell, M. et al. (2011), Investing in our future: an evaluation of the national rollout of the Home Interaction Program for Parents and Youngsters (HIPPY), http://library.bsl.org.au/jspui/bitstream/1/6182/1/Investing in our future HIPPY National Rollout Evaluation FinalReport 2011.pdf.	[97]

Martin, K. (2008), "Please Knock Before You Enter: Aboriginal Regulation of Outsiders and the Implications for Researchers.", <i>Teneriffe, Qld: Post Pressed.</i> .	[124
Martin, K. (2007), "Ma(r)king Tracks and Reconceptualising Aboriginal Early Childhood Education: An Aboriginal Australian Perspective", <i>Childrenz Issues: Journal of the Children's Issues Centre</i> , Vol. 11/1, pp. 15-20.	[119
Martin, K. (1999), "When 'why?' becomes 'why not?': Cultural safety and Aboriginal early childhood services", <i>Every Child</i> , Vol. 5/4, pp. 6-7.	[139
McRae, J. (1997), "From Maori oral traditions to print", in Griffith, P., R. Harvey and K. Maslen (eds.), Book and print in New Zealand: A guide to print culture in Aotearoa, Victoria University Press, Wellington, NZ, http://nzetc.victoria.ac.nz/tm/scholarly/tei-GriBook.html .	[29]
McTurk, N. et al. (2008), <i>The school readiness of Australian Indigenous children: A review of the literature.</i> , Menzies School of Health Research and School for Social and Policy Research, Charles Darwin University, Northern Territory, https://www.aracy.org.au/publications-resources/command/download_file/id/152/filename/The_school_readiness_of_Australian_Indigenous_children.pdf .	[22]
Meek, B. (2018), "Learning a new routine: Kaska language development and the convergence of styles", in Wigglesworth, G., J. Simpson and J. Vaughan (eds.), Language Practices of Indigenous Children and Youth: The transition from home to school, London: Palgarve Macmillan, pp. 337-364.	[59]
Meek, B. (2010), "We are our language: An ethnography of language revitalization in a northern Athabaskan community.", <i>Tucson: The University of Arizona Press.</i> .	[174
Meek, B. (2007), "Respecting the language of Elders: Ideological shift and linguistic discontinuity in a Northern Athapascan community", <i>Journal of Linguistic Anthropology</i> , Vol. 17/1, pp. 23-43.	[184
Melhuish, E. et al. (2008), "Effects of the Home Learning Environment and Pre-school Center Experience upon Literacy and Numeracy Development in Early Primary School", <i>Journal of Social Issues</i> , Vol. 64/1.	[185
Miller, M. (2015), "Consultation with Aboriginal and Torres Strait Islander people in early childhood education: the impact of colonial discourses.", <i>The Australian Educational Researcher</i> , Vol. 42/5, pp. 549-565.	[175
Miller, M. (2011), "Embedding Indigenous Perspectives in the Early Childhood Curriculum", <i>Educating Young Children: Learning and Teaching in the Early Childhood Years</i> , Vol. 17/2, pp. 37-39.	[134
Ministry of Education (2019), <i>He Taonga te Tamaiti - Every Child a Taonga: Early Learning Action Plan</i> 2019-2029., https://conversation-space.s3-ap-southeast-2.amazonaws.com/SES 0342 ELS 10YP Final+Report Web.pdf .	[64]
Ministry of Education (2019), Attendance at licensed ECE services in 2019. Education Counts: Early Childhood Education Census 2019., https://www.educationcounts.govt.nz/ data/assets/pdf file/0011/196562/Attendance-at-licensed-ECE-services-in-2019.pdf.	[87]
Ministry of Education (2017), Te Whāriki- Te whāriki mātauranga mō ngā mokopuna o Aotearoa: Early childhood curriculum. Wellington, New Zealand.,	[68]

https://www.education.govt.nz/assets/Documents/Early-Childhood/Te-Whariki-Early-Childhood-Curriculum-ENG-Web. [173 Ministry of Education (2013), Ka Hikitia. Wellington, New Zealand. Accelerating Success, https://www.education.govt.nz/assets/Documents/Ministry/Strategies-and-policies/Ka-Hikitia/KaHikitiaAcceleratingSuccessEnglish.pdf. [176 Ministry of Education (2013), Tau Mai Te Reo: The Māori language in education strategy 2013-2017., https://www.education.govt.nz/assets/Documents/Ministry/Strategies-and-policies/Ka-Hikitia/TauMaiTeReoFullStrategyEnglish.pdf (accessed 21 February 2020). [157 Minutjukur, M. et al. (2014), "Voices from the Red Dirt on Education", Journal of Australian Indigenous Issues, Vol. 17, pp. 158-163. [109 Mitchell, L. and P. Meagher-Lundberg (2017), "Brokering to support participation of disadvantaged families in early childhood education", British Educational Research Journal, Vol. 43/5, pp. 952-967, http://dx.doi.org/10.1002/berj.3296. [162 Moore, T. (2011), Review of the evidence base in relation to early childhood approaches to support children in highly disadvantaged communities for the Children's Ground Project.. [163 Moore, T., M. McDonald and H. McHugh-Dillon (2015), Early childhood development and the social determinants of health inequities: A review of the evidence, Vic Health, Carlton South, Victoria, https://www.rch.org.au/uploadedFiles/Main/Content/ccch/151014_Evidence-review-early-childhooddevelopment-and-the-social-determinants-of-health-inequities_Sept2015.pdf. [166 Morabito, C., M. Vandenbroeck and R. Roose (2013), "'The Greatest of Equalisers': A Critical Review of International Organisations' Views on Early Childhood Care and Education", Journal of Social Policy, Vol. 42, pp. 451-467, http://dx.doi.org/10.1017/S0047279413000214. [177 Morton, S. (2018), Growing Up in New Zealand: A longitudinal study of New Zealand children and their families. Transition to school., Auckland: Growing Up in New Zealand. [79] Morton, S. et al. (2017), Growing Up in New Zealand: A longitudinal study of New Zealand children and their families, Growing up in New Zealand, Auckland. [21] Moyle, K. (2019), Literature Review: Indigenous early childhood education, school readiness and transition programs into primary school.. [26] New Zealand Ministry of Education (2020), Ka Hikitia: Accelerating Success, https://www.education.govt.nz/assets/Documents/Ministry/Strategies-and-policies/Ka-Hikitia/KaHikitiaAcceleratingSuccessEnglish.pdf. [178 New Zealand Ministry of Education (2017), About Māori-medium education, https://education.govt.nz/ministry-of-education/specific-initiatives/nga-whanaketanga-rumakimaori/about- maori-medium-education/. [33] New Zealand Ministry of Health (2019), Wai 2575 Maori Health Trends Report, https://www.health.govt.nz/publication/wai-2575-maori-health-trends-report. [4] OECD (2020), Early Learning and Child Well-being: A Study of Five-year-Olds in England, Estonia, and the United States, OECD Publishing, Paris, https://dx.doi.org/10.1787/3990407f-en.

OECD (2017), Promising Practices in Supporting Success for Indigenous Students, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264279421-en .	[5]
OECD (2012), Starting Strong III - A Quality Toolbox for Early Childhood Education and Care, OECD Publishing, Paris, http://www.oecd.org/education/school/startingstrongiii-aqualitytoolboxforearlychildhoodeducationandcare.htm .	[121
OECD (2009), <i>Doing Better for Children. Paris: OECD Publishing.</i> , https://www.oecd.org/els/family/doingbetterforchildren.htm .	[159
Olsen, T. and B. Andreassen (2017), "Indigenous Issues in Early Childhood Education Curricula in Norway and Aotearoa/New Zealand", <i>NZ J Educ Stud</i> , Vol. 52, pp. 255–270, http://dx.doi.org/10.1007/s40841-017-0085-0 .	[70]
Page, J. et al. (2019), "An Abecedarian Approach with Aboriginal Families and Their Young Children in Australia: Playgroup Participation and Developmental Outcomes", <i>International Journal of Early Childhood</i> , Vol. 51/2, pp. 233-250, http://dx.doi.org/10.1007/s13158-019-00246-3 .	[132
Pascoe, S. and D. Brennan (2017), Lifting our game: Report of the Review to Achieve Educational Excellence in Australian Schools through Early Childhood Interventions, Victorian Government, Melbourne, https://education.nsw.gov.au/content/dam/main-education/early-childhood-education/whats-happening-in-the-early-childhood-education-sector/media/documents/Lifting-Our-Game-Final-Report.pdf .	[19]
Pasolli, L. (2019), "An Analysis of the Multilateral Early Learning and Child Care Framework and the Early Learning and Child Care Bilateral Agreements". Child Care Now., https://www.childcarecanada.org/documents/research-policy-practice/19/04/analysis-multilateral-early-learning-and-child-care-framework .	[63]
Pence, A. and V. Pacini-Ketchabaw (2010), "Both/And: Reflections on Recent Anglo/Western Early Childhood Curriculum Statements", <i>International Journal of Child Care and Education Policy</i> , Vol. 4, pp. 15-24, https://doi.org/10.1007/2288-6729-4-2-15 .	[32]
Phair, R. (2021), "International early learning and child well-being study assessment framework", <i>OECD Education Working Papers</i> , No. 246, OECD Publishing, Paris, https://dx.doi.org/10.1787/af403e1e-en .	[14]
Phillips, L., J. Ritchie and J. Adair (2020), "Young children's citizenship membership and participation: comparing discourses in early childhood curricula of Australia, New Zealand and the United States", Compare: A Journal of Comparative and International Education, Vol. 50, pp. 592-614, https://doi.org/10.1080/03057925.2018.1543578 .	[169
Prentice, S. and L. White (2019), "Childcare deserts and distributional disadvantages: the legacies of split childcare policies and programmes in Canada", <i>Journal of International and Comparative Social Policy</i> , Vol. 35/1, pp. 59-74, http://dx.doi.org/10.1080/21699763.2018.1526700 .	[110
Press, F. and A. Hayes (2000), <i>OECD Thematic Review of Early Childhood Education and Care Policy:</i> Australian Background Report, https://www.oecd.org/australia/1900259.pdf .	[170
Preston, J. (2016), "Education for Aboriginal Peoples in Canada: An Overview of Four Realms of Success", <i>Diaspora, Indigenous, and Minority Education</i> , Vol. 10/1, pp. 14-27, http://dx.doi.org/10.1080/15595692.2015.1084917.	[135

Preston, J. et al. (2012), "Aboriginal Early Childhood Education in Canada: Issues of Context", <i>Journal of Early Childhood Research</i> , Vol. 10, pp. 3-18, https://doi.org/10.1177/1476718X11402753 .	[113
Priest, K., B. Coleman-Sleep and K. Martin (2005), <i>Preparing the ground for partnership: Exploring quality assurance for Aboriginal and Torres Strait Islander child care: A literature review and background paper</i> , https://apo.org.au/sites/default/files/resource-files/2005-12/apo-nid892.pdf .	[167
Prochner, L. (2004), "Early childhood education programs for Indigenous children in Canada, Australia and New Zealand: An historical review", <i>Australian Journal of Early Childhood</i> , Vol. 29, pp. 7-16, https://search.informit.com.au/documentSummary .	[27]
Radio New Zealand (2018), <i>Inside the Attempts to Revive Ngai Tahu Dialect, Te Manu Korihi</i> , https://www.rnz.co.nz/news/identity/367486/inside-the-attempts-to-revive-ngai-tahu-dialect .	[55]
Rameka, L. (2018), A commentary on Ngā Pou Here, ERO's framework for reviewing early childhood services. With a particular focus on Mātauranga and Tikanga Whakaako., https://www.ero.govt.nz/assets/Indicators-supporting-reports/A-commentary-on-Nga-Pou-Here-EROs-framework-for-reviewing-early-childhood-services-Dr-Lesley-Rameka.pdf .	[82]
Ratima, M. et al. (2019), "Te kura mai i tawhiti research programme: A collaborative lifecourse approach to health, well-being and whānau development", <i>MAI Journal: A New Zealand Journal of Indigenous Scholarship</i> , Vol. 8/1, http://dx.doi.org/10.20507/maijournal.2019.8.1.5 .	[130
Rau, C. and J. Ritchie (2011), "Ahakoa he iti:Early Childhood Pedagogies Affirming of Māori Children's Rights to Their Culture", <i>Early Education & Development</i> , Vol. 22/5, pp. 795-817, http://dx.doi.org/10.1080/10409289.2011.596459 .	[30]
Ritchie, J. (2010), "Being "socio-cultural" in early childhood education practice in Aotearoa", <i>Early Childhood Folio</i> , Vol. 14/2, http://dx.doi.org/10.18296/ecf.0164 .	[67]
Ritchie, J. (2008), <i>Te Puawaitanga: Partnerships with tamariki and wha nau in bicultural early childhood care and education.</i> , http://www.tlri.org.nz/pdfs/9238 finalreport.pdf.	[136
Ritchie, J. and C. Rau (2006), Whakawhanaungatanga: Partnerships in bicultural development in early childhood care and education. Wellington, New Zealand, http://www.tlri.org.nz/pdfs/9207 finalreport.pdf.	[154
Rogoff, B. et al. (2017), "Noticing Learners' Strengths Through Cultural Research", <i>Perspectives on Psychological Science</i> , Vol. 12/5, pp. 876–888.	[144
Rouse, E. and F. Hadley (2018), "Where did love and care get lost? Educators and parents' perceptions of early childhood practice", <i>International Journal of Early Years Education.</i> , Vol. 26/2, pp. 159-172.	[179
Rowan, M. (2017), "Thinking with Nunangat in Proposing Pedagogies For/With Inuit Early Childhood Education. Faculty of Education, University of New Brunswick.".	[137
Royal Commission on Aboriginal Peoples (2015), <i>Volume 3 Gathering Strength</i> , Ottawa, Canada, https://data2.archives.ca/rcap/pdf/rcap-492.pdf .	[42]
Ryan, S. and S. Grieshaber (2005), "Shifting from Developmental to Postmodern Practices in Early Childhood Teacher Education", <i>Journal of Teacher Education</i> , Vol. 56/1, pp. 34-45.	[142

Sam, M. (2011), "An Indigenous Knowledges Perspective on Valid Meaning Making: A Commentary on Research with the EDI and Aboriginal Communities", <i>Social Indicators Research</i> , Vol. 103/2, pp. 315-325, http://dx.doi.org/10.1007/s11205-011-9848-z .	[158
Shuey, E. and M. Kankaraš (2018), "The Power and Promise of Early Learning", <i>OECD Education Working Papers</i> , No. 186, OECD Publishing, Paris, https://dx.doi.org/10.1787/f9b2e53f-en .	[3]
Silburn, S. (2018), Early Pathways to School Learning: Lessons from the NT Data Linkage Study – Summary Findings, Darwin: Menzies School of Health Research	[15]
Silburn, S. et al. (2011), The First 5 Years: Starting Early. Topical paper commissioned for the public consultations on the Northern Territory Early Childhood Plan, https://hdl.handle.net/10070/268740 .	[165]
Simpson, J. et al. (2017), <i>Te Ohonga Ake: The Health of Māori Children and Young People in New Zealand Series Two</i> , http://hdl.handle.net/10523/7390 .	[172
Sims, M. (2014), Submission DR710- Childcare and Early Childhood Learning Public Inquiry, https://www.pc.gov.au/inquiries/completed/childcare/submissions/post-draft/submission-counter/subdr710-childcare.pdf .	[171]
Sims, M. (2011), Early childhood and education services for Indigenous children prior to starting school. Resource sheet no. 7 for the Closing the Gap Clearinghouse. Canberra: Australian Institute of Health and Welfare and Australian Institute of Family Studies, https://www.aihw.gov.au/getmedia/c091cf6b-c4ca-4e36-ac61-25150b0b92b9/ctgc-rs07.pdf .	[7]
Sims, M. et al. (2008), "Indigenous Child Care—Leading the Way", <i>Australasian Journal of Early Childhood</i> , Vol. 33/1, pp. 56-60, http://dx.doi.org/10.1177/183693910803300110 .	[143
Sinclair, K. (2019), "An analysis of educators' understandings of cultural competence", <i>Methodological Innovations</i> , Vol. 12, pp. 1-12, https://doi.org/10.1177/2059799119825563 .	[153
Siraj-Blatchford, I. and M. Woodhead (2009), <i>Effective Early Childhood Programmes</i> . <i>Early Childhood in Focus 4</i> , The Open University and Bernard van Leer Foundation, Milton Keynes, UK, http://oro.open.ac.uk/19300/ .	[164]
Smith, H. et al. (2016), "Caregivers and service providers' perspectives on a Western Australian aboriginal community's 0–3 years, early learning programme", <i>Early Child Development and Care</i> , Vol. 188/10, pp. 1431-1441, http://dx.doi.org/10.1080/03004430.2016.1263946 .	[133
SNAICC (2020), SNAICC Submission to the House of Representatives Standing Committee on Employment, Education and Training: Inquiry into Education in Remote and Complex Environments., https://www.snaicc.org.au/wp-content/uploads/2020/03/SNAICC-Submission Education-in-Remote-and-Complex-Environments.pdf .	[40]
SNAICC (2019), "Successful strategies to support Aboriginal and Torres Strait Islander participation in early childhood education and care.", https://www.snaicc.org.au/policy-and-research/early-childhood/ (accessed on 23 March 2020).	[122
SNAICC (2018), Aboriginal and Torres Strait Islander Child and Family Centres: Changing futures with our children and families, https://www.snaicc.org.au/wp-content/uploads/2019/03/NT_ACFC_Profiles_Report-July_2018.pdf .	[93]
SNAICC (2014), The journey to big school: Supporting Indigenous and Torres Strait Islander children's transition to primary school, https://www.snaicc.org.au/wp-content/uploads/2016/01/03316.pdf .	[160]

SNAICC (2013), A Place for Culture? Exploring Aboriginal and Torres Strait Islander Cultural Competence in the National Quality Standard, SNAICC, Melbourne, http://snaicc.org.au/wp-content/uploads/2015/12/03265.pdf .	[23]
SNAICC; ECA (2019), Discussion Paper: Ensuring Equality for Aboriginal and Torres Strait Islander Children in the Early Years, SNAICC – National Voice for our Children and ECA (Early Childhood Australia), http://www.earlychildhoodaustralia.org.au/wp-content/uploads/2019/02/SNAICC-ECA-Discussion-Paperpdf .	[65]
SNAICC; ECA (2019), Working together to ensure equality for Aboriginal and Torres Strait Islander children in the early years, https://www.snaicc.org.au/wp-content/uploads/2019/02/SNAICC-ECA-Early-Years-Position-Paper-Feb2019.pdf .	[180
Stairs, A. et al. (2002), "Considerations for Evaluating 'Good Care' in Canadian Aboriginal Early Childhood Settings", <i>McGill Journal of Education</i> , Vol. 37, pp. 309-330, https://mje.mcgill.ca/article/view/8641 .	[168
State Services Commission (2018), <i>Better Public Services: Supporting vulnerable children [archived].</i> , https://ssc.govt.nz/resources/bps-supporting-vulnerable-children/ .	[103
Statistics Canada (2016), <i>The Aboriginal languages of First Nations people, Métis and Inuit. Census of Population 2016, Table 1, p. 2. Source:</i> , https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016022/98-200-x2016022-eng.cfm .	[49]
Statistics New Zealand (2020), 2018 Census Totals by Topic - National highlights (updated), https://www.stats.govt.nz/information-releases/2018-census-totals-by-topic-national-highlights-updated .	[45]
Statistics New Zealand (2018), <i>Use of Childcare by Maori and Pacific Children Takes Off</i> , https://www.stats.govt.nz/news/use-of-childcare-by-maori-and-pacific-children-takes-off .	[46]
Stiles, J. and T. Jernigan (2010), "The basics of brain development", <i>Neurophsychology Review</i> , Vol. 20, pp. 327-348, http://dx.doi.org/10.1007/s11065-010-9148-4 .	[11]
Sylva E., K. et al. (2010), Early Childhood Matters: Evidence from the Effective Pre-School and Primary Education Project, Routledge, London & New York, https://doi.org/10.1080/09575146.2011.580972 .	[18]
Sylva, K. (2010), Early Childhood Matters: Evidence from the Effective Pre-School and Primary Education Project,, London & New York: Routledge.	[8]
Sylva, K. et al. (2004), <i>The Effective Provision of Pre-School Education (EPPE) Project: Findings from Pre-school to end of Key Stage1</i> , http://www.ioe.ac.uk/projects/eppe (accessed on 5 December 2019).	[151
Taguma, M., I. Litjens and K. Makowiecki (2012), <i>Quality Matters in Early Childhood Education and Care: New Zealand</i> , OECD Publishing, Paris, https://www.oecd.org/education/school/NEW ZEALAND policy profile - published 3-8-2012.pdf.	[66]
Tarlov, A. and M. Debbink (2008), <i>Investing in Early Childhood Development: Evidence to Support a Movement for Educational Change</i> , Palgrave Macmillan, New York, https://www.palgrave.com/gp/book/9781403979933 .	[9]
Tayler, C. (2018), "International Case Studies of Innovative Early Childhood Systems: Australia.", (accessed 2 February 2020)., http://ncee.org/wp-content/uploads/2019/04/Australia-Case-Study-for-NCEE-41219.pdf .	[155

Taylor, A. (2011), "Coming, ready or not: Aboriginal children's transition to school in urban Australia and the policy push", <i>International Journal of Early Years Education</i> , Vol. 19/2, pp. 145-161.	[85]
Te Puni Kokiri (2017), Future Demographic Trends for Māori Part One: Population Size, Growth and Age Structure, https://www.tpk.govt.nz/en/mo-te-puni-kokiri/our-stories-and-media/future-demographic-trends-for-maori-part-one .	[47]
Te Puni Kōkiri (2019), <i>Measuring the current state of te reo Māori</i> , https://www.tpk.govt.nz/en/a-matou-kaupapa/maihi-karauna .	[56]
Townsend-Cross, M. (2004), "Indigenous Australian perspectives in early childhood education", <i>Australian Journal of Early Childhood</i> , Vol. 29/4, pp. 1-6.	[127
Truth and Reconciliation Commission of Canada (2015), <i>Honouring the Truth, Reconciling for the Future - Summary of the Final Report of the Truth and Reconciliation Commission of Canada</i> , https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Executive_Summary_English_Web.pdf .	[44]
UNDRIP (2007), <i>United Nations Declaration on the Rights of Indigenous Peoples</i> , https://www.humanrights.gov.au/our-work/un-declaration-rights-Indigenous-peoples-1 .	[181
UNICEF, O. (2018), <i>An Unfair Start: Inequality in Children's Education in Rich Countries</i> , https://www.unicef.org/publications/index 103355.html.	[20]
United Nations (2015), Transforming our world: The 2030 Agenda for Sustainable Development.	[62]
United Nations (2007), <i>United Nations Declaration on the Rights of Indigenous Peoples</i> , United Nations, https://www.un.org/esa/socdev/unpfii/documents/DRIPS en.pdf.	[43]
United Nations (1989), Convention on the Rights of the Child, https://www.unicef.org/child-rights-convention/convention-text# .	[61]
United Nations (1959), Declaration of the Rights of the Child.	[182
Waitangi Tribunal (2013), <i>Matua rautia: The report on the kōhanga reo claim</i> , https://forms.justice.govt.nz/search/Documents/WT/wt DOC 68775144/Matua Rautia W.pdf.	[183
Waitangi Tribunal (1986), Report of the Waitangi Tribunal on the Te Reo Maori claim: Wai 11. Brooker's, Wellington, Reprinted 1993, http://www.waitangitribunal.govt.nz .	[31]
Walker, S. et al. (2011), "Early Childhood Stimulation Benefits Adult Competence and Reduces Violent Behavior", <i>PEDIATRICS</i> , Vol. 127/5, pp. 849-857, http://dx.doi.org/10.1542/peds.2010-2231 .	[12]
Walter, M. (2018), ""The voice of Indigenous data – Beyond the markers of disadvantage".", <i>Griffith Review 60</i> , https://www.griffithreview.com/articles/voice-Indigenous-data-beyond-disadvantage/ .	[128
Warren, D. (2016), "A critical review of the early childhood literature. Online", <i>Australian Institute of Family Studies</i> ., Accessed 2 November, https://www.education.gov.au/critical-review-early-childhood-literature .	[78]
Wise, S. (2013), <i>Improving the early life outcomes of Indigenous children: Implementing early childhood development at the local level</i> , https://www.aihw.gov.au/reports/indigenous-australians/improving-early-life-outcomes-indigenous-australia/contents/table-of-contents.	[38]

[161

Zubrick, S. (2006), The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People. Perth: Curtin University of Technology and Telethon Institute for Child Health Research.