



Poipoia ngā ākonga kanorau ā-roro

A literature review prepared for the Ministry of Education

Dr Melanie Riwai-Couch

2021

He mihi

Tēnei te hā o mihi ka rere ki a koutou ngā kairangahau Māori, ngā kaituhi me ngā kaitautoko o te ao kanorau ā-roto. Ko tā koutou mahi te pūtake e puta ai ngā akoranga nui o te pūrongo nei, i runga i te aroha nui ki ngā tāngata Māori kanorau ā-roto. Tēnā rawa atu koutou i hāpai, i tautoko, i manaaki hoki i tēnei kaupapa.

E tika ana kia mihia ngā ākonga kanorau ā-roto, ō rātou mātua, me ngā whānau. Ko rātou e whakapeto ngoi ana mai i rā āno, ahakoa ngā taumahatanga, ahakoa ngā karawhiu o te wā. He mea nui kia whai wāhi ngā whakaaro, me te tirohanga o te hunga Māori ki tēnei rangahau; ki te kore e pērā, ka kore rawa atu e whai hua tēnei pūrongo.

Me mihi hoki ki Te Tāhūhū o te Mātauranga i te whakaaro nui kia kohia ngā whakaaro o ngā kairangahau mō te kaupapa nei me ngā āhuatanga e pā ana ki te whakaako me te manaaki i ngā ākonga kanorau ā-roto. Ko ngā mātāpono me ngā uara Māori te tūāpapa o ngā āhuatanga e tino ārahi nei i te rangahau, kei ngaro te wairua Māori me ōna tikanga.

Ko te manako ia ka whai hua tēnei pūrongo hei painga mō tātou, e eke ai te ākonga ki ngā taumata o te mātauranga.

About the cover illustration

The cover illustration is by Taane Flanagan (Ngāi Tai), a raukura of Te Aho Matua who graduated from te Kura Kaupapa Māori o Te Whānau Tahi in 2016. Taane is fluent in te reo Māori, English, and reo Rotarota (Māori sign language). Taane and his whānau learnt reo Rotarota to communicate with his older brother who is deaf.

The image represents the journey of ākonga kanorau ā-roto and their whānau as they navigate an education system that has not traditionally met their needs. The tīwhana is centralised and symbolises the tapu of the roto (brain). All other aspects of the mata (face) are drawn towards the tīwhana as supports. The mango pare on the left and right paparinga (cheeks) represent resilience and perseverance respectively. The design affirms ākonga kanorau ā-roto as culturally located individuals who are part of wider whānau groups. The blue represents their desires to learn, grow, and succeed as Māori in their own space and time.

Te whakarāpopototanga matua | Executive summary

This literature review answers the questions:

‘What does the research tell us about neurodiversity from a Te Ao Māori perspective?’ and in turn, **‘What does the research tell us about the educational experiences, needs and aspirations of ākonga kanorau ā-roto¹ and their whānau?’**

It provides a Māori centric view of neurodiversity that will benefit educators, helping them to work more effectively with ākonga kanorau ā-roto and whānau. The research included in this review provides insights into how to **work in partnership** with ākonga kanorau ā-roto and whānau to provide culturally responsive and effective education and care. These require consideration of **power imbalances; tailoring for individual ākonga** and their specific needs and aspirations; and how to **use the identity, language and culture of the ākonga** as an asset that will support them to learn, grow, and excel. Key to providing effective care and services to ākonga kanorau ā-roto are **relationships, respecting culture**, and having educators who are **culturally competent** working with Māori people.

Key features of effective models and frameworks include: being underpinned by **uaratanga Māori** (Māori values); being centred on **Treaty of Waitangi principles**; and providing **deliberate space for whānau** to engage in processes and decision making.

The principles and solutions are presented thematically using the outcome domains of *Ka Hikitia – Ka Hāpaitia | The Māori Education Strategy*: **te whānau** (inclusive, responsive and lived), **te tangata** (addressing racism and raising critical consciousness), **te kanorautanga** (catering for diversity and individuality), **te tuakiritanga** (promoting and honouring identity, language, and culture) and **te rangatiratanga** (mana enhancing, decision making is ‘with Māori, by Māori and for Māori’).

Recommendations are made for future investment in generating te ao Māori literature; future investment in generating a te ao Māori evidence base, and developing the education workforce. The recommendations from the report are duplicated here in full:

Recommendations for increasing the depth of te ao Māori literature:

1. Gathering **iwi perspectives**; conducting research to help better understand kanorau ā-roto in **Māori medium** education settings - particularly what is working well that English medium can learn from.
2. **Invest in kaupapa Māori research** relating to both kanorau ā-roto generally and particular types of kanorau ā-roto specifically. Partnerships with universities may help identify post-graduate students interested in engaging in kanorau ā-roto research for Masters or PhD study.
3. Convene a hui including key kanorau ā-roto researchers (such as Bevan-Brown, Macfarlane, Elder, and Crawford) for the purpose of **identifying opportunities for new or further research** that will help to fill gaps and provide additional perspectives about existing knowledge.

¹ ‘Ākonga kanorau ā-roto’ refers to Māori students who are neurodiverse.

Recommendations for growing the te ao Māori evidence base:

4. Find ways to **trial and evaluate the models and frameworks** profiled in the literature to help **build an evidence base** about what works for ākonga kanorau ā-roro and their whānau. In particular *Te Waka Kuaka* (Elder, 2017), *Te Waka Oranga* (Elder, 2017) and *He Pikinga Ki Runga* (Macfarlane, 2009) seem ready and able to be implemented beyond individual settings.
5. Communicate with schools and Māori communities requesting **submissions of grassroots (unpublished) research and evidence** that they may have (but that is not considered to be academic research). Conduct a review of what is submitted and assist in documenting the learnings so that they can be considered and shared.
6. Consider **training facilitators and researchers** with te ao Māori methodologies such as Puna Kōrero (Riwai-Couch, 2015; Riwai-Couch, Bull, Ellis, Hall, Nicholls & Watkinson, 2020; Riwai-Couch, Bull & Nicholls, 2020) for the collection of ākonga Māori and whānau voices.

Recommendations for developing a culturally responsive education workforce able to work effectively with ākonga kanorau ā-roro:

7. Prioritise developing **culturally competent practitioners** who are cognisant of Māori worldviews and local histories; familiar with historical and contemporary challenges experienced by Māori (particularly Māori kanorau ā-roro) and how these can be mitigated; and are aware of Te Tiriti o Waitangi, its articles and principles for underpinning and shaping Treaty centric practices.
8. The principles and solutions presented in this report on pages 16 - 21 and recommendations made by Berryman, Nevin, SooHoo and Ford (2015) on pages p.14-16 of their chapter should be used for **professional development planning, discussions and learning** designed to help meet the educational needs of ākonga kanorau ā-roro.
9. The benefits of **cultural supervision** were not discussed in the literature, however, it is likely that this would assist people in specialist education roles to actively engage in examining their own practice and how it can be better aligned to meet the needs of ākonga kanorau ā-roro. Cultural supervision roles and monitoring may also provide **opportunities for iwi and mana whenua** to be included as partners in the process of improving education and services for ākonga kanorau ā-roro and their whānau.

Rārangi Kaupapa | Contents

| | |
|--|-----------|
| He mihi | 1 |
| Te whakarāpopototanga matua Executive summary | 2 |
| Hei whakataki ake Introduction | 5 |
| What is research? | 5 |
| Methodology | 6 |
| Realities for ākonga kanorau ā-roro and their whānau | 6 |
| About Māori knowledge | 8 |
| How is neurodiversity explained in Māori language? | 8 |
| Kanorau ā-io | 9 |
| Kanorau ā-roro | 9 |
| Ngā kaupapa nui nā ngā kairangahau matua Key messages from lead researchers | 10 |
| Findings specific to Māori medium | 13 |
| Historical Māori perspectives | 14 |
| Contemporary Māori perspectives | 15 |
| Māori values and beliefs | 16 |
| Missing from the literature | 16 |
| Ngā mātāpono me ngā rautaki whakatika Key principles and solutions | 17 |
| Te Whānau | 17 |
| Te Kanorautanga | 18 |
| Te Tangata | 19 |
| Te Tuakiritanga | 20 |
| Te Rangatiratanga | 21 |
| Ngā taunakitanga Recommendations | 21 |
| Rārangi pukapuka Bibliography | 23 |

Hei whakataki ake | Introduction

This report aims to provide a robust analysis and synthesis of neurodiversity from a Māori worldview. In doing so, it seeks to answer the questions: **‘What does the research tell us about neurodiversity from a Te Ao Māori perspective?’** and in turn, **‘What does the research tell us about the experiences, needs and aspirations of ākonga kanorau ā-roro² and their whānau?’** It identifies key principles and solutions, and provides descriptions of effective methods and teaching innovations that are being used with ākonga kanorau ā-roro in Māori in Maori-medium and English-medium settings.

The solutions, methods, and innovations are presented thematically using the outcome domains of *Ka Hikitia – Ka Hāpaitia | The Māori Education Strategy*: **te whānau** (inclusive, responsive, lived), **te tangata** (addressing racism and raising critical consciousness), **te kanorautanga** (catering for diversity and individuality), **te tuakiritanga** (promoting and honouring identity, language, and culture) and **te rangatiratanga** (mana enhancing, decision making is ‘with Māori, by Māori and for Māori’).

What is research?

The term ‘research’ is inextricably **linked to European imperialism and colonialism**. Smith (1999) describes the word ‘research’ as “probably one of the dirtiest words in the Indigenous world’s vocabulary” (p.1). Written sources about intellectual disability in pre-European times are non-existent (Bevan-Brown, 2013). Much of the contemporary research that has been published is by a small number of academics. Some are Māori, some are not. Some deliberately set out to probe and honour Māori experiences and use kaupapa Māori methodologies; some comment about Māori “in passing”.

Much **knowledge from te ao Māori** remains in the realm of tāngata Māori, not the print world. This creates an instant challenge when seeking to gain a full understanding of Māori perspectives on a topic through published sources. Some recent writers have attempted to develop better understandings by interviewing tāngata kanorau ā-roro (Bevan-Brown, 2013, Birken et al., 2008), reviewing traditional stories, customs, and practices; and by examining whakapapa information and early ethnologies (see for example Makareti, 1938 and Best, 1952). From these efforts they developed hypotheses and proposals about the traditional practices of Māori and kanorau ā-roro.

There are two dominant traditional Māori perspectives about intellectual disability: on one hand that Māori had little tolerance or acceptance of people with intellectual disabilities, and on the other hand Māori were completely accepting and valued those with intellectual disabilities. Regardless of these conflicting positions, there is strong evidence that people with intellectual disabilities were fully included in traditional Māori society (Bevan-Brown, 2013, p. 573).

What has been ascertained from first hand accounts of whānau Māori who have tamariki kanorau ā-roro, is that whānau want to **protect their tamariki from stigma and poor service provision**; and this in turn sometimes means not utilising available services. The impact of this might very well be a lack of willingness to share stories and experiences amongst wide audiences. Those researchers whose literature has been included in this review have demonstrated a high level of ethical care and consideration of the vulnerabilities of the ākonga kanorau ā-roro and their whānau. However, a lack of trust in the system and some practitioners means that researchers are often viewed as aligning more with ‘the system’ than Ngāi Māori³.

² ‘Ākonga kanorau ā-roro’ refers to Māori students who are neurodiverse.

³ A term that refers to Māori as a collective.

Methodology

The search methodology for this mahi (work) was completed by the Ministry of Education who provided a bibliography of titles to the writer. Their process involved using Google Scholar and the researchers' base knowledge to identify authors and articles related to the topic.

In their selection process there was not an explicit focus on neurodiversity as a term or concept that needed to be explicitly stated in the research. This was because neurodiversity is a fairly recent term and unlikely to feature in searches. Rather, various neurological impairments connected to neurodiversity were considered.

Jill Bevan Brown in a paper prepared for Massey Specialist Teaching Course (2021) explains,

Neurodiversity is based on the underlying premise that in a diverse, inclusive society all children should be equally valued and equitably provided for, a premise that sits well with Māori values such as aroha, manaakitanga, and kotahitanga. If the concept of neurodiversity is understood and operationalised in this way, it will shine bright.

This is the approach that resonates with the Ao Māori literature reviewed for this paper. There was also a selection of general literature that addressed culture, impairment, ethnicity, and/or race.

This review of Māori literature identified multiple barriers and concerns about how Māori are marginalised, overlooked and over represented in special education, a summary of which follows.

Realities for ākonga kanorau ā-roro and their whānau

Ākonga Māori are often **marginalised** in school settings due to the power imbalance between Māori and mainstream cultural norms and practices. When ākonga Māori also have physical and/or learning disabilities the situation is **further exacerbated and problematised**. "Those who are marginalised, watch from the edges, often feeling belittled, othered, and/or alienated" (Berryman, Nevin, Soohoo & Ford, 2015, p. 2).

Māori educationalist Linda Tuhiwai Smith in the foreword to 'Working with Māori children with special education needs: He mahi whakahirahira' (Bevan-Brown, Berryman, Hickey, Macfarlane, Smiler & Walker, 2015) explains,

I know adults who are now in their 60s whose special education or not-so special educational experiences were devoid of any connection to Māori cultural values and experiences. Some were removed from their families to get specialist help, while others attended their local schools. The disconnection between their cultural and schooling lives has had a huge impact on their adult lives. Culture exists wherever people live, so the absence of Māori culture from programmes and practices. Not only are these 'other' practices and values an assimilation of culture, but they are often assimilated by a 'special educational needs' culture that, in my view, while well intended can only ever be partial and inadequate as a way to live an adult life in their cultural community. (p.vi)

Key obstacles identified in the literature were:

- Lack of research into the perspectives of Māori in the disability sector. (Bevan-Brown, 2013; Ministries of Health and Education, 2016)
- Delayed diagnosis of tamariki Māori, even when parents note differences about how their tamaiti interacts (Bevan-Brown, 2004; Ministries of Health and Education, 2016) and some

reluctance by whānau for tamariki to be labelled with a neurodiverse condition (Bevan-Brown, 2004).

- Unequal power relationships (Bishop & Glynn, 1999; Berryman & Woller, 2013; Macfarlane, Macfarlane & Gillon, 2016).
- Traditional Special Education discourse encouraged teachers to treat learners as deficient and deficit rather than as agentic, or self-determined. (Nevin in Berryman et al. 2015, p.55 (Chapter 3), Berryman & Woller 2015, p165 (chapter 9) in Berryman et al. 2015)
- Indigenous knowledge is often treated as inferior and antiquated, and not worthy of consideration alongside Western knowledge. (Macfarlane et al., 2016, p.56).
- Need to overcome multiple structural and cultural barriers to accessing services (Bevan-Brown-2004). These include: geographic isolation, lack of knowledge, lack of culturally appropriate services, funding and resource constraints, lack of information for whānau, reluctance seeking treatment, uniqueness of ASD (Ministries of Health and Education, 2016).
- Communication and information sharing, for example, professionals using jargon (Ministries of Health and Education, 2016)
- Diversity of perspectives and opinions of Māori - no one single viewpoint (Bevan-Brown, 2013). As an example, some think problems are harder because the person with ASD is Māori (such as geographic isolation, reluctance to seek treatment, lower socio-economic status) and others disagree because 'services should be the same for Māori and non-Māori' (Ministries of Health and Education, 2016).
- Approaches to understanding and responding to the special needs of tamariki kanorau ā-roto have become more inclusive, but the management systems for determining funding and resourcing are still based on separate labels and categories (Berryman & Woller, 2013).
- Lack of teacher expertise about catering for special needs of tamariki kanorau ā-roto and with Māori knowledge to provide culturally responsive services (Bevan-Brown, 2013).
- "Many teachers fail to recognise the overpowering impact that their own culture has on indigenous students, and at the same time, they fail to recognise the beneficial contribution that their students' own culture can bring to the learning context" (Berryman & Woller, 2013, p.828).
- Extra resources are needed for total inclusion to be successful in school classrooms, particularly in Māori medium settings (Bevan-Brown, 2013 p.574).
- Lack of formative assessment tools in Māori medium settings (Berryman & Woller, 2013).
- "The lack of culturally appropriate programs and services for Māori learners with special needs and the shortage of culturally qualified special education professionals impact adversely on what can be achieved. This situation is exacerbated by additional issues such as: the widespread practice of deficit theorising that disadvantages Māori students in general, special education being used as a means of excluding minority group students from mainstream education, and the pathologization of minority groups and students with special needs. In respect to pathologizing practices Maori learners with special needs are doubly disadvantaged" (Bevan-Brown, 2013. p.580).

- Māori richness is often cut off by dominant Pākehā worldviews and deprives ākonga Māori, including those with special needs of culturally rich curriculum and pedagogies which could better unlock their potentials (Berryman & Woller, 2013).

About Māori knowledge

Theory and knowledge partnership can be a difficult balance, but is a critical aspiration when informing policy and practice that impacts on Māori people. When wanting to identify effective approaches and solutions for supporting ākonga kanorau ā-roro it is wise to combine Māori knowledge with contemporary and or clinical understandings. Conversely, it is not wise to rely solely on one knowledge base without the other. In order to effectively draw from both knowledge bases there needs to be an understanding of what the knowledge base actually is.

Māori knowledge in the neurodiversity space has not been deeply explored 'on scale' to date. The very good, but very scarce research that exists has been completed either through Ministerial requests or by individuals or small groups of academics due to their own interest. Because of this it is difficult to easily identify commonly accepted evidence, beliefs, indicators, or principles about what a te ao Māori perspective about neurodiversity might be, what effective approaches might look like and what innovation is happening.

The very nature of neurodiversity itself means that there are multiple experiences, presentations and understandings of different conditions, circumstances, impacts. From a te ao Māori perspective we also know that there are iwi (tribal) and rohe (area) differences in the experiences of Māori people within education and social services. This layering of variety can give the impression that to try and find commonalities is both a fruitless and unnecessary endeavour. However, this would be an overly simplistic view that doesn't allow for the complexity that exists within any lived system. Neurodiversity from a te ao Māori perspective is able to be explained and understood based on accepted definitions and understandings. From here we are able to identify opportunities for further research and investment in the neurodiversity space that will help ākonga kanorau ā-roro to have their needs and aspirations met in education spaces.

How is neurodiversity explained in Māori language?

Interestingly I have not been able to locate a traditional Māori term for intellectual disability. In contemporary times one term used for intellectual disability is 'mate hinengaro'. This was criticised by Opai (2021) for having a negative connotation, particularly associated with the word mate giving a sense of finality or conclusion, as it is also a word used to describe death. In 2018 Opai undertook to publish Te Reo Hāpai: The Language of Enrichment - A Māori language glossary for use in the mental health, addiction, and disability sectors.

Opai's Māori dictionary of mental health terms was informed from a te ao Māori world view using mana enhancing descriptions for the conditions being described. In one explanation, Opai adjusted mate hinengaro to mauui hinengaro - a slight shift but 'words have power' (Opai, 2018). Mauui by comparison to mate signifies an unwellness that can shift, may be temporary, and is not all defining. In the same Māori dictionary were the terms kanorau ā-roro used for neurodiversity (the many faces of the mind) and takiwātanga for autism (meaning in one's own time and place).

On the balance of information, it appears that the two most common expressions for neurodiversity in reo Māori (Māori language) are 'kanorau ā-io' and 'kanorau ā-roro'. Each of these terms are explained below.

Kanorau ā-io

'Kanorau' is an adjective that means to be diverse or varied. As a noun it can mean both diversity and variety.

The word 'io' is the noun commonly used to describe nerves, the nervous system and things that are neurological. 'Io' is also the name commonly used for God, or specifically God as the supreme being who created and oversees Māori and our ancestors.

Kanorau ā-io can be used to describe both 'neurological diversity' and 'emotional diversity'.

Kanorau ā-ro-ro

As per above, kanorau is an adjective that means to be diverse or varied. As a noun it can mean both diversity and variety.

The word 'ro-ro' is a noun that can be used to mean brain, marrow, or spongy matter. It is also the word used when describing the front end of a meeting house, verandah, or porch.

Kanorau ā-ro-ro is the preferred term used in this report.

Ngā kaupapa nui nā ngā kairangahau matua | Key messages from lead researchers

Jill Bevan-Brown's work has been conducted over several decades and spans multiple forms of neurodiversity. Bevan-Brown sometimes collaborates with others. Her research has been firmly underpinned by kaupapa Māori principles and has a strong interface with real Māori people in real Māori communities. Special education, or more appropriately, finding out about the experiences of tamariki and young people with special education needs and how to best empower them to reach their fullest potential, has been an unrelenting focus of her research. As well as contributing to the knowledge about ākonga Māori and special education generally, her research also offers insights specifically into the experience of Māori who have vision impairment, ASD, or intellectual disabilities. Her work has a strong focus on using the voices of ākonga and their families to inform how care, delivery of services, and education can be improved.

The key messages from Bevan-Brown's work include: Māori concepts, beliefs, values, subject matter and te reo should be included in the care and education of Māori kanorau ā-roto; Māori identity is just as important to Māori kanorau ā-roto as to other Māori people; there are teaching strategies and approaches that are more effective for Māori kanorau ā-roto such as whānau grouping, tuakana-teina relationships, strengths-based teaching, cooperative learning, consensus decision-making, and power-sharing. A significant theme from Bevan-Brown's work is there is a need to support Māori control of education and care, with more attention and priority given to Treaty-based partnership.

Sonja Macfarlane's work similarly draws on the experiences of ākonga Māori and their whānau. Her work is underpinned by kaupapa Māori theory and framed by Te Tiriti o Waitangi. Macfarlane developed *Te Pikinga ki Runga* (2009), a practical and effective education tool to help support ākonga kanorau ā-roto, and particularly students with behaviour and other special teaching and learning needs. *Te Pikinga ki Runga* can be used to help assess and inform individual learning programmes for ākonga by working with their whānau and working in a strengths based, culturally responsive way. *Pikinga ki Runga* provides a framework for identifying potential and opportunity in a way that is inclusive of whānau and the ākonga. *Te Pikinga ki Runga* is presented in more detail in the final section of this report. Macfarlane's doctoral thesis (2012) investigated two key special education constructs: culturally responsive practice and evidence based practice. She found that culturally responsive evidence based services for special education requires attention and resource to be given to these four areas:

1. Knowledge construction - actively building on and growing the evidence base (p.221)
2. Content integration - the process of introducing, integrating and embedding culturally-relevant content, programmes and practice approaches in organisational core business (p.222)
3. Equity practices - ensuring that the three principles of Te Tiriti o Waitangi are fundamental to and applied to special education (p.223)
4. Skilled professionals - being responsive to the concepts of rangatiratanga and cultural competency (p.223-224)

Co-authoring with her husband **Angus Macfarlane**, Macfarlane and Macfarlane's joint work focuses on culturally responsive practice and sharing understandings with the ultimate goal "to live as Māori, to actively participate as citizens of the world and to enjoy good health and a high standard of living" (Macfarlane & Macfarlane, 2008).

In 2016, Sonja Macfarlane, Angus Macfarlane and Gail Gillon co-authored a book chapter titled 'Sharing the food baskets of knowledge: Creating space for a blending of streams'. This provided an introduction to, and overview about indigenous Māori theory, socio cultural theory and how these impact perceptions of learning and effective approaches for Māori students. It was not specifically targeted for ākonga kanorau ā-roro, however, the approach places students and their realities at the absolute centre of practice making the learnings fully relevant to the kanorau ā-roro space. They present a strong argument that effective practices need to focus on both the learner and their context - they will combine individual and socio-cultural perspectives.

In the same chapter, Macfarlane, Macfarlane and Gillon (2016) present a framework and a model that are worth consideration. *Tō tātou waka: a blending of clinical and cultural streams* is a framework developed by Macfarlane, Blampied and Macfarlane (2011) that shows how cultural and clinical practices can align to provide culturally reasoned epistemology as a foundation for better outcomes.

He awa whiria: A braided rivers approach (Ministry of Social Development, 2011) is a process model that attempts to interrogate and integrate Western science and Indigenous Māori models of programme development and evaluation. Based on the analogy of two streams of knowledge becoming interconnected streams by reaching points of convergence. The key features are:

- Western and Indigenous Māori streams are acknowledged as distinct
- Knowledge from each stream is able to inform programme development in the other stream
- Evaluation methodologies from each stream can be applied to the other stream
- The acceptance of programme efficacy relies on the acceptance of the evidence from both knowledge streams (p.64).

Psychiatrist **Hinemoa Elder** developed Wairua Theory, a kaupapa Māori theory to underpin working with Māori who have experienced a Traumatic Brain Injury (TBI); Te Waka Kuaka, a cultural needs and assessment tool; and Te Waka Oranga, a delivery framework focused on providing more culturally appropriate and effective supports for Māori (2017). Elder's theory, model and framework are presented in more detail in the final section of this report.

Elder advocates for a move away from professional knowledge in isolation and creating space for whānau and Māori worldviews. A key message from Elder's work is that whānau should be involved throughout the care and treatment of Māori people. This is because they are recognised as an essential aspect of and contributor to positive hauora.

Te Waka Kuaka is presented bilingually with a series of assessment questions in English and te reo Māori. These questions would be easily transferable into an educational context and usable in Māori medium settings or with ākonga arero Māori (students who have Māori language capability). The tool provides a diagnostic assessment of cultural needs and monitoring of those needs in collaboration with whānau can take place over time in the same way. Health workers and educationalists can likewise use the tool for monitoring purposes.

The delivery framework Te Waka Oranga uses the metaphor of bird's eye view of a waka to bring both whānau and clinicians to work together paddling the waka to bring the recovery destination forward in the context of injury or insult to the brain. Elder explains, "each team of paddlers work side by side, bringing both worlds of knowledge together, to serve a common purpose. This activity visibly brings together whānau knowledge, skills, and feelings with health workers' knowledge, skills, and feelings on an equal footing to improve the experience of recovery and to improve outcomes for whānau."

Elder proposes that the Te Waka Oranga approach will improve work satisfaction for the health workers. Underpinning the theory, assessment, and framework are the following principles:

1. Wairua is fundamental and attended to as a priority;
2. Whānau are the functional unit of healing;
3. Whānau experience the clinical world as an alien culture;
4. Mātauranga Māori has a wealth of resources specific to mokopuna traumatic brain injury;
5. Māori identity is about connection;
6. Places have a healing role because they define identity;
7. Other trauma is remembered when traumatic brain injury discussion is invited.

Mere Berryman is an exceptional proponent of kaupapa Māori and the need for decolonisation education. Her sharing, development and application of indigenous frameworks is invaluable as she has applied them to education generally and into the kanorau ā-roto space. She has consistently shared through her research that a te ao Māori world view will provide “understandings that equip Māori to be Māori and enables the maintenance of the unique Māori identities for iwi, hapū, and whānau” (2013, p.833) and that this will help Māori to achieve better in education.

Paul Woller partnered with Mere Berryman on at least two publications about Māori kanorau ā-roto that model a bi-cultural partnership approach to research about Māori. This allowed the authors to provide additional insights into how non-Māori can work effectively in Māori special education spaces.

Berryman and Woller’s (2013) work investigated four Māori medium education settings to help identify characteristics to inform an inclusion model. The key themes were relationships, accountability (cultural and professional), collaboration and interdependence, and culturally responsive solutions. A key finding was that teachers and schools need to move towards pedagogies based on relationships and that are inclusive of cultural differences. They also found that when schools focused on potential rather than fixing problems or managing risk they were more likely to have interventions that were seen as being positive and constructive, rather than reactive.

Berryman later teamed with **Nevin, SooHoo, and Ford** (2015) to write a chapter titled “Relational and Responsive Inclusion: Contexts for Becoming and Belonging: A dream to dream together”. They discuss how ākonga Māori are often marginalised in school settings due to the power imbalance between Māori and mainstream cultural norms and practices. They found that when ākonga Māori also have physical and/or learning disabilities the situation is further exacerbated and problematised. “Those who are marginalised, watch from the edges, often feeling belittled, othered, and/or alienated.” (p.2). Berryman et al. (2015) present *A cultural and relational approach to belonging and inclusion*. This model includes recommendations about what to do and what not to do, grouped under three headings: Relationships that are familial in nature: **whanaungatanga**; Learning from each other: **ako**; and, working together: **mahi tahi** (p.14-15).

Berryman, Nevin, SooHoo and Ford (2015) specify **recommendations for both achieving cultural and relational response to belonging and inclusion** (p.14-15) and for repositioning from traditional discourses to cultural and relational discourses to belonging and inclusion (p.16). It is recommended that the recommendations provided, along with things the authors suggest are avoided, are considered in their entirety by educationalists. The content is directly relevant to informing the work of Special Education Needs Coordinators (SENCO) and Learning Support Coordinators (LSCs) working with ākonga kanorau ā-roto.

The recommendations provide a kaupapa Māori informed framework about how to: inform practice, engage with ākonga Māori and their whānau, and monitor and review practice using inclusion as the key criterion.

Berryman et al. (2015) explain that repositioning requires a shift in mentality where the professional/educator rejects the traditional stance of cultural neutrality and instead understands that the ākonga, their community, and culture are part of the solution. The authors recommend that good practice uses a strengths base, allows for change, considers the environment, seeks input and advice from whānau, and seeks to work within Māori culture and language. Further, the professional response includes building relationships with the ākonga and their community to seek ways to include and work together to benefit the child; developing empathetic two way communication, and nurturing relationships so that they can be caring and part of an ongoing positive experience and contribution to improving outcomes for the ākonga (p.16).

The five guiding principles that Berryman et al. (2015) provide are:

1. Learn and honour epistemological pluralism
2. Bring your authentic self
3. Conscientization: Develop a relational and dialogical consciousness
4. Resistance: enact ongoing critical reflection
5. Transformative praxis: shared relationships and agreements (p.19-20)

In a chapter in the same book as Berryman et al. (2015), **Jacob and Green** (2015) reviewed policy documents predominantly from the Ministry of Education leading to an inquiry about how to better work with whānau of ākonga who are deaf. They held an unspecified number of conversations with whānau of ākonga Māori with hearing impairments. Their findings endorsed the following principles which also aligned with the guiding principles of Ka Hikitia Accelerating Success 2013-2017:

1. Treaty of Waitangi - ensuring Māori students enjoy and achieve education success is a shared responsibility
2. Māori potential approach - high expectations for Māori students to achieve
3. Ako - a reciprocal and responsive two way teaching and learning approach
4. Identity, language and culture count - Māori students benefit from seeing their experiences and knowledge reflected in teaching and learning
5. Productive partnerships - with key stakeholders - ongoing exchange of knowledge and information and the involvement of parents and whānau. (p.102)

Andrea Crawford's doctoral thesis (2018) about adaptive functioning in children with Fetal Alcohol Spectrum Disorder (FASD) offers significant insights into the experience as a non-Māori practitioner and how she navigated her own identity to partner effectively with Māori. Her work provides further insights into the value of partnerships between Māori, and how non-Māori can navigate space working with Māori in Treaty centric ways. A key message from Crawford's work is that Te Tiriti o Waitangi can be used as a platform for Māori and tauwi to collaborate and build partnerships to provide more tailored and effective services for tamariki kanorau ā-roto.

Findings specific to Māori medium

While it is possible that some Māori participants in the different research pieces were from Māori medium education settings, this is generally not specified.

Given the focus on Māori people it can reasonably be assumed that the principles and solutions in this review can apply and are relevant to ākonga in Māori medium settings. Bevan-Brown's research specifically mentions Māori medium education spaces, with nominal mention by other authors.

In 2004 Bevan-Brown found that Māori medium education and Māori services were seen to hold both advantages and disadvantages for children with ASD. The main advantages were the cultural content, wairua and inclusive, supportive attitude of staff and children in educational facilities, and the friendly, approachable style of Māori service providers. The disadvantages were concerns about the lack of ASD expertise among some Māori staff and service providers.

Later in 2013 Bevan-Brown found that positive experiences were reported to occur mostly in kōhanga reo, kura kaupapa Māori, and mainstream schools that: "operated within an inclusive ethos.... participants had positive schooling experiences when they were in schools that made an effort to take into account the whole child, and accommodate both their cultural identity and their impairment" (Higgins et al. 2010, cited in Bevan-Brown, 2013. p.576-7).

As previously discussed, Berryman and Woller's (2013) work investigated four Māori medium education settings to help identify characteristics to inform an inclusion model. The key themes were relationships, accountability (cultural and professional), collaboration and interdependence, and culturally responsive solutions. A key finding was that teachers and schools need to move towards pedagogies based on relationships and that are inclusive of cultural differences.

In 2015 Bevan-Brown found that her participants believed Māori with intellectual disabilities felt better in bilingual or Māori immersion environments rather than monolingual English speaking classrooms.

Jacob & Green (2015) noted that when kura kaupapa Māori requested Māori speaking Resource Teachers for the Deaf (RTD) to work with their hearing impaired ākonga, the RTDs saw this as a rejection of their services (p.101).

Finally in 2017 Bevan-Brown found that parents of tamariki attending kōhanga reo and kura kaupapa Māori "praised the inclusive, supportive environment provided by both teachers and students" (p.577). Parents also noted disadvantages in Māori medium settings; specifically staff having a lack of special education expertise and lack of assessment tools and resources in Māori language (p.578).

Historical Māori perspectives

In order to reflect a te ao Māori view I have tried to locate accounts in the literature that provide insight into pre-European Māori perspectives about different aspects of and conditions related to kanorau ā-roro and the education experience of tangata kanorau ā-roro. The following quotes provide some useful insights:

- "Māori in the ancient world who had a vision impairment were people with the power and status of deities. They were known for the talents that they possessed, not for what they didn't have. They also held great knowledge and shared that knowledge with others. As time has progressed, though, this notion appears to have changed" (Higgins et al. 2010, as cited in Bevan-Brown, 2013. p.577).
- Traditionally, Māori are a group-oriented people who have a holistic view of the world (Durie, 1985). Well-being is not simply about good health but involves the interaction of four dimensions: taha wairua (spiritual side), taha hinengaro (thoughts and feelings), taha tinana (the physical side), and taha whānau (family) (Durie, 1994).

- Whanaungatanga, aroha, wairuatanga, āwhinatanga, and manaakitanga were core Māori values in pre-European times and remain so today” (Bevan-Brown, 2013. p.579).
- “Māori traditionally have a culture that is based on inclusion, and a collective approach to learning and teaching that values all students and takes responsibility for finding ways to meet their needs, be they intellectual, physical, or spiritual, and their need for being connected and belonging” (Berryman & Woller, 2015 p.166).
- “For hundreds of years Māori (like other Indigenous nations) had their own education systems and preferred ways of knowledge transmission, long before European colonists and missionaries landed on the shores of Aotearoa” (Macfarlane, Macfarlane & Gillon, 2016, p.56).
- Traditionally Māori “demonstrated exceptional kindness and nurturing for their people, especially their children, which was at a level probably not observed in Victorian England” (Crawford, 2018).

Bevan-Brown’s (2015) research provided a literature review and the findings of interviews with sixteen people living with or working with intellectually disabled Māori people. **While intellectual disability is not a neurological condition there is value in considering what has been learnt from the research by Bevan-Brown in this area.** The first part of her research aimed to surface traditional views of intellectual disabilities.

Two opposing hypotheses emerged: First that “Māori in pre-european times appear to have had little tolerance or sympathy for people who are intellectually disabled”. This was because the disability may have been viewed as a punishment for a tapu infringement - either by the person or a close relative. Therefore the disability was accepted but was veiled with negative connotations. (p.151).

The second view was that Māori were tolerant, sympathetic, accepting, and inclusive towards intellectual disabilities. People with disabilities were seen as taonga, were accepted and valued as an important part of the wider community. This view was linked to the concepts of whanaungatanga and collective wellbeing as opposed to individual personal dysfunction. Because of this collective view there was a strong sense of moral obligation for whānau to look after and care for any family member with a disability (p.152).

Contemporary Māori perspectives

The second part of Bevan-Brown’s (2015) research investigated contemporary views about intellectual disabilities. Interestingly, nearly half of the interview participants felt they had Pākehā understandings of intellectual disabilities as they had not had the opportunity to learn about this from a Māori worldview. Nine of the eighteen identified differences between Māori and Pākehā views of intellectual disability, being: degree of severity (had to be really bad to be considered a disability); spiritual component (spirituality plays a part in the understanding); and the concept of time and development (which is a direct conflict with the Western concept of mental age development chronological age development) (p.153).

The literature reviewed by Bevan-Brown (2015) did not differentiate between Māori and Pākehā views of intellectual disability but did differentiate on views of hauora and well being. The most frequently mentioned attitude towards intellectual disability was that Māori are non-judgmental and Māori with intellectual disabilities were accepted by other Māori individuals and the Māori community. It was noted, however, that urbanisation had made it harder to care for people with intellectual disabilities.

Bevan-Brown’s five key findings were:

1. Māori identity is just as important to a Māori with intellectual disability as it is to a non-disabled Māori. Because of this, they are entitled to have Māori content and te reo included in their care and education.
2. All Māori content should be included and/or taught with the correct wairua. Values must not only be acknowledged but also practiced by all concerned.
3. Consultation with and involvement of whānau in educational and care provisions for Māori with intellectual disabilities are paramount. They should be empowered in the process.
4. Māori with intellectual disabilities are best raised in their own homes. To enable this parents and whānau members will need additional assistance and support.
5. Māori should be involved at all levels in decision-making related to the care and education of Māori with intellectual disabilities.

Māori values and beliefs

The literature surfaces values and beliefs about kanorau ā-roto and Māori worldviews, including:

- “The past and present are inextricably linked” (Bevan-Brown in Bevan-Brown et al. 2015, p.150) - Tupuna are real entities who continue to influence into the present and future.
- “Māori regarded children with disabilities as ‘special and precious’ and that Māori values of aroha, kaitiakitanga, and wairuatanga dictated a responsibility to look after and care for these children” (Bevan-Brown, 2013. p.579).
- Some Māori people have a ‘She’ll be right’ attitude because they don’t understand the needs of tamariki with ASD because they ‘look normal’. (Bevan Brown, 2013. 579)
- “Many fundamental Māori values are supportive of including people with disabilities. These are the values that should underpin the services and education provided for Māori who are disabled” (Bevan-Brown, 2013. p.580).
- Deliver information kanohi ki te kanohi (Ministries of Health and Education, 2016).
- “From a Māori worldview collective benefits are more important than individual benefits and interdependence is just as valid as independence” (Berryman & Woller, 2013).

Missing from the literature

There is a notable lack of published research into the perspectives of Māori in the disability sector. (Bevan-Brown, 2013; Ministries of Health and Education, 2016). While there are individuals and small groups of researchers who are publishing in the kanorau ā-roto and special education spaces, there is a lack of variety of views, lack of research from specific settings, and a lack of evidence generated from the use and implementation of proposed models. In addition, much more could be learnt if there was a greater depth of research available about supporting ākonga kanorau ā-roto from Māori communities across different rohe and iwi.

It is also worth considering collecting unpublished research known to the Māori and education communities. For example, Te Iti Kahurangi Kāhui Ako in Auckland surveyed Māori and Pasifika parents about their perceptions of giftedness and how they wanted ākonga who are gifted to be supported at school (unpublished report and templates by Riwai-Couch, 2020). This undertaking followed the puna kōrero methodology for collecting whānau narrative (Riwai-Couch, 2015) which has proven effective when wanting to gather whānau voice about education experiences (see for example Riwai-Couch, Bull, Ellis, Hall, Nicholls & Watkinson, 2020; Riwai-Couch, Bull & Nicholls, 2020).

Ngā mātāpono me ngā rautaki whakatika | Key principles and solutions

These principles and solutions provide an evidence base for the development of professional learning and development for professionals working with ākonga kanorau ā-roto. This includes Learning Support Coordinators and SENCO in their roles supporting classroom teachers. Organised by the domains from *Ka Hikitia – Ka Hāpaitia | The Māori Education Strategy*: Te Whānau, Te Kanorautanga, Te Tangata, Te Tuakiritanga and Te Rangatiratanga, they answer the question:

What do professionals need to **understand about** (principles)
and **do for** (solutions) ākonga kanorau ā-roto?

Te Whānau

- *Education provision responds to learners within the context of their whānau.*
- *We will support Māori learners and their whānau to be informed and demanding decision-makers, with high expectations of our education services.*
- *We will support Māori learners and their whānau to plan and pursue education pathways they aspire to.*

Key principles that apply to ākonga kanorau ā-roto

- Parents want tamariki included as much as possible, but rates of inclusion reduced with age. Those in special units still wanted opportunities for inclusion (Bevan-Brown, 2013).
- Many whānau want support for itinerant delivery of services while being included in local schools rather than having tamariki attend specialist schools where they have to leave their home, whānau and support network (Bevan-Brown, 2013).
- Cultural choices of whānau should be respected (Ministries of Health & Education, 2016).
- The role of whānau is recognised as an essential aspect of hauora for Māori (Elder, 2017).
- Whānau want their children to participate in positive, culturally responsive learning programmes that are tailored to their needs and aspirations.
- Often effective interventions are connected to a Māori world view, and are grown out of good relationships with Māori families - they are listened to and agencies/teachers work alongside them - learning together (Berryman & Woller, 2013).

Solutions

- To improve parent engagement in interventions consider and carry out: home support initiatives; home visits; parent education; kaiārahi involvement, build relationships through cultural activities; provide childcare.
- Use a strengths based model that recognises the strengths of connections between whānau and marae and extended whānau (Crawford, 2018).
- Move away from professional knowledge in isolation, and create space for whānau and Māori world views (Elder, 2017).
- Listen to ākonga kanorau ā-roto and involve whānau in information sharing and decision making (Bevan-Brown et al., 2015).
- To improve parent experience and involvement in education decision making:

Communication and information factors:

- information provided in a clear, precise and meaningful way - avoid jargon;
- reduce the number of professionals in contact with the family.
- Understand that silence does not indicate agreement.
- Whānau to take a support person to hui (p.212).

Cultural protocols:

- Karakia; understanding of whakawhanaungatanga; upholding of mana of the whānau.
- Inclusion of a kaiārahi to support the whānau as they engage with professionals (Ministries of Health & Education, 2016, p.212).

Te Kanorautanga

- *Māori are diverse and need to be understood in the context of their diverse aspirations and lived experiences.*
 - *Our education services will recognise and provide for Māori diversity. Our education workforce will have the right skills and capacity to support all Māori learners, including those with disabilities and learning support needs, to achieve excellent outcomes.*
-

Key principles that apply to ākonga kanorau ā-roro

- A single viewpoint on any disability cannot exist (Bevan-Brown, 2013).
- Māori vary in their support of inclusion as applied to people with disability in general and children with special needs in particular (Bevan-Brown, 2013).
- Cultural knowledge and understanding provide the platform for generating effective practices that enhance and in turn further sustain the cultural, social, and learning needs of tamariki kanorau ā-roro (Berryman & Woller, 2013).
- “Recognising, valuing, and being responsive to children’s diversity is paramount” (Berryman, Nevin, SooHoo & Ford, 2015, p.2).
- He mana ko te tamaiti (each child has mana) (Bevan-Brown, 2002).
- “Learning and knowledge are inextricably intertwined with the content within which they occur...that context extends beyond physical location to include cultural, social, institutional and historical ferents” (Macfarlane, Macfarlane & Gillon, 2016. p.54).
- “Wholesomeness or well-being can be defined and ecological terms. The wellbeing of the individual is seen as dependent not only on the absence of illness or disability but also on the presence of an awareness of historical Social Cultural economic political and environmental circumstances” (Macfarlane, Macfarlane & Gillon, 2016. p.58).

In regard to specific conditions

- Tamariki with FASD are more likely to struggle with adaptive functioning, social and emotional competence, executive functioning, and general intellectual functioning (Crawford, 2018).
 - There is a need for enhanced transition support for tamariki with ASD to better meet their needs (Ministries of Health and Education, 2016).
 - Parents want their tamariki takiwātanga aged 17 - 20 to receive better teaching of life-skills in school settings (Ministries of Health and Education, 2016).
-

Solutions

- Provide culturally affirming professional processes for ākonga kanorau ā-roro (Ministries of Health and Education, 2016).
- Move away from professional knowledge in isolation, and create spaces for whānau and Māori world views (Elder, 2017).
- Shift focus from ākonga being ‘at risk’ to ākonga being ‘full of potential’ and use strengths based approaches (Berryman & Woller, 2013).
- Move towards pedagogies based on relationships and that are inclusive of cultural differences (Berryman & Woller, 2013).
- Plan for and provide tailored transition programmes for ākonga kanorau ā-roro (Ministries of Health and Education, 2016).
- Tailor each learning environment to the needs of each tamaiti (Bevan-Brown, Berryman, Hickey, Macfarlane, Smiler & Walker, 2015).

In regard to specific conditions

- Identify people to support and help the whānau as soon as possible following diagnosis of ASD (Ministries of Health and Education, 2016).
-

Te Tangata

- *Māori are free from racism, discrimination and stigma in education.*
- *Māori learners and whānau have identified racism as a major barrier in our education system. We will address this, provide equitable access to services, and in ways that promote fairness and are respectful and culturally appropriate, so that Māori learners and their whānau have a strong sense of belonging.*

Key principles that apply to ākonga kanorau ā-roro

- Issues of family violence and addiction have occurred “as a direct result of colonisation” (Crawford, 2018).
- Colonisation directly associated with historical trauma, through families and communities. New Zealand rhetoric of “we are all one” continues the trauma as the grief cannot be acknowledged (Crawford, 2018).
- Indigenous people are often the victims of marginalisation and exclusion, made worse when combined with intellectual disability (Bevan-Brown, 2013).
- Māori learners with special needs are doubly disadvantaged by pathologising practices (Bevan-Brown, 2013).
- There is a difference in perception about the availability of support services (both formal and informal) between Māori and non-Māori, where Māori are disadvantaged (Searing & Granger, 2015).

In regards to specific conditions

- There is overrepresentation of tamariki Māori with **FASD**, many of whom don't meet the threshold to access services (Crawford, 2018).
- The most significant barrier identified was exclusionary attitudes of other people including stereotypes about the capabilities and limitations of **tāngata kāpo** (Bevan-Brown, 2013).

Solutions

- Provide ākonga and whānau with safe spaces where they can name the problems and practices they experience, to then be placed on the table to negotiate equity and equality to enact concrete actions (Ritchie, 2016).
 - Encourage paradigms, discourse and practices that support setting up positive, interdependent relationships (Berryman et al., 2015).
 - Whanaungatanga, ako, and mahi tahi are recommended principles for achieving a cultural and relational response to inclusion that also addresses racism and prejudice (Berryman et al., 2015).
-

Te Tuakiritanga

- *Identity, language and culture matter for Māori learners.*
 - *Our education services will support the growth and development of the Māori language.*
 - *We will support the identity, language and culture of Māori learners and their whānau to strengthen belonging, engagement and achievement as Māori so that Māori learners can actively participate in te ao Māori, Aotearoa, and the wider world.*
-

Key principles that apply to ākonga kanorau ā-roro

- Te ao Māori knowledge is written and unwritten (Macfarlane, 2012).
- Beliefs and favoured practices of te ao Māori have value, are valid and legitimate (Macfarlane, 2012; Bevan-Brown, 2013).
- Māori identity is just as important to ākonga kanorau ā-roro as it is to all ākonga Māori (Bevan-Brown, 2015).
- Cultural identity matters to whānau and they want this reflected in the services they access for their tamariki kanorau ā-roro (Bevan-Brown, 2004).
- The alienation of many Māori from their Māoritanga (their whānau, hapū and iwi) does not exonerate professionals from their responsibility to seek and apply practices and approaches that are appropriate and responsive to Māori (Macfarlane, Macfarlane & Gillon, 2016).
- “Informal supports” are highly valued by Māori whānau (Searing & Grainger, 2015).
- If cultural needs are met first, then learning will follow (Berryman & Woller, 2013).
- Cultural knowledge and understanding provide the platform for generating effective practices that enhance and in turn further sustain the cultural, social, and learning needs of tamariki kanorau ā-roro (Berryman & Woller, 2013).
- Effective interventions grow out of good relationships with Māori families, they are listened to and agencies/teachers work alongside them, learning together (Berryman & Woller, 2013).
- Professionals who interpret Māori thinking, health, and wellbeing solely from a Western science paradigm are being insensitive and unprofessional - assessments and interventions may often be flawed, incongruent and irrelevant (Macfarlane, Macfarlane & Gillon, 2016).

In regard to specific conditions

- A person's ethnic culture has an impact on how **ASD** is experienced and managed (Bevan-Brown, 2015).
 - Māori language, concepts, beliefs, values, and content should be included in the education and care of children with **intellectual disabilities** (Bevan-Brown, 2013).
-

Solutions

Resource related...

- Professional resources, services and supports need to have more of a cultural focus to better serve whānau needs (Searing & Grainger, 2015).

Content related...

- Use content integration - the process of introducing, integrating and embedding culturally-relevant content, programmes and practice approaches in organisational core business (Macfarlane, Macfarlane & Gillon, 2016).
- Cultural content should be facilitated in a wairua affirming, inclusive way (Bevan-Brown, 2004).

Practice related...

- Beliefs and favoured practices of te ao Māori should be a focus of inquiry, planning, and practice (Bevan-Brown, 2013).
 - Use equity practices - ensuring that the three principles of Te Tiriti o Waitangi are fundamental to and applied to special education (Macfarlane, Macfarlane & Gillon, 2016).
-

People related...

- Have skilled professionals - being responsive to the concepts of rangatiratanga and cultural competency (Macfarlane, 2012; Macfarlane, Macfarlane & Gillon, 2016).
 - Have culturally competent Pākehā staff (Bevan-Brown, 2015). This requires quality training, professional learning and development, and prioritisation. To work effectively professionals must have an understanding of Māori perspectives and practices (Bevan-Brown et al., 2015).
 - Professionals, ākonga, and whānau should use te ao Māori knowledge and understanding to interact with and learn from each other (Bevan-Brown et al., 2015).
 - Professionals who are working from a Western science paradigm should consult or enlist the expertise and knowledge of Māori who are proficient in kaupapa Māori
-

Te Rangatiratanga

- *Māori exercise their authority and agency in education.*
 - *Our education services will support whānau, hapū, iwi and Māori to exercise agency and authority over the education of Māori learners at all levels of the education system.*
 - *We will support Māori to make decisions about the education of Māori learners. We will account to whānau, hapū, iwi and Māori for the education services we provide.*
-

Key principles that apply to ākonga kanorau ā-roro

- The cultural choices of whānau should be respected (Ministries of Health & Education, 2016).
 - Kaupapa Māori interventions are most effective for Māori (Crawford, 2018).
 - Māori determination and Māori 'know-how' can provide effective sources of potential for Māori students (Berryman & Woller, 2013).
-

Solutions

- Māori models should be used in the development of prevention and intervention programmes (Crawford, 2018).
-

Ngā taunakitanga | Recommendations

Recommendations are made for future investment in generating te ao Māori literature; future investment in generating a te ao Māori evidence base, and developing the education workforce. These are duplicated from the report, below.

Recommendations for increasing the depth of te ao Māori literature:

1. Gathering **iwi perspectives**; conducting research to help better understand kanorau ā-roro in **Māori medium** education settings - particularly what is working well that English medium can learn from.

2. **Invest in kaupapa Māori research** relating to both kanorau ā-roro generally and particular types of kanorau ā-roro specifically. Partnerships with universities may help identify post-graduate students interested in engaging in kanorau ā-roro research for Masters or PhD study.
3. Convene a hui including key kanorau ā-roro researchers (such as Bevan-Brown, Macfarlane, Elder, and Crawford) for the purpose of **identifying opportunities for new or further research** that will help to fill gaps and provide additional perspectives about existing knowledge.

Recommendations for growing the te ao Māori evidence base:

4. Find ways to **trial and evaluate the models and frameworks** profiled in the literature to help **build an evidence base** about what works for ākonga kanorau ā-roro and their whānau. In particular *Te Waka Kuaka* (Elder, 2017), *Te Waka Oranga* (Elder, 2017) and *He Pikinga Ki Runga* (Macfarlane, 2009) seem ready and able to be implemented beyond individual settings.
5. Communicate with schools and Māori communities requesting **submissions of grassroots (unpublished) research and evidence** that they may have (but that is not considered to be academic research). Conduct a review of what is submitted and assist in documenting the learnings so that they can be considered and shared.
6. Consider **training facilitators and researchers** with te ao Māori methodologies such as Puna Kōrero (Riwai-Couch, 2015; Riwai-Couch, Bull, Ellis, Hall, Nicholls & Watkinson, 2020; Riwai-Couch, Bull & Nicholls, 2020) for the collection of ākonga Māori and whānau voices.

Recommendations for developing a culturally responsive education workforce able to work effectively with ākonga kanorau ā-roro:

7. Prioritise developing **culturally competent practitioners** who are cognisant of Māori worldviews and local histories; familiar with historical and contemporary challenges experienced by Māori (particularly Māori kanorau ā-roro) and how these can be mitigated; and are aware of Te Tiriti o Waitangi, its articles and principles for underpinning and shaping Treaty centric practices.
8. The principles and solutions presented in this report on pages 16 - 21 and recommendations made by Berryman, Nevin, SooHoo and Ford (2015) on pages p.14-16 of their chapter should be used for **professional development planning, discussions and learning** designed to help meet the educational needs of ākonga kanorau ā-roro.
9. The benefits of **cultural supervision** were not discussed in the literature, however, it is likely that this would assist people in specialist education roles to actively engage in examining their own practice and how it can be better aligned to meet the needs of ākonga kanorau ā-roro. Cultural supervision roles and monitoring may also provide **opportunities for iwi and mana whenua** to be included as partners in the process of improving education and services for ākonga kanorau ā-roro and their whānau.

Rārangi pukapuka | Bibliography

- Berryman, M., Nevin, A., SooHoo, S., & Ford, T. (Eds.) (2015). *Relational and responsive inclusion Contexts for Becoming and Belonging*. Peter Lang Publishers.
- Berryman, M., & Woller, P. (2013). Learning about inclusion by listening to Māori. *International Journal Of Inclusive Education*, 17(8), 827-838. <https://doi.org/10.1080/13603116.2011.602533>
- Best, E. (1952). *The Māori as he was*. Wellington: Government Printing Office.
- Bevan-Brown, J. (2004) Māori perspectives of ASD, December 2004, Group Special Education.
- Bevan-Brown, J. (2013) Including People with Disabilities: an indigenous perspective. *International Journal of Inclusive Education*, Volume 17, 2013, pp. 571-583, DOI: 10.1080/13603116.2012.694483.
- Bevan-Brown, J. (2015). Intellectual disability: Looking through a Māori lens. In J. Bevan-Brown, M. Berryman, H. Hickey, S. Macfarlane, K. Smiler & T. Walker, *Working with Māori children with special education needs: He mahi whakahirahira*. NZCER Press.
- Bevan-Brown, J., Berryman, M., Hickey, H., Macfarlane, S., Smiler, K. & Walker, T. (Eds.). (2015). *Working with Māori children with special education needs: He mahi whakahirahira*. Wellington, NZ: NZCER Press.
- Bevan-Brown, J. (2021) Neurodiversity and Christmas Tree Lights. A paper written for the Massey Massey Specialist Teaching Course, Massey University 21/1/202. Unpublished.
- Birkin, C., Anderson, A., Seymour, F., & Moore, D.W. (2008) A Parent-Focused Early Intervention Program for Autism: Who Gets Access? *Journal of Intellectual & Developmental Disability*; 33(2):108-16.
- Bishop, R., & Berryman, M. (2009). The Te kotahitanga effective teaching profile. *Set: Research Information for Teachers*, Wellington, (2) p27-33.
- Crawford, A.M. (2018) "Social cognition, executive functioning and IQ. What are the important influences on adaptive functioning in children with Fetal Alcohol Spectrum Disorder?", Ph.D thesis submitted to the University of Auckland.
- Durie, M. (1994). *Whaiora: Maori health development*. Auckland, N.Z: Oxford University Press.
- Elder, Hinemoa (2017) Te Waka Kuaka and Te Waka Oranga: Working with Whānau to Improve Outcomes. *Australian and New Zealand Journal of Family Therapy* 2017, 38, 27–42 doi: 10.1002/anzf.1206. Retrieved January 2021 from: http://teipuwhakahauaa.teraumatatini.com/uploads/elder/2017/1166_Elder2017.pdf
- Jacob, H. & Green, C. (2015) Working within Government: Contexts to Include Māori students with Hearing Impairments in Education. In Berryman, M., Nevin, A., SooHoo, S., & Ford, T. *Relational and Responsive Inclusion: Contexts for Becoming and Belonging*. Peter Lang Publishers.
- Macfarlane, A., Macfarlane, S. & Webber, M. (eds.): *Sociocultural Realities: Exploring New Horizons. New Zealand Journal of Educational Studies*. 51. 1-3. 10.1007/s40841-016-0055-y.
- Macfarlane, A. H., Blampied, N. M., & Macfarlane, S. H. (2011). Blending the clinical and the cultural: A framework for conducting formal psychological assessment in bicultural settings. *New Zealand Journal of Psychology*, 40(2), 5–15.
- Macfarlane S, Macfarlane A, Gillon G. 2015. Sharing the food baskets of knowledge: creating space for a blending of streams. In: A. Macfarlane, S. Macfarlane, M. Webber, editor. *Sociocultural realities: exploring new horizons*. Christchurch: Canterbury University Press; p. 52–67.
- Macfarlane, S. (2009). Te Pikinga ki Runga: Raising possibilities. *SET: Research Information for Teachers*, 2, 42-50.

- Macfarlane, S. (2012). In pursuit of culturally responsive evidence based special education pathways in Aotearoa New Zealand: Whaia ki te ara tika: A thesis presented to the University of Canterbury in fulfilment of the requirements for the degree of Doctor of Philosophy in Education.
- Makereti. & Penniman, T. K. (1938). The old-time Maori. London : V. Gollancz Ltd
- Ministries of Health and Education (2016) The New Zealand Autism Spectrum Disorder Guideline. Ministries of Health and Education.
- Ministry of Education. (2009). Ka Hikitia – Managing for Success 2008-2012 Updated 2009. Wellington, New Zealand: Author.
- Ministry of Social Development. (2011). *Conduct problems: Effective programmes for 8 - 12 year olds, 2011*. Wellington, NZ: Ministry of Social Development.
- Opai, K. (2018). *Te Reo Hāpai The Language of Enrichment* [PDF]. Retrieved 21 January 2021, from <https://www.tereohapai.nz/>.
- Riwai-Couch, M. (2015). Puna Kōrero: Iwi and schools working together to support Māori student success. (Unpublished doctoral thesis). University of Canterbury, Christchurch.
- Riwai-Couch, M., Bull, A., & Nicholls, J. (2020). Puna kōrero: Learning from the parents of Māori and Pasifika students. *Set: Research Information for Teachers*, 1. <https://doi.org/10.18296/set.0162>
- Riwai-Couch, M., Bull, A., Ellis, B., Hall, K., Nicholls, J., Taleni, T., Watkinson, R. (2020) *School-led learning at home: Voices of the parents of Māori and Pasifika students*. Auckland. Evaluation Associates Ltd.
- Searing, B.M.J., Graham, F., & Grainger, R. (2015) Support Needs of Families Living with Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*; 45(11):3693-702.
- Smith, L. (1999) Decolonizing Methodologies: Research and Inigenous Peoples. Zed Publishers.

