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Triangulating Student, Teacher and Family Perceptions to Guide Theory-Based Reform for Engaging Indigenous Students

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Abstract

The racialized, historical legacy of colonization has resulted in intergenerational disparities for disproportionate numbers of Indigenous students across many parts of the globe. In Aotearoa New Zealand, several national school reform and policy initiatives have been undertaken to better improve the schooling system for our Indigenous, Māori learners. The development of walkthrough observations and surveys that ask students, their family members and teachers to ask critical questions is to explore perceptions of their learning experiences within the school reform. A set of tools, known as Rongohiate Hau, has been used to ensure both a more theory-based approach and identify changes over time. This paper presents quantitative and qualitative evidence from 25 secondary schools that indicate the importance of gathering and utilizing evidence such as this, if the "core" of education can be changed and more transformative reform pathways determined.

Keywords

Theory Based Reform, Indigenous Led Equity, Shared Humanity

1. Introduction

We position this paper within the ongoing disparities faced by Indigenous peoples globally and in Aotearoa New Zealand in particular. We contend that the assimilation practices embedded within the colonial education responses must be better understood, disrupted, and reformed. We then consider the historical and international significance of theory-based reform and culturally responsive pedagogy as more effective responses to the disparities experienced by Māori and other mar-

ginalized learners across the globe.

Clearly identifiable groups of students across the globe are underserved through education, within a political landscape that has been increasingly shaped by neo-liberal ideologies. Despite the government's own statistical information from the early last century, clearly identifying that the Indigenous Māori population was being seriously disadvantaged through the systems provided by the government (Hunn, 1961), this situation has continued largely unabated, and it is intergenerational (Ngaamo, 2019). For disproportionate numbers of Māori students, this evidence is ongoing. Furthermore, for disproportionate numbers of Māori students, a gap is evident in entry to schooling and for many, this gap continues to widen throughout schooling, negatively influencing life chances on exit.

This paper takes the view that the status quo is often perpetuated when narrowly defined evidence sets are used to advance the political agenda of those in power. Like other British Commonwealth, colonized countries, the political authority in Aotearoa is set by the Crown. This paper focuses on education, given that education has real implications for whether or not qualifications will be achieved that will lead to quality employment, housing, health, etc. While the range of services provided by governments is essential to the country's population, we question why increasingly we are continuing to perpetuate societies where some populations continue to be privileged while others continue to be marginalized and disadvantaged (Shields et al., 2005).

This paper focuses on evidence using the Rongohiate Hau tools (Berryman, 2013), which were developed towards the end of Te Kotahitanga (Unity of Purpose). Te Kotahitanga was a secondary school, theory-based reform initiative that aimed to change the core of education for Māori learners (Bishop & Berryman, 2006; Bishop et al., 2014), and, in Phase 5, its final iteration, it was able to do just that (Alton-Lee, 2015). However, this paper focuses on Kia Eke Panuku: Building on Success, a resource and time-constrained reform initiative that was to follow. We present quantitative perception evidence from Rongohiate Hau (listening to the winds of change) surveys triangulated across students, teachers, and whānau (family or extended family). We discuss evidence from these tools to understand how cultural relationships and responsive pedagogies were being implemented across these schools. How this was playing out for learners and their families, has forced us to confront what happens when competing demands distract reform facilitators and educators from the evidence and theories that underpinned the reform (Egan, 2022) and the authentic voices of all participants are silenced.

Within the constraints of resourcing and implementation, we conclude that rather than a suite of tools that are implemented by an external group and done to teachers, this process must begin with the co-construction of a collaborative continuum of teaching and learning that creates deeper understandings of the theories and practices underpinning the reform. We are learning that these under-

standings can and must extend across the school and into its whānau and community if they are to become "core" to the reform (Elmore, 1996).

2. Racialized Legacy of Colonization

Schooling across the globe has underserved specific groups of clearly identifiable students (Organization for Economic Cooperation and Development (OECD), 2013), as evidenced by achievement disparities that continue to be well documented in Aotearoa (Bishop et al., 2014; Harker, 2007). Schooling has had an unfortunate way of creating and perpetuating "images of children in ways that are destructive, in ways that predispose some children to be successful, confident and engaged, and others to become lower achieving, timid or aggressive, reluctant and disengaged" (Shields et al., 2005: p. 1). Descriptions of high-quality and low-equity education systems, driven by deficit-oriented views of particular groups, are familiar to educators across the world (Berryman et al., 2015; Sleeter, 2011). Indigenous students comprise one such marginalized group (McKinley & Smith, 2019).

In Aotearoa today, the difference in lifestyles and life chances between the average Indigenous Māori and non-Māori is long-standing (Harker, 2007). European colonization, in Aotearoa, as elsewhere, is deeply implicated in representing Indigenous peoples "as a pathologized other" (Shields et al., 2005: p. 2). This is even though iwi (the Indigenous tribal groups) in Aotearoa have long been politically savvy. For example, in 1831 a group of Northern tribal leaders sought an alliance and protection from King William IV. In 1835 this was granted and formalized with the signing of He Whakaputanga—the Declaration of Independence. However, in 1840 the Crown developed the Treaty of Waitangi and this document, in the English language, was signed by the colonizers. Iwi leaders signed TeTiriti o Waitangi, a very different document in the Indigenous Māori language (Mutu, 2004, 2018). Article 1 of TeTiriti o Waitangi is kāwanatanga, Māori understood that the Crown would govern Aotearoa. However, under Article 2, tino rangatiratanga, Māori hapū (subtribe) and iwi would have control over their resources, people and communities. Furthermore, under Article 3, ōritetanga, Māori would have equal rights as citizens of Aotearoa.

None-the-less the English language version of the Treaty was privileged and implemented, and Māori potential to be politically powerful remains largely unfulfilled due to the master-servant relationship that was promoted under this Treaty (Jackson, 2021; Mutu, 2018). This cultural positioning was normalized by the settlers; matters relating to culture and race that were established by the coming together of Indigenous and settler peoples under the Doctrine of Discovery were silenced (Jackson, 2019; Ngata, 2019). Difficult histories involving illegal land acquisition were soon replaced by the normalization of cultural bias, blindness to difference and historical amnesia (MacDonald, 2022). Accordingly, like many other colonized (MacDonald, 2021) and racialized societies (Mills, 1999), the ongoing subordination of Indigenous peoples by European colonists in Ao-

tearoa saw Māori continue to be undermined, disadvantaged and marginalized (Bishop & Glynn, 1999). The systematic subordination of Māori by the colonizer ensued (Consedine & Consedine, 2012), helped along by the systems set up by the Crown (Jackson, 2019, 2021; Mutu, 2018).

The status of Māori within the colonial education system in Aotearoa for example, reflects a continuous cycle of recurring deficit themes in attitudes, expectations, and beliefs (Penetito, 2010). Māori have in turn been civilized, discriminated against, segregated, assimilated, and had their traditions and culture fore-grounded by a system that was built on "myth takes" or "deliberately concocted falsehoods to justify a process that is actually unjustifiable" (Jackson, 2019: p. 102). It is therefore not surprising that the differences between rich and poor, health and life expectancy, crime rates and educational achievement are not only drawn along economic lines, but racial ones as well.

Since the foundation of these colonial states, the poorest members of society are often the "colonized" Indigenous populations (Mills, 1999). Māori, for example, remain disproportionately represented within the bottom quartile of society in academic achievement and employment prospects (Ministry of Education, 2016, 2022); they do not remain in schooling as long as other students nor are they achieving as highly (Office of the Auditor-General, 2013, 2015, 2016a, 2016b). Despite many initiatives to raise Māori student achievement, Englishmedium schooling continues to return lower engagement and achievement rates for Māori than for non-Māori students (Udahemuka, 2016). For example, statistics published by the Ministry of Education (MoE) indicated that in 2021:

- 24% of Māori students left school without a National Certificate of Educational Achievement (NCEA) Level 1 or above compared to 10.6% of European New Zealand students.
- 62.9% of Māori students left school with NCEA Level 2 or above compared to 81.1% of European students (Ministry of Education, 2022).

International measures confirm this picture of differential achievement. The outcomes of the Program for International Student Assessment (PISA) comparisons across the OECD countries continue to show New Zealand's education system as one that, in terms of education outcomes, achieves high levels of achievement for many students but not for all (OECD, 2019). As reported in the 2018 PISA survey, for example, overall achievement in Aotearoa was above the OECD average in reading, mathematics and science, but the achievement of Māori students was both below the average in Aotearoa and the OECD average (May et al., 2019). Therefore, the question of what can be done to promote improved educational opportunities and experiences for Māori students remains a major and long-standing question for educators interested in promoting the future life chances of every young person.

School Reform

Several school reform initiatives have been undertaken in Aotearoa to improve

this situation, many finished when the external funding stopped. The focus of this paper is the reform initiative named Building on Success. The intention of this reform was to build on the success factors evident from previous reform initiatives such as Te Kotahitanga (Bishop et al., 2014), mentioned above. Building on Success was also explicitly linked to the Māori education policy Ka Hikitia, defined as a means to "step up', 'lift up', or lengthen one's stride" (Ministry of Education, 2008: p. 10). Ka Hikitia was positioned as "a call to action" (p. 11) in order to step up "the performance of the education system to ensure Māori [students] are enjoying education success as Māori" (p. 10). For the first time in our history as a nation, rather than continually focusing on fixing up Māori learners, the system was being identified as needing to change in order to improve the historical disparities for this group of underserved learners. The intent of this policy was to change the rhetoric and practice of educators across the system—a huge and necessary undertaking.

As the project plan for Building on Success developed, the term Kia Eke Panuku was used by the contracted consortium to encapsulate the concept of a journey towards success that is both dynamic and continuous. The Kia Eke Panuku metaphor also speaks to both an individual and collective Māori and non-Māori commitment to achieve excellence. Therefore, the reform built from both the Ka Hikitia policy and each school's current situation, to where each school aspired to be for Māori students and their home communities. Accordingly, the kaupapa (shared agenda, vision) of Kia Eke Panuku became: secondary schools giving life to Ka Hikitia and addressing the aspirations of Māori communities by supporting Māori students to pursue their potential.

Utilizing a collaborative, evidence-based inquiry model, Kia Eke Panuku focused on strengthening Māori students' participation and achievement and thus their potential and future as productive citizens at a whānau (family or extended family), hapū (subtribe) and iwi (tribe) level and also at the level of Aotearoa and the global community. It built on what schools' leaders, teachers, and in turn, Māori students and whānau could do in response to the strengths and/or challenges identified from within the range of contexts and settings in which they each engaged, including the use of emerging evidence. The aim was that schools would become inextricably connected through Māori students to their homes and communities (Alton-Lee et al., 2009). This would enable schools to benefit from the funds of Māori cultural knowledge (Moll et al., 1992) and expertise that continued, and still continues, to be marginalized and under-utilized by many schools.

3. Cultural Relationships and Responsive Pedagogy

The reform required utilizing new cultural relationships as ways of being with Māori students and their home communities. By teachers knowing and respecting their learners and whānau, and vice versa, it was proposed that more effective and responsive engagements with learning would ensue. Within this responsive

approach, Kia Eke Panuku facilitators engaged in an iterative, Professional Learning and Development (PLD) journey with schools that was: differentiated and adapted to their own evidence; that built capacity and expertise within the school; and that invested in local people, especially Māori, and their own solutions. This relational approach promoted respectful, two-way relationships developed with the school, within the school, with other schools, with whānau, hapū and iwi and with relevant MoE personnel so that all could maintain a clear and unrelenting focus on the kaupapa of transformative school reform.

There were understandings across the school community that educational reform needed to go beyond a desire to do more effectively "what we have always done" and as confirmed by the Tomorrow's Schools Independent Taskforce (2018), to move to places where changes are "as much about the culture of our schooling system as they are about its organization and structures" (p. 134). In Kia Eke Panuku, changing the culture occurred when leaders, teachers and community members opened their hearts and minds to deeply examine the disparities of educational outcomes for Māori and sought to understand the social, historical and political reasons for these outcomes. They challenged their own consciously and subconsciously held beliefs about the families and children in their care, and the stereotypes and biases they themselves hold, and they are committed to a journey of resisting damaging and deficit theorizing (Shields et al., 2005). Structural shifts occurred as the school community examined the existing policies, curriculum, school rules and regulations (Bishop et al., 2010) and the role each of these structures had in perpetuating a status quo that minoritized and disadvantaged Māori and also impacted adversely on some while privileging others. The school community then undertook deliberate actions to decolonize and indigenize their systems and structures.

Culturally responsive and relational contexts for learning were one of five interrelated dimensions that began with an initial profiling process and the development of individualized school action plans. The Rongohia Te Hau tools were central to this dimension. They included complimentary surveys for students, teachers and family members, as well as timed observations of classroom walk-throughs. This paper explores educators' theorizing about the implementation of the tools processes and thus their praxis. Of particular importance is the co-construction of a continuum of practice, designed to generate shared examples and understandings of the theoretical underpinnings of the relational and responsive pedagogy. Deliberately enacted, this continuum construction supports novice observers to recognise the interactions and relationships that exemplify the relational and responsive pedagogy.

4. Methods

4.1. Research Design

Mixed methods research involves "mixing" qualitative and quantitative research methods in collecting, analysing and interpreting data sets in a single study. A

pragmatic and explicitly critical approach takes mixed methods beyond the qualitative and quantitative binary. This paper presents are trospective, pre- and post-analysis of the overall Rongohiate Hau survey and walkthrough observation evidence from twenty five secondary schools over three years.

4.2. Participants

Purposive sampling was the means used to select the twenty-five Kia Eke Panuku secondary schools in the Central South and Southern regions of New Zealand that participated in this study.

4.3. Data Collection

The Rongohiate Hau process was developed by Indigenous researchers and informed by a body of Indigenous epistemology, disciplinary knowledge and research (Berryman, 2013; Berryman et al, 2023; Hokowhitu et al., 2022; McKinley & Smith, 2019). This Indigenous knowledge guided the participatory and relational development of the tools and their prescribed use. These approaches ensure the protection of anonymity of respondents, the triangulation of the data sets collected, and the critical analysis of the power dynamics within schools which Rongohiate Hau uncovers (Dumont, 2023). In this study, evidence was gathered by facilitators, trained in these processes, and taken from the three years of the reform, over two separate points: baseline and final. Schools with only one data point were removed from this sample.

4.4. Data Analysis

Surveys used a five-point Likert scale over eleven items with space for an open, related comment at the end. Quantitative evidence from surveys was triangulated across the three groups of respondents; students, teachers and families and are presented as mean ratings on radar graphs. Gaps, between these mean ratings for the three different groups, represent a difference in respondents' perceptions. A thematic analysis, using a grounded theory approach, was used to analyze the qualitative evidence from the open comments. This thematic analysis is shown as qualitative comments being presented as a series of direct quotes in a collaborative story as well as themes presented in a table.

5. Rongohiate Hau Results

As part of the Rongohiate Hau process, the set of three surveys have been used for over fifteen years by trained facilitators and have proven to be reliable when used and analysed as prescribed by the developers (Berryman, 2013; Berryman et al., 2023).

Quantitative evidence from surveys was triangulated across the three groups of respondents: students, teachers, and families. Surveys were separated into relational items (as shown in Figure 1 and Figure 2) and pedagogical items (as shown in Figure 3 and Figure 4).

The five relational items asked questions in relation to positive identity, opportunities for engaging, care, being known, and mutual respect. For each item, the mean scores of each group, as shown in the key below, are plotted against the 1 to 5 Likert scale and presented on radar graphs.

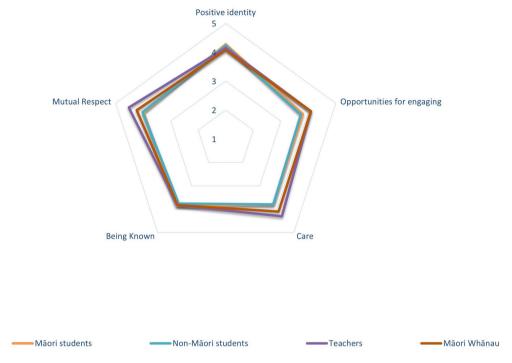


Figure 1. Baseline survey evidence for relational items comparing responses from all participants.

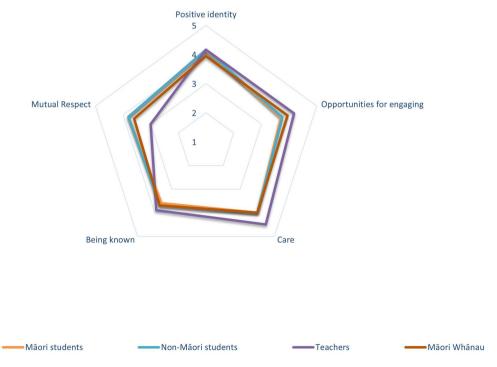


Figure 2. Final survey evidence for relational items comparing responses from all participants.

Figure 1 shows that at baseline, perceptions of cultural relationships were comparable across each of the survey groups. Figure 2, however, shows that in the final cycle, teachers believed they were showing more care for students than was being experienced by students and their family members, who also perceived that there was less mutual respect shown.

The six pedagogical items, as shown in **Figure 3** and **Figure 4**, asked questions with regard to being listened to, having high expectations, being supported to learn, learning being fun, opportunities to collaborate and provision of feedback/feed forward. As above, the mean scores of each group were plotted against these items and presented on radar graphs.

Figure 3 shows that at baseline, experiences of pedagogy were comparably perceived by students and family members, with teachers' perceptions of their practice rated slightly higher. Of note is the evidence in Figure 4, which shows that at the final data point, there is a more pronounced difference between what teachers were saying with all other groups. Māori students, non-Māori students and Māori family members all believed that they or their children experienced less support on each of the pedagogical items than teachers believed they were providing. This divergence speaks to the notions of intentionality and "over-assimilation" (Timperley, 2011), whereby teachers perceived they were implementing new practices and providing more than students and family members thought they were experiencing.

These discrepancies required a deeper consideration of the qualitative evidence that might explain these differences. We used the open-ended question at the end of each survey to understand what each group was saying.

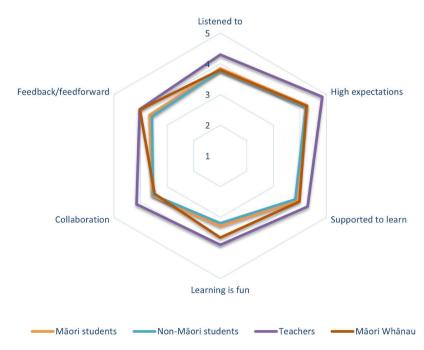


Figure 3. Baseline survey evidence for pedagogical items comparing responses from all participants.

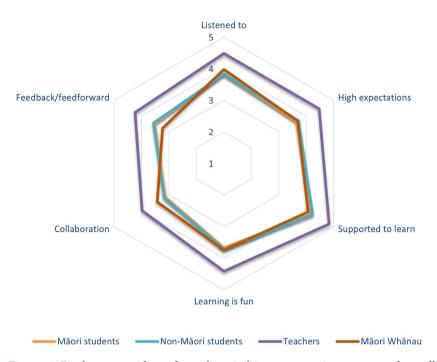


Figure 4. Final survey evidence for pedagogical items comparing responses from all participants.

6. Māori Students

Māori students suggested that for a number of reasons their experiences with some teachers did not help them to learn. One inferred disrespect by teachers yelling and talking down to them:

Some of the teachers here think that we learn by them [teachers] yelling at us and not actually talking to us and helping us to achieve. Only some of them are fun and talk to us as if we are equal, others talk down to us because they are higher up. Students need a bit more respect.

Likewise, other students who believed schooling should be helpful learning environments explained:

I feel as though school is an environment which is supposed to encourage learning with teachers who are helpful, while some teachers excel at this, others need to up their game.

Some teachers aren't very helpful at this school and only three or four teachers that I've had throughout my years have worried about my education and are willing to help me achieve my goals.

One problem I see is that teachers refuse to listen to our ideas about how we learn, and some go to the length of ignoring those, like myself, who speak out against the current system.

Teachers need to listen to students more so learning can be more fun.

Māori students made comments, which showed they were aware of the unfairness of not being listened to and constantly being negatively judged by their

teachers. One student commented that Māori students have to work harder because at their school they have a bad reputation:

I feel like for me being a Māori student I have to try harder because of the bad reputation most of the Māori kids have at my school.

Similarly, another student talked about Māori students facing barriers and being judged:

There is quite often a barrier between the teachers and students, and you can't be yourself without being judged.

Power, manifested by teachers, played out in a variety of ways:

Some teachers care about my learning, some teachers don't, some teachers respect students, some teachers don't, some teachers also see being a teacher as a way to be better than students and treat them like they are less than them...that's just the way it is.

One problem I see is that teachers refuse to listen to our ideas about how we learn and some go to the length of ignoring those like myself, who speak out against the current system.

Māori students were able to identify teachers who seemingly wanted to have a positive relationship with them, but they explained that this relationship did not always carry over into teachers helping them to learn. They were frustrated by their lack of agency and this resulted in two polarized outcomes. The first response was that because they wanted the qualifications only schooling could provide them with, some Māori students tolerated the teaching they experienced and looked for other opportunities to learn. A student who fits this group said:

It's alright I suppose, it gets boring at times, but we get opportunities.

Another explained it as:

...College has been alright, it's supported me with my sports and fitness but the education side is a bit rough. Some teachers know how to work with students and other teachers just tell us what to do instead of teaching. They lose the point of teaching. Some just tell and others explain and show. I guess that's just how it goes.

Many Māori students recognized that schooling was not always supportive and often resulted in boredom. They spoke of some teachers who did not listen to their ideas but who insisted if they wanted to succeed then they must do as they were told.

Other Māori students, who experienced this treatment believed it was biased and unfair. They became disengaged, stopped attending classes or let people know of their frustrations and were soon stood down or removed from school. These students commented:

Some stuff we're learning is so boring, why don't we get a say in what we

learn?! Some teachers are good but some don't know how we learn...

...Some teachers make school really boring and depressing. I don't go to those classes often.

School is boring most of the time...I don't really do my work because I'm that bored.

When the voices of Māori students were analyzed further, it became clear that "boredom" was the term often used to describe a range of different themes, related to poor teaching, as illustrated in **Table 1**.

It is interesting to note that of the total number of comments on the baseline survey, 77 of the 696 were related to teaching that Māori students perceived as boring and demeaning. By the final cycle, the total number of overall comments had reduced by over a third to 213 and of these, only 28, just over a third were related to teaching that Māori students perceived as boring. It is hard to know if these types of comments had actually reduced because of the overall reduction of total comments. However, when this is compared to the radar graphs in Figures 1-4, it is likely that little has changed. While teachers had increased their use of relational cues (see Figure 1 and Figure 2), pedagogically little had changed. Māori students were tolerating pedagogy they found demeaning in order to become qualified, or they were intentionally or otherwise refusing to put up with it.

7. Families of Māori Students

The voices of families of Māori students spoke similarly of their concerns about the poor cultural relationships and teaching experiences that some of their children had to endure. One parent explained their frustration with the lack of cultural understanding, or racism being shown by their child's school:

Table 1. Voices of Māori students: Learning is boring.

Learning is boring when it:	BASELINE	FINAL CYCLE
is taught by people who do not engage us	21	5
is taught in a way that does not engage us	9	3
is not fun	8	5
does not challenge us	7	1
is taught by teachers who don't care for us	7	4
does not interest us	6	3
creates barriers or does not respect students	5	6
is difficult to understand	5	1
repeats what we already know	5	0
does not allow me to work with others	4	0
Total number of comments	77/696	28/213

I find some teachers to be racist about my child missing class to attend Māori events. This is unacceptable. My child should feel supported with their cultural needs being met.

Another parent stated:

As Māori parents we have concerns about the lack of value being placed on tereo and mātauranga [Māori language and knowledge] for our Māori children within the school.

Families affirmed that being Māori was neither understood nor valued:

Our son is shy about being Māori. He knows that being Māori isn't the done thing at school. It happens on the side but isn't integrated into the school ethos. Many teachers do not understand how Māori students learn and they are not willing to change their practice to suit Māori learners. Most teach in a very traditional way—they do not empower the students to lead their own learning.

Like students, family members identified that some teachers were unwilling to change what they were already doing:

Some of the older teachers who are nearing retirement are not willing to make any changes to the way they teach and only teach the students that are high achievers in the class and tend to forget about the students who struggle.

At times, she [her daughter] has felt that some of her teachers do not know how she works best and have not engaged with her properly or have taken her questioning as a sign she is testing them rather than she is seeking clarity in the tasks.

The main themes that arose from their voices included negative stereotypes, racism, white privilege and the power to redefine or assimilate learners' identities. One whānau member shared that:

They [students] have to be white to be right—teachers don't listen—they think they know what it means to be Māori—they tell me about Māori success—a pretty quick look at the school's results tells you this is all rhetoric—they still have a punitive discipline system of meanness detentions—there is nothing more demotivating for students than this archaic system that makes teachers feel good and kids feel like criminals.

While these statements make for sobering reading, over the course of Kia Eke Panuku, as well as engaging with different responses from their students, these schools increasingly recognized their need to engage with families in order to seek their advice about Māori students' experiences of schooling. At baseline, 182 family members were surveyed; by the final cycle this had increased to 527.

8. Teachers

Schools get two different measures of pedagogical change, one from the classroom walkthrough observations and the other from the surveys.

8.1. Classroom Walkthrough Observations

A continuum of teaching and learning, against which the classroom walkthrough observations are compared and assigned, is co-constructed by observers in the school prior to their undertaking the walkthroughs. This continuum has three broad themes to do with the learning experiences of students. It includes students experiencing: very basic learning support (1 on the continuum); learning where cultural relationships for responsive pedagogy are still needing to develop (2 and 3 on the continuum); and learning where cultural relationships for responsive pedagogy are being fully integrated (4 and 5). Descriptors of these understandings allow observers to moderate the observations they collect from classroom walk-throughs more effectively. The shared theorizing within the conversations to build the continuum holds important learnings for those who have created it. The more carefully the continuum is developed and understood, the easier it is for observers to make sense of all of the evidence sources and critically reflect on their implications for the reform.

Given the time-sampling technique, used by this walkthrough observation, they are used to observe 20 minutes per classroom in total, it was never designed to be owned by or fed back to individual teachers. However, what makes this technique effective is the cumulative evidence across all of the walkthroughs that is able to be triangulated with the survey evidence and used to either affirm or deny what the survey evidence shows.

In these schools, the overall classroom walkthrough evidence at baseline showed that in the majority of classrooms, cultural relationships for responsive pedagogy still needed to be developed. This had improved in the final sample. However, in line with what families and Māori students were saying, it still needed further improvement. Importantly, turning it from an exercise in sampling a range of classroom praxis across the school into one for collective learning and growth means that the continuum must, in some form, be shared with teachers across the school. We have learned that by teachers actively contributing to the co-construction of the continuum of teaching and learning they are more likely to support the wider purpose of theory-based reform.

8.2. Surveys

Overall, Figures 1-4 showed that both Māori and non-Māori students experienced positive relationships more frequently than positive pedagogy. Interestingly, perception evidence from their teachers revealed no such difference. We found that teachers had a tendency to refer to the efforts of their school when discussing relational and responsive pedagogy:

Māori student achievement is a main priority at the College. Teachers and students are dedicated to ensuring Māori students can achieve through learning they find engaging and relevant.

The school is making a sustained effort on many fronts to support and encourage Māori students to achieve to their potential.

Teachers also associated Māori learners feeling secure in their cultural identity with systems linked to opportunities to engage with tikanga (Māori cultural practices) in the school:

Māori students are well-represented in this school and find strong Māori tikanga in school life, including pōwhiri [formal Māori rituals of encounter] and ongoing use of Māori language and concepts in school values.

Unlike their Māori students, teachers believed, it was these specific Māori cultural events that would show Māori students that they were valued:

Māori students know we value them. This is increasing the more effort we put into celebrating Māori, e.g. more waiata [song], more larger scale pōwhiri [rituals of encounter] the upcoming celebration of Taraika [a local cultural setting].

Teachers also believed that Māori students were proud to be Māori.

They [Māori students] are generally very proud to be Māori and a large group is active in learning tereo and kapa haka [cultural performance].

Clearly, within the voices of teachers were stereotypes about Māori that surrounded the exotic brown cultural frills provided by the school. This was seen as often unrelated to the curriculum and pedagogy they were providing. This thinking has emerged from a colonial education system that has systematically redefined and pathologized what it means to be Māori. One teacher, blind to the experiences of Māori students in terms of their language, culture and identity being deliberately erased through historical, colonial educational policies of assimilation justified it as:

A lot of Māori students at this school are disconnected from their roots and therefore, their values are not Māori-based but a mix of Modern European/gang/low socio economic/and disconnected cultural values.

Another teacher justified the negative stereotypes:

Some [Māori students] seem determined to live up to the non-achieving stereotype and are just not interested in attempting to better themselves or their current situation in life through education.

Clearly, teachers' blindness to the plight of their Māori students continued theepistemology of silence and white privilege (MacDonald, 2018). **Table 2** presents the extent ofteachers' pathologizing and silencing of Māori found in the surveys.

Table 2. Teachers' pathologizing Māori students.

Māori students	BASELINE	FINALCYCLE
have poor whānau support/low expectations	26	12
have a low opinion of themselves and don't believe they can be successful	25	30
are disconnected from their culture/don't feel good about being Māori	25	21
are lazy/lack drive and ambition/reluctant learners	21	14
have poor attendance	13	20
are disengaged/do not positively engage in learning	9	14
have behavioral issues	6	6
don't ask for help/resist help	5	12
don't value education	4	3
lack resilience/give up when work gets hard	3	6
Total number of comments	137/682	138/483

While teachers' overall comments in the final survey had decreased markedly from baseline, the number of pathologizing statements about Māori learners had not.

9. Conclusion

If we are to purposefully disrupt the intergenerational disparities, the system has perpetuated on Māori, all learners and families, their educational professionals and the state must all understand the historical legacy of colonization, so that the huge investment they make in schooling serves to disrupt rather than perpetuate the status quo. Accordingly, we need to know just how well schooling is working for all who are invested in it. This can be achieved by triangulating evidence from the school's leaders, their teachers and other staff members, their learners and their families.

Achievement disparities continue to be consistently documented for clearly defined groups, within schooling across the globe. In Aotearoa, these disparities show that the systems provided by the Crown have never and are continuing not to work for many Māori. This is a situation that is complex but there have been examples in Aotearoa to show that it is not immutable (Alton-Lee, 2015; Bishop et al., 2010). As long noted by Elmore (1996), "Innovations that require large-scale changes in the core of educational practice seldom penetrate more than a small fraction of US schools and seldom last for very long when they do" (p. 1). Furthermore, he contended that changing the core of education meant changing "how teachers understand the nature of knowledge and the student's role in learning, and how these ideas about knowledge and learning are manifested in teaching and classwork" (p. 1). Changing the core also included changes to the:

Structural arrangements of schools, such as the physical layout of classrooms,

student grouping practices, teacher responsibilities for groups of students, and relations among teachers in their work with students, as well as processes for assessing student learning and communicating it to students, teachers, parents, administrators, and other interested parties (p. 1).

This aligns with the seminal work of Freire (1970) and Fullan (1993, 2007) who are both concerned with the expert, top-down reform models that, like colonization, reject involvement and ownership from those on the ground. Furthermore, as suggested by McLaughlin and Mitra (2001), reforming schooling often requires "significant teacher learning and contextualization if they are to change teaching and learning in significant and sustained ways" (p. 302). Reforms such as this, which are often externally generated, require a theory-based set of clear principles that allow for "co-invention and flexible implementation in practice" (p. 302).

If we are to achieve equity for Indigenous and other minoritized groups, the use of evidence generated from tools such as Rongohiate Hau, which allow for the authentic experiences of learners and families to be triangulated with the theorizing of leaders and teachers, is well-placed to more purposefully disrupt the current power imbalances that continue to be perpetuated in education (Datnow, 2000) through colonization. However, the voices of learners and families, seeking to redefine and decolonize their experiences and aspirations, must be heard and actioned. While examples of cultural brown frills were provided at the school level, Māori were clearly tolerating pedagogy at the classroom level that was mediocre at best. White privilege overpowered brown tolerance and the potential for Indigenous-led equity and shared humanity (Egan, 2022) was once again silenced. This research shows that theory-based reform for engaging Indigenous students could emerge from the use of tools that allow for the careful triangulation of student, teacher and family. However, this will only happen if the hearts and minds of educators are open to the challenge.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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