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KOI TŪ:
THE CENTRE FOR
INFORMED FUTURES

NGĀTI WHĀTUA
ŌRĀKEI

ADDRESSING RANGATAHI EDUCATION: CHALLENGES AFTER COVID-19

A partnership report by Ngāti Whātua Ōrākei and Koi Tū: The Centre for Informed Futures

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July 2020

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Kia koi te tū , ka toi te tū

If one's intellect is sharpened, one's profile is raised

TE WHAKARĀPOPOTOTANGA

Nā te āwhiowhio haere o COVID-19 huri noa i te ao me ngā tikanga i whakaritea hei pakanga i taua mate, ka rangona tonutia ngā pānga mō ngā tau e heke mai nei. I Aotearoa nei, hohoro tonu te huri a te kāwanatanga ki te whakatutuki i te rautaki "kia tere, kia kaha" hei whakamōtī i te huaketo i tēnei whenua. Nā ngā tikanga pākaha i te rohenga whenua, nā te nui o te wā i hamarurutia ki te kāinga, kua karo te motu i te nuinga o ngā pānga kino rawa a COVID-19 e kitea ai i whenua kē. Heoi anō he nui te utu pāpori, he nui te utu ohanga o tēnei rautaki whakamōtī, ā, kātahi anō ka mārama haere ki te whānuitanga, ki te hōhonutanga o ngā pānga ki te hauora hinengaro. Ka rangona tonutia ngā rūmuri pāpori, ngā rūmuri ohanga o te mate urutā me te hamaruru i whai atu, tae noa ki te wā whakamāui. E ai ki ētahi he roa te whiore o te whakamāuitanga, tēnā pea he tekau tau neke atu.

Kia ū ki te manawaroa o te tangata, ki te aumangea o te pāpori . Heoi me pēhea te whakatū, te whakapakari i aua āhuatanga? He huarahi kei mua i te aroaro mō te tangata i tātāhia e tēnei mate urutā, nā wai, nā ka whai oranga i roto i ngā āhuatanga hou o te wā? Me mātua mōhio ki hea tīmata ai, ki hea ahu atu ai.

Me mōhio ki te nui o tēnei kaupapa, me mārama ki ngā take uaua e putaputa mai ana - mā te tangata, mā te pāpori. Kei roto i te ao o te taiohi kei te tāpirihia ngā pōraruraru o te mate urutā ki ngā whakapātaritari o te ao e hurihuri haere ana ā-hangarau, ā-pāpori, ā-taiao. Rangona kētia ai te ngau o māharahara mō te piki haere o te tokomaha o ngā rangatahi e pāngia ai ki te mate hinengaro.

I Aotearoa nei, ko te angotanga kei waenganui i te pōhara me te whairawa ā-rauemi matihiko[1] he mea whakarahia, he mea miramirahia e te wā hamaruru nō nā tata nei.[2] I ngā wiki o ngā Taumata Ohiti 3 me te 4, ko tā ngā mātua tokomaha he mahi mamao, ā, i taua wā tonu rā, i tohutohua te nuinga o ngā ākonga kura kia pērā hoki tā rātou ako.

Nā te mea ko ētahi noa iho o ngā pekanga pūnaha mātauranga i rite ki te huri wawe ki te ako ā-ipurangi, ako mamao, kua huraina ētahi wero, ētahi takahanga i ngā marama kātahi anō ka pahure. Me nonoi te aro atu ki ēnei tū ahuatanga.

He urupare tēnei pūrongo ki te mahi rangahau i oti ai i a Ngāti Whātua Ōrākei i ngā haukāinga; kua whakaaturia te tino uaua mā ētahi ki te hono ki te ipurangi i te wā o te mate urutā. Kitea atu ai ngā hua o aua angonga, ā, ka aro ana ki ngā pānga, ka hua mai ngā āhuatanga papai mā te rangatahi, mā ō rātou mātua. Ko ngā hua i puta mai ai i ngā wheako a Ngāti Whātua Ōrākei, he mea e hāngai ai ki te katoa.

NGĀ TŪTOHUNGA

1. **He mahi ki te taha o te iwi,** pērā i a Ngāti Whatua Ōrākei, **whakapakari ai i taua iwi**, ka mutu ka kōkirihia te kaupapa matihiko hei kaupapa mā te katoa

2. **He akiaki** i te Tāhuhu o te Mātauranga me ngā rōpū ā-iwi ki te whakaū i te mahi tahi, mā reira e puta ai ngā hua papai e pā ana ki te āheinga ki te whakamahi i ngā rauemi matihiko

3. **He taunaki, he whakarahi i te rangahau a te haukāinga**, he mahi i te taha o te iwi, o ngā hapori Māori, ki te aromatawai i ngā pānga mātauranga i tēnei wā whakamāui whai muri ake i te COVID-19

4. **He whakarite kia tere ake ai te taenga atu o te pūrere matihiko tika** ki tēnā ākonga, ki tēnā ākonga, kia tōkeke ake ai ngā huarahi ako, ngā hua ako

5. **He tere te aro atu ki te hiki i ngā ārai hono ipurangi**; mā reira e taea ai e ngā ākonga katoa te hono ki te ipurangi e tika ana, e rahi ana, hei tautoko i tā rātou ako ā-ipurangi

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1   Ko te 'angonga matihiko' matua ko taua puare kei waenganui i te hunga e whai ai i te pūrere matihiko, i te hononga ki te ipurangi, i ngā pūkenga matihiko, me te hunga whai kore. Ko tētahi anō angonga e kitea ana, he rerekē te hunga e hono ai ki te ipurangi toro ai i ngā rauemi mātauranga whakauaua, rauemi whakahihiko, ki te hunga whai pūrere, heoi anō kāore tōna hononga ipurangi.

2   Department of Internal Affairs (DIA), 2019. *The Digital Inclusion Blueprint: Te Mahere mō te Whakaurunga Matihiko*. Wellington: Department of Internal Affairs. Available at https://www.digital.govt.nz/assets/Documents/113Digital-Inclusion-BlueprintTe-Mahere-mo-te-Whakaurunga-Matihiko.pdf

6. **He whakarato i te ako hōhonu mā te ākonga atamai, i te whakaako tautāwhi hoki** hei āwhina i te ākonga i pāngia ai e te wā hamaruru ki te kāinga; mā reira e whai ai te angitū e tika ana tae atu ki ngā hua papai, me ngā tohu mātauranga ā-motu

7. **He whakarato i te tautoko** mā tēnā kaiako, mā ēnā mātua, mā tēnā whānau e āwhina ana i ngā ākonga ki te ako mamao

8. **He whakarato i te āwhina utukore a te mātanga take hinengaro, i te āwhina e hāngai ā-ahurea ai**, mā ngā ākonga, mā ngā mātua, mā ngā kaiako, i te roanga o te wā whakamāui, inarā i ngā marama e ono whai muri. Mā reira e whai tautoko tika ai ngā kura auraki me ngā kura rūmaki i te reo Māori

9. **He** whai i te rautaki ā-rāngai ki te **aro atu ki ngā take hanganga** e kōhure ai i te angonga matihiko me ngā wero mātauranga mā te Maori

10. **He tautoko i te pūtea tōtika, i te whakarauemi tōtika mā te arareo Māori** i ngā whare kōhungahunga, i ngā kura

EXECUTIVE SUMMARY

The rapid spread of COVID-19 around the world, and the restrictions put in place to combat it, have had enormous impacts that will continue to be felt for years to come. In Aotearoa New Zealand, the Government moved swiftly in an attempt to eliminate the virus from our shores through an aggressive "go early, go hard" strategy. As a result of tight border controls and a significant lockdown period, the nation has been relatively unscathed by the serious direct health impacts of COVID-19 seen elsewhere. But this elimination strategy has come with significant and rapidly growing socioeconomic costs, and the full range of psychosocial impacts is only just beginning to be understood. The social and economic aftershocks of the pandemic and consequential lockdown will continue through the recovery period, which will have a long tail estimated to last for at least the next ten years.

Resilience at both individual and societal levels is more important now than ever. What will be required to build and enhance it? Can we find opportunities for positive transformation so those hardest hit by the pandemic can thrive amidst the changes of the new normal? We need to understand both our starting point and our desired trajectory.

The scale and speed at which complex issues are evolving present challenges for individual and societal wellbeing. For adolescents, the stresses of the pandemic add to their already complex developmental journey that was occurring within a context of continuous rapid technological, social and environmental change. This was associated with concerns of already rapidly rising rates of compromised mental wellbeing among young people.

In Aotearoa New Zealand, significant pre-existing inequalities across the digital divides[3] have been exacerbated and highlighted by the recent lockdowns.[4] During the weeks spent at Level 3 and 4, many parents were working remotely where possible, and simultaneously the majority of school students were required to swiftly adjust to remote learning.

With the education system being variably prepared for such a swift change to online teaching and remote learning, a number of challenges and inequalities have come to the fore in recent months. These need to be addressed as a matter of urgency.

This report responds to flaxroots research by Ngāti Whātua Orākei that provides compelling evidence of disparities in digital education during the pandemic response. It shows the positive effects of addressing these digital divides on the outlook of both rangatahi and their parents about their futures. The lessons learned can be generalised beyond the experiences of Ngāti Whātua Ōrakei.

RECOMMENDATIONS

1. **Identify and build on the capacity of iwi**, like Ngāti Whātua Orākei, to promote and enhance digital inclusiveness

2. **Ensure greater co-determination** between the Ministry of Education and iwi organisations to create effective partnerships so as to ensure effective digital inclusion

3. **Support more flaxroots research**, partnering with iwi and Māori communities, to assess educational impacts and needs in the post-COVID-19 and recovery periods

4. **Expedite universal provision of suitable devices** to ensure each student has access to their own device to promote equitable learning opportunities and outcomes

5. **Address the connectivity barriers**, with urgency, to ensure all students have appropriate and sufficient access to the internet for online learning and support

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3   The primary 'digital divide' is the gap between those who have access to digital devices, internet connectivity, and digital skills and those who do not. A second divide occurs where there are gaps between those that have access to complex and stimulating educational resources online and those who do not, even if they have access to devices.

4   Department of Internal Affairs (DIA), 2019. *The Digital Inclusion Blueprint: Te Mahere mō te Whakaurunga Matihiko*. Wellington: Department of Internal Affairs. Available at https://www.digital.govt.nz/assets/Documents/113Digital-Inclusion-BlueprintTe-Mahere-mo-te-Whakaurunga-Matihiko.pdf

6. **Provide accelerated learning and additional tutoring** to help students recover from lockdown impacts on their learning so they can achieve equitable success in valued outcomes, including national qualifications

7. **Provide one-to-one teaching support** for teachers/kaiako and parents/whānau assisting students in remote learning

8. **Provide free access to culturally responsive psychosocial support** for students, parents and teachers throughout the recovery period, especially during the next six months, and thereafter ensure adequate psychosocial support capability in all schools and kura kaupapa to meet ongoing needs

9. **Address the ongoing structural drivers** underpinning the digital divide and educational challenges for Māori, through an inter-sectoral approach

10. **Support equitable funding and resourcing of Māori-medium education** in the preschool and compulsory sector based on need

BACKGROUND: SETTING THE SCENE

The swiftness and severity of the COVID-19 pandemic has taken the world by storm and exposed the lack of adequate preparedness across all nations. In contrast to many governments that made calculated trade-offs between serious medical or economic impacts from COVID-19, Aotearoa New Zealand leveraged its isolated geography by closing its borders quickly.[5] Society was soon after placed into a national lockdown, creating unprecedented conditions, challenges and stressors.[6] Immediate impacts were felt across all sectors of the economy, industries were halted and jobs were lost.

As businesses and schools were swiftly closed, teachers, parents and school students were thrust into an unfamiliar world of remote working, teaching and learning dependent upon online and digital technology. While many people were able to handle this transition with relative ease, there was also a large portion of society with much lower resilience and capacity for whom the impacts of these rapid changes were threatening, and which left communities and individuals badly ill-prepared.[7] For some parents, the lockdown period became a very difficult juggling act as they navigated between the demands of remote working and assisting children with remote learning as well as their own working needs, family commitments and dealing with multiple stresses created by changed circumstances. Further stresses were soon evident where appropriate devices were not available and/or internet access was unreliable.

Unfortunately, the Government's initial national pandemic response had at best limited consultation with iwi. Whānau Māori (Māori extended families) and hapū/iwi generally did not receive advice in culturally-responsive ways,[8] nor were timely or equitable actions undertaken to protect and support vulnerable Māori.[9] It also became clear that the educational and psychosocial needs of Māori tamariki (children), rangatahi (youth), and whānau during lockdown were not being met adequately. While surveying the impacts of COVID-19 on their tribal whānau, Ngāti Whātua Ōrākei's social and cultural support arm, Whai Maia,[10] identified high levels of concern around education, with specific unmet needs regarding digital devices.[11]

Located in and around the Tāmaki isthmus, in Tāmaki Makaurau (Auckland), Ngāti Whātua Ōrākei[12] are a collective of three hapū (sub-tribes) – Te Tāōū, Ngāoho and Te Uringutu – from the wider Ngāti Whātua iwi (tribe) that trace their whakapapa (genealogy) to rangatira (chief) Tuperiri. With approximately 5,000 combined hapū members located throughout Aotearoa New Zealand, and around the world, Ngāti Whātua Ōrākei Trust looks after the collective affairs of the tribal collective, holding firm to their history, culture, identity and language. There are 1217 tamariki aged between 0 and 11 years and 668 rangatahi aged between 12 and 17 years in Ngāti Whātua Ōrākei: 217 rangatahi are enrolled for NCEA levels 1, 2 or 3.

Whai Maia was established to advance the cultural, social and environmental aspirations of Ngāti Whātua Ōrākei. It focuses on whānau outcomes and management of programmes related to health, education, small business, and employment. It provides assistance to Ngāti Whātua Ōrākei regarding education, housing, healthcare, aged-care, mental wellbeing and disability support. Additionally, it oversees development of community-based mechanisms for the benefit of Ngāti Whātua Ōrākei as well as provision of funding for cultural and social development of the hapū collective.

5   Gluckman, P & Bardsley, A. April 2020, *The Future Is Now: Implications of COVID-19 for New Zealand – A Koi Tū discussion paper*. Available at: https://informedfutures.org/the-future-is-now/

6   Poulton et al. June 2020, *Protecting and Promoting Mental Wellbeing: Beyond COVID-19*, Koi Tū: The Centre for Informed Futures. Available at: https://informedfutures.org/protecting-and-promoting-mental-wellbeing-beyond-covid-19/

7   Spoonley et al. May 2020, *He Oranga Hou: Social cohesion in a post-COVID world*, Koi Tū: The Centre for Informed Futures. Available at: https://informedfutures.org/social-cohesion-in-a-post-covid-world/

8   Menzies, R. 5 April 2020. *The need for inclusive and deliberative decision-making in the COVID-19 pandemic*. Koi Tū: The Centre for Informed Futures. https://informedfutures.org/inclusive-and-deliberative-decision-making-in-the-covid-19-pandemic/

9   Menzies, R. 1 May 2020. *A pandemic response framework for equitable and inclusive planning and decision-making.* Koi Tū: The Centre for Informed Futures. https://informedfutures.org/a-pandemic-response-framework-for-equitable-and-inclusive-planning-and-decision-making/

10   See http://ngatiwhatuaorakei.com/whai-maia/

11   Ngāti Whātua Ōrakei (NWŌ), 2020. *COVID-19 Impacts* report. Whai Maia. http://ngatiwhatuaorakei.com/wp-content/uploads/2020/05/NWO%CC%84-Covid-19-Wha%CC%84nau-Survey-Insights.pdf

12   See http://ngatiwhatuaorakei.com/ngati-whatua-orakei/our-story/

During April 2020, Whai Maia surveyed Ngāti Whātua Ōrākei to get an understanding of the overall concern and need over the COVID-19 lockdown period. From here, they asked whānau with school-aged tamariki and rangatahi currently at levels between Year 7–13 to complete a second survey that focussed on education needs and requirement for digital devices. Thereafter, a hui with a national group of Māori-medium kaiako (teachers), separate to the surveyed cohorts, provided Whai Maia with additional qualitative data related to lockdown impacts on kōhanga reo (pre-schools) and kura kaupapa (primary/secondary schools). At this stage, Koi Tū: The Centre for Informed Futures was asked to partner with Ngāti Whātua Ōrākei to assist and put an expert lens to their work and report on the educational challenges and inequalities exposed during the lockdown period.

The initial Whai Maia *COVID-19 Impacts* survey[13] revealed a large number of struggling whānau, and in particular, a concerning lack of access to technology among tamariki and rangitahi, which was impeding their ability to engage in online learning. This was followed up by an extensive response by the iwi that saw 400 digital devices distributed by Ngāti Whātua Ōrākei to their tamariki and rangatahi struggling with online learning.

Digital divides in terms of both access to and use of technology (digital devices and internet), disproportionately impacts Māori.[14] It reflects existing inequalities that have been uncovered and exacerbated through the conditions imposed by the COVID-19 lockdown. On the other hand the pandemic has also revealed a remarkable resilience, in terms of adaptability and creativity that whānau and iwi have, to formulate their own solutions in the face of challenges to their success and wellbeing.

While the degree and scale of impact awaits more formal evaluation, the indications from the Ngāti Whātua Ōrākei survey are that the lack of access to digital devices during the lockdown period had a significant impact on students' learning and emotional wellbeing, potentially impacting significantly on their educational outcomes this year.[15] In the longer term, solving inequalities while building whānau and iwi capability further, as well as capitalising at school on what has been learned, will be paramount to sustainable digital inclusion.[16]

THE DIGITAL DIVIDE

According to the Organisation for Economic Co-operation and Development (OECD):

> The 'digital divide' – a term that refers to the gaps in access to information and communication technology (ICT) – threatens the ICT 'have-nots', whether individuals, groups or entire countries. Education and learning lie at the heart of these issues and their solutions. The gaps that define the 'learning digital divide' are thus as important as the more obvious gaps in access to the technology itself.[17]

The OECD outline several gaps between the 'haves' and 'have nots' within the digital divide that need to be addressed for equitable digital inclusion:

1. **Access to digital devices**. Equitable access is key to digital inclusion in contemporary society and education.

2. **Access to internet connectivity** is paramount to digital inclusion at school and at home.

3. **Digital technology gaps within education systems**. The learning digital divide within formal education speaks to digital technology gaps that exist between schools or school districts, in terms of resourcing and supply of digital equipment, resource materials, internet connectivity, and integration of digital technology within the wider teaching/learning context.

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13   NWŌ, 2020. [see footnote 9]

14   Grimes, A & White, D. 2019. *Digital Inclusion and Wellbeing in New Zealand – Working paper 17–19*. Motu Economic and Public Policy Research. Available at: http://www.motu.org.nz

15   NWŌ, 2020. [see footnote 9]

16   DIA, 2019. [see footnote 2]

17   OECD, 2000, *Towards Bridging Learning's Digital Divide*. In Bridging the Digital Divide. https://www.oecd.org/site/schoolingfortomorrowknowledgebase/themes/ict/towardsbridginglearningsdigitaldivide.htm

4. **Capacity for students to participate in remote learning**, including home-based online learning, extracurricular digital activities, and access to devices with adequate software and digital capabilities for their learning.

5. **Capabilities of teaching staff** is pivotal to bridging the digital divide. Untrained, incompetent or poorly prepared teachers can reinforce gaps by negatively influencing digital divides further. As such, professional development of teachers in digital skills, and capacity building with educational technologies and supported learning, is crucial to closing the gaps and promoting digital inclusion.[18]

These latter factors introduce risks of a second digital divide, which can mirror existing disparities in educational provisions associated with low expectations, more limited educational resources provided for Māori students, and assumptions about the educational resources whānau can draw upon to support their tamariki learning at home.

THE DATA

Whai Maia conducted their online survey between April 1 and April 14, 2020[19] in an effort to better understand the impacts of the pandemic on tribal members. The survey was completed by a total of 2,684 respondents representing 589 households. From the households surveyed there were 1038 tamariki and rangatahi currently in education. Figure 1 reveals a gradient of resilience across the different age brackets of the respondents, with kaumātua and kaukuia (elders) reporting considerably more resilience than middle-aged or younger adults, and rangatahi. Compared to their older counterparts, rangatahi aged 17–24 years were highly likely to report perceptions of low or no resilience during COVID-19.
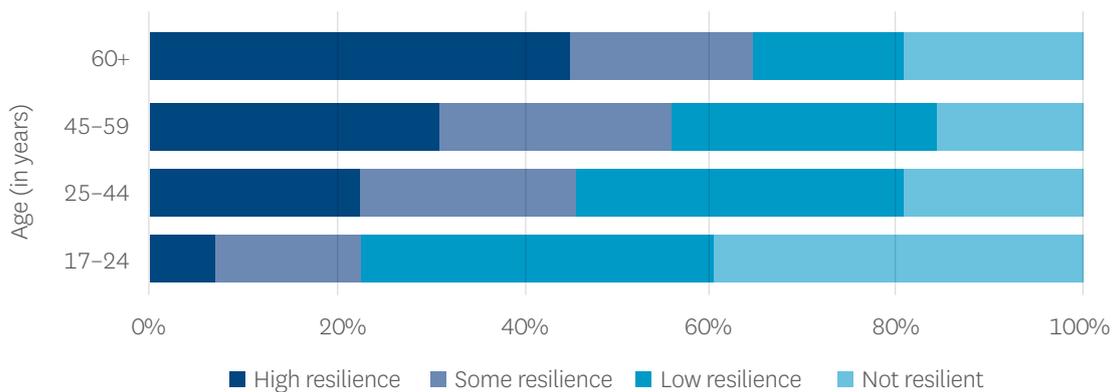

Figure 1: Perceived resilience by age group[20]

As shown in Figure 2, 51% of respondents felt they had limited resilience, in terms of income and employment, to negate the impacts of COVID-19, and 60% had limited financial capacity. Similarly, findings revealed age-related variability around respondents' levels of concern, with kaumātua and kaukuia more likely to report low levels of concern compared to rangatahi, who generally reported high concern. Nearly a third (29%) of respondents reported being concerned about the basic necessities of life (e.g. housing, food and finances) and needed support in the form of 2–3 of the care packages that were distributed by Whai Maia to whānau in need. Thirty percent indicated the need for specific support in the future.

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18   ibid.
19   NWŌ, 2020. [see footnote 9]
20   ibid.

How are people feeling?

47% People are not relaxed or hopeful

29% Concerned about the basics (housing, food, bills, finance) and need 2 or 3 of the basic care packages

51% Have limited resilience (due to income, employment, bills) to negate the impact

30% Need specific support in future

28% Concerned about education

60% Have limited financial capacity to cope with COVID-19 (uncertain or less than 4 weeks)

Kaumātua and kaukuia have resilience and low concern.

This is the opposite for those between 17–24 years. They are not feeling resilient and have high concern.
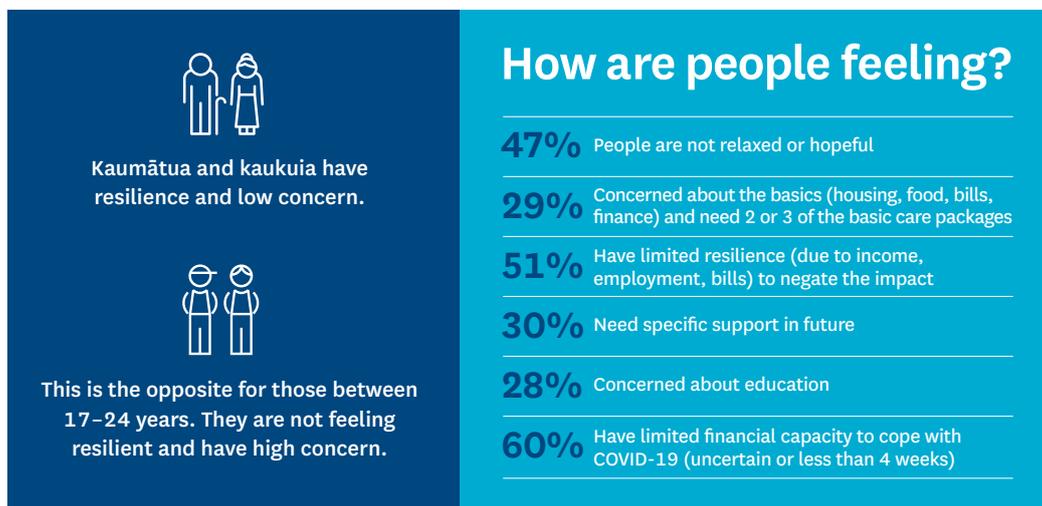
Figure 2: Resilience and concern amongst iwi members[21]

Fifty-one percent (215) of households were concerned about the educational impacts of lockdown. Over a third (36%) of surveyed households (153) indicated the need for additional educational support through this period. Up to half of students (50%) reported lack of access to digital devices and tools, which will have significant impacts on their short-term educational achievements and long-term outcomes.

To establish level of need and urgency of support, survey respondents were categorised into three levels of priority (i.e. 1–3), according to risk factor criteria (see Figure 3). The risk factors considered were: no household income; unemployment; overcrowding; rental housing; uncertain financial capacity; high concern regarding money, education, food and housing.

Priority 1 **High impact**	**Priority 2** **COVID-19 impact**	**Priority 3** **Low impact**
32% of respondents 188 households	35% of respondents 206 households	33% of respondents 194 households
Have 4–5 risk factors, including: · No household income · Unemployed · Overcrowding · Rental accommodation · Financial capacity uncertain · High concern about money, education, housing and food	Have 2–3 risk factors, including: · Pre-COVID doing ok · Shock · Rapid change management needed · Unlikely to be employed	Have 0–2 risk factors, including: · Self-sufficient · Secure employment · Less concerned about COVID impact · Concern for impact on others · Connection to others important · Coping tools and mindset to manage · Limited concern about money, education, food and housing

Figure 3: Classification of priority groups[22]

As shown in Figure 3, Priority 1 group have four or more risk factors and are considered a high-impact risk category. Of the total sample, 32% of respondents (188 households) are Priority 1. Another 35% of respondents (206 households) categorised as Priority group 2, have 2–3 risk factors, making them at potential risk of COVID-related impacts related to shock and rapid change management. Low-impact Priority 3 group has up to two risk factors and constituted 33% of respondents (194 households). They reported being fairly self-sufficient, with secure jobs as well as good personal coping and financial capacities.

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21   NWŌ, 2020. [see footnote 9]

22   Adapted from NWŌ, 2020. *COVID-19 Impact report.* [footnote 9]

As shown in Figure 4, only 39% of Priority 1 group had sufficient access to digital devices, compared with 54% of Priority group 2 and 61% of Priority group 3. These findings suggest insufficient access to devices was likely to be a major constraint for learning in many households, and in particular for 61% of Priority 1 group and larger households (3 or more children).
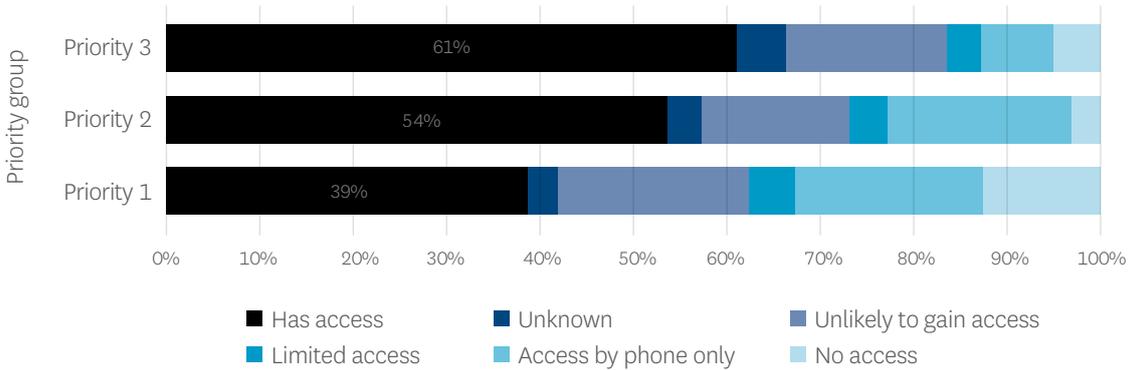

Figure 4: Access to digital devices according to Priority group[23]

Alarmed by the high number of whānau struggling with remote education challenges that were beyond their control, Whai Maia conducted another survey to better ascertain the specific issues and level of support needed within the iwi. The survey targeted whānau with tamariki and rangatahi currently enrolled between Years 7–13 at school. Whānau were asked to complete a survey that focussed on education needs and requirement for digital devices. Data collected revealed what devices (if any) whānau were utilising for remote learning during lockdown, and what was needed to better support tamariki and rangatahi succeed in learning.

This follow-up with the 668 rangatahi aged between 12–17 years, including 217 senior students currently studying at NCEA[24] Levels 1, 2 and 3, soberingly elucidates the degree of difficulty these students were facing with remote learning. Responses confirmed more than 50% of whānau only had an internet-enabled phone in the household that tamariki were trying to use for their remote learning. Qualitative data collected from these senior students and whānau, with no digital devices or only access to a phone, offer insight into resilience of whānau within their lived realities of being on the wrong side of the digital divide.

RANGATAHI AND WHĀNAU VOICES

Rangatahi and mātua (parents) shared information around the educational challenges they were experiencing and how access to a Chromebook device or similar would help with remote learning.

"If I had a device it would be a blessing! Not only would it take the financial pressure off my parents, but it would also help me to keep up my education and when I have the opportunity to return to [High School] after the lockdown, I'll be in the same level as my peers and I won't feel embarrassed and my teachers will be pleased that I haven't lagged behind everyone else. If you could please assist me with a new device I'll be very grateful and much appreciated. Thank you." (Rangatahi, Year 11)

Many parents' responses showed their positive mind-set and remarkable resilience in managing the rapid changes around schooling. Rather than perceiving lockdown as stressful, these mātua quoted below focused on the positives within the difficult situation and the opportunity to support their children in their learning.

"I think the school has done its best to keep in contact and provide work to keep [XXX] busy, it has been good in the way that [XXX] has had the time to think about the work required and put more effort into completing it in his own time."

23   NWŌ, 2020. [see footnote 9]
24   National Certificate of Educational Achievement

"We are all feeling fine during lockdown the kids have adjusted well to completing tasks given from their schools and have access to hard copy resources provided."

"I'm feeling positive about schooling during lockdown. I'm more interactive with my children and love to help them if needing too."

In some cases, one or two devices in the household were shared between mātua and numerous siblings, who were trying to complete online learning requirements around the parents' other obligations. Comments from the rangatahi also highlighted issues around access to devices with sufficient capability for software and platforms required for online learning activities. Even with the assistance of school-supplied devices, in whānau with three or more tamariki, limited supply meant some tamariki missed out and their learning was negatively impacted.

"I am currently using my parent's digital devices, neither of which have the capability to allow me to use a mic or my headphones to engage in Zoom conferences with my teachers. This has been frustrating and interfering with my online classes. Secondly, I am online learning with a full timetabled schedule, Monday to Friday, with a variety of conferences or self-directed learning. Having the Chromebook will help me be more independent and confidently moving forward with my studies and classes." (Rangatahi, Level 1 NCEA)

"I'm good - my tamariki getting mahi kāinga, heoi, it's not easy trying to share 2 laptops between me and my 3 kids as everything is online learning." (Mātua)

"Having my own device will help me access Google Classroom better and I'm able to create documents etc for my work. It's hard and slow to do it on my phone. At the moment me and my other two siblings are all sharing one device, which belongs to my father. We can only use it when it's free, so half the time I'm not getting much time because my siblings are Year 13 and apparently need it more than me." (Rangatahi, Level 1 NCEA)

"There are three of us at home. We were provided with two Chromebooks from the Kura to use. This means though that sometimes I miss out on my classes because we have to share the devices between ourselves. One of the Chromebooks that was provided is also a later model and sometimes freezes which means we only have one device to use. My mum has a work laptop but she needs that for work. And while my mum and dad both have phones they are not compatible for me to access Google Classrooms, Gmail, Padlet and other apps I need to for my mahi." (Rangatahi, Year 9)

In the second survey, Whai Maia also asked whānau how tamariki were feeling about their education during the lockdown's remote learning conditions. Responses from whānau with only a phone for a digital learning device revealed students' feelings ranged from 'unmotivated' to 'anxious' and 'stressed'. Tamariki became disheartened and unmotivated about their learning due to lack of access to a suitable device, creating difficulties in completion of school work.

"Not learning anything, missing the person to person contact, way behind to achieve the best level of accomplishment for NCEA." (Matua)

"Unmotivated because I have no device to access the online school work. I have tried using mum's phone, but I find it challenging to use and am unable to use software like Word Docs." (Rangatahi)

Some senior students with no device from their schools, and only access to a phone at home, were reportedly feeling anxious or stressed about negative effects of online learning on their school work and NCEA outcomes. These responses highlight the psychosocial impacts of remote learning on students' wellbeing and academic aspirations during lockdown.

"Sometimes I'll feel a little anxious about [not] knowing when I'll be able to return to school, to catch up with my school work, and seeing my friends again. I miss hanging out and playing volleyball with them. I understand why I can't return because of COVID-19 and how it is affecting my family, community, and our country and all I hope is that my family, friends, and teachers are safe." (Rangatahi)

"They miss their friends. [XXX] is worried he'll get behind in his first NCEA year." (Matua)

"I'm feeling [a bit] overwhelmed and worried about my academics this year. Being away from school and our teachers is a bit stressful as when we are at school they are there to help us at any time. Online learning is ok, but having to be online so much for all of my subjects is stressful and I'm struggling sometimes to stay on top of my work and get it finished. I want to go to university next year so I hope I can achieve all the assessments I need to so I can pass and get UE too." (Rangatahi)

In some large households, parents had to help numerous tamariki with their learning, creating a heavy daily workload for these adults. Lack of communication and support from some schools was highlighted as a negative experience of remote schooling. However, mātua reportedly gained and expressed a deep appreciation for kaiako and the important role they play in their children's lives and educational success.

"I am happy with my baby being at home during this rāhui. I am disappointed that it has taken the school 4 weeks to start interacting with their students."

"It's very trying at the moment. I love the work and all the resources the teachers are helping with, but there is so many children in my house and only 1 of me so we are doing a few bits and pieces during the day to have some sort of work for school. Otherwise it's ok. Also the teachers are amazing."

"I'm feeling like I admire and I thank every teacher and every person training to be a teacher out there."

FROM THE PERSPECTIVES OF THE KAIAKO

Soon after the second survey was completed with years 7–13 rangatahi, Whai Maia was given the opportunity to hui with a large group of kaiako (teachers) and discuss the impacts of lockdown on learning and teaching. Kaiako from across the motu (nation) offered key insights and rich data around the issues.

These kaiako, currently teaching within Māori-medium education, shared their experiences and perceptions around remote schooling and online teaching during lockdown. They report clear disparities around the motu regarding lack of access to devices and internet connectivity for whānau as well as financial difficulties during lockdown.

"The main issue for our kura was access to digital devices and to internet for whānau... In no time, we worked out that we needed to issue all devices that we had at our kura. We are still trying to address internet accessibility for some of our whānau."

Further, the kaiako stress the need to understand the psychosocial impacts of COVID-19 so as to better support and protect whānau Māori. Kaiako noted the diversity of lockdown experiences had by their students. Adding to the stress of lockdown conditions, insufficient learning support for whānau had negative impacts on all parties. They emphasised the importance of building cohesion within whānau, and between whānau and kura, during the recovery period.

"Also, some of our whānau had difficulty in supporting their tamariki with Te Reo at home. Parents were stressed and this sometimes detrimentally affected relationships between parents and tamariki, between kaiako and whānau."

Kaiako experienced remote schooling and online teaching as a heavy workload. They highlighted the need for kaiako to have opportunities for training in remote teaching and competency with educational software. A desire to be more digitally inclusive in future was evident.

"Workload on kaiako was tremendous… felt like we didn't really have a break… during 'holiday' we were upskilling… very proud of how our kaiako managed with distance teaching. Was a bit of a trial and error with various programmes/apps."

"How do we start looking at being 'future focused', having a clear picture of what we want for our whānau, hapū, iwi? Where might we start?"

The limited supply of resources to kōhanga reo (Māori-medium pre-schools) and kura kaupapa (Māori-medium schools) from the Ministry of Education during the lockdown suggests serious inequalities exist. Firstly, kaiako report resources needed for the lockdown period were very slow to arrive at kura kaupapa compared to mainstream schools, according to their colleagues' reports. Secondly, rather than ensuring one device per child, kaiako across the motu commonly reported the Ministry of Education supplied only one device per three tamariki to kura kaupapa for distribution to their students. Thirdly, resources included in the Ministry of Education packs for Māori-medium schools were deficient when compared to mainstream packs.

"Our kōhanga in Auckland received resource packs from Ministry of Education about two weeks ago. They were great, but a bit late."

"Our tamariki received theirs then too. I ended up going to Ministry of Education, because the process for reo Māori packs was confusing – 3 weeks later than the mainstream one and the resources were less initially."

The lifelong health and socioeconomic negative impacts of inequitable educational opportunities are well-evidenced.[25] This differential and inequitable supply of resources is concerning and may suggest systemic biases that will potentially impact Māori students' educational outcomes and wellbeing, beyond lockdown,[26] and well into the future.[27] Kaiako agreed these undesirable circumstances were exacerbated through lockdown, making remote schooling that much harder for kura kaupapa and their students and whānau. Indeed, a recent international report argues that COVID-19 interruptions to schooling will compound existing and persistent ethnic disparities in educational outcomes.[28] Kaiako advocate for honest, brave conversations at a national level to address the inequalities in education exposed by the COVID-19 crisis, to ensure these do not continue or occur again during a future crisis.

Furthermore, kaiako stress the need to sufficiently assess the impacts of the pandemic on whānau Māori in order to protect and support the wellbeing of tamariki. Feeding into the shock already experienced by whānau, kaiako are concerned about potentially negative effects on tamariki and rangatahi if exposed to recent media coverage, of the racism-fuelled rioting occurring internationally and within the national context. This again speaks to the need to promote greater social cohesion as a matter of urgency, by addressing inequities in education currently impacting tamariki and rangatahi.[29]

25   Marmot, M., 2017. Social Justice, epidemiology, and health inequalities, *European Journal of Epidemiology* 32(7): 537–546.
26   OECD. 2020. *School Education During Covid-19: Were Teachers and Students Ready? New Zealand – Country Note*.
      Available at http://www.oecd.org/education/coronavirus-education-country-notes.htm
27   Reimers, F & Schleicher, A. 2020. *Schooling Disrupted, Schooling Rethought: How the Covid-19 pandemic is changing education*.
      OECD. Available at https://read.oecd-ilibrary.org/view/?ref=133_133390-1rtuknc0hi&title=Schooling-disrupted-schooling-rethought-How-the-Covid-19-pandemic-is-changing-education
28   Dorn et al. 2020. *COVID-19 and student learning in the United States: The hurt could last a lifetime*. McKinsey & Company.
      Available at https://www.mckinsey.com/industries/public-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime
29   Spoonley et al., 2020. [footnote 5]

TOWARDS EQUITABLE OUTCOMES

Achieving equitable outcomes in education is key to improving intergenerational disadvantage and promoting success in education and employment and ensuring societal wellbeing.[30] These in turn translate into better health and mental wellbeing through schooling and as adults, which has flow-on positive effects for future generations.[31] Tamariki Māori achieve higher and stay in school longer if they have access to Māori-medium education, whether delivered through kōhanga reo, kura kaupapa, or Māori-immersion and bi-lingual units within mainstream schools.[32] However, limited choices to Māori-medium education throughout the motu means the majority of tamariki and rangatahi attend English-medium education and many have poorer outcomes, which can be attributed in part to embedded inequalities within the education system, including teacher bias and low expectations.[33,34]

Education-sector research in Aotearoa New Zealand has identified several factors associated with improved education outcomes for Māori students that can be leveraged:[35]

1. For Māori students, positive cultural identity and connection to Māori culture and language, have large positive effects on NCEA outcomes.

2. Māori students from households that place a strong emphasis on cultural identity, connection and language have the highest rates of reported whānau wellbeing and higher NCEA achievement than peers from households with weaker cultural identity and connectedness.

3. Māori-medium education is effective – Māori students attending Māori-medium schools generally have substantially higher attainment than their peers in English-medium education.

4. Kaiako Māori have a very positive effect on Māori students' educational outcomes. In mainstream schools with no Māori-medium offerings, but with high numbers of kaiako Māori amongst teaching staff, Māori students achieve NCEA at comparable rates to their peers in Māori-medium education.

In response to the challenges facing tamariki and rangatahi in mainstream education, Ngāti Whātua Ōrākei have targeted solutions in place for existing disparities.[36] These include full payment for early learning places in Māori-medium, tutoring of senior students in core subjects, and monetary incentives for high-level passes in NCEA (i.e. merit and excellence passes). The efficacy of and the relative priorities for these interventions merits formal evaluation and reporting.

It is likely that some students will have developed a greater sense of agency and capacity for self-regulation as a result of these iwi initiatives. The development of self-regulation is largely a function of a cumulative effect of experiences in the early years, especially before school starts. It is then built on through primary and into secondary education. It is a critical foundation for mental wellbeing.[37] It is possible that the experience of remote learning during lockdown may have reinforced some students' capacity for 'managing self' (the competency referred to in the curriculum[38]), which also may have been enhanced within whānau and through the activities provided by teachers. Further, social skills may have been promoted too, which happens with well-designed online resources and when students are required to consider the needs of those they are interacting with at a distance.[39] On the other hand, in some contexts the digital environment

30   Marmot, 2017. [footnote 23]

31   Poulton et al., 2020. [footnote 4]

32   Education Review Office (ERO), 2016. Increased numbers in Māori-medium achieving NCEA Level 2 and beyond to be celebrated. See https://www.ero.govt.nz/footer-upper/news/increased-numbers-in-maori-medium-achieving-ncea-level-2-and-beyond-to-be-celebrated/

33   Ministry of Education, 2017. Māori Education Overview. Briefing to Incoming Minister. https://www.education.govt.nz/assets/Documents/Ministry/Publications/Briefings-to-Incoming-Ministers/4-1093092-Maori-Education-BIM-Annex-ABC.PDF

34   ERO, 2016. [footnote 30]

35   Ministry of Education. March 2020. The importance of identity, language and culture for ākonga Māori. He Whakaaro: Educational Insights. See https://www.educationcounts.govt.nz/__data/assets/pdf_file/0003/198642/He-Whakaaro-Importance-of-Maori-identity-language-and-culture-for-akonga-Maori.pdf

36   See: http://ngatiwhatuaorakei.com/opportunities/education/

37   Gluckman, P., 2017. *Youth Suicide in New Zealand: A discussion paper*. Available at: https://www.pmcsa.org.nz/wp-content/uploads/17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf

38   Ministry of Education, 2007. *The New Zealand Curriculum*. Wellington: Learning Media Ltd.

39   Chassiakos, Y et al. 2016. Children and adolescents and digital media. *Pediatrics* 138(5), e20162593

can compromise emotional wellbeing through inappropriate use, cyberbullying or diversion from educational use.

Ngāti Whātua Ōrākei invested in 400 Chromebooks, which were distributed amongst whānau in need, to support the learning of tamariki and rangatahi most impacted by COVID-19 and the lockdown. Immediate feedback from tamariki and rangatahi as well as their parents provided compelling evidence of positive impacts on learning and wellbeing.

VOICES OF TAMARIKI AND RANGATAHI

"Tēnā koutou NWŌ whānau mo nga rorohiko pōnaho e rua mo aku kotiro nei. Online school has just gotten better."

"Just want to thank you for the Chromebook this means a lot as it will really help me with my last year of study!! Thank you for allowing us to have these devices."

"Tēnā koe, Ngā mihi nui ki a koutou Ōrākei mo taonga whakata. Thank you, thank you and my [Chrome]book arrived yesterday and I am very grateful for this gift and will now be able to work in total independence, whereas before I was always having to wait my turn, which was never easy and very limiting. You have just allowed me to have more freedom and access to do my mahi, increasing my chances of success in completing my school work and NCEA. Extremely grateful once again, thank you [Whai Maia] and your team. Kia Ora."

VOICES OF NGĀ MĀTUA

"Thank you, thank you, thank you, my boy got his Chromebook, very grateful and he's stoked."

"Thank you, Ngāti Whātua, for taking care of our tamariki and their educational needs."

"Ngā mihi, Ngāti Whātua, for our boy's Chromebook. Received yesterday with gratitude and thanks to you all."

"Huge thank you, from me and [XXX] for the Chromebook. We got it delivered this afternoon and he is using it already for [tutoring] homework. Super grateful and blessed. Thank you."

The efforts of this iwi to assist their whānau and support the learning of their tamariki and rangatahi are admirable and extensive, and clearly boosted the flagging wellbeing of these stressed whānau.[40] It also emphasises the need, in the event of a national lockdown, for the Government to ensure *every* school student requiring digital access to online lessons, resources, or learning support is supplied with a digital device and internet connectivity.

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40   Grimes & White, 2019. [footnote 12]

BRIDGING THE LEARNING DIGITAL DIVIDE

These data from the surveys with senior students and parents as well as discussions with kaiako help frame both the problem definition and pathways to its solutions. The Whai Maia *COVID-19 Impacts* survey and the feedback from students, parents and teachers, have revealed that online teaching and learning has exaggerated existing multiple disadvantages and persistent stresses experienced by these students, and uncovered new additional factors.

First is being on the wrong side of two digital divides. The primary one is the digital resources divide.[41] For example, over half of NCEA students in Ngāti Whātua Ōrākei did not have access to the necessary digital devices (e.g. Chromebooks, laptops) to engage effectively with their learning, but were instead limited to using smartphones. Having to share devices in multi-generational whānau and under conditions which limit or compete with study time (e.g. space) added further to this stress.[42] Students reported increased anxiety or reduced motivation (disengagement from learning) as a consequence of being aware of having their opportunities to learn interfered with, and possible futures fading (e.g. university).[43,44] The reduced mental wellbeing reported by these students and parents is supported by research that speaks to the psychosocial harm done by the digital divide during lockdown to disadvantaged individuals and groups.[45]

A second digital divide occurs where less complex and less educationally challenging curriculum resources and pedagogy are provided, which is also associated with reduced opportunities to learn.[46,47] The weaker provision is a pre-existing non-digital condition: it is unknown the degree to which this has changed as a consequence of the pandemic condition, but it may well have worsened.

The range of school-related resources and practices that whānau have access to is a major contributor to differences in levels and rates of curriculum-related learning between communities.[48,49] Put simply, students with parents/caregivers/whānau with lower educational and literacy levels, limited education-related resources (books, extracurricular activities), and lesser knowledge of practices valued in education are less likely to be able to provide effective support and guidance for students at home.[50] The reality for many whānau is that intergenerational disadvantage and socioeconomic realities add significantly to the stresses these rangatahi have faced.[51]

DIGITAL INCLUSION

More general conclusions can be drawn from the Ngāti Whātua Ōrākei experience and approach. In the first instance, universal provision of digital devices to all learners is a must. The Ministry of Education initially targeted its rollout of digital devices to senior secondary students in low-decile schools. But the shortfall uncovered by Ngāti Whātua Ōrākei Whai Maia is substantial. More direct partnership with the Ministry of Education may have enabled targeted provision through the iwi networks.

This highlights the need for the Ministry of Education to not rely on ratings for deprivation area level or school decile for roll-out purposes. Whānau Māori, including highly disadvantaged whānau, reside across the motu within all deprivation areas, with tamariki Māori attending local schools across the range of deciles.[52] It is suggested that robust ethnicity data needs to be collected at every entry point and level

41   OECD, 2000. [footnote 15]
42   OECD, 2020. [footnote 24]
43   Poulton et al., 2020. [footnote 4]
44   Reimers & Schleicher, 2020. [footnote 25]
45   Grimes & White, 2019. [footnote 12]
46   OECD, 2000. [footnote 15]
47   OECD, 2020. [footnote 24]
48   Ministry of Education, 2017. [footnote 31]
49   Reimers & Schleicher, 2020. [footnote 25]
50   Taupo, K., 2016, Creating spaces for Whānau wellbeing, literacy and numeracy in the context of neoliberalism in Aotearoa, New Zealand, *Waikato Journal of Education*, 21(1).
51   Mutu, M. 2014. The Māori (pp 91–116). In S. Neely, *Native Nations: The survival of fourth world peoples*. J Charlton Publishing Ltd.
52   Health & Disability System Review, March 2020. *Health & Disability System Review: Final Report*. Pūrongo Whakamutunga. https://systemreview.health.govt.nz/assets/Uploads/hdsr/health-disability-system-review-final-report.pdf

of the education system and collated within co-ordinated databases to facilitate targeted provision of educational necessities that will improve learning outcomes and experiences for all Māori students.

Furthermore, ensuring opportunities to learn across the full curriculum is paramount to achieving true digital inclusion in learning for Māori students. A variety of tutoring mechanisms is possible, but need to be targeted and enacted with alacrity.

For schools and the wider education system, there are potential solutions that involve greater engagement with iwi: these align with the strategies outlined in the Government's *Digital Inclusion Blueprint* report.[53] In order to reduce the disparities in achievement levels, many students will require special support upon return to school post-lockdown. Accelerated learning once back at school is needed.[54] However, it needs to be acknowledged that teachers are reporting high rates of mental distress amongst all returning students to school, irrespective of ethnicity, and expectations must be adjusted accordingly. Strategies are needed to help students recover from the negative impacts of lockdown on their educational outcomes and opportunities to learn. Approaches used within Māori-medium education may provide valuable guidance here.[55]

Despite the variability in response, a large-scale shift to using online learning blended with face-to-face learning will make hybrid learning the new and long-term 'normal' for education.[56] The implementation of digital tools in classrooms generally is associated with increased engagement (less distractibility, persistence, and independence) and increased agency or self-efficacy. But for this new environment to consistently produce benefits across the needed range of social and emotional skills, much more deliberate planning will be required at a whole school level, with specific instructional and operational design. Effective designs increase teachers' productivity by taking over routine tasks, and enabling teachers to engage in more personalised interactions with students focused on complex activities.

Inter-sectoral policies that promote digital inclusion for all tamariki and rangatahi are urgently needed. The OECD warns against myopic education policies that seek to bridge the digital divide within educational settings, but fail to address some of the most influential factors, which clearly include the at-home differences in access to digital devices and internet connectivity.[57] Many already privileged students are enabled to undertake online learning at home (i.e. homework and assignments) as well as extracurricular digital activities that further their education. This creates further advantage for these more privileged students compared to others from disadvantaged households.[58] This speaks to an urgent need for the Government to sufficiently bridge home-related digital inequalities.

SUSTAINABLE SOLUTIONS FOR FUTURE PREPAREDNESS

Whilst Aotearoa New Zealand has done extremely well in battling COVID-19, science tells us that we are highly susceptible to further outbreaks as the pandemic continues to rage around the globe and we could face similar biological or other threats in future.[59] Hence, now is the time to address the issues and inequalities in education exposed during the lockdown before we face such situations again. We need equitable and sustainable solutions to the current digital divide in education.[60] Partnering with iwi to promote digital inclusion in learning will be paramount. We can avoid a repetition of the same issues during the recovery period and beyond if digital inclusiveness is seen as a priority.

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53   DIA, 2019. [footnote 2]

54   Reimers & Schleicher, 2020. [footnote 25]

55   Rewi & Rātima, 2018. Ngā hurihanga o te reo Māori i te mātauranga: Changes in Māori language education (pp 304-323). In M. Reilly et al, *Te Kōparapara: An Introduction to the Māori World*. Auckland University Press.

56   OECD, 2020. [footnote 24]

57   OECD, 2000. [footnote 15]

58   Grimes & White, 2019. [footnote 12]

59   Professor Sir David Skegg, Tuesday 7 April, Epidemic Response Committee. Transcript available at: https://www.parliament.nz/en/pb/sc/scl/epidemic-response/news-archive/watch-public-meetings-of-the-epidemic-response-committee/

60   DIA, 2019. [footnote 2]

APPENDIX

CONTRIBUTORS TO THE REPORT

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GLOSSARY

Aotearoa	New Zealand
hapū	sub-tribe
heoi	however
hui	meeting
iwi	tribe
kaiako	teacher
kaukuia	female elder
kaumātua	male elder
kōhanga reo	Māori-medium pre-school
kura	Māori-medium school, primary or secondary
mahi	work
mahi kāinga	home-based work
matua/mātua	parent/parents
motu	nation, country
rāhui	temporary restriction/prohibition
rangatahi	youth or young person
rangatira	chief
tamariki	children
te reo Māori	the Māori language
whakapapa	genealogy
whānau	extended family