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# Toitū te Toki

## Digital Equity Programme

Supporting rangatahi in  
Waihōpai Invercargill with  
access to digital tools  
2023







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Toitū te toki, toitū te  
tangata, toitū te taiao

*Tools that sustain our people  
and our environment*



# Introduction

*“When I got the laptop it made everything easier — school work, career stuff, other stuff.”*

— Rangatahi

Toitū te Toki is a pilot programme designed to support digital equity in Waihōpai Invercargill. It was developed and delivered by Te Rourou, One Aotearoa Foundation and One New Zealand with support from Quadrent and Brightpoint New Zealand. It exists to improve access to digital tools in schools and enable better outcomes for rangatahi and their whānau. This report considers the impact of the pilot programme on participating students alongside the insights of staff involved with implementation of the programme. It is shaped around the words and insights of the young people involved.

The New Zealand government’s Digital Inclusion Action plan estimates that ‘one in five people in New Zealand lack at least one of the four elements needed to be digitally included — motivation, access, skills or trust.’\* Toitū te Toki aims to provide support within the access space, taking second-hand laptops donated by corporate organisations and getting them into the hands of school students who need them. With the NCEA moving online, and digital skills required across the working world, access to devices has never been more important for school students.

Te Rourou and Quadrent acted in partnership to offer ex-lease devices to two schools in Waihōpai Invercargill for students to use. The intent of loaning devices to schools was that Te Rourou would take on responsibility for ensuring an ongoing pipeline of devices for schools.

In addition to the likely potential social impacts of providing access to devices, the hope was that the programme would also create positive environmental impacts through reducing the amount of hardware going into landfills. Any devices not in good enough condition to use were disposed of through certified recycling programmes.

## About the Schools

Two schools in Waihōpai Invercargill were selected for this pilot — Te Wharekura o Arowhenua and Aurora College. Aurora College is a co-educational school on the ‘southside’ of Waihōpai Invercargill with around 560 students. Te Wharekura o Arowhenua is a Māori medium school with around 200 students.

\* <https://www.digital.govt.nz/dmsdocument/174~digital-inclusion-action-plan-20202021/html>

## Programme Design and Delivery

Te Rourou and Quadrent provided devices and loaned directly to the schools in May 2022. Devices were offered first to senior students (who could take them home) and to junior students (who could use them in class) in accordance with arrangements made by each school. In most cases, this meant each student had a laptop of their own for the duration of the programme. The students were loaned computers until the end of the 2022 school year, when they were returned for reuse in 2023. The intention was to ensure equitable access to laptop computers for all rangatahi — and grow their sense of personal agency through temporary ‘ownership’ of their devices.

To explore the impact of the programme on students, a number of focus groups were conducted with groups of students at both schools in March and November 2023. In between these engagements, participating students were also invited to complete a survey about their experience so far. A total of 67 students responded — 23 from Te Wharekura o Arowhenua and 44 from Aurora College.

The focus groups and surveys were conducted by Toi Āria: Design for Public Good, a research unit based at Toi Rauwhāangi, College of Creative Arts, Massey University Wellington, who are also the authors of this report.

At the end of the programme, key teaching staff from the two schools were also invited to share their observations and insights.

## Translations

kaiako — teacher

kaimahi — staff

rangatahi — young person

kura kaupapa — a state school where the teaching is in te reo Māori and is based on Māori culture and values



# Te Wharekura o Arowhenua



Senior school students at Te Wharekura o Arowhenua

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Te Wharekura o Arowhenua is a kura kaupapa located in Waihōpai Invercargill. It is an area school with 202 students in years 1-13. It is the only kura kaupapa in Murihiku Southland.

# 54

devices provided  
to the school

# 1

kaiako

# 23

rangatahi participated  
in the research

# 4

focus groups

*\* Devices were distributed to students in June 2022. Focus groups took place in March and October 2023.*



# Aurora College

## Te Mūranga a Rangi



Senior school students at Aurora College

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Aurora College is a state coeducational years 7–13 secondary school located in Waihōpai Invercargill. It is New Zealand's southernmost stand-alone secondary school.

# 208

devices provided  
to the school

# 1

kaiako

# 32

rangatahi participated  
in the research

# 5

focus groups

*\* Devices were distributed to students in August 2022. Focus groups took place in March and November 2023.*



# Overview



This pilot programme was set up to explore the impact of ensuring junior and senior high school students have access to laptop computers through their school.

This report explores the emerging insights from this 18-month pilot and unpacks some of the questions explored.

In what ways would the devices be used? What difference might it make to their lives — both at school and outside of school? What wider ripples of impact might there be on participating individuals, the school community and beyond the classroom?

At the end of this first pilot phase, there can be no doubt that students at both schools gained from the gift of individual computers. They enabled more autonomy, extended students' horizons and enhanced learning and skills development.

*"It simplifies everything basically."*

There are early signs of positive impact for the schools, and in some cases for students' families and whānau.

*"I give it 10/10 — there's been nothing that's made me think it's not useful to do this."*

The pilot has also enabled much learning about the realities of delivering a programme like this — particularly around the challenges of repurposing second-hand devices.

Much of the direct feedback received from students related to the difficulties of dealing with devices of hugely variable quality. For the programme to succeed in the long term, more support in this area will be required.

What follows is an outline of the programme from the perspective of some of the participating rangatahi. Their insights are supplemented by those of some of the teaching staff who support them.

## How the laptops were used

Each school developed their own system for gifting the donated devices to their students. For the most part, senior students were given one each for the whole year — to use at home and at school as they wished. Younger students were generally enabled to use the devices on site only.

Some of the students used their laptop exclusively for schoolwork, whereas others shared that they also found it useful for extracurricular reasons.

*"I only use it for school work."*

*"I use it for more than school work."*

*"It's been good cos I can talk to my mates."*

*"Homework, gaming and anime."*

*"I used mine to do school work at home as I can focus more at home no friends distracting me, I also was able to use it to video call long distance family members."*

Not all students found it necessary or helpful to bring the laptop home. Some students also reported it was 'heavy' and that they would prefer to have a place to leave it at school. Of those who did use their laptop at home, some reported that they let other members of the family use it as well, others were deliberately protective of 'their' computer.

*"I just use my phone at home."*

*"I don't use mine at home, I've got a Playstation, phone and food."*

*"My sister and my parents use it."*



# Emerging insights



## Impact on Individuals

- Developing autonomy and personal responsibility
- Extending horizons
- Enhancing learning and enabling skills development

## Impact on School Communities

- Equity of access
- Easier learning environments

## Impact Beyond the Classroom

- Additional capacity
- Better relationships



# Impact on individuals

The primary aspiration of the Toitū te Toki programme was to deliver tangible impacts in the lives of young people in Waihōpai. Their initial reflections suggest that there are three main areas where they noticed a difference:

- More autonomy around how, where and when they get their work done
- Easier access to additional opportunities
- Enhanced learning outcomes and skills development

*“Now I can do work at night if I want to.”*

## Developing autonomy and personal responsibility

The most frequently cited impact of the programme on students' lives was the autonomy it gave them to do work on their own terms, according to their own schedules. In both schools, the students appreciated that having their own device created more choice for when they could do their work — whether at school during break times, at home, or even at night. The removal of the need to ‘ask permission all the time’ was significant — creating a sense of ‘being in charge’ of their own learning.

*“It’s cool being able to use the computer whenever I want to.”*

*“It’s useful for finishing work at different times and joining meetings.”*

*“I like doing work at night sometimes.”*

*“We had a computer at home but I wasn’t able to use it — we had to do everything at school.”*

*“It’s really handy being able to take it home — less pressure on getting your work done during the school day.”*

*“If I don’t finish my work at school, I can do it at home now.”*

*“Being in charge of your own computer is good.”*

*“Occasionally I use it at home — like if I’m behind.”*

## Kaimahi views

Conversations with school staff support the insight that having access to a device develops autonomy. They also suggest that having responsibility for their own device offers an important experience in itself for many students:

*“Some kids just find that they work better at a different time than the one hour that’s allotted to this work during the school day. It’s enabled them to work to how they best work. If they don’t get it done in class, they can take it home. It frees them up to be able to do it their way.”*

*“The funny thing is, I’ve had students who have been very... unmotivated, I guess, during lesson time, and not got lesson content done. But then they’ll go home and do it, and suddenly it’s done the next day.”*

*“It shocked us that they were doing school work at that time of night when they could have been on Instagram or anything, but they were actually on there doing work.”*

*“There are lots of kids who work better at home, or in the evening.”*

*“It’s their laptop, they get it out of their bag — some students that you wouldn’t even expect, looking after it, bringing it in each and every lesson. They’re taking responsibility, it’s just amazing.”*

*“You can see that extra level of care that certain students have in their laptops that haven’t had something like that before. They’re very gentle — those are the students that keep it charged — there’s an element of pride.”*



*“I did my CV on it and got a job.”*



### Extending horizons

There were some clear articulations of how having a personal laptop has allowed rangatahi to learn about and more easily access new, more or different opportunities. Several students talked about how they had used the devices to research courses and further study opportunities. Others outlined other things they did with their laptops — including attending online meetings, working on their CVs and doing tasks related to extra-curricular activities:

*“I did my CV on it and got a job, it was useful for writing speeches, printing photos for posters, YouTube, doing research on jobs and other stuff.”*

*“The people from Otago came in so I did a whole lot of research on Otago, every single type of teaching, different kinds of teaching, teacher aids, just all around social work and all that and it just really helped me figure out a little bit more what I wanted to do.”*

*“So just recently I finished up a plumbing work placement. Yeah, and then mum was saying if it comes to choosing options next year, if I want to go to Southland Institute of Technology and do a plumbing course then I’ve got to find the classes that I’ve got to do in order to get into that. So I went onto my Chromebook and searched everything I needed and found everything. It’s a lot more easier than doing it on your phone cos you have it right here [indicating ahead] not like in the palm of your hand.”*

*“In the Service Academy [school military focused programme] we Facetime the military a lot. So having a laptop makes this a lot easier. For the last camp I had to organise the whole camp through just FaceTime.”*

*“School work, board rep meetings, One NZ meetings, funding meetings, council meetings and a few other meetings.”*

A further outcome of the autonomy outlined here is a sense of ‘more time’ described by some students — more time for pursuing their own interests.

*“Having your own computer makes things more efficient — I can finish my work much faster.”*

*“It’s freed up time — cos you can do your schoolwork anytime.”*

*“It’s made work easier to do.”*

### Enhancing learning and enabling skills development

Some students self-reported doing more — or better work — as a result of having a personal laptop. The opportunity for greater autonomy is likely to be one reason for this, but also a preference for working digitally instead of on paper. One student also described how it helped with their additional needs — in terms of being a bigger screen and the opportunity for audio capture.

*“We can do more work online now — it was a lot of paperwork before.”*

*“It does help you do more work cause writing with a pen for ages makes your hand really sore.”*

*“It’s been cool cos I’m not failing school now.”*

*“It helps a lot with my special assessment needs — like being able to talk into it, and cos my eyes aren’t that good.”*

*“It has encouraged us to do more work and it’s made it easier to do.”*

*“I was using my laptop last night to do an assessment, but if I was writing it in a book I would have finished after five minutes. Because I’d be like ‘stuff this writing’ but I went for the whole two hours and finished it ...it just makes you do a lot more work than what you realise I guess.”*

### Kaimahi views

School kaimahi support these assertions — outlining how it’s encouraged them to adapt their teaching style to further enable digital learning — and important skills for the digital age.

*“For certain individuals, I can definitely say it has made a positive difference.”*

*“It’s amazing the obstacles they’re able to overcome in having those laptops. I wholeheartedly endorse this.”*

*“The devices and this movement to a digital platform has almost forced us as teachers to upskill and I’d say that’s a positive.”*

*“I ended up changing the class content that I was delivering so it was more digital because that’s the feel I got from the students, that compared to the past, they weren’t as prepared to do bookwork. They were far more willing to engage in content that was digital, rather than pen and paper.”*

*“The way AI has taken off just means that the way students write and draft assignments have evolved. I’m aware that’s something all schools have been struggling with. I’ve done lessons with all my students this year about what plagiarism is, and how AI fits into that space.”*





## Impact on school communities

Alongside the difference Toitū te Toki has made for individual students, there has also been an impact for wider school communities. There are two main strands here:

- Enabling equity of access for all rangatahi
- Easier learning environments

*“I love the idea, it helps so many people.”*

### Equity of access

The importance of how this programme prioritises equity of access cannot be underestimated. Whilst many students shared that they could indeed access the internet without these computers, several expressed concern that this may not be the case for all their fellow students. School staff also underlined the difference that removing the stigma of ‘not having a device’ made in a school setting.

*“That’s one great thing about this whole scheme — not having to have those conversations around ‘do you have a device at home?’ It’s quite an uncomfortable conversation to have with kids. If the answer is ‘no, I don’t’, what do I do then? Whereas with this programme, we know they’ve got that access.”*

*“I can think of some students in particular who are probably a bit economically disadvantaged and I think being provided with their own devices provided that equity and put them on par with all of the other students in the class, so they’re not starting behind — they get to start at the same point as everyone else. It also takes away that social element of not being able to do something at home.”*

*“I don’t have to have those conversations or send kids to the library because they can’t afford a device. That in and of itself is empowering and it puts our kids on an equal footing, which is just fantastic.”*

### Easier learning environments

Giving students access to their ‘own’ computer also makes a positive contribution at the level of the school environment. Quite simply, more computers and more chargers means fewer issues around access, capacity and sharing. Less time spent on this means less angst and more peace — more time and space to focus on learning. This is appreciated by both students and teachers.

*“Makes school easier — less wasted time.”*

*“Makes the situation at school better too — less fighting over Chromebooks, chargers etc — ‘more peace’.”*

*“Useful being able to take it around with you, not always logging in and out and relying on other people to remember to leave it to charge.”*

*“This programme has made the teachers happier as well.”*

When the rangatahi were asked if their year group had been able to do more work or better quality work, the answer was “100%.”

When asked if the programme should run again, “100%”.



# Impact beyond the classroom

A key aspiration for the programme was the idea of potential benefit for students and their whānau beyond the realm of improved educational outcomes. Whilst this is hard to measure in a relatively short time frame, there are several anecdotes that suggest potential in this area is significant:

- Additional capacity
- Better relationships

*“We don’t need to share a computer now.”*

## Additional capacity

Whilst many families do have access to laptops and other computers, students having their ‘own’ can offer helpful extra capacity in family settings and support more harmonious relationships.

*“My mum uses it every night because she’s gonna buy a laptop when she has enough money.”*

*“I actually do the grocery shopping off the Chromebook. Without it, that would be a lot harder.”*

*“My mum also does courses, but we don’t need to share a computer now.”*

## Better relationships

Having access to more devices in households proved valuable to more harmonious relationships inside some homes.

*“It’s better for my family because they don’t get calls about me not doing my school work all the time now.”*

*“My time management is really bad. So my parents are like ‘it’s good that you have your Chromebook at home, the fact you can get your assessments done and dusted, out of the way.’ So they just think it’s a good thing.”*



# Opportunities for development

## Device quality

For everybody, the biggest challenge with this pilot was the variable quality of the donated devices. Multiple students experienced difficulties with quickly-draining batteries, as well as broken buttons, touch screens and track pads. There was next to no spare capacity when devices or chargers were broken. Some students also reported difficulty getting connected to home wifi. Each of these issues created additional demands on staff and school resources. This was particularly challenging for Aurora College given the scale of the programme in their school (208 devices).

*“I really love the idea but the computers need to work.”*

*“Our teacher has so many people coming to her with problems that she isn’t able to help everyone or at least not quickly.”*

*“They took forever to arrive.”*

*“It was exciting [getting the computers] until we realised half of them didn’t work. And mine didn’t actually connect to home wifi. Some of the other ones didn’t either.”*

*“If they worked really good, I feel like they’d be a lot more useful. Especially cos a lot of students don’t have laptops at home. When they are working, everyone seems to be doing a lot more work than they would be able to do on paper.”*

*“We just can’t do our school work for a couple weeks while it’s getting fixed.”*

*“These are so outdated. They’re just old computers that have been refurbished. They’re slow and the battery dies really quick.”*

*“I wanted to use at home but it didn’t connect to our wifi and lost charge real quick.”*

Short battery life and access to chargers was a particularly challenging issue — which had a direct impact on many individuals’ experience of the programme. In a classroom setting this also created some difficulties around classroom management where access to power points couldn’t always be guaranteed for everyone.

In addition, the volume of issues meant that there was no spare capacity in the programme — if a student’s individual laptop was unusable, it wasn’t always possible for them to borrow another one.

## Kaimahi views

*“Some of them have terrible battery life so it depends on how many plugs you have in your room, and then students are moving around, sharing plugs and stuff like that.”*

*“The biggest issue was we were short — there weren’t enough computers for everyone... ‘It would all be much more manageable with spares’.”*

*“Having some spare chargers if that’s a possibility, even if I had one on hand it would have made a difference.”*

*“Our biggest issue was the number — we were short all year. By quite a few. It definitely will be more manageable when I’ve got spares. And it was always set up to have spares; it was just that our roll grew. It exploded, we had plenty the year before last, but kids kept coming. It’s about 26 that we didn’t have. Which is quite a lot.”*

*“It’s shit but amazing.  
The computers are shit,  
but the idea’s amazing.”*

## Programme support

The goodwill and commitment of the school kaimahi played a critical role in the delivery of this pilot programme. Staff went out of their way to get the devices set up, integrated into school systems, distributed, and to support the students with any arising issues.

## Kaimahi views

*“Basically the setting up just took hours and hours and hours... One NZ back at the start of the year was amazing and organised and paid Noel Leeming to come in and do it. And then it never got done, never got done, never got done and in the end we did it ourselves on the Strike Day, because we needed the devices. So I just came in and showed some of the teachers who were not on strike how to do it. To set them up we have the kids out of the computer labs and we have to unplug all the computers in there and plug all the new ones. It’s like a day long job.”*

*“It gives freedom for the kids who want to take them, but also leave them at school if they want.”*

*“I’m a systems person, I wanted to get everything ordered — it would be so much better if there was a system for this all ready to go — it took a while to develop our own tracking system.”*

## Programme logistics

Whilst some students appreciated the opportunity to take their devices home, others found them heavy — or simply unnecessary at home — and would have preferred an option to leave them at school overnight. They also questioned the wisdom of needing to return them before the exam period was concluded.

*“We should be able to keep them until we’ve finished exams.”*

*“It’s kinda dumb that we have to give them back now because it’s just gone into exams. If you wanna study then you have to come in, like you can’t do it at home. I think that’s the thing most of us seniors are annoyed about.”*

## Kaimahi views

*“The option to leave the devices at school in homebase classes would be perfect, there are sometimes the same students that don’t end up bringing it back, but we’d be more than happy to keep them here if the students wanted to.”*

*“I wouldn’t say it’s been disruptive, but at the beginning of the year it took a long time to get the laptops which pushed back our programmes and beginning our assessments.”*



### Device accessories

In a similar vein, there was a mixed response regarding the accessories that were provided — generally low enthusiasm for laptop bags without a strap but more appreciation for sleeves and backpacks. A mouse and headphones were the most frequently suggested additional accessories.

*“The bag has been great — everything fits in it, it’s my school bag now.”*

*“I would’ve liked a carry case with a shoulder strap as I walk to school and holding it hurts my hands.”*

*“I would like a carry case that can fit both my computer and computer case and my charger ALSO STICKERS!!!!”*

*“Buttons that don’t gaslight me and a case with a strap.”*

### Digital skills development

Neither school currently has provision in the school environment for learning about digital safety or good digital behaviour. This is something that could be developed to enhance the positive impact of the programme. Some students expressed anxiety about the laptops ‘collecting data’ — how might their understanding be developed about what is monitored, by whom and why?

What role could there be for Toitū te Toki to support their understanding of operating in digital environments more generally, and how to take good care of themselves and their information?

*“We got Chromebooks for a reason — so they could monitor us.”*

### Kaimahi views

*“Us teaching them about how to properly access their device, we don’t do that. That whole idea of being technologically savvy, and what’s etiquette... I think it would be good to give them some training. Even just the basics of Google Doc formatting. Just those simple things that you’d almost expect them to know, but it’s not how they interact with tablets and phones.”*

*“Maybe just teaching them why it’s not good to use phones for those things, for eyesight and things, just teaching them about the whole process.”*

*“Teaching them the formatting aspects of things is really important too. They’re not always aware of cutting and pasting tools, shortcut keys, anything that would be beneficial going into senior school would be great.”*

# Concluding thoughts

The gifting of laptop computers has unquestionably had a positive impact on the lives of rangatahi in Waihōpai. Whilst there have been challenges in this pilot year, none of these are insurmountable for future iterations of the programme. Sourcing more reliable devices and improving the refurbishment programme would significantly improve both the student experience, and the day to day running of the programme. Students and staff also have plenty of ideas about how the implementation of the programme could be improved in the context of their school.

Te Rourou and the schools are using these insights to further develop and improve Toitū te Toki to ensure it becomes even more effective for students, and easy to implement for schools.

And finally, it is important to remember that this programme was a pilot. By definition, an opportunity to learn and develop how to do something well. And with this in mind, a few closing words of advice from one of the rangatahi involved:

*“I think just don’t rush the process. They rushed it a little bit. And they didn’t look at all the technical stuff. A good product is going to take time.”*



# Ngā mihi nui

Te Rourou, One Aotearoa Foundation would like to thank all the organisations and individuals who have contributed to this pilot programme:

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Brightpoint for supporting management of devices for the pilot.



Rangatahi from Te Wharekura o Arowhenua were gifted devices on 9 October 2023.



Te Rourou  
One Aotearoa Foundation



In collaboration with:



TE KUNENGA | MASSEY  
KI PŪREHUROA | UNIVERSITY  
UNIVERSITY OF NEW ZEALAND

