Digital Divide Workshop

As part of its inquiry into technological change and the future of work, the New Zealand Productivity Commission, together with the New Zealand Work Research Institute, hosted a workshop on the digital divide in August 2019 at the AUT City Campus in Auckland.

The terms of reference for the Commission's inquiry ask, 'how can we address the digital divide in New Zealand?'. This workshop focused on the digital divide as it affects young people, given the forward-looking nature of the inquiry. However, in its inquiry the Commission recognises that the needs of other digitally-excluded groups, such as adults with disabilities, Pasifika, Māori, and senior citizens.

The workshop was designed to gather the views of specialist experts in this field, and to contribute towards a realistic set of policy solutions for Government. Two Commissioners, Sally Davenport (Professor of Management, Victoria University of Wellington) and Gail Pacheco (Professor Economics and Director, New Zealand Work Research Institute), attended to listen to the discussion and engage with participants.

The workshop consisted of three sessions:

- Session 1: What is the nature of the digital divide that New Zealand should be concerned about?

- Session 2: If you were the Minister of Education, would you spend money on digital access as a priority?

- Session 3: If the access problem was solved, would we solve the digital divide?

The slide pack for the workshop is available on the Commission's website here.

The participants were divided into four tables, and each table was given time to discuss the questions as a group. Then they summarised their discussion in a '60 second soundbite'. Key points from these soundbites are in the following sections, with the key themes of each session in the annexes to this summary.

Session 1: What is the nature of the digital divide that New Zealand should be concerned about?

This session opened with the premise that the digital divide could encompass multiple issues. Is it about universal access, or increasing overall standards of digital literacy, or teacher capability, or whanau motivation and trust, or teaching kids to become digital creators rather than consumers? The session asked participants what exactly about the digital divide should be the primary issue of concern in New Zealand.

60 second soundbites

- Digital inclusion is about access, skills, motivation and trust. But it's not just an issue facing children, it's about whanau. Becoming a digital citizen means that you can participate in a digital society, and we need these digital citizens to be discerning. Teachers are key in building the skills to be discerning, and in how to leverage digital technology for the development of critical thinking among young people.

- We need to focus on digital *inclusion* rather than a divide and recognise that effective digital inclusion requires proper consideration of different cultural worldviews. The Te Ao Māori worldview shouldn't just be bolted onto a Te Ao Pakeha worldview.

- Connectivity and equity of access is a necessary, but not sufficient condition to achieve digital inclusion. Teacher capability, knowledge and understanding is also critical to creating digital change.

- We need to focus on affordable access for the 20% without home internet access – it needs to be a fit-for-purpose service that focuses on reducing barriers to take-up. We also need to think about the nature of home access (ie, what type of device), who is online, and what behaviours are being modelled to our young people.

Session 2: If you were the Minister of Education, would you spend money on digital access as a priority?

This session opened with a presentation from the Ministry of Education on their equitable digital access proposal (available on the Commission's website [here](#)). It offered two scenarios for getting all school-aged children home internet access: one solely funded out of the education budget at about $200 million over five years; the other with a cross-government approach recognising value would be shared with other areas (like social development), with an education budget share of about $100 million over five years.

In the context of the overall education budget of approximately $13 billion per year, participants were asked if they were the Minister of Education and had approximately $150 million to add to the education budget, would they spend it on digital access? If yes, why; and if not, what else would they spend the money on and why?

60 second soundbites

- Spending money on digital access should be a priority – like other basic services like water, it should be an uncapped and filtered service that is recognised as a direct investment for future economic wellbeing. It is an essential foundation for learning.

- Because digital access has wider societal benefits, funding should not be solely from the education budget. There should be a non-siloed approach across government for digital inclusion, while also ensuring that this money is not taken from other core resources or services.

- Collaboration with other public services, and whanau support, should be part of the scope of digital inclusion projects so that we can leverage as much value as possible out of the investment. Lack of digital access has been holding the country back!

- There should be bespoke, targeted investment in both access and infrastructure needs for disadvantaged communities. Leverage the government's buying power (eg, for hardware) but don't subsidise everyone. We also need to shift spending beyond infrastructure to teaching capability, as well as pathways and opportunities for students to get applied digital learning.

- It is important to continue to value print literacy for our young people. Books and libraries are still valuable resources that deserve funding.

Session 3: If the access problem was solved, would we solve the digital divide?

This session asked participants to look forward into the future and imagine a scenario with universal home internet access for all school-aged children. Would this solve the digital divide? The session also offered an opportunity for participants to canvas any issues that had not been covered in previous sessions.

60 second soundbites

- Access is only one element of digital inclusion – affordability is still an issue over and above access. The three other areas of digital inclusion – skills, motivation and trust – also need to be tackled.

- Digital inclusion isn't just about kids – other disadvantaged communities facing barriers should be part of the focus to better enable lifelong learning, citizenship, and social connection.

- We can solve connectivity, but access also requires capability which in turn requires ongoing effort and learning – including by teachers – as the technology keeps moving.

- Digital inclusion is about intergenerational learning and activating communities, which in turn involves agency for learners, parents and communities. Being able to seamlessly move between different types of devices and access is important as it increases the value of being connected. People must also be

digitally resilient – this means being able to cope with technological change and feeling safe to support kids' learning.

- Access in isolation won't deliver the change that we seek. There are different stakeholders that also have to experience change on that journey. To take teachers as an example, issues such as the quality of teacher training, best teaching practice, the potential for teachers and schools to form partnerships with other stakeholders, and different schooling models all come into it. A teacher does not have all the expertise in things digital, they should be seen more as a facilitator than as an expert.

Commissioner main take-outs

At the close of the workshop, Commissioners Gail Pacheco and Sally Davenport shared their main take-outs after having listened to the discussions at the different tables throughout the afternoon. They heard that:

- Access is a universal right – it is a necessary but not sufficient condition to achieving digital inclusion. We also need to move from access to capability.

- There are four critical areas: access, motivation, skills and trust. Motivation is particularly important – we need to understand what the motivation is for achieving access, as it could be for a range of things, of which learning is amongst them.

- The Department of Internal Affairs' definition of digital inclusion is helpful: "A digitally included person, whanau or community has convenient, reliable access to affordable, accessible digital devices and an internet connection, and can confidently use them in their day-to-day life".[1]

- We need to achieve affordability without stigma, as well as bespoke solutions with the local community. Digital inclusion is not just about young people and achieved through the education system, it's about the whole community, otherwise we'll just shift the divide to another place. It's also about democratic rights and citizenship (eg, online voting, the census etc.). There are multiple different lenses through which we can look at digital inclusion, such as student-centred, whanau-centred or community-centred.

- We need to be aware of the context – there are important socio-economic factors at play in terms of why whanau may or may not prioritise digital access. Digital inclusion also has valuable co-benefits such as achieving a stable education environment (eg, families staying in the same area to retain internet access, and kids staying home at night because they can do something (go online) rather than head out).

- In terms of solutions, there's a balance between bespoke and being scalable.

Attendees

Participants

Ann Bentley	Project Manager - Equitable Digital Access for Students, Ministry of Education
Anne Goulding	Professor of Library and Information Management, Victoria University of Wellington
Anne Taylor	Education Lead, Microsoft; Executive Council, EdTech New Zealand
Greg Duff	National Engagement Manager, Network for Learning
Jay Allnutt	Chief Executive, Ako Mātātupu, Teach First NZ programme
Jenny Oxley	Executive Officer, Manaiakalani Trust
Kim Connolly-Stone	Policy Director, InternetNZ
Kirk Mariner	Principal Advisor, Department of Internal Affairs
Marg McLeod	Strategic Advisor ICT Strategy and Planning, Ministry of Education
Mehrdad Fatemi	Digital Enterprise Architect, Ministry of Education
Michael Fletcher	Principal, Chaucer School
Peter Jones	Principal, Manurewa High School

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[1] Department of Internal Affairs. 2019. The Digital Inclusion Blueprint, Te Mahere mō te Whakaurunga Matihiko. Wellington: Department of Internal Affairs, p. 10.

Sally Hart   Learning Team Leader, Hobsonville Point Secondary School
Simon Thode   Senior Data Analyst, Network for Learning
Sue Kini   Stepping UP Programme Manager, Digital Inclusion Alliance Aotearoa
Sue West   Auckland Area Manager, 20/20 Trust

Commission attendees

Amelia Sharman   Principal Advisor
Gail Pacheco   Commissioner
John MacCormick   Principal Advisor
Judy Kavanagh   Inquiry Director
Nicholas Green   Principal Advisor
Sally Davenport   Commissioner
Tim Maddock   Advisor

Annex 1: Key themes from session 1

Session 1: What is the nature of the digital divide that New Zealand should be concerned about?

- Affordable access has to be the primary focus – we need to get those 100,000 kids without home access online. Lots of other issues branch off this, including the three other main aspects of digital inclusion: motivation, skills and trust. Digital inclusion is an inherently interrelated issue.

- The nature of the access is important. There can be "a divide in devices", such as having the right devices for education rather than just accessing social media. Becoming a digital citizen is also about understanding digital technologies more broadly, such as cars, fridges and other internet-enabled technologies.

- Digital literacy enables new models of learning and teaching, such as flexibility for students and teachers to move at a different pace and beyond the constraints of 9am to 3pm. It also allows for better teaching of critical thinking skills – becoming digitally literate means learning how to be a discerning consumer of digital information.

- Being digitally literate is an important future work skill – young people need to be able to engage at a cognitive level with a variety of different digital channels. However, we shouldn't focus exclusively on turning out 'work-ready' young people. Education is about fulfilling student potential and too much focus on work-readiness may fuel inequalities and narrow learning options.

- Inequalities in digital access can fuel greater inequalities later in life. This applies for students from different schools, from different community groups, or for those with disabilities or other challenges.

- Effective digital inclusion requires proper consideration of different cultural worldviews, especially the nuances of Te Ao Māori. The Te Ao Māori worldview shouldn't just be bolted onto a Te Ao Pakeha worldview, and the burden of biculturalism shouldn't just be with Māori.

- The quality of teaching in the digital space is a critical factor. It's not just about schools having a 'digitech' kaiako, it's about wider skill levels across all teaching staff.

- Whanau engagement is crucial to achieving digital inclusion. Adult capability, as well as what they themselves do on screens, has a huge influence on children (as does what older siblings and cousins do). Mistrust of the internet can be a significant factor in achieving home internet access – teaching kids about digital literacy can help raise parents' digital literacy.

- A number of specific solutions were identified. These included: free wifi in lower socio-economic communities, professional learning development and other support for school communities' capability, better collaboration across schools/government/businesses, and laptops for kids on the same basis as they are currently provided to teachers.

Annex 2: Key themes from session 2

Session 2: If you were the Minister of Education, would you spend money on digital access as a priority?

- Access is a necessary first – it's not transformational on its own, but it sets the scene for future transformation. Think about the internet as a basic service or a public good, like water, electricity, roads or rail. While there's always more to do, we need good foundations.

- The cost of not doing it would be much higher in terms of lost community capability or productivity. We shouldn't wait as the gaps are getting more pronounced and having larger impacts over time. It's an opportunity to help to develop flexible, resourceful people for our future, including young people with specific technical capabilities.

- We need to get away from thinking about digital inclusion as a siloed issue – there are benefits beyond education, such as in health and social development. But equally, digital access shouldn't come at the expense of other vital/core areas.

- Expenditure on digital inclusion should be well-targeted – universal infrastructure or data or device subsidies are a waste of money. There have been many previous failed subsidies for gadgets, and this can lead to an underinvestment in people, teaching capability and student pathways.

- Focus on the notion of 'win-wins', such as digital programmes invested in community venues like libraries, churches or marae. These can support community access more broadly and address digital exclusion.

Annex 3: Key themes from session 3

Session 3: If the access problem was solved, would we solve the digital divide?

- It's not just about access – we still need motivation, skills and trust. Learning happens in a context, and communities need to be activated and engaged. Tech access is also never "solved" – there is always going to be work to be done and we need to move away from a tick-box mentality.

- Motivation means whanau need to see the relevance for them and their communities. This can be as diverse as health (eg, continuous glucose monitors for type 2 diabetes), whanau connections (eg, sending remittances online), or digital citizenship (eg, the census).

- Affordability still matters, especially for low-income communities. There will also always be laggards in terms of schools accessing and adopting new approaches which can influence equality.

- Digital resilience is another issue. This is about having access, but then coping with change and learning to learn. Skills need to be sustainable, and to be digitally literate means keeping up-to-date and understanding technology at a deeper level. Kids need to learn how to be digital makers and creators.

- Cultural worldviews are an important consideration, especially Te Ao Māori. Online may be perceived as a negative space, and whanau expectations around device use (ie, who should use it, rather than necessarily who the school has allocated it to) are relevant. Incorporating multiple worldviews enables more meaningful learning.

- Co-benefits can be an important focus – understanding wider spillover and intergenerational benefits has implications for the investments made now.

- Digital inclusion is not just about kids at school – it affects wider communities. Communities need to be empowered to decide what support they need. Incorporating the incentives and actions of universities and businesses into schools is also important – what they do matters in terms of student decisions at school.

- New models of learning and teaching are vital. We have a very industrial, rigid and task-driven schooling and teaching system, despite having an increasingly outcomes-focused society and economy. The problem isn't necessarily with the New Zealand Curriculum or NCEA, it's about their interpretation. Internal cultures and paradigms within schools can be hard to shift, and innovative approaches (such as multi-provider models where students take courses from more than one school) can be challenging to implement.

- Teacher professional learning and development (PLD) is another important factor. There's a divide in the workforce in terms of teacher practice, and it's a big ask for teachers to keep up.