Connecting on Country

Closing the Digital Divide for First Nations students in the age of COVID-19
This is a joint report by World Vision Australia and The Australian Literacy and Numeracy Foundation

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Cover Photo: Digital connectivity can open up a world of online learning opportunities, but sadly almost one in four First Nations households do not have internet access at home © The Australian Literacy & Numeracy Foundation
COVID-19 exacerbated many inequalities in Australia, but few more so than the Digital Divide between First Nations and non-First Nations students. Schools around the nation were forced to close because of the pandemic. The hope was that all students would be able to continue their education online. But this was not the case.

One in four First Nations households do not have internet access at home. The coronavirus disrupted most Australian students’ 2020 education to some extent, but for too many First Nations students the closure of schools and move to online learning stopped their education altogether. Some were not able to use the learning materials, teaching and support that their class peers could access online.

Of course, there were stories of creativity and resilience – some teachers dropped off hard copies of materials to offline students and others offered classes over radio. But many First Nations students were unfairly disadvantaged due to the inequality in online access that persists in Australia. This Digital Divide – the disparity between First Nations and all Australian students in accessing technology and the internet – needs to be urgently closed to support continuity of education and to improve education outcomes for First Nations students.

COVID-19 has accelerated the digital revolution across many sectors, including in education, which makes it more important than ever to urgently close the Digital Divide. Beyond education, online access is also critical for job opportunities and e-commerce, health advice, accessing government services and participating in broader society.

There is an opportunity for governments and the private sector to work together with First Nations communities to ensure coverage, affordability and access. If the Digital Divide is not closed, already large inequalities in educational outcomes will be amplified as children are increasingly taught through online classes and resources in the future.

Critically, remote First Nations communities have by far the greatest online disadvantage across any First Nations area. These communities should be given the highest priority for improving online access.

We therefore call on the Australian Government to develop a First Nations Digital Inclusion Strategy in partnership with First Nations communities and organisations and the private sector, to close the Digital Divide for First Nations students once and for all. Every First Nations child should have the opportunity to learn and continue their education online, especially in the age of COVID-19 and the shifts the pandemic has caused.

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The Australian Literacy & Numeracy Foundation
Part 1
Defining the Problem

This section defines the nature and scale of the problem – the Digital Divide – especially as it relates to the education of First Nations children in Australia. It finds that almost one in four First Nations households do not have internet access. This limits the education opportunities for children in those households, which was clearly demonstrated during the COVID-19 crisis in Australia and the associated school closures. It makes the point that if Australia is to close the education divide between First Nations and all Australian students, then it needs to close the Digital Divide as a priority. (McKay 2016)

What is the Digital Divide?
The Digital Divide is the gap between those who can access and use modern information and communications technology – such as the internet, computers and mobile phones – and those who cannot. This gap is often defined along socio-economic, geographical and cultural lines. People without access to the internet and other technologies are heavily disadvantaged in our digital age as they are unable (or less able) to learn online, get their information online, get mentoring or support online, or participate in broader society online. Internet affordability and coverage, access to devices (such as laptops, tablets and smartphones), data stability and users’ abilities or digital literacy are the key barriers to effective online participation. (Rowsell, Morrell et al. 2017)

Extent of the Digital Divide
The Digital Divide is a significant issue in Australia, especially when you compare internet access between First Nations Australians and the general population. According to the 2016 census conducted by the Australian Bureau of Statistics, almost one in four First Nations households did not have internet access. This is notably less than the access to the internet for all Australian households: 75.3 per cent of First Nations households have internet access versus 85.8 per cent of all households in Australia. (Rennie, Thomas et al. 2019)

This disparity in online access has been confirmed by the Australian Digital Inclusion Index (ADII), which examines Australia’s online participation. The Index measures access, affordability, and digital ability. The 2020 ADII (ADII) found that First Nations people living in urban and regional areas had low digital inclusion (55.1, or 7.9 points below the national average). The access score is 68.5 which is 7.8 points less than the national average. This can be largely attributed to mobile only access. This is increasing yearly as more Australians have fixed NBN access which is not experienced at the same rate for First Nations people.

First Nations people spend a greater proportion of their household income accessing the internet, creating affordability issue. The affordability score is 54 which is 6.9 points below the national average of 60.9. The relative expenditure score is 53.6 which is 1.1 points below the national average of 54.7. The value of expenditure score of 54.3 is 12.7 points lower than the national average of 67. This has increased from the previous reporting period where there was a gap of 8.8 points. In other words, First Nations people receive less data for every dollar spent on data and this has increased by around 50 per cent in a year. This means that even though there is a disparity for online access for First Nations people, to move towards parity using current modes of access, which is largely mobile phones, it would cost a lot more for First Nations people. (Thomas 2020)

The Digital Ability score for First Nations people in 2019 was 6.4 points below the national average of 50.8 at 44.4 points. Additionally, the digital inclusion gap, widened to 7.9 from 6.8 in the previous period. Importantly, the ADII did not include data from remote communities which would have seen even larger gaps across all measures. It’s important to recognise that remote communities have distinctively much larger disparities than any other First Nations region. This is largely because of geographic isolation, lack of infrastructure and socioeconomic disadvantage, including lower literacy and English levels. (Thomas 2019)

The 2020 data from the ADII paints a picture of increasing disparity in online equity. This can be seen through increases in digital inclusion by the Australian population in densely populated areas which hasn’t been enjoyed by First Nations people. This may be due to underlying socio-economic disadvantage and lower literacy and English language levels.

A report commissioned by the Australian Education Union stated that First Nations students were much more likely to have no internet access at home — 21 per cent compared with 5 per cent for all public-school students. This fourfold disparity only magnifies existing education disadvantages. (Preston 2020)
Affordability and the Digital Divide

Affordability is a major barrier for equitable online access. Data affordability is much lower for First Nations people, primarily because of the high levels of exclusive reliance on mobile phones to access the internet. Around 36.8 per cent of First Nations people exclusively rely on mobile data to access the internet compared to 21.1 per cent for the general Australian population. The problem is that mobile phone data is more expensive and often less reliable than broadband data, and the cost can lead to some First Nations households to have no internet access altogether. This is one of the reasons behind the low digital access scores for First Nations people.

The National Broadband Network (NBN) hasn’t been rolled out in many First Nations households. This is also a contributor to disparity in internet access, which widened by about 50 per cent from 2018 to 2019 alone. (Thomas 2019)

Remoteness and the Digital Divide

The Digital Divide increases with remoteness. First Nations people living in remote areas are much less likely to be able to access the internet. According to the 2016 census, 82.8 per cent of First Nations people in major metropolitan areas accessed the internet, 73.2 per cent in regional areas, 61.3 per cent in remote areas, and only 49.9 per cent in very remote areas. (Australian Bureau of Statistics 2016)

The Centre for Appropriate Technology surveyed very remote First Nations communities in 2016 and found only 37 per cent of the 401 small communities surveyed had internet coverage and in 80 per cent of those communities this was only available in one household. (Rennie, Hogan et al. 2016)

The 2014–2015 National Aboriginal and Torres Strait Islander Social Survey also found major geographical disparities for First Nations communities. While there was a national average of 78.6 per cent of First Nations people accessing the internet in the 12 months prior to the survey, there were about twice as many First Nations people in urban areas (88.8 per cent) accessing the internet compared to very remote areas (47.5 per cent). The frequency of access also varied considerably. The survey found that 19 per cent of First Nations people in very remote areas accessed the internet daily compared to 71.1 per cent in urban areas. (Australian Bureau of Statistics 2016)

The low rates of access for First Nations communities in remote contexts has implications for online learning as well as accessing government services, information, resources and services such as banking. For example, around 64 per cent of First Nations people nationally access government services online. These rates become increasingly worse in remote locations, with 70 per cent in urban areas benefiting from online government services compared to 55 per cent in remote Australia and 54 per cent in very remote settings. This is problematic – in fact, more geographically disadvantaged communities in remote locations need better online access. This not only disadvantages consumers, it is also inefficient, as government services may have to be provided physically if consumers are unable to access services online. (Australian Bureau of Statistics 2016)

Table 1 demonstrates the large disparity between internet access between First Nations households and all other Australian households. The disparity is also obvious between First Nations households with lower internet access the more remote the location. This disparity also widens between First Nations households and all other households the more remote the location. For example, within Sydney the internet access gap is 5.8%. This is 50.7% in Apatula in the Northern Territory where on 27.5% of households have internet access. Therefore while there is an imperative for all First Nations households to have improved internet access, the urgency is greatest with remote First Nations households.

Table 1

<table>
<thead>
<tr>
<th>Remoteness</th>
<th>Internet Access Rate (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Remote</td>
<td>49.9</td>
</tr>
<tr>
<td>Remote</td>
<td>61.3</td>
</tr>
<tr>
<td>Regional</td>
<td>73.2</td>
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<tr>
<td>Metropolitan</td>
<td>82.8</td>
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</table>

The Centre for Appropriate Technology surveyed very remote First Nations communities in 2016 and found only 37 per cent of the 401 small communities surveyed had internet coverage and in 80 per cent of those communities this was only available in one household. (Rennie, Hogan et al. 2016)
<table>
<thead>
<tr>
<th>First Nations Region</th>
<th>First Nations Household</th>
<th>Other Households</th>
<th>Digital Divide</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td></td>
<td></td>
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<tr>
<td>Sydney-Wollongong</td>
<td>82.3</td>
<td>88.1</td>
<td>5.8</td>
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<tr>
<td>Dubbo</td>
<td>68.4</td>
<td>76.1</td>
<td>7.7</td>
</tr>
<tr>
<td>North Eastern NSW</td>
<td>66.3</td>
<td>76.4</td>
<td>10.1</td>
</tr>
<tr>
<td>North Western NSW</td>
<td>66.3</td>
<td>72.4</td>
<td>19.3</td>
</tr>
<tr>
<td>NSW Central and North Coast</td>
<td>78.8</td>
<td>81.7</td>
<td>2.9</td>
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<tr>
<td>Riverina Orange</td>
<td>71.2</td>
<td>77.7</td>
<td>6.5</td>
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<tr>
<td>South Eastern NSW</td>
<td>77.3</td>
<td>81.9</td>
<td>4.5</td>
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<tr>
<td>Victoria</td>
<td></td>
<td></td>
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<tr>
<td>Melbourne</td>
<td>85.4</td>
<td>87.9</td>
<td>2.5</td>
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<tr>
<td>Vic Excl Melbourne</td>
<td>76.6</td>
<td>80.8</td>
<td>4.2</td>
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<tr>
<td>Queensland</td>
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<tr>
<td>Brisbane</td>
<td>84.6</td>
<td>88.5</td>
<td>3.9</td>
</tr>
<tr>
<td>Cairns - Atherton</td>
<td>64.9</td>
<td>84.0</td>
<td>19.1</td>
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<td>Cape York</td>
<td>67.1</td>
<td>81.8</td>
<td>14.7</td>
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<td>Mount Isa</td>
<td>58.2</td>
<td>84.1</td>
<td>25.9</td>
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<td>Rockhampton</td>
<td>75.4</td>
<td>81.2</td>
<td>5.7</td>
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<td>71.3</td>
<td>79.9</td>
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<td>Torres Strait</td>
<td>68.2</td>
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<td>20.8</td>
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<td>Townsville – Mackay</td>
<td>71.7</td>
<td>83.6</td>
<td>11.9</td>
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<td>South Australia</td>
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<tr>
<td>Adelaide</td>
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<td>83.3</td>
<td>6.2</td>
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<td>Port Augusta</td>
<td>52.3</td>
<td>74.5</td>
<td>22.2</td>
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<tr>
<td>Port Lincoln – Ceduna</td>
<td>62.0</td>
<td>79.3</td>
<td>17.3</td>
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<td>Western Australia</td>
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<tr>
<td>Perth</td>
<td>79.4</td>
<td>89.0</td>
<td>9.5</td>
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<td>Broome</td>
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<td>88.6</td>
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<td>Geraldton</td>
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<td>24.7</td>
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<td>Kalgoorlie</td>
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<td>84.4</td>
<td>28.9</td>
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<td>Kununurra</td>
<td>39.6</td>
<td>84.8</td>
<td>45.2</td>
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<td>South Hedland</td>
<td>61.4</td>
<td>91.2</td>
<td>29.8</td>
</tr>
<tr>
<td>South Western WA</td>
<td>69.6</td>
<td>83.2</td>
<td>13.5</td>
</tr>
<tr>
<td>West Kimberley</td>
<td>47.3</td>
<td>85.0</td>
<td>37.7</td>
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<tr>
<td>Tasmania</td>
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<td></td>
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<tr>
<td>Tasmania</td>
<td>78.8</td>
<td>80.1</td>
<td>1.3</td>
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<td>Northern Territory</td>
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<tr>
<td>Darwin</td>
<td>74.4</td>
<td>88.9</td>
<td>14.5</td>
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<tr>
<td>Alice Springs</td>
<td>63.2</td>
<td>87.8</td>
<td>24.7</td>
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<tr>
<td>Apatula</td>
<td>27.5</td>
<td>78.2</td>
<td>50.7</td>
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<td>Jabiru-Tiwi</td>
<td>53.2</td>
<td>81.6</td>
<td>28.4</td>
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<tr>
<td>Katherine</td>
<td>47.8</td>
<td>83.9</td>
<td>36.0</td>
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<tr>
<td>Nhulunbuy</td>
<td>55.7</td>
<td>90.5</td>
<td>34.8</td>
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<td>Tennant Creek</td>
<td>45.5</td>
<td>83.8</td>
<td>38.3</td>
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<tr>
<td>Australian Capital Territory</td>
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<tr>
<td>ACT</td>
<td>88.1</td>
<td>91.9</td>
<td>3.8</td>
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<tr>
<td>Total Australia</td>
<td>75.3</td>
<td>85.8</td>
<td>10.5</td>
</tr>
</tbody>
</table>
The Education Divide and the Digital Divide

Closing the Digital Divide between First Nations and all Australian students is an important but often overlooked part of closing the gap in education outcomes. Education is increasingly reliant on online access, whether that be conducting research online for homework and accessing learning materials and e-classrooms online. First Nations students are much more likely than other students to have difficulties undertaking schoolwork and study at home due to a range of reasons, including limited digital connectivity. If many First Nations students continue to not have equitable online access, then the educational gap will only increase. (Radoll and Hunter 2018)

“Problematically, it’s the students that face the greatest educational challenges – those from low-socioeconomic backgrounds – who are also most likely to live in households without adequate access to the internet and technology, and without the know-how to use them most effectively.” – Kate Noble, Education Policy Fellow at the Mitchell Institute at Victoria University, 2020

Education equity is critical to address the many disadvantages which First Nations people and communities face – including employment, disproportionate incarceration and compromised health and wellbeing. Other disadvantages include poor literacy and/or illiteracy, low oral language capacity which impact comprehension etc.

Snapshot of the Education Divide

• First Nations children are twice as likely as all Australian children to be developmentally vulnerable (41.3 per cent and 20.4 per cent respectively). (Department of Education and Training 2019)

• We already see a gap in attendance rates which indicates a low level of engagement in the education system by First Nations students. In 2019, the overall attendance rate for First Nations students nationally was 82 per cent, compared with 92 per cent for all Australian students. (Department of the Prime Minister and Cabinet 2020)

• The educational outcomes for First Nations children are well behind the broader Australian population. NAPLAN results show only Year 9 numeracy is on track for most jurisdictions. This is out of eight areas which are measured. (Department of the Prime Minister and Cabinet 2020)

• The only educational Closing the Gap indicator which is on track is the target to halve the gap in Year 12 attainment. (Department of the Prime Minister and Cabinet 2020)

COVID-19 as a divide multiplier

COVID-19 has exposed and exacerbated the inequality that already exists in online access between First Nations and all Australian students. The disruption to regular schooling caused by COVID-19 was not the cause of the issue, but it highlighted the severity of the existing structural problem and the urgency with which it needs to be addressed.

“COVID-19 merely exacerbated pre-existing disadvantage which requires urgent and ongoing attention to ensure that all students have access to the tools needed to engage positively throughout their schooling” – Barbara Preston, Report to the Australian Education Union, 2020

The education system has done its best to adapt to meet the needs of Australian students during the COVID-19 disruptions, but school closures and the move to online learning in some parts of Australia brought into sharp focus the digital inequality that persists in Australia. A recent Ministerial Briefing Paper on the likely impact of COVID-19 disruptions on the educational outcomes of vulnerable children learning at home highlighted that the immediate transition to online teaching and learning was a significant challenge. The report highlighted the existing disparities and the risks associated with online teaching on disadvantaged students and families particularly relating to internet access, technology and the ability for technical and learning support within disadvantaged households. (Masters, Taylor-Guy et al. 2020)

“Post-COVID-19, we can’t ignore what we’ve all just seen – there is a gaping digital divide and it is contributing to inequity in education and limiting future opportunities for some young people” – Melodie Potts Rosevear, CEO of Teach For Australia, 2020

The national education system would have been in a much better position to ensure education continuity during disruptions like COVID-19 if Australia had closed or at least narrowed the Digital Divide between students. While the long-term impacts on education from this pandemic-related disruption are not yet clear, what is clear is that the education system would be more resilient, flexible and inclusive in the future if Australia is made more digitally inclusive.
CASE STUDY:
Closing the Digital Divide, one student at a time

Region: APY lands, South Australia
Boarding school student: Emily, 18

Background:
Emily was sent home to her community at the end of Term 1 due to the COVID-19 pandemic. Emily had been supported to go to boarding school through the Ngaanyatjarra Pitjantjatjara Yankunytjatjara (NPY) Women’s Council Boarding School Project. Emily is in Year 12. The boarding school project officer maintained contact to assist with Emily’s ongoing education while she was back home in her community. She attends a boarding school that is across state borders.

Situation:
When it became clear Emily would return to her home community indefinitely, NPY Women’s Council engaged with her boarding school to understand how they could each support her during the pandemic. Emily did not have a laptop. The boarding school initially sent Emily home with a hardcopy work pack to complete, and followed up with the purchase of a laptop, recognising that the need for technology and access to internet would assist her learning. Collaboratively, the boarding school and NPYWC worked together to determine the level of support she required, given the laptop took six weeks to arrive (as it was posted from QLD to SA).

During this time, the Project Officer worked with the NPY Women’s Council Youth Worker in community to check in on Emily. Emily had been completing her work from home. The Project Officer spoke with the local school about what support they could provide Emily. The school offered for Emily to do her work with the senior class. But Emily decided that it worked best for her to keep studying from home. She was happiest doing this and her home space was conducive for study. For extra support the youth worker in community set up a weekly time for Emily to do some work with them at the youth office. Emily had been able to use the laptop and hot-spotted from her phone, using the community internet to continue her schoolwork.

Outcome:
This collaborative approach of the Boarding school and Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women’s Council enabled Emily to succeed in her schoolwork. She graduated from boarding school in November. She is the first member of her family to have graduated from boarding school and was one of two young women from her community who did so this year, despite the challenges of COVID-19.
There has long been a disparity in online education access for First Nations students and this was highlighted during COVID-19 as online education increased.

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CASE STUDY:
Amid school closures, students turn to radio classes due to lack of internet

Region: Western NSW

During the period of school closures in 2020 due to the COVID-19 pandemic, SBS reported on the remote town of Wilcannia, where a school of 90 students turned to radio to deliver classes. The local radio station offered 30 minutes each morning for teachers to read a story and outline the workplan for the day because it was not feasible to take classes online.

Few families in the area have access to broadband, and those who do rely on a patchy 3G service. Teacher Tarren Walsh told SBS: “With the internet service not being great, we’re not able to read stories via learning apps that other teachers elsewhere can use. By putting it on radio, we can reach a large number of families.”

Local leaders expressed frustration about the lack of digital access for people in Wilcannia, many of whom are Barkindji people. Greg Hill, the general manager at the Central Darling Shire Council said: “Since I’ve been here I’ve been lobbying to improve mobile and internet coverage. With schools trying to continue education, it’s really not good. It shouldn’t be like this.”
Part 2
Scoping Solutions

This section explores possible solutions to close the Digital Divide, from public-private partnerships, to subsidies, to leveraging existing telecommunications rollouts such as the NBN or 5G technology. The benefits of closing the Digital Divide would be wide ranging – it would open opportunities for learning, education continuity, First Nations e-commerce, and the digitising of First Nations history, culture and language.

Ultimately, education is a human right and, when education goes online, every student should have the ability to continue their education regardless of their socio-economic status, race or location.

“Education is a fundamental right and if school students are expected to continue their education online, then the government has a responsibility to guarantee access to the internet and necessary equipment and support for every pupil.” – Kate Noble, Education Policy Fellow at the Mitchell Institute at Victoria University, 2020

Closing the digital asset divide

There are various ways in which the internet can be accessed. This includes wireless hot spotting, mobile phones, mobile data, fixed line and satellite. The current gold standard option is NBN fixed line broadband. Addressing the technology shortfall which causes the online access inequity between First Nations and the Australian population will not be simple, but essential. The digital assets required to create equity between First Nations and the Australian population are significant. Laptops and tablets are particularly needed for students to access learning materials, conduct research and to complete assignments using standard software – such as Microsoft programs. While some of the more advanced smart phones have some capabilities, they provide far inferior performance compared to laptops and tablets. To help increase access to digital assets, some communities provide online access centres or internet cafes with a bank of computers with internet access. While this useful in some cases, it lacks the convenience and immediacy of having internet in the home. (Daly 2006)

Expanding internet coverage, speed and reliability

The rollout of 5G technology provides enormous potential to improve the reliability and speed for online access, for both computer users and phone users alike. 5G offers higher data volumes with lower latency than previous 4G technology. This is good news for remote First Nations communities who have relied on 4G for years with limited reliability and capability. In some remote communities, 5G can be built on existing 4G networks with no further infrastructure needed. In other remote communities, however, investment will be needed to address black spots and build new infrastructure to increase coverage.

Leveraging the public and private sectors

Closing the Digital Divide is a shared responsibility. Both government and the private sector have a role to play. For example, in 2020, Telstra provided 20,000 students and teachers with internet access to educational content, the NBN offered at least $50 million to assist with remote schooling for low income families, and other providers also gave support to low income families of school children.

“As the pandemic keeps the spotlight on the critical role of connectivity, we see unprecedented momentum to accelerate efforts to bridge the digital divide. Governments, business — including telecommunications companies — and society must seize this watershed moment to close the gap between the digital haves and have-nots, once and for all.” – The Boston Consulting Group, 2020

Some may argue that government should not intervene and that the free market should be left to close the Digital Divide. However, on the one hand, the market has the technology to close the Digital Divide but it has not done so due to cost and affordability barriers (it can take a long-time to break even and generate returns from building telecommunications infrastructure, especially in remote areas). On the other hand, increasing connectivity and digital inclusion contributes to the public good, education and employment and, in turn, the national economy. That is why a collaborative approach is needed across the public and private sectors to close the Digital Divide. The Government can provide incentives or potentially subsidise corporate Australia to close the Digital Divide in certain regions and communities and it can also provide mechanisms for large companies to donate excess digital assets such as computers and tablets that are sitting unused in offices or a buy one donate one program for corporations to contribute to closing the digital divide.
Making digital access more affordable

While market competition has reduced the costs associated with owning a computer and accessing the internet, for many First Nations households the costs remain prohibitive. There are many options that could be explored to increase affordability. The Australian Government could:

- Earmark a portion of COVID-19 crisis recovery and economic stimulus to support digital inclusion initiatives
- Provide subsidies for the provision of equipment and home internet for households with First Nations students
- Drive affordability through subsidies and the direct provision of services and devices for those First Nations students
- Work with telecommunications companies to offer low-cost network options and creative financing models such as installment plans and inexpensive equipment rentals
- Create a mechanism for companies and government departments to donate surplus digital devices to high-need First Nations students
- Support an action plan for accessible content quality such as an inter-school program so that curriculum specifically developed by a well-resourced school/staff for delivery on-line can be shared between schools.

Some of these initiatives are being explored and implemented internationally as governments, NGOs and the private sector all understand the important role of online access in addressing inequality, particularly in developing nations.

In the USA, state governments are committed to ensuring all students domestically have internet access to improve education equality. Washington State for example has an “Internet for All” initiative where free at home internet will be provided to 25,000 disadvantaged households. (Blumenthal 2005)

The USA has also committed to investing in developing nations such as through the Global Connect initiative which is backed by the World Bank. The aim of the project was to bring an additional 1.5 billion people online by 2020. (US Interagency Steering Group 2016) The World Economic Forum also introduced an Internet for All initiative. These initiatives have used innovation to bring internet to remote areas such as balloons, drones, and low-flying satellites. (World Economic Forum 2017)

Google has several initiatives aimed at creating digital equity. They offer free applied digital skills training which anyone can access and provide an important platform for access equity such as the Digital Literacy and Digital Citizenship Training Program Nationwide in Myanmar. (Chang and Coppel 2020) The international Close the Gap organisation creates digital equity by sourcing donated used laptops in Europe and refurbishing them before distributing in developing and emerging nations. (Close the Gap 2019)

Jordan is an example of a nation which has committed to providing all households online access. This universal access is seen as a basic equity issue. It’s fundamental in ensuring educational and socio-economic disparities are not widened due to cost barriers. The downstream impacts of cost outcomes of disadvantage may be addressed through early intervention measures of investing in online access for all. (Obeidat 2017) The Australian Government had committed to a Universal Service Guarantee by 2020 which wasn’t realised. This guarantee was to ensure broadband access to all Australians regardless of their location and included the Mobile Black Spot Program. (Madsen and De Percy 2020)

Building digital literacy

Providing adequate hardware and expanding internet coverage should be accompanied by education and training in digital literacy. First Nations students, and all students for that matter, need to be able to understand and use technology such as the internet and computers in an effective and safe way to make the most of digital opportunities. According NAP–ICT Literacy assessments, First Nations students have lower digital literacy than their peers.

“Digital inclusion programmes developed specifically for Aboriginal and Torres Strait Islander people may be beneficial as their digital choices are different from other groups. Moreover, the fact that Aboriginal and Torres Strait Islander people have a positive attitude to technology suggests that these programmes may be well received if delivered by appropriate entities.” — Ellie Rennie, Julian Thomas and Chris Wilson, RMIT University, 2019

Alongside digital literacy programs should be put in place to manage the risks associated with online participation, especially for those who are not familiar with cyber security, cyber bullying and online content not suitable for children. Precautions should be put in place to ensure the First Nations children who are new to the internet are not exposed to online child exploitation. Online predatory behaviour will be a continuing threat for children as they become more reliant on internet for education access and a way of life. There must be targeted education programs for both parents and children on the risks.

Technology can help First Nations students learn in language
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Part 3

Recommendations

Addressing the Digital Divide should not be a question of “if” but “how fast”. In 2021, online access and digital inclusion are a necessity for all Australian students, not a luxury. Australian governments should work urgently with the private sector and First Nations communities to ensure all students – especially the most vulnerable – have access to the digital tools and resources that they need for their education. This will help ensure First Nations students can access the same education opportunities and resources as other Australian students who have ready access to the equipment and home environment to support their learning.

COVID-19 triggered steps in the right direction to close the Digital Divide, and these initiatives should be built upon and accelerated. Local efforts, while important, are not enough to address the systemic barriers and challenges associated with closing the Digital Divide. That is why we are recommending the following four actions be taken as a priority to accelerate digital inclusion so First Nations students can benefit from the education opportunities of online learning.

Recommendation 1: That the Australian Government develop a First Nations Digital Inclusion Strategy, in consultation with First Nations communities and Aboriginal Education Consultative Groups, to ensure all First Nations students have access to the digital tools and resources they need for their education.

What is needed is a coordinated, national approach to ensure no one is left out of Australia’s digital future and that First Nations students are prioritised in all efforts to close the Digital Divide. This should involve a national strategy backed by funding, resources and a commitment to work across sectors and geographies to address the digital inclusion gap for educational equity.

This strategy should be informed by the Australian Digital Inclusion Index and other initiatives to monitor gaps in access to the internet and digital assets across First Nations communities and different settings (urban, rural and remote). The Australian Education Union has recently called for the Australian Government to conduct a ‘digital equity audit’ to determine the impact on students of a lack of access to the internet and digital resources. This would be a strong first step to inform the recommended strategy.

Recommendation 2: That the Australian Government prioritises First Nations communities in the rollout of its Mobile Black Spot Program to improve mobile phone coverage in regional and remote Australia.

The Australian Government administers the Mobile Black Spot Program to improve mobile phone coverage and competition across Australia’s regional and remote communities. The program is a good example of a cross-sector digital inclusion partnership, as it is funded by the Federal Government with co-contributions from state and local governments, mobile network operators, businesses and local communities. In future funding rounds, this program should prioritise fixing black spots in areas with a large proportion of First Nations students. As mentioned earlier, First Nations households especially rely on mobile data and so improving mobile coverage, speed and reliability is an important step for many First Nations students.

Recommendation 3: That closing the Digital Divide be considered as a dedicated target in the Closing the Gap agreement given its importance for closing other gaps, especially in First Nations education and employment.

Closing the Digital Divide deserves to be elevated to a dedicated target in the national Closing the Gap agreement due to its intersectionality with a range of other issues, such as First Nations education (accessing online learning materials), First Nations health (access e-health services and health information), and First Nations employment (accessing e-commerce opportunities and upskilling programs). Closing the Digital Divide will require all levels of government, First Nations organisations and the private sector to work together, and the Closing the Gap framework provides an opportunity to make this a reality.

Recommendation 4: That the Australian Government explore public-private partnerships to close the Digital Divide by increasing the affordability and access of going online for First Nations students.

As mentioned earlier, closing the Digital Divide is a shared responsibility. The Australian Government should explore a range of ways to work with the private sector to promote digital inclusion and access for First Nations students and households. Opportunities that could be explored include subsidising the cost of the internet and computers for First Nations students, trialling data donation programs with consumers, accelerating the 5G rollout in communities with a large First Nations population, increasing the coverage of Sky Muster to enable internet access via satellites and developing a mechanism for the private sector to donate digital assets to First Nations students. Australian Bureau of Statistics (2016)

Recommendation 5: That the Australian Government fund further research to understand the magnitude of the impact of the Digital Divide on First Nations students’ educational outcomes.

The magnitude of the impact of the Digital Divide on First Nations students and their education needs to be better understood. There is little to no research on the links between online access at home and education outcomes for First Nations students. There is even less research on how this gap in online access has contributed to the education divide that First Nations students face. This information is important to understand the extent of the Digital Divide and its wide-ranging impacts, and to ensure appropriate policy solutions are prioritised and resourced. Research should be commissioned to investigate the impacts and identify further solutions to rectify the problem. That being said, research to better understand the problem should not be used as an excuse to delay work on closing the Digital Divide, which is a no regrets action to improve equity in online access.
References

Daly, A. (2006). Bridging the digital divide: The role of community online access centres in indigenous communities, Canberra, ACT: Centre for Aboriginal Economic Policy Research (CAEPR), The ….
Rennie, E., et al. (2019). “Aboriginal and Torres Strait Islander people and digital inclusion: what is the evidence and where is it?” Communication Research and Practice 5(2): 105-120.