

# Telstra Connected Students

## Lessons for Digital Inclusion



Telstra's purpose is to build a connected future so everyone can thrive, and is committed to addressing barriers that prevent Australians from enjoying the benefits of participating in the online world.

Affordability is a major barrier to inclusion for many Australians, but there are other factors that influence how individuals engage online.

To understand more about the complex issues affecting digital inclusion, Telstra recently collaborated with RMIT University to trial an intervention program – Connected Students – in the Shepparton area of Victoria.

The program provided participating low-income families with a computer device, Wi-Fi router and unlimited broadband connection, and considered the impact this had on their lives, as well as other lessons regarding digital inclusion.

## Summary of Findings

Connected Students found:

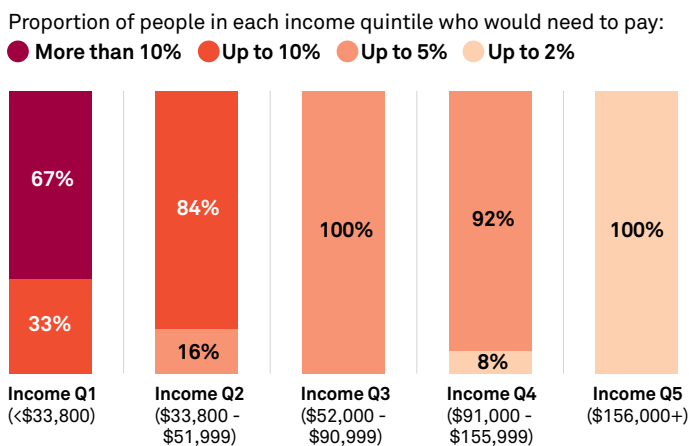
- Access to an **affordable and quality internet service** is critical to digital inclusion.
- Low-income households need plans that provide quality and **reliable connectivity at reasonable price points**.
- Affordability is about more than the cost of connecting to the internet.
- **Suitable and available devices are critical** to digital inclusion.
- **Individual** device access is another element to digital inclusion. Sharing access to devices in households can be impractical.
- Interventions at the individual level can improve **digital inclusion at the household level**.
- Students in **disrupted living situations, such as frequently moving house, have difficulty** accessing a quality internet connection.
- **Digital skills and access to technical support** also impact inclusion.
- Low-income households **prioritise internet connectivity in their spending** – they place a high value on it.
- Affordability barriers are **not limited to the lowest income bracket** or solely experienced by those households.



# Digital Inclusion – Background

Affordability is the greatest barrier to digital inclusion for low-income families with school-aged children<sup>1</sup>. These families spend 5.3% of their household income on internet access each month, compared with the 1.09% spent by families in other income quintiles. The Australian Digital Inclusion Index records that more than a third of low-income households would need to allocate 10% or more of their income to access an ‘internet bundle’ that enables quality and reliable connectivity<sup>2</sup> (see Fig 1)

**Figure 1: How many low-income households would need to pay more than 10% of income for an internet bundle?**



Even this expenditure does not guarantee reliable and easy access. Low-income families are highly reliant on mobile-only access<sup>3</sup>. Where 19.9% of the Australian population are mobile-only internet users, this jumps to 33.5% of low-income families with school-aged children.

Parents in low-income families are also less likely than parents in other income quintiles to have the digital skills required to support their children’s online schooling<sup>4</sup>.

All these aspects – affordability, reliance on mobiles, and technical knowledge – were relevant to families participating in the Connected Students pilot.

1 Ogle, G 2017. Submission on the Productivity Commission Telecommunications Universal Service Obligation draft report. South Australian Council of Social Services, Adelaide.

2 This idealised internet bundle includes a fast internet connection (such as that provided through a cable (HFC) service, NBN 50 or above, or 5G service), an unlimited monthly data allowance, and a mobile broadband or mobile phone data allowance above 61GB per month.

3 Ogle, G & Musolino, V 2016. Connectivity costs: Telecommunications affordability for low income Australians. ACCAN, Sydney.

4 Flack, CB, Walker, L, Bickerstaff, A, & Margetts, C 2020. Socioeconomic disparities in Australian schooling during the COVID-19 pandemic. Pivot Professional Learning, Melbourne.

# Pilot Overview

The Connected Students program was conducted in Shepparton, a regional city in Victoria located 180km north of Melbourne. Shepparton is an area with low levels of digital inclusion and many low-income residents.

The study households already understood the need for an internet connection, particularly for their children’s schooling and future. Before receiving the kit, many of the households in our study already prioritised internet access in their household spending to the best of their ability, including over essentials such as food.

**“It depended on how much work we both had each month and what money was available. I mean, we always - it sort of came before the food and everything else.”**

The program team asked participants to describe the routines and dynamics of their household; the costs and other barriers associated with connectivity and how they navigated these; the impact of these barriers on their lived experience; the impact of the Connected Students kit for them and their household, including education, financial and social impacts; and their decision-making processes around digital access and device acquisition.

## Connected Students Cohort

**63 households** and a total of **183 individuals** participated.

### Of the 63 households:

- 7 identified as Aboriginal and/or ATSI
- 21 identified as CALD
- 14 had at least one resident with a long-term disability or health concern
- 36 received government pensions or benefits
- 13 were one-parent families
- Average household size was 4.73 people, but ranged from 2-11

### Housing status varied across the sample:

- 4 owned the home outright
- 20 were paying off a mortgage
- 14 rented from a private landlord
- 5 rented from a public housing authority



## Key financial barriers

Upfront costs of devices, lack of household savings, and fees associated with acquiring devices through payment plans were all key financial barriers confronting participating households.

More than half (59%) of participating households had an existing internet connection prior to Connected Students, but these connections varied in their suitability. Some (6%) had less than 10GB per month on their household internet plan, and 16% reported regularly exceeding their data allowance.

The pilot had an immediate effect on affordability – 21% of the participating households strongly agreed and 32% agreed that the Connected Students kit reduced the pressure on their household budget.

**“[Studying online] would have been a lot harder [without the kit] because I would have been using the hotspot off my phone. Whereas having the Connected Students kit... I’m not going to have to worry about the internet connection.”**

Participant families also reported an improvement in digital inclusion across the household, citing increased time to engage in online activities (including learning), and increased funds available to direct towards devices and mobile internet services for other household members. Without the support, many families spoke of the challenges of siblings sharing devices.

**“It’s made it a lot easier...you know how slow it [the internet] gets when it gets down to the last couple of percent [of data allowance]? That just used to do my head in. And the tension over the phones, the arguments over data usage, who’s doing what...the same in every house. It’s just stopped one level of stress, which has been really good.”**

The individual device use enabled by the program also allowed students to do schooling activities in more private areas of the home, reducing distractions.

More than two-thirds of participating students (69%) agreed that receiving the Connected Students kit helped them to continue their schoolwork during COVID-19 school closures and restrictions.



## Devices are critical to digital inclusion

Digital inclusion initiatives that only provide internet connections will be of limited use for people who lack devices. Prior to the Connected Students program, many of the students were attempting to do homework via their older model smartphones, were sharing one computer with many other family members, or were needing to travel to use library computers.

Some participants commented that school-based ‘Bring Your Own Device’ policies are aimed at late primary school or early secondary school years, and that by the time students reached higher years, their personal devices were broken or obsolete. Participants also reported that the availability of school-provided devices was inadequate. Beyond high school, households and students saw the need to provide their own device as a potential barrier to postsecondary pathways, influencing their perspectives on higher educational and career choices.

Digital inclusion requires access to an up-to-date device of an appropriate type and capacity.





## Digital skills and technical support also impact inclusion

Participants had limited knowledge about how to troubleshoot issues or maintain the functionality of devices. This showed the importance of technical support in achieving digital inclusion.

Support could include guidance on maintaining devices, training or advice around troubleshooting problems, directions for accessing technical support for more challenging issues and access to services for repairing broken devices.



## Impact at the household level

Families described the program as having a range of benefits for the wider household. Households were better able to manage and allocate resources, including money, time, devices, data, and spaces within the home.

Money that would have been spent on a laptop or connection could be redirected to other necessities. Parents did not need to choose between purchasing a device or extending connection. It also reduced conflict between family members over device and data usage and eased pressure on family schedules, for example by removing the need to travel to locations where free public Wi-Fi or device access was available.

The provision of an additional device combined with the improved connectivity enabled some students to complete schoolwork in quiet spaces of the home, such as their bedroom, rather than having to use the family desktop which was generally located in busy shared spaces. The kits were also used by other household members – for work, study, and accessing government services – thereby supporting education, skill development, and income generation for the whole household.



## Disrupted living situations require particular thought including mobile access

Household internet connections are interrupted when financial pressures mean the bill doesn't get paid, or credit cannot be purchased. Some students described disrupted living arrangements, including moving to a new house, living between homes, and becoming estranged from parents. Having the mobile Connected Students connection that moved with them helped minimise disruption to their education and connections to essential social networks. Although often considered inferior to wired connections, quality and reliable mobile connectivity presents an opportunity for digitally including low-income students.

The Connected Students pilot was conducted by researchers from RMIT University with support from Telstra. Further details regarding research methods and sample can be found [here](#).

Kennedy, J., Holcombe-James, I., Mannell, K., Boyle, E. (2022) 'Telstra Connected Students: Lessons for Digital Inclusion', RMIT University and Telstra, Melbourne. 12 October 2022.

