The low-income families digital divide

Digital Inclusion is Everybody's Business

Key Findings from the ARC Linkage Project Advancing digital inclusion in low-income Australian families

Research Team

Professor Michael Dezuanni, Queensland University of Technology
Professor Marcus Foth, Queensland University of Technology
Dr Jenny Kennedy, RMIT University
Dr Amber Marshall, Griffith University
Professor Anthony McCosker, Swinburne University of Technology
Professor Peta Mitchell, Queensland University of Technology
Associate Professor Tanya Notley, Western Sydney University
Dr Kim Osman, Queensland University of Technology
Dr Julie Tucker, Swinburne University of Technology
Aimee Hourigan, Queensland University of Technology & RMIT University
Dr Jasbeer Mamalipurath, Western Sydney University
Dr Jane Mavoa, RMIT University
Dr Abdul Aziz, Queensland University of Technology & Western Sydney University
Dr Alexia Maddox, Swinburne University of Technology
Anne Hampshire, The Smith Family
Dr Marion Byrne, yourtown

Citation

Dezuanni, M., Osman, K., Foth, M., Mitchell, P., McCosker, A., Notley, T., Kennedy, J., Marshall, A., Tucker, J., Hourigan, A., Mamalipurath, J., & Mavoa, J. (2023). *Digital inclusion is everybody's business: Key findings from the ARC Linkage Project Advancing digital inclusion in low-income Australian families*. Brisbane: Digital Media Research Centre, Queensland University of Technology.

Contact

Digital Media Research Centre
Queensland University of Technology
Creative Industries Precinct, Musk Avenue
Kelvin Grove, QLD 4059 Australia

dmrc@qut.edu.au
research.qut.edu.au/dmrc

This document is intended to be read in conjunction with individual community digital inclusion profiles that form part of **The low-income families digital divide series** that can be found at qut.to/bctvy. For more information on the research project contact the DMRC via the details above.

Project Overview

The Australian Research Council Linkage Project (2021-2024), "Advancing digital inclusion in low-income Australian families" focuses on the digital inclusion impacts on children's home and school learning experiences, school leaver's transitions into work, and parenting in digital times. It is a collaboration between Queensland University of Technology, Western Sydney University, Swinburne University of Technology, RMIT University, Good Things Foundation, The Smith Family, yourtown, Infoxchange and the Digital Literacy Foundation.

The need for this research project was apparent before the COVID-19 global pandemic, with many low-income families struggling to afford the digital devices and connections necessary to fully participate in the digital economy and society. The pandemic served to highlight the disparity in access and affordability for those people who already experience daily intersecting dimensions of disadvantage.

Research teams from each of the four universities have been working with 30 families living in six communities around Australia over the last three years. Through ethnographic research with each family, and interviews with personnel from community organisations in the local area we have developed a comprehensive evidence-base that outlines the key issues that affect the digital inclusion of low-income Australian families.

This engagement in communities, over time, has led us to conclude that efforts to address digital inclusion in low-income families need to be collaborative, and shared between multi-level stakeholders as digital inclusion is everybody's business.

Digital inclusion and the digital divide

Our research approaches digital inclusion as a complex issue with intersecting factors that affect a family's levels of inclusion. The term "divide" can position people as either "haves" or "have nots" on either side of this divide. The term divide acknowledges that while gains have been made especially in relation to access and affordability, there is a deepening gap between those who are digitally included and those who are at risk of being left behind by the digital economy.

Our research focuses particularly on income as a determinant of digital inclusion recognising that low-income status affects several areas of a person's life. We have gained many insights into families' lived experiences of digital exclusion and note that family members' ability to be resilient and respond to their exclusion is highly dependent on their personal circumstances. A major challenge for low-income families as they aim to participate in the digital society is the precarious position they are often in with regard to housing, employment and access to health services. The digital divide, then, is not just a technological divide, but is made complex by social and economic disadvantage.

Key Findings: Families

Families are resilient problem-solvers, but hard decisions have to be made

Digital devices and connections are considered essential by low-income families, but affordability is a major issue. Cost of living increases mean families often must choose between digital connections and other necessities like groceries. Parents and caregivers often self-sacrifice or take on extra work that can put a strain on the family. Household access to technology is frequently insufficient for family needs. Families' devices are often second hand, and broken devices may stay broken due to the costs associated with repairing them. Families sometimes find DIY solutions to technical problems via YouTube videos or help from other family and friends. Many of the project families were mobile-only and chose pre-paid plans due to their flexibility, despite these often costing the family more when compared to fixed-line connections.

Technology is critical for education and lifelong learning

Connected devices that enable learning, participation and connectivity at school are essential for students. There is great variation in how schools provide technology for classroom use and how digital skills are taught. This inconsistency is an issue across the country and has a significant impact on learning outcomes for low-income students. Most parents and caregivers recognise that technology is important to education, and they do not want their children to be left behind due to lack of access to devices and data. Without access to appropriate devices and quality connections, young people struggle to develop the skills needed for transitions to higher education and work. Access issues also lead to difficulties with home-school communication. Low-income families are often challenged by the need navigate different apps, platforms and digital channels for home and school communication.

Connectivity and access to devices improves learning and positive outcomes for families

Laptops provided to families are valued and make an important difference to children's, parents' and caregivers' ability to learn. Access to an appropriate device and stable internet connection makes it possible for students to complete their schoolwork at home, in an environment that is conducive to learning. In addition, parents and caregivers with a fixed-line connection at home often seek out online learning opportunities for themselves, as the flexibility allows them to balance existing work or caregiving commitments. Families without devices and connections at home make use of free Wi-Fi available in their community through places like the library, community centres, shopping centres and fast-food outlets.

Families also use community centres or libraries to access the internet, devices and quiet spaces for learning, and to complete everyday tasks such as applying for housing and jobs. Lack of connectivity reinforces disadvantage for low-income families. For instance, mandatory participation in online skills and retraining programs linked to ongoing entitlement to government benefits is difficult without an appropriate device and data, and particularly when course content is video-based.

Children, families and communities experience digital inclusion in complex ways

The experiences of low-income families are varied but they face some common challenges. Family members' ability to take advantage of access to digital technologies may be impacted by learning difficulties and deficits, school attendance and exclusion, and disability. Precarity is common for families, and insecure housing has a disproportionate impact on levels of digital inclusion. Low-income family accommodation often lacks a stable internet connection and adequate spaces for learning and quiet work. The low availability of social housing and the unaffordable and unstable private rental market affect families' ability to afford appropriate devices and connections. These issues are compounded in low-income families as underemployment and unemployment are common, and it is not uncommon for family members to experience chronic and multiple health issues. Family violence plays a role in some families' digital experiences and the impact of trauma may affect families' levels of engagement with digital technologies and connections.

Parenting and caring approaches impact digital inclusion

Parents' and caregivers' literacies, along with values, attitudes and approaches to technology and digital media impact their children's opportunities and experiences. This includes parents' and carers' concerns about the potential risks of social media, including mental health impacts and bullying, and issues such as screen time, surveillance and hacking. The uncertainty related to online safety and scams also shapes families' use of digital technologies. Tensions are sometimes evident when children move between different households where family rules differ and children's access to connections and devices differ.

Digital engagement with social, community and government services is varied

The turn to 'digital by default' has direct, but different consequences for families. As services withdraw from some areas (particularly rural towns) and then rely on digital service provision, some digitally excluded families struggle to access support. Some families are unaware of the services available in their community to support them. Some people rely on one local organisation because they distrust government services and others find it difficult to navigate between paperwork, documents and digital portals. On the other hand, digital services offer a convenient way for some families to access support, when they face other barriers such as lack of transport or caregiving responsibilities. These families were adept at managing everyday tasks across a variety of digital platforms including myGov.

Cultural, creative and social activities drive digital participation

Families use digital technologies in a range of creative ways. One of the biggest drivers of digital engagement for children and young people is gaming. Children reported using local libraries with PCs to play online with friends, and gaming consoles handed down from other family members to play at home. For some families the Smart TV, has a crucial role in intergenerational digital engagement and learning. Social media platforms also provide opportunities for family members to connect with each other, friends and their local community. Some families use these platforms to seek out free family activities, competitions and offers, while others use digital platform to create additional income via selling their own products online and buying and selling second hand goods.

Key Findings: Communities

There is little capacity within local organisations to deal with digital inclusion issues

For many local community organisations, digital inclusion is not a core service or a priority, even though it has workload implications for their staff who are often called on to do frontline tech support. Community organisations are often already stretched providing support to families during the concurrent cost-of-living and housing crises. Some local organisations look for ways to improve the digital literacies of the people they work with, often through small grants. But available grants are often ad-hoc, not fit-for-purpose, unsustainable and create additional administration.

Libraries and community centres play a central role in supporting families' digital inclusion, but the location of services matters

Libraries and community centres are often safe spaces that provide families with access to devices and connections, and sometimes dedicated digital inclusion programming. However, digital inclusion programming is often targeted at seniors rather than children, teens transitioning to higher education or work, or parents and caregivers. Free public Wi-Fi in libraries and community centres is one important point of connection for low-income families. Young people often use free public Wi-Fi outside community buildings rather than venturing inside unless something entices them, such as targeted programming or facilities. However, in some communities, the library or community centre is poorly located, transport is a barrier, opening hours are limited and the building itself may not be accessible or inviting to all, limiting its use by low-income families.

A lack of digital connectivity, devices and digital ability is a persistent issue for community-based organisations

Community organisations report a persistent misconception (from digital service providers including government agencies) that the people they work with have the devices, data and digital ability to access and use essential services. Problems occur when online government portals aren't optimised for mobile use, older devices and operating systems, or rely on high volumes of data (for example, video-based telehealth appointments). Digital service providers often presume the existence of a digital inclusion safety net such as free Wi-Fi at shopping centres, or internet-enabled devices in public places like libraries or Centrelink offices. However, these resources are not always available to people. In addition, they are not useful without the appropriate personal support to help people to use digital services in cases where they have low literacy, low English proficiency or low digital literacy. This presumed digital inclusion safety net is not cheaper, easier, nor appropriate for the most excluded groups who rely on community organisations to access one-on-one support to address immediate needs.

Very few digital literacy programs are designed specifically for children, teenagers, parents and caregivers

Existing digital ability programs tend to be for seniors aged over 65 (for example, Be Connected, Tech Savvy Seniors). There is a general mismatch between low-income families' needs and community providers' current programming and resources. Young people report a need to gain skills in basic office programs like presentation apps or word processing, and employment services report a lack of digital skills as a barrier to employment for school-leavers. Community organisations also report an emerging need for digital literacy programming for 20 to 40-year-olds and emphasise the importance of parents and caregivers being able to transfer digital literacies and skills to their children. Digital skills are embedded in some face-to-face programs aimed at improving transitions to work and parenting skills, and organisations report that general programs like these attract frequent engagement. This suggests digital skills and literacies can be gained by embedding them into these types of programs.

Communities rely on Facebook to circulate vital information

Without local and regional newspapers, community organisations rely on social media, in particular Facebook, to communicate essential information to community members. This presents several problems for low-income families and the organisations themselves who are trying to support them. First, it relies on the assumption that everyone has access to Facebook and chooses to use it. Second, families and community organisations report inconsistent circulation of community information – for example messages posted on the community centre page, but not on the local group page. Third, important messages can get lost in crowded Facebook feeds, or not pushed out to people at all due to how the Facebook algorithm works. Some community organisations report using other social media services like Messenger and WhatsApp to keep in touch with clients who may struggle to access a device and keep the same phone number.

Regional and rural towns face specific digital inclusion challenges

Despite the advances made in connecting regional and rural towns to the NBN, connectivity infrastructure is still a challenge for these communities. Regional towns are faced with reduced revenue due to a low rates base as compared to larger metropolitan areas. Local government often focus on "roads, rates and rubbish" and transport infrastructure that make prioritising digital inclusion difficult. In smaller towns, community networks and interpersonal relationships can make or break and reshape collaboration and service provision and coordination.

Trust and interpersonal relationships are necessary to improve digital inclusion

Organisations reported that building trust with service users is essential. Getting to know families means community organisations understand the complexity of digital inclusion needs and barriers they face and can better connect them to the support they need. However, staff turnover in organisations is a significant barrier to building trust, as is families' concern with being overly surveilled by the government. This is particularly an issue for newly arrived migrants from humanitarian and refugee backgrounds who face additional language barriers to accessing digital services. While websites may be translated or resources available in different languages, information about the process of navigating different online portals is not, resulting in parents and caregivers becoming lost and left without social support.

Recommendations

Digital inclusion is everybody's business

There is no current "digital inclusion safety net" supporting low-income families. Improving digital inclusion for low-income families requires coordination and collaboration between a variety of stakeholders including community organisations, schools, universities and local, state and federal governments. In addition, digital inclusion must be seen as a whole of government responsibility and not just an economic issue as it impacts families' ability to access services, education, health, housing and employment. It also plays a role in compounding issues such as mental health, wellbeing and family violence.

As the Australian government strives to make all government services available digitally by 2025, local, state and federal governments have a responsibility to ensure that low-income families, and the organisations that work with them, are properly supported.

1. Low-income families should have access to affordable pre-paid products (including mobile and fixed line broadband)

As affordability is still a key barrier to digital inclusion for low-income families, appropriate, reliable low-cost home internet connectivity should be made a priority for families with school-aged children. Families are hesitant to sign up for ongoing contracts and many low-income families prefer the flexibility and certainty of pre-paid plans. Therefore, low-cost solutions should include pre-paid products.

Devices and connections provided to low-income families should be appropriate and fit-for-purpose. Efforts to provide devices and connections to low-income families need to be responsive to each family's needs and future requirements. Families' preferences for affordable pre-paid and/or mobile connections may need to take precedence over contract-based broadband and fixed line solutions.

2. Communities and organisations must invest in capacity to provide just-in-time support for families to access technology and digital services

Governments and organisations need to build capacity within communities to respond to ad hoc requests for support. This will require investing in professional development for community organisations and local government staff. Government and organisation should also recognise the time staff and volunteers spend supporting low-income families to access services and complete everyday digital tasks. There should be greater recognition and investment in the role libraries and community centres play in supporting families' digital inclusion.

3. Community-based organisations should collaborate to advocate for increased resourcing to support low-income families' digital inclusion

Community organisations are likely to be more successful in supporting digital inclusion if they collaborate to share resources and avoid duplication. Creating a community digital inclusion plan that includes different stakeholders is recommended as a viable way to work toward shared outcomes.
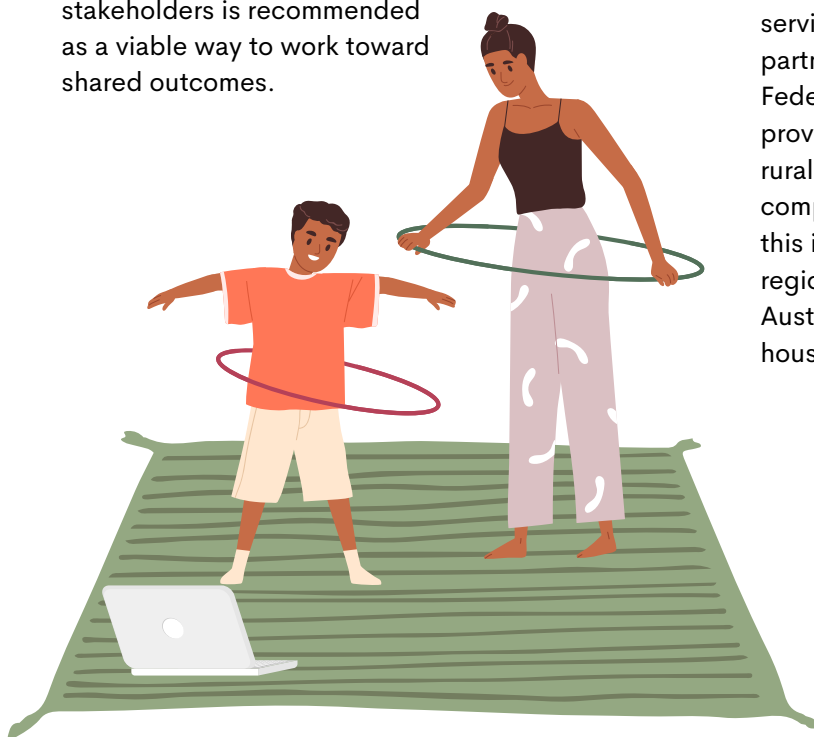
4. Educational authorities and policy makers should develop policy and guidelines for the provision of school technology to low-income students

Currently, decision making about technology provision is devolved to the local school leadership leading to very little consistency for low-income students. Policy and resources for fair and equitable provision of technology to students need to be developed at state and federal levels to support school leaders to make fair and just decisions and to create more consistency across schools.

5. Expand the range of consumer information available through agencies like ACCAN and increase consumer awareness of affordable telecommunications products

Advice on affordable and appropriate connectivity should be extended nationally, and more attention should be paid to the marketing practices of internet and mobile service providers. The Regional Tech Hub, in partnership with the National Farmers' Federation and ACCAN, has been set up to provide independent advice and help people in rural, regional and remote areas to navigate complex phone and internet products. While this initiative offers welcome support in regional and rural areas, these issues affect all Australians, particularly low-income households, including in urban areas.

6. Investment needs to be made into designing and delivering digital inclusion programs for families and young people

There are few dedicated community-based digital ability programs available to low-income families. Low-income students require the opportunity to develop basic digital skills; school-leavers need access to programs as they transition into further education and work; and low-income parents and carers need access to programs about supporting children in the digital age. Programs like 'Be Connected' for seniors may serve as a model for national program development for low-income families.

7. Digital service delivery platforms must be accessible for the most digitally excluded people

Governments and service providers must appropriately design digital service delivery platforms for the most digitally excluded people including low-income families, people from culturally and linguistically diverse backgrounds and those living with a disability. This should include a trauma-informed approach to digital service delivery that means families do not have to retell their stories but can also have agency over how and when their story is shared.

8. Funding for digital inclusion programs and activities needs to be fit for purpose and sustainable

Funding for digital inclusion programs and activities needs to be sustainable beyond short periods of time, recognising that despite advances in digital inclusion nationally, digital divides for the most excluded groups are deepening. Available funding programs often do not provide flexibility to meet local needs.

9. Rural and regional towns need support to meet the digital inclusion needs of low-income families, recognising the resource constraints often experienced by these communities

Many local councils cannot meet the digital inclusion needs of their communities without support from state and federal governments. The low rates base of many rural communities precludes them from resourcing digital inclusion efforts. While the focus has previously been on connectivity for regional, rural and remote areas of Australia, a more holistic approach to digital inclusion that encompasses affordability and digital ability training needs to be supported.

10. Essential community information needs to be well-planned and communicated across a variety of digital and non-digital platforms

Information should not only be channelled through commercial social media platforms and investments need to be made in communication strategies that ensure essential information is available across a variety of different digital platforms. This is particularly true for communities where traditional local media such as newspapers no longer exist.

The low-income families digital divide