How wide is the divide?
Assessing digital inequality in Knowle West

From the University of Bristol:
Dr Claire Lee, Dr Artemio Cortez Ochoa,
Carolina Valladares Celis, Professor Susan Halford,
Dr Helen Manchester, Dr Faranak Hardcastle

From Knowle West Media Centre:
Carolyn Hassan and Lorraine Hudson
About the research

In partnership with Knowle West Media Centre, researchers from the Bristol Digital Futures Institute co-designed and sent questionnaires to 5,500 households in Knowle West – an area of Bristol in the Filwood ward that features highly in the government's multiple deprivation indices.

As well as investigating how COVID-19 shaped patterns of digital exclusion, the survey aimed to uncover the reasons for it too. Are the main problems affordability, skills and confidence, perceived relevance to life, or something else? And are these problems different for different social groups?

The survey responses from our work with Knowle West Media Centre have been combined with insights and interviews conducted by researchers at the University of Bristol School of Education. By bringing our studies together, we aimed to gain a richer understanding of the patterns and processes of digital exclusion.

This research provides the evidence base needed to improve education, employment and health outcomes, allow policymakers to take effective, targeted, local action, and enable Knowle West Media Centre to redefine its digital strategy to address the issues our study reveals.
Key policy recommendations

This report demonstrates that digital inequality impacts life chances, quality of life, social inclusion and participation – challenges that will persist beyond short-term lockdowns – and Bristol needs a joined-up, coherent and ongoing policy response. That policy must recognise the specific challenges for different communities across the city.

- Take a community-based approach to digital skills and confidence-building that responds to concerns about online safety, protecting personal data, and knowing when to trust online information.
- Make it compulsory for providers to offer lower-priced tariffs to low-income customers without compromising on internet speeds.
- Rapidly identify children without adequate digital resources. Publish response times for providing high-quality devices and ensure robust access to high-speed internet, data and free printing services.
- Extend free, fast and secure WiFi to suburban neighbourhoods.
- Acknowledge that social and technical innovation occurs in communities and should be supported, trusted, and funded at the city level.
- Adopt a joined-up policymaking approach to digital disparity, recognising it’s part of a wider web of inequalities.
- Create an ongoing map of connectivity across the city, identifying poor-connectivity areas for priority intervention.
- Help regenerate struggling community-based resources and initiatives, reducing reliance on crisis solutions, such as food banks.
- Ensure that improving fibre-optic infrastructure is a condition of planning approval for new developments.
- Invest in further research to: 1) explore key findings from Knowle West and understand how circumstances have changed for residents since the original survey; 2) build a city-wide picture of digital inequality by extending the reach of this survey.

Awareness of digital inequality has never been greater than it is today. Now is the time to mobilise communities, government and business to promote inclusive, prosperous, sustainable futures for all.
A complex picture

Through our interview data, we found evidence of how people experiencing multiple inequalities – low income, precarious employment, health conditions, food poverty, educational inequalities and more – are further hindered by digital disparities, particularly as access to vital services and information increasingly shifts online. The COVID-19 pandemic has compounded these disadvantages, including by cutting people off from their support networks.

That complexity is a theme of our survey findings too. There are few easy generalisations to be made about digital inequality in Knowle West: household internet connectivity is high, older people appear to be mostly online, and for the large part, the internet is a valued resource. But when findings are stacked on top of each other – COVID-related job losses, limited availability of digital technology, cost pressures, access to school work and inconsistent digital skills and confidence – the potential for inequality is revealed.

We conducted our study during England’s first COVID-19 lockdown. 275 households responded in the period May – June 2020, representing 885 individuals. Of those in employment pre-lockdown, 11% were no longer employed by June. The majority of that decline consisted of people who became unemployed (8%) rather than furloughed (2%). But the internet played a part in maintaining some employment.

“I wouldn’t have been able to work from home without it and could have lost my job.”

“Due to being on benefits, I can’t afford to pay for broadband at the moment.”
Is all access equal?

Almost 93% of households in our survey had internet access. However, over half of respondents reported having only one type of internet, usually broadband, which may limit the range of activities they are able to carry out online. Twenty-four homes, 11%, had no internet devices at all and the same number had only one. Of those homes without internet, more than half supported people aged over 75. Yet, our survey found far more of Knowle West’s over-55s were online than might be expected.

We found that internet speeds weren’t significantly affected by lockdown. However, some people did express concerns about speed and reliability in general, particularly those caused by users accessing the same connection.

Another common complaint was the cost of access and technology. Many felt internet connections were too expensive, sometimes prohibitively so, particularly given the bundling of broadband services with TV and landline by suppliers.

“Everyone at home wants to use the internet at the same time and it’s causing slow speed.”

“They offer amazing opportunities to level up our society, but they are still too expensive.”

“My internet is very slow even after three home visits and new equipment installed.”
For most people, smartphones tended to be more prevalent and newer than other devices, such as laptop and desktop computer. As responders noted, this can bring about differences in access equality even when a household has internet connectivity.

Whilst 94.5% of Asian or British Asian respondents in Knowle West did have access to the internet, 94% said they did not have access at home. This is in stark contrast with the number of Black or Black British (14.3%) and White (18.7%) respondents lacking home internet access. Further research is needed to explore where these individuals did access the internet and to understand the implications of no home access.

“There’s limitations on what you can do on a smartphone if you’ve got to fill in forms or access new Universal Credit stuff.”

“If you’re a family with four kids and you say, ‘Yes I’ve got access to the internet’, but it’s one phone. That’s no use.”
Figure 1: Factors for no internet access compared between Oxford Internet Surveys 2019 and Knowle West community.
Figure 2: Amount of household internet devices
The uses of digital technology

Perhaps unsurprisingly, entertainment, socialising and shopping were the main reported uses of the internet, although, for the majority, their internet time wasn’t limited to these three spheres. Other stated uses included working, learning, accessing information and healthcare.

The first COVID-19 lockdown brought into sharp relief the need for internet-enabled equipment for children to participate in school work. A significant number of households (108) required technology and connectivity for this purpose, yet over half that number reported having insufficient devices to do so.

“All of our entertainment also comes from the internet, so we would have been bored and cut off without it.”

“I study karate and it has continued online using video and Zoom.”
“Lots of young people are sharing bedrooms with their siblings, they’re in a small house. Not everyone’s lucky enough to have a spare room that they can set up as their office...It’s all linked. Yes you may have a device but do you have headphones to be in a quiet space? Do you have to share the device? How long do you have the device?”
A small minority of respondents didn’t use the internet at all, and they tended to cite confidence, skills, privacy, security and cost as barriers to participation. In fact, overall, we found that Knowle West survey participants were four times more likely to express concerns about security, privacy and the trustworthiness of information than a recent national study. Older respondents added that accessing the internet wasn’t necessary or that disabilities presented an issue.

Wellbeing and safety were recurring themes in people’s attitudes. Some said that the increased amount of time spent online affected their mental and physical health, although others highlighted the benefits of the internet, particularly during lockdown, to support mental health through entertainment and social engagement.

Respondents were positive about the influence of online activity on children’s education and future employment opportunities but were also concerned about how much time children spend on digital devices and their potential exposure to online abuse. Indeed, our participants wished for a safer internet experience for everyone and stated a hope that technology would play a vital role in solving big, societal issues, such as healthcare, the environment, education, misinformation and improving the quality of life of older, vulnerable and disabled people.

“Screen time increases and I am sitting down more often - giving me migraines & back issues.”

“Good for the younger generation but not us. Too old to care.”
"I've found keeping in touch with people extremely important at the moment, especially because I live alone and work for the NHS. It's been a really weird and stressful time, I don't think I would've been able to cope without contact with family and friends."

"My hope is that we are left feeling that our personal data is not abused. Safety is paramount for most people, security needs to be improved in all areas. Being able to trust in internet providers. Being able to tell fake news from truth."

"Temptation to constantly check news updates. This can sometimes be very distressing and creates further worry and anxiety."

"I feel there is either a risk of being scammed with increased use of the internet and a high risk of personal information being misused."

"I hope that the younger generation don’t come ultra reliant on technology at the expense of experiencing life in the real world."
Further information

For project reports and updates, visit:
bristol.ac.uk/bristol-digital-futures-institute/research/covid-digital-inequality-kwmc

To find out more about the Bristol Digital Futures Institute:
bristol.ac.uk/bdfi

To find out more about Knowle West Media Centre:
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Contact the researchers

Professor Susan Halford
Academic Co-Director
susan.halford@bristol.ac.uk

Dr Helen Manchester
Reader in Digital Inequalities and Urban Futures
helen.manchester@bristol.ac.uk

Carolyn Hassan
Chief Executive Officer
carolyn@kwmc.org.uk

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