Poverty and social exclusion: Review of digital exclusion

Background

The Wales Centre for Public Policy (WCPP) was commissioned by the Welsh Government to conduct a review of international poverty and social exclusion strategies, programmes and interventions. As part of this work, the Centre for Analysis of Social Exclusion (CASE) at the LSE was commissioned to conduct a review of the international evidence on promising policies and programmes designed to reduce poverty and social exclusion across twelve key policy areas. This briefing summarises the findings on digital exclusion.

Introduction

Digital inclusion facilitates access to services that impact positively on health, employment, education, and housing. Exclusion from, or even partial access to, the digital realm can thus be a source of economic and social inequality.

Ten percent of people in Wales were classified as digitally excluded in 2020 (meaning they have not personally used the internet in the last three months), down from 19% in 2015. Levels of digital exclusion are higher for more deprived households, older people and those with lower levels of health.

Digital exclusion hinders people's ability to participate in social relationships and the economic, social, cultural or political activities available to the majority of people in society. Without improving digital inclusion in an increasingly digitalised world, the digitally excluded will be increasingly marginalised and left further behind.

Evidence of policy effectiveness

Although knowledge gaps remain, there are clear indications that policies need to address physical access to information and communication technologies (ICT), data poverty and digital literacy. This review therefore focuses on access to devices and connectivity and digital literacy.

> **While affordability is a key element relating to digital access, successful programmes require a holistic approach and must tackle other aspects related to motivation, skills and training.**

Access to devices and connectivity

Policies tackling digital exclusion originally focused primarily on access – especially physical access to equipment and technological infrastructure. Since the mid-2000s, however, skills and usage have been growing in importance as key policy areas and attention has turned more recently to 'data poverty' and connectivity.

A range of initiatives in high-income countries have seen governments committing substantial funds to expand infrastructure (e.g. to support and widen coverage of high speed broadband). However, expanded availability does not

automatically translate to adoption and access to devices and connectivity remain critical issues for some disadvantaged groups.

Libraries and other community organisations have been shown to fill the gap between low home adoption and high demand for access to technology and connectivity. In a number of countries in Europe and in the US, libraries play a range of roles to foster digital inclusion, including offering training and providing tailored individual help (e.g. for job applications and access to public services), and running communication and outreach campaigns. This expanded role, however, requires sufficient resources, for instance to adapt service provision to users' needs (e.g. in terms of opening hours) and to train support staff.

One way of increasing home access to devices and connectivity is through the use of demand-side subsidies which attempt to expand adoption by making ICT more affordable for disadvantaged groups. Some governments (e.g. Greece, Italy, US) have introduced schemes to support low-income families in accessing broadband services as part of their Coronavirus pandemic response. For example, the Emergency Broadband Benefit in the US provided a monthly discount towards the cost of broadband services to eligible disadvantaged households, made available through the Federal Communications Commission.

More recent work on the 'digital divide' has emphasised the need to distinguish between those who have access to the internet on mobile devices, those who have broadband access, and individuals who have access to multiple devices. Even in countries with high levels of internet access, it is more likely for people with high income and education to have access to several devices, subscriptions and apps (and faster connectivity). People on low incomes and with lower education levels, while rarely entirely unable to gain access, are likely to rely on one device, often a mobile or smartphone. These devices are still inferior in several respects (e.g. storage, speed, dedicated broadband connection) compared to PCs and laptops,

limiting users' ability to learn or work online, for example. This widespread trend has led some researchers to talk of a 'mobile underclass'.

Users' different needs – for instance shaped by stage of life and occupation – also explain preferences for certain devices: these dynamics link differences in digital use to existing socio-economic disparities. Users with higher socio-economic status are consistently found to use the internet in more beneficial ways despite more disadvantaged users spending more time online.

Overall, this literature shows that while affordability of both devices and data is a key element relating to access, and digital adoption is sensitive to price, successful programmes require a holistic approach and must tackle other aspects related to motivation, skills and training or 'digital literacy'. Differences in use are also shaped by relevance to users' needs, including differences in the position of users in the labour market, which digital accessibility alone cannot change.

> **Digital literacy programmes can reduce digital exclusion but there is a lack of high-quality evaluation evidence to help guide 'what works'.**

Digital literacy

Digital literacy, computer literacy or internet literacy refer to the skills and competencies required to operate safely and effectively online. Digital literacy and ICT competence are essential elements of digital inclusion. While digital literacy is typically taught to young people in schools, the barriers to gaining these skills faced by adults, particularly older adults, can be somewhat different. An important element can be overcoming a lack of self confidence in relation to learning new ICT skills. In addition, concerns about online security are also a deterrent.

Expanding adult digital literacy is important for reducing exclusion and marginalisation, particularly for vulnerable adults. With social opportunities increasingly shifting into the digital world, digital literacy is not only empowering – it can also help reduce social isolation. Digital literacy is also key to unlocking widening adult participation in learning and lifelong learning initiatives, as it facilitates flexible learning.

Despite the importance of digital literacy, recent estimates suggest that around 15% of adults in the OECD lack even the most basic computer skills. An estimated 21% of the UK population lacked full basic digital skills (11.3 million people) and 8% (4.3 million) had no basic digital skills based on 2018 data.

To address this deficiency, countries have developed plans to improve digital skills. For example, Hungary has a national development plan which aims to provide digital skills training opportunities to 260,000 low-skilled adults from disadvantaged regions. The EU recently published The Digital Education Action Plan (2021-2027) which offers a long-term strategic vision for high-quality, inclusive and accessible digital education.

During the pandemic when face-to-face training for job seekers was suspended, in countries where online training was available, public employment services were able to continue to provide training (for a select set of skills that is possible to teach online). However, people who are out of work are less likely to be digitally literate. Recent estimates for the UK find that nearly one-third (31%) of unemployed people have low or very low digital capability relative to 19% of people in the workforce, and over one-third of UK benefit claimants were found to have very low digital engagement. Improving digital skills among the unemployed could therefore help increase access to training.

Preferences for how to acquire new digital skills vary by age, with younger people happier with being self-taught or using online information sources than older age groups, and the oldest age group preferring to learn new digital skills from family. Around two-thirds (67%) of adults said they would improve their digital skills if they knew there was support available.

One factor explored in a number of studies is the role of self-efficacy, in particular internet self-efficacy (the belief in one's capabilities to use the internet for particular purposes), in contributing to digital exclusion and differences in digital literacy. Research has found evidence of self-reinforcing relationships, with prior internet experience, outcome expectancies and internet use significantly and positively correlated with internet self-efficacy judgments. Internet stress and self-disparagement were negatively related to internet self-efficacy. Self-efficacy can also be an important factor motivating people to participate in digital skills training programmes.

Promising actions

The review concludes with promising actions to consider in the Welsh context as emerging from the analysis of the international literature:

1. **Access to devices and connectivity**

    -   While affordability is a key element relating to access, and digital adoption is sensitive to price, successful programmes require a holistic approach and must tackle other aspects related to motivation, skills and training.

    -   Differences in use are also driven by perceived relevance to users' needs, which digital accessibility alone cannot change.

2. **Digital literacy programmes** can reduce digital exclusion. However, there is a lack of high-quality evaluation evidence to help guide 'what works'. There is a need to address motivational barriers and literacy programmes are likely to be more successful when linked to a clear need.

About the Wales Centre for Public Policy

Here at the Centre, we collaborate with leading policy experts to provide ministers, the civil service and Welsh public services with high quality evidence and independent advice that helps them to improve policy decisions and outcomes.

Funded by the Economic and Social Research Council and Welsh Government, the Centre is based at Cardiff University and a member of the UK's What Works Network.

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