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## **The Challenges of Digital Exclusion**

**By Stephen J McKinney, Stuart Hall and Kevin Lowden**

During the pandemic, many education systems throughout the world have adopted online learning and teaching or hybrid models during the periods of restricted access to schools and during lockdowns. However, there have been serious concerns about the extent of digital exclusion (or digital poverty) and the number of children who have been affected. UNICEF has pointed out that 1.6 billion children worldwide were affected by school closures and had to continue their learning at home (UNICEF, 2020). However, only one third of children and young people throughout the world have access to the internet at home. This is a global figure and, in some parts of the world, very few children have access to the internet. There is a stark contrast between low and high income countries. In high income countries 87% of the children and young people have access to the internet compared to 6% in low income countries. UNICEF reports that the figure is 5% for children and young people in West and Central Africa. These figures highlight the challenges of the digital and equity gap.

The success of moves by educational systems to online provision is determined by the (1) technology and the technological infrastructure and (2) the skill set of teachers and pupils required to support such a move. This means that the following conditions have to be met. First, devices are regularly available (available at the time when needed) and fully functional. Second, there is regular and uninterrupted access to the internet. Third, the teachers are competent in the use of technology and have acquired skills in the methods of online delivery or hybrid delivery. Fourth, the pupils have adapted to the new modes of delivery.

A very interesting number of resourceful alternatives to online learning and teaching have been used in different parts of the world: radio, television, printed learning packs and phone calls (Schleicher, 2020). A number of countries in Africa, for example Algeria, the Democratic Republic of the Congo and Rwanda, have made extensive use of the more traditional communication tools of radio and television (Kuwonu, 2020; Zatat, 2020; UNESCO, 2020b). There have been particular challenges for children who are refugees as there may be linguistic barriers to online learning and parents may feel ill equipped to support their children (UNHCR, 2020a, 2020b). Many refugee children have experienced serious disruption to their education

in the period of the pandemic and will require considerable support and resources to recommence school education (UNHCR, 2020c)

While much information has been gathered regarding young people and digital exclusion there is less research regarding the digital ‘readiness’ of those charged with educating them. Ongoing research by the NSEE team at the Robert Owen Centre in the University of Glasgow has begun to explore this issue while focusing on the impact of school closure in Scotland during the recent COVID pandemic. Two focus group discussions, involving twenty-two educational practitioners, were conducted in January 2021 and these have revealed that teaching staff may also be experiencing forms of digital exclusion, albeit effects with less obvious impact on their life chances. While many of our teacher informants spoke about the positive opportunities afforded by the development of online teaching and access to digital media that has come about in response to school closures it is also the case that some teachers are feeling they lack the technical skills necessary to fully exploit this new electronic world. Moreover, a number of staff also indicated that they not only lacked the skills to engage to best effect online but that they also lacked either the computer hardware and/or adequate broadband access to engage effectively.

UNESCO has called for the roll out of a serious educational recovery package in January 2021 (UNESCO, 2021). The aim is to set out on a more resilient, green and inclusive trajectory. One of the imperatives is to ‘build resilience to future shocks’. The digital divide must be narrowed and connectivity and electrification extended throughout the world. This means a focus on technology and an opportunity to assess the technology needs of both children and teachers. This is also an opportunity to focus on users. Throughout the pandemic different models of schooling were adopted including home learning for all, home learning for all except the children of essential workers, rotational schooling and hybrid models. Strategies to prepare for ‘future shocks’ include the provision of professional development for teachers to adapt to these different models of remote and hybrid teaching. This can be extended to teacher education and the preparation of teachers for the future.

Kuwonu, F. (2020) Radio Lessons: In Africa schools are closed, but learning goes on. *Africa Renewal*.

<https://www.un.org/africarenewal/magazine/may-2020/coronavirus/africa-schools-are-closed-learning-goes>

Schleicher, A. (2020) The Impact of Covid-19 on Education. *Insights from Education at a Glance 2020*. OECD.

<https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf>

UNESCO (2020a) *The Digital Transformation of Education, connecting schools, empowering learners*.

<https://en.unesco.org/news/new-publication-digital-transformation-education-and-school-connectivity>

UNESCO (2020b) *Learning through radio and television in the time of COVID-19*.

<https://en.unesco.org/news/learning-through-radio-and-television-time-covid-19>

UNESCO (2021) *Time to Roll out Education's Recovery Package*.

<https://en.unesco.org/news/time-roll-out-educations-recovery-package>

UNHCR (2020a) *Supporting Continued Access to Education During Covid-19. Emerging Promising Practices. Issue 2*

<https://www.unhcr.org/5f06d92e4.pdf>

UNHCR (2020b) *Five ways education continued for refugees during Covid-19*.

<https://www.unrefugees.org/news/five-ways-education-continued-for-refugees-during-covid-19/>

UNHCR (2020c) *Covid-19 Refugees' Return to Schooling Guidelines*.

<https://www.unhcr.org/5fdb7e724.pdf>

UNICEF (2020) *How Many children and Young People have internet access at home?*

<https://data.unicef.org/resources/children-and-young-people-internet-access-at-home-during-covid19/>

Zatat, N. (2020) Fighting for an education; How children in the Middle East are learning under lockdown. *The New Arab*. 12 May 2020.

<https://english.alaraby.co.uk/english/society/2020/5/12/how-coronavirus-has-transformed-education-in-the-middle-east>