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The Peterloo Institute Report

Bridging the Digital Divide: Addressing Inequalities
in UK Secondary Education



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Executive Summary

As technology becomes an integral part of contemporary life, the ‘digital divide’ in access to the internet between lower- and upper-income households has thus significantly impacted the livelihoods of people across the country. In one such study cited within the report, Burgess and Holmes (2020) exemplify this divide, where they find that 99% of households earning over £40,000 a year have internet access, compared to only 51% of those earning below. In the pandemic, this digital divide crystallised in students’ differing access to online learning. Although 1.3 million laptops and a catch-up tutoring programme were provided by the government, these are solutions that paste over, rather than solve, issues of digital inequality.

With research collected during the coronavirus lockdowns, this report captures differences in digital exclusion and online learning from the perspectives of parents and teachers of secondary school children. A failure of schools to communicate resources to parents were found throughout the data collection process. Our findings strongly indicate the failure of government provisions to adequately address issues within the online learning programme—including poor broadband connections, unsuitable environments and lack of engagement—which are rooted in systematic digital exclusions. As gathered from Ofsted ratings, the quality of education and access to digital means posed significant challenges to students, particularly those from low socio-economic backgrounds, with adverse effects lasting beyond the pandemic itself.

Policy Recommendations:

- *General:* Access to internet should be considered as a fundamental infrastructure. Moreover, discussions and policies targeting digital exclusion must incorporate issues beyond technology, such as but not limited to housing and food.
- *School-Specific:* Integrating a hybrid learning approach that allows teachers to adapt teaching styles to differing student abilities is essential. In addition, a reworking of communication methods between teachers and parents, and providing further support to students still impacted by lockdown remains necessary.

Following the height of the pandemic, the digital divide continues to manifest in education. With students now significantly impacted by income-related differences in digital access, a widespread addressing of the pandemic’s legacy is needed to ensure that class does not dictate this generation’s lifepath.

Introduction

The internet and corresponding digital technologies play a profound role in modern life. Britain's digital economy accounts for around 8% of its GDP¹, a figure that is only expected to increase over the next decade, particularly given the increased reliance on digital solutions during the COVID-19 pandemic. However, this rapid growth in digital resources – known as the 'digital revolution' – has not resulted in equal access for all areas of society. The rapid advances in technological innovation have enabled a stark rise in efficiency, productivity, and flexibility; people lacking access to this technology are being left behind, putting their education, jobs, and future in jeopardy. This is the digital divide.

Those worst affected by the digital divide are low-income families, with “only 51 percent of households earning between £6000-£10,000 [having] home internet access compared with 99 percent of households with an income of over £40,001”.² In an educational system that is increasingly reliant on recent technologies, children without access to technology at home are at a significant disadvantage to their peers. As a result, the already concerning attainment gap between social classes is at risk of worsening.³

The COVID-19 pandemic has highlighted and further exacerbated the existing digital divide in the UK. The overnight shift to online education in March 2020 transformed the way students across the UK accessed education. At the time, according to estimates from Oxfam, between 1.14 million and 1.78 million children did not have access to a device for home-schooling, and 7% of households could only access the internet through mobile connectivity.⁴ The findings from the Ofsted report on remote education suggests that most schools, by taking proactive measures, were largely able to address the initial barrier of access to digital devices.⁵ Only one in ten parents stated 'lack of access to devices' as a reason their child was struggling to continue their education during the lockdown.

¹ Matt Warman, “Digital sector worth more than £400 million a day to UK economy”, Gov.uk, February 5, 2020, <https://www.gov.uk/government/news/digital-sector-worth-more-than-400-million-a-day-to-uk-economy>.

² Hannah Holmes and Dr Gemma Burgess, “Pay the wi-fi or feed the children: Coronavirus has intensified the UK's digital divide,” University of Cambridge, February 19, 2020, <https://www.cam.ac.uk/stories/digitaldivide>.

³ Imran Tahir, “The UK education system preserves inequality – new report”, IFS, September 13, 2022, <https://ifs.org.uk/articles/uk-education-system-preserves-inequality-new-report>.

⁴ Clare McDonald, “The UK's struggle with digital schooling”, *Computer Weekly*, January 11, 2021, <https://www.computerweekly.com/news/252494599/The-UKs-struggle-with-digital-schooling>.

⁵ Ofsted, “Remote education research”, February 18, 2021 <https://www.gov.uk/government/publications/remote-education-research/remote-education-research>.

However, in Greater Manchester, the issue of access inequality persists. Greater Manchester Mayor Andy Burnham in January 2021 disclosed that, despite the Government efforts to increase the provision of laptops, there are still around 20,000 school pupils in Greater Manchester who are unable to access online learning.⁶ Furthermore, a study by the Greater Manchester Combined Authority (GMCA) showed that there are “700,000 people in Greater Manchester using the internet in a narrow or limited way, and 450,000 classified as non-users.”⁷

Our research aims to identify barriers to higher education for secondary school students in Greater Manchester in the context of the COVID-19 pandemic and inequality of access to digital resources. This report will explore the impact of the coronavirus pandemic on schools’ policies for technological provisions, investigate means to improve access to technology both during and after the pandemic, and translate these findings into practical policy solutions that can help to reverse the digital divide.

⁶ Zoe Tidman, “Around 20,000 young people still unable to access online learning in Greater Manchester, Andy Burnham says”, *The Independent*, January 26, 2021, <https://www.independent.co.uk/news/education/education-news/online-learning-greater-manchester-andy-burnham-b1792332.html>.

⁷ Greater Manchester Combined Authority, “New digital inclusion taskforce launched to tackle digital divide across Greater Manchester,” GMCA, November 30, 2020, <https://www.greatermanchester-ca.gov.uk/what-we-do/digital/digital-inclusion-agenda/#:~:text=Following%20his%20re%2Delection%20in,and%20technology%20to%20get%20online.>

Literature Review

Effect of the COVID-19 Lockdown on Schools

The rapid growth of the COVID-19 pandemic and subsequent lockdowns brought the widespread closure of schools across the country, leaving policymakers scrambling to keep students' learning on track. Teaching was quickly shifted online, a feat made possible only by the already-established widespread digital connectivity in the UK today. Nonetheless, the abrupt shift from a physical to digital learning environment led to huge educational losses for pupils, with the greatest burden falling on the country's poorest children. A report found that one month into lockdown, students confined to their homes in the UK spent an average of 2.5 hours each day doing schoolwork, compared to five hours normally.⁸ One fifth of pupils (around 2 million) did less than one hour of, schoolwork per day.

In the UK, significant inequalities in digital access manifest along socio-economic lines; the more deprived an individual is, the less likely they will be digitally able and connected. As learning shifted to online platforms, these digital inequalities translated into educational inequalities. A paper by the Education Policy Institute highlighted how device access, internet access and suitable workspace are critical for a smooth transition to home learning.⁹ However, many households do not enjoy the attributes that enable remote working. In fact, over 50% of households with incomes of £10,000 or less are reported to have no internet access.¹⁰ An Institute for Fiscal Studies report found that within state schools, parents in the richest families were around 15 percentage points more likely than those in the poorest fifth to report that their child's school offered active resources such as online classes, or video or text chatting. The report also found that 60% of pupils in the UK's poorest households did not have access to their own study spaces. There was a large disparity in the quality of digital education provided by state and private schools. 31% of private schools provided four or more live online lessons daily, compared with just six percent in state schools.¹¹ The capacity

⁸ Francis Green, "Schoolwork in lockdown: new evidence on the epidemic of educational poverty", The Centre for Research on Learning and Life Chances, accessed on February 21, 2023, <https://www.llakes.ac.uk/wp-content/uploads/2021/01/67-Francis-Green-Research-Paper-combined-file.pdf>.

⁹ Education Policy Institute. "Event Paper: Addressing the digital divide in education", Education Policy Institute, August 12, 2020, <https://epi.org.uk/publications-and-research/paper-addressing-the-digital-divide-in-education>.

¹⁰ Clea Skopoleti, "MPs urge Johnson to ensure all pupils have digital resources for home learning", *The Guardian*, April 1, 2021.

¹¹ Green, "Schoolwork in lockdown".

of parents to support students' online learning also varies according to socio-economic and occupational background. Those in elementary occupations, such as cleaners, labourers, agricultural workers, and hospitality workers, are within the lowest paid career sectors, and the least able to work from home. In contrast, professional and managerial jobs are the most likely to afford its workers the ability to work from home.¹² The ability of parents to work from home thus greatly influences their ability to aid and oversee students' learning.

11% of students in receipt for free school meals (FSM) spent more than four hours on schoolwork at home, compared to 19% of non-FSM students. Inequalities in digital learning also persisted at a regional level. In the North West, the proportion of students receiving four or more pieces of schoolwork a day was just 16%, compared to 28% in the South East. Such figures illustrate the scale of the digital divide in education and how it has exacerbated inequalities in education throughout the COVID-19 pandemic.

Qualitative research published by Policy@Manchester based on a sample of primary and secondary schools also confirms how the digital divide, along with other social inequalities, has made life more difficult for some pupils. Additionally, many schools have found it difficult and time-consuming to keep pupils engaged. The report indicates that, although secondary schools have had more infrastructure than primary schools to support pupils (such as progress tutors, learning mentors and IT technicians) than primary schools, they have struggled more to maintain consistent and personal communication with pupils and parents.¹³

Despite the problems around growing inequality, online learning is likely to be increasingly important to education; as in many workplaces, the pandemic will be outlasted by the practices it has made routine. To ensure educational inequalities are not widened by

¹² Mariya Brussevich, Era Dabla-Norris, and Salma Khalid. "Who will Bear the Brunt of Lockdown Policies? Evidence from Tele-workability Measures Across Countries," *IMF Working Papers*, no. 2020/088 (2020). <https://www.imf.org/en/Publications/WP/Issues/2020/06/12/Who-will-Bear-the-Brunt-of-Lockdown-Policies-Evidence-from-Tele-workability-Measures-Across-49479>.

¹³ Paul Armstrong, Stephan Rayner and Melvin Ainscow, "Bridging the digital divide: Greater Manchester schools creating pathways to success," University of Manchester, November 5, 2021, <https://blog.policy.manchester.ac.uk/posts/2021/11/bridging-the-digital-divide-greater-manchester-schools-creating-pathways-to-success/#:~:text=Bridging%20the%20digital%20divide%3A%20Greater%20Manchester%20schools%20creating%20pathways%20to%20success,-By%20Paul%20Armstrong&text=During%20the%20COVID%2D19%20pandemic,to%20vulnerable%20children%20during%20lockdown.>

digital inequalities, effective, evidence-based policies on how to mitigate problems associated with the digital divide are required.

Response to the Lockdown

The Department of Education (DfE) provided more than 1.3 million laptops and tablets to help disadvantaged pupils and young students with remote and face-to-face education during the COVID-19 pandemic.¹⁴ Schools, 16-19 academies, further education (FE) institutions and local authorities were eligible to apply for the scheme. Devices were also made available to care leavers aged sixteen to twenty-five years old who needed them to access support from their local authority. To expand access to the internet, DfE further partnered with mobile network operators.¹⁵

Schools and further education institutions could request additional mobile data for disadvantaged children and young people in school years three to thirteen. Those eligible for the scheme were able to benefit from the increases in data until the end of the 2021 summer term. Additionally, DfE also provided schools, colleges, FE institutions, trusts and local authorities with 4G wireless routers that could be lent to disadvantaged pupils aged sixteen to nineteen who did not have access to broadband at home. Routers were also dispatched to local authorities and academies in the summer term of 2020. DfE set up grants to support the establishment of digital educational platforms like Google Workspace for Education Fundamentals and Microsoft 365 Education.¹⁶

At the regional level, Andy Burnham, the mayor of Greater Manchester (GM), launched the Greater Manchester Technology Fund in April 2020 to support young learners facing limited access to devices and connectivity to continue their learning at home.¹⁷ With the help of a wide range of organisations such as O, Arup, Auto Trader, Huawei, Boohoo, Beechfield Brands and Irwell Insurance Company, the GM tech fund was able to support

¹⁴ Department for Education and Gavin Williamson, “Hundreds of thousands more laptops to support disadvantaged pupils learn at home,” Gov.uk, January 12, 2021, <https://www.gov.uk/government/news/hundreds-of-thousands-more-laptops-to-support-disadvantaged-pupils-learn-at-home>

¹⁵ *Ibid.*

¹⁶ UK Government, “Digital Education Platforms,” April 19, 2020, <https://get-help-with-tech.education.gov.uk/digital-platforms>.

¹⁷ GMCA, “The Greater Manchester Technology”, accessed March 1, 2023, <https://www.greatermanchester-ca.gov.uk/what-we-do/digital/get-online-greater-manchester/greater-manchester-wide-support/the-greater-manchester-technology-fund/#:~:text=The%20GM%20Tech%20Fund%20was,schools%20and%20colleges%20were%20closed..>

over 1300 young people in the first eighteen months of launching. The Greater Manchester Technology Fund then transformed from emergency response to long-term support scheme, helping to tackle the digital divide and exclusion in communities across Greater Manchester. Furthermore, The Manchester Evening News and Business in the Community (BITC) organised a Digital Donation Day to encourage businesses and individuals to support the Greater Manchester Technology Fund. The Manchester Evening News digital donation day raised over £180,000 in donations of funds, new tech data packages and used digital data devices for the GM Technology Fund to help reduce digital exclusion among young people in Greater Manchester.¹⁸

Another key campaign to improve the digital divide in the North included the Cash for Connectivity Campaign, which aimed to raise 1.2 million pounds to help provide free internet to 100,000 households.¹⁹ This initiative was part of the Laptop for Kids Campaign, launched by David Richards in collaboration with Northern Powerhouse Partnership and a growing number of newspapers, websites, business, and local authorities. The Cash for Connectivity Campaign aimed to fund the purchase of dongles (small devices that allow access to wireless broadband) to connect laptops and up to five other devices per household to the internet.

Digital Inequalities and Social Exclusion

The digital divide or digital exclusion refers to the difference in access to, and proficiency to use, computers and the internet. The UK has one of the most technologically proficient populations in the world, with 99% of those aged sixteen to forty-four having used the internet in the past three months.²⁰ However, this data can be deceiving. To understand how to bridge the digital divide, one must consider the following: access to modern technological devices, access to the internet, motivation to use the internet, and the ability to use technology.

¹⁸ Emma Gill, “M.E.N’s Digital Donation Day raises £188k to help Manchester children learn from home”, *Manchester Evening News*, January 25, 2021, <https://www.manchestereveningnews.co.uk/whats-on/family-kids-news/mens-digital-donation-day-raises-19694246>.

¹⁹ InYourArea Community, “Cash for Connectivity Campaign helps 5,000 northern families get connected”, June 2nd, 2021, <https://www.inyourarea.co.uk/news/cash-for-connectivity-helps-5-000-northern-families-get-connected>.

²⁰ Office for National Statistics, “Exploring the UK’s digital divide,” March 4, 2019a, <https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/articles/exploringtheuksdigitaldivide/2019-03-04>.

There are clear links between social deprivation and digital exclusion. A London School of Economics study (2008) of the UK general population found that 7% of those in the social grade DE (semi-skilled, unskilled manual occupations and unemployed) were non-users of the internet.²¹ In contrast, none of those in the social class AB (higher & intermediate managerial, administrative, professional occupations) were non-users. One reason for this is that rapid technological developments are inflating the cost of standard technological devices. Moore's Law states that the number of transistors on an integrated circuit generally double every two years, yielding ever faster processing power.²² This law has 'set the pace for the PC-software industry' today.²³ Planned obsolescence, where products are intentionally designed to have a limited shelf life, is another issue with modern devices that requires technology-users to regularly replace devices and modern software.²⁴ This puts the latest technology out of reach for many: online homework or classes may require a camera, a microphone, and standard download and streaming internet speeds. As the accessibility and quality of such components are changing so rapidly, it may be difficult for deprived families to afford to keep up. This problem is exacerbated for larger families as every extra member of a household means each person has less time to use devices, and are under more pressure to buy new ones.

The trends found in Greater Manchester are consistent with the rest of the country. The Good Things Foundation's report in 2018 found that 1.2 million people in Greater Manchester are digitally excluded.²⁵ Given that 40% of benefit claimants have very low digital engagement, this indicates that social deprivation is a major factor of digital exclusion in GM. Furthermore, not having access to the internet and compatible devices worsens economic hardships. The report also found that "52% of those offline spend £300+ a year on utilities because they don't have the capacity to compare prices online". Even if access to

²¹ Ellen Helsper, "Digital inclusion: an analysis of social disadvantage and the information society", LSE Research Online, November, 2013, https://eprints.lse.ac.uk/26938/1/__libfile_REPOSITORY_Content_Helsper,%20E_Digital%20inclusion_Helsper_Digital%20inclusion_2013.pdf.

²² Britannica, "analysis of algorithms," accessed on June 17, 2021, <https://www.britannica.com/technology/analysis-of-algorithms>.

²³ R. R. Schaller, "Moore's law: past, present and future," *IEEE Spectrum* 34, no. 6 (1997): pp. 52-59, <https://doi.org/10.1109/6.591665>.

²⁴ Mariateresa Maggolino, "Planned Obsolescence: A Strategy in Search of Legal Rules," *IIC - International Review of Intellectual Property and Competition Law* 50 (2019) pp.405-407. <https://doi.org/10.1007/s40319-019-00812-1>.

²⁵ Good Things Foundation, "Motivational barriers of non-users of the internet," accessed on February 22, 2023, <https://www.goodthingsfoundation.org/insights/digital-motivation>.

broadband is acquired, families may have to make difficult decisions: “pay the wi-fi or feed the children”²⁶. Those without access often struggle to break this cycle, as “digital skills are essential entry requirements for two-thirds of UK occupations” and “roles requiring digital skills pay 29% over those roles that do not.”²⁷ These statistics highlight the perpetuity of digital exclusion and the increasing need to solve it.

Manchester City Council understands the significance of the digital divide and has enacted policies to try to bridge it. Their main focus has been investment in libraries. Modern libraries have free internet, access to computers, and access to printing services. Additionally, the council provides IT support and “IT training is provided by partner organisations such as MAES digital drop-ins and Citizens Advice’s digital support.”²⁸ This provides public access to technology and digital skills. Naturally, the next step in bridging the digital divide is ensuring people have the requisite private access as well.

Policy Overview

Both the UK Government and local authorities across the country recognise that the digital divide is a major policy issue that needs to be addressed. Sara Todd, Lead CEO for the Digital Portfolio at Greater Manchester Combined Authority (GMCA) sets out the authority’s vision by saying that “we believe access to the digital world should be a basic human right, and connectivity should be treated as the fourth utility”; alongside electricity, gas, and water.²⁹ Until now, the focus has tended to be on older people and the people with disabilities, based on the recognition that these groups are much more likely to be digitally excluded.³⁰ In July 2020, in the midst of the first wave of COVID-19 in the UK, the UK Parliamentary Culture Media and Sport Committee recognised the perils of digital exclusion

²⁶ Holmes and Burgess, "Pay the wi-fi or feed the children".

²⁷ Department for Digital, Culture, Media & Sport, “*No Longer Optional: Employer Demand for Digital Skills*,” accessed on February 22, 2023, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/807830/No_Longer_Optional_Employer_Demand_for_Digital_Skills.pdf.

²⁸ Manchester City Council Communities and Equalities Scrutiny Committee, “Driving digital inclusion and bridging the digital divide in Manchester,” December 3, 2020, <https://democracy.manchester.gov.uk/documents/s21606/Driving%20Digital%20Inclusion%20and%20Bridging%20the%20Digital%20Divide%20in%20Manchester.pdf>.

²⁹ Greater Manchester Combined Authority, “How Greater Manchester is doing digital differently - digital inclusion event,” accessed on February 22, 2023, <https://www.greatermanchester-ca.gov.uk/what-we-do/digital/digital-inclusion-agenda/greater-manchester-digital-inclusion-event>.

³⁰ Office for National Statistics, “Internet Users, Labour Force Survey,” March 4, 2019b, <https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/articles/exploringtheuksdigitaldivide/2019-03-04#what-is-the-pattern-of-internet-usage-among-disabled-people>.

for these groups. The committee noted that hundreds of thousands of people who were asked to shield had no access to the internet, making it very difficult for them to access information and support available online.³¹ Concerningly, the committee also found that although the Department for Culture Media and Sport's remit extended to digital inclusion, it lacked funds specifically for this goal.³²

Nevertheless, initiatives targeted at redressing digital exclusion have formed a part of the Government's emergency response to the pandemic and have gone some way to address this funding gap, including the following:

- The Government set a goal in April 2020 to provide devices to disadvantaged children via the DfE. As of 11th May 2021, it had distributed over 1.3 million laptops and over 76,000 routers,³³ although it failed to meet its target to achieve this by the end of March.³⁴
- In July 2020 the Government announced the Catch-up Premium and National Tutoring Programme.³⁵ Together, these formed a package totalling £1 billion, which attempted to address the fact that online learning had exacerbated educational inequalities and left many pupils struggling to catch up. This has recently been supplemented by another £1 billion in June 2021.³⁶

However, the tutoring programme was subject to criticism from the Education Endowment Fund, an independent charity focusing on educational inequality. The charity found that the quality of fragmented private tutoring provision and a lack of appropriate equipment made online tutoring inaccessible for many who were eligible.³⁷ Nevertheless, these measures

³¹ Culture Media and Sport Select Committee, "The role of the Department for Digital, Culture, Media and Sport," July 23, 2021, <https://publications.parliament.uk/pa/cm5801/cmselect/cmcmums/291/29108.htm>.

³² UK Parliament, "The role of the Department for Digital, Culture, Media and Sport," July 23, 2020, <https://publications.parliament.uk/pa/cm5801/cmselect/cmcmums/291/29108.html>.

³³ Department for Education and Gavin Williamson, "Hundreds of thousands more laptops to support disadvantaged pupils learn at home."

³⁴ James Carr, "DFE finally hits 1.3 million laptop target (5 weeks later than promised)", *Schoolsweek*, May 11, 2021b, <https://schoolsweek.co.uk/dfe-finally-hits-1-3-million-laptop-target-5-weeks-after-it-was-promised>.

³⁵ UK Government, "Guidance: Catch-up Premium," April 27, 2021a, <https://www.gov.uk/government/publications/catch-up-premium-coronavirus-covid-19/catch-up-premium>.

³⁶ UK Government, "Press Release: Huge expansion of tutoring in next step of education recovery," June 2, 2021b, <https://www.gov.uk/government/news/huge-expansion-of-tutoring-in-next-step-of-education-recovery>.

³⁷ James Carr, "Online tutoring during school closures 'feasible', but digital divide a key barrier", *Schoolsweek*, February 12, 2021a, <https://schoolsweek.co.uk/online-tutoring-during-school-closures-feasible-but-digital-divide-a-key-barrier/>.

provide a positive starting point for tackling digital exclusion. These measures should be supplemented by a longer-term strategy and funding commitment far beyond the immediate pandemic response. This should clearly detail how all citizens will be provided with the necessary resources and skills they need to become digitally connected, including a dedicated strategy for young people.

Returning to a regional level, we can see that GMCA's efforts have mainly focused on coordinating and supporting existing private, public and charity sector efforts to address the digital divide in the form of the Greater Manchester Digital Inclusion Taskforce, established in December 2020.³⁸ GMCA worked with Vodafone to roll out its "*schools.connected*" scheme to provide data SIMs to those pupils who are most in need.³⁹ GMCA also championed the Greater Manchester Tech Fund to distribute used laptops and equipment donated by a range of companies across the city region to those who needed help, providing 1,300 pupils with equipment.⁴⁰ However according to Ofcom's statistics from early 2020, only 9% of pupils lack access to a laptop across England, which would imply there were over 35,000 pupils across Greater Manchester in this position.⁴¹ Greater Manchester Mayor Andy Burnham made a commitment in May 2021 to ramp up existing efforts to get all under-25s, over-75s and disabled people in Greater Manchester online, supported by a new digital Inclusion Action Network.⁴²

Other initiatives beyond Greater Manchester should act as inspiration for the city region, evidencing what is possible as the Combined Authority increases its ambition. One promising initiative has been in Leeds, where the City Council has expanded free WiFi in public spaces and in social housing blocks through the 100 % Digital Leeds initiative.⁴³

³⁸ Greater Manchester Combined Authority, "Fixing the digital divide in Greater Manchester and beyond!," May 10, 2021b, <https://www.greatermanchester-ca.gov.uk/what-we-do/digital/digital-inclusion-agenda/fixing-the-digital-divide-in-greater-manchester-and-beyond>.

³⁹ Greater Manchester Combined Authority, "Tackling digital exclusion integral to grow a £5 billion digital ecosystem," January 14th, 2021a, <https://greatermanchester-ca.gov.uk/news/tackling-digital-exclusion-integral-to-grow-a-5bn-digital-eco-system>.

⁴⁰ GMCA, "The Greater Manchester Technology."

⁴¹ Ofcom, "Ofcom Nations & Regions Technology Tracker - 2020. 9th January to 7th March 2020," accessed February 23, 2023, https://www.ofcom.org.uk/__data/assets/pdf_file/0030/198138/tech-tracker-internet-and-device-access-children-data-tables.pdf.

⁴² Greater Manchester Combined Authority, "Mayor of Greater Manchester announces bold ambition to help get residents online," May 17, 2021c, <https://www.greatermanchester-ca.gov.uk/news/mayor-of-greater-manchester-announces-ambitions-to-help-get-residents-online>.

⁴³ *Yorkshire Evening Post*, "Hundreds of Leeds social housing tenants enjoy free WiFi", October 15, 2018, <https://www.yorkshireeveningpost.co.uk/news/hundreds-leeds-social-housing-tenants-enjoy-free-wifi-242635>.

Moreover, in digitally excluded places around the world, community networks have been rolled out around the principle of an open digital commons, challenging the dominance of commercial networks providers. In Perafita, Spain, for instance, the public library acted as a hub for a local network, installing antennas that provide local people with access to WiFi.⁴⁴ These cases demonstrate the potential of more radical approaches that transform digital connectivity from a private commodity to a public resource for the benefit of all.

GMCA's approach helps compensate for some of the gaps in existing provision by drawing on local contributions from companies and charities. However, the reliance on these partnerships is also partly born of necessity and a result of limited dedicated resources. Only the UK Government has the resources to fund and pass legislation that will allow local goals to become a reality. Moreover, tackling digital exclusion should go beyond merely the provision of equipment. It is also about digital skills and digital confidence of parents, tackling poverty (including housing poverty where homes are not in a fit state for working from home), and improving language skills in the case of first-generation migrants.⁴⁵ In other words, it is not possible to take a siloed approach to tackling digital exclusion because it is strongly linked to other forms of marginalisation. Instead, efforts to combat digital exclusion must be linked to a broader strategy to tackle all kinds of poverty and social exclusion.

⁴⁴ International Federation of Library Associations and Institutions, "Community Networks: a briefing for libraries" (ver. April 2020), accessed February 23, 2023, https://www.ifla.org/files/assets/faife/publications/community_networks_-_a_briefing_for_libraries.pdf.

⁴⁵ Nicole S Goedhart; Jacqueline Broerse; Christine Dedding, "'Just having a computer doesn't make sense': The digital divide from the perspective of mothers with a low socio-economic position," *New Media & Society* 21 (2019), pp.2347-2365, <https://doi.org/10.1177/1461444819846>.

Methodology

Our key research aim is to assess the scale of digital exclusion across secondary schools in Greater Manchester, and to better understand the experiences of parents/guardians and teachers of online learning before and during the COVID-19 pandemic.

Method of Data Collection and Sampling

Through an online survey, we invited parents/guardians and teachers to share their different perspectives on the experiences of secondary school pupils throughout the pandemic. Parents/guardians of pupils at mainstream state schools were invited to participate in the survey on community Facebook groups, whilst teachers were contacted via phone calls and emails to their schools and through the education board. 150 Greater Manchester schools were contacted and the survey was distributed to a variety of Facebook groups; 61 parents/guardians and 10 teachers responded. All participants of the survey are either parents/guardians or teachers of pupils aged 11-18 in Greater Manchester secondary schools.

We invited participants from all 10 boroughs of Greater Manchester to complete the survey, aiming to provide a complete picture of digital access to education during the COVID-19 pandemic. By reaching out to schools with varied Ofsted ratings and of different types (e.g. Academy, Free School etc), we have more accurately represented the general population and illuminated how different policies or circumstances have affected digital inclusion. While there were 61 respondents on the parent/guardian survey, some parents may not have accurately represented the student's experience, which may be based on anecdotal evidence provided from the student. As respondents were self-selecting, there is a risk of bias towards parents/guardians that are more involved in the student's education. This has implications pertaining to class. Douglas⁴⁶ found that "middle class parents were more likely to go to parent's evenings and offer help and guidance with homework. Middle class parents also put more emphasis on attainment, with higher demands of the children both in and out of school". This survey could therefore have led to an under-representation of disadvantaged families' experiences.

⁴⁶James William Bruce Douglas, *The Home and the School: A Study of Ability and Attainment in the Primary School*. (London: MacGibbon and Kee, 1966).

The research design of an online survey was employed because it enabled researchers to assess digital exclusion accurately and extensively from education across the large area that Greater Manchester covers. The online nature of the survey enabled participants to easily respond from anywhere across the Greater Manchester region, allowing for a broad sample of voices and experiences. The anonymous nature of responses encouraged respondents to answer honestly, thus providing more dependable results. The ability of respondents to add comments to their answers also deepens the analysis, supplementing the key quantitative data with insightful written experiences of those closest to the problem of digital exclusion in schools. Critically, respondents' ability to discuss their experiences of online learning in the survey allowed researchers to analyse personal accounts from those most familiar with the issue.

Survey Design

The survey was divided into three sections: pre-pandemic, school closures, and post-pandemic. This allowed us to compare participants' experiences at different stages of the pandemic and corresponding issues they faced. For example, one of the survey questions was, 'Before Covid, did your child's school have an official policy to support pupils/families who did not have sufficient laptop or internet access?'. This gave us an insight into the policies managing digital exclusion before the COVID-19 pandemic. The question was followed by 'Has your child's school supported your family to access online education during the pandemic?'. We were therefore able to compare the answers to these questions and find out if policies managing digital exclusion changed as a result of the school closures. The survey also provided respondents with the ability to share their personal anecdotal experience, enabling researchers to gauge people's attitudes towards how their schools have managed events related to the recent pandemic.

Ethical Considerations

Participants were sent the Participation Information Sheet (PIS) which specified the nature of the research project, the survey details, and how participant data and information would remain confidential under The University of Manchester's Research Ethics Regulations. Participants were required to read the PIS and give consent before starting the survey. The personal information required of each participant was limited. Parents/guardians provided the name of the student's school, their academic year, and if the parents/guardians are key workers. Teachers provided their school name, email and job role. Respondents were then

informed their personal data would only be accessible to The Peterloo Institute's education research team, and that it would be anonymised. The respondent's data was handled according to the guidelines set by the Peterloo Ethics Board.

Evaluation

There are potential drawbacks in the research design. Firstly, access to the internet is required in order to complete the survey. As a result, the research may exclude those in Greater Manchester most affected by the problem it aims to investigate. This potentially limits the breadth of the sample. Secondly, the survey may be considered to be lengthy and unstimulating for some participants, leading them to answer inadequately or not at all. To mitigate against these respective drawbacks, researchers encouraged participants in Facebook posts to represent anyone they know who doesn't have access to the internet. To make the survey as engaging as possible, its design was uncomplicated and encouraged straightforward answers.

When analysing the survey, we summarised the respondents' answers to the key questions and identified the major themes and issues raised by them. The data from the responses to the surveys was imported from Qualtrics to Excel. This enabled the results to be subsequently represented on bar charts, showing how each of the questions of the survey were answered by participants whilst clearly displaying any trends in these responses. Relationships within the data were then explored to determine, for instance, whether a school's Ofsted rating affected the sufficiency of its online learning response to the school closures resulting from Covid-19. Findings were corroborated with the written experiences participants provided, which deepened insights obtained from the analysis. The information gathered about the scale and types of challenges faced, combined with participants' personal attitudes towards them, enables a thorough understanding of the issue of online learning in Greater Manchester.

Findings and Discussion

There are a number of limitations surrounding the survey samples used, which must be addressed. Firstly, there were only ten responses from teachers, compared to sixty-one from parents. Therefore, the teacher surveys must be considered as solely indicative, rather than representative of the experiences of teachers across Greater Manchester. The sample contains data from a broad range of different schools across the boroughs of Greater Manchester, in areas of varying levels of deprivation. As the two maps below demonstrate, respondents to the parents' survey cover schools in eight of Manchester's ten authorities (all except Salford and Rochdale), whereas the teachers' survey covers just four local authorities: Bolton, Manchester Tameside, Trafford and Wigan. There is also no overlap between the schools included in the parents' and teachers' survey, meaning the two samples are entirely independent of each other.

Secondly, the schools included in the sample for the parents' surveys tend to be clustered in Lower Super Output Areas with a middling score on the Indices of Multiple Deprivation (IMD) scale. 75% of schools are in areas with an IMD decile of between 5 and 6, and all have an IMD decile between 4 and 8. This is merely indicative, given that LSOAs (Lower Layer Super Output Areas) have a population of around 1,500 as compared to much larger school catchments. Nevertheless, it is clear that the survey has not captured parents' experience in some of the most deprived areas in Greater Manchester, such as Blackley and Broughton, Rochdale, Hyde, Droylsden and Bolton South East.⁴⁷

Thirdly, regardless of the areas in which the schools were located, an important limiting factor to the sample is that the respondents are entirely self-selected. The teachers who responded were those who had the capacity and the motivation to take part in the survey, which could exclude those teachers who are experiencing burnout, excessive workloads or overwhelm. Meanwhile, those parents who responded are more likely to be engaged internet and social network users. They are also more likely to have the time, energy and motivation to complete a survey. The sample is unlikely to include parents who feel disenfranchised and

⁴⁷ Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government, "English Indices of Multiple Deprivation", Gov.uk, December 13, 2012, <https://www.gov.uk/government/collections/english-indices-of-deprivation>.

lack the trust in educational institutions to take part in a survey run by University of Manchester students. Therefore, the study could be improved by working to include those who lack reliable internet access and those who have had little experience in education. Furthermore, over 80% of the schools included in the parents' survey have an Ofsted rating of good or outstanding. The limited sample size means the participation of those experiencing school closures in more poorly managed schools is very small⁴⁸.

Despite these limitations, the surveys still provide a relative broad sample of experiences from teachers, and particularly parents. By examining these results in the context of existing research, we can learn a great deal about some of the challenges and opportunities around online learning. It is important, however, to keep in mind that the sample does not capture the experiences of the entirety of those who struggled during the school closures.

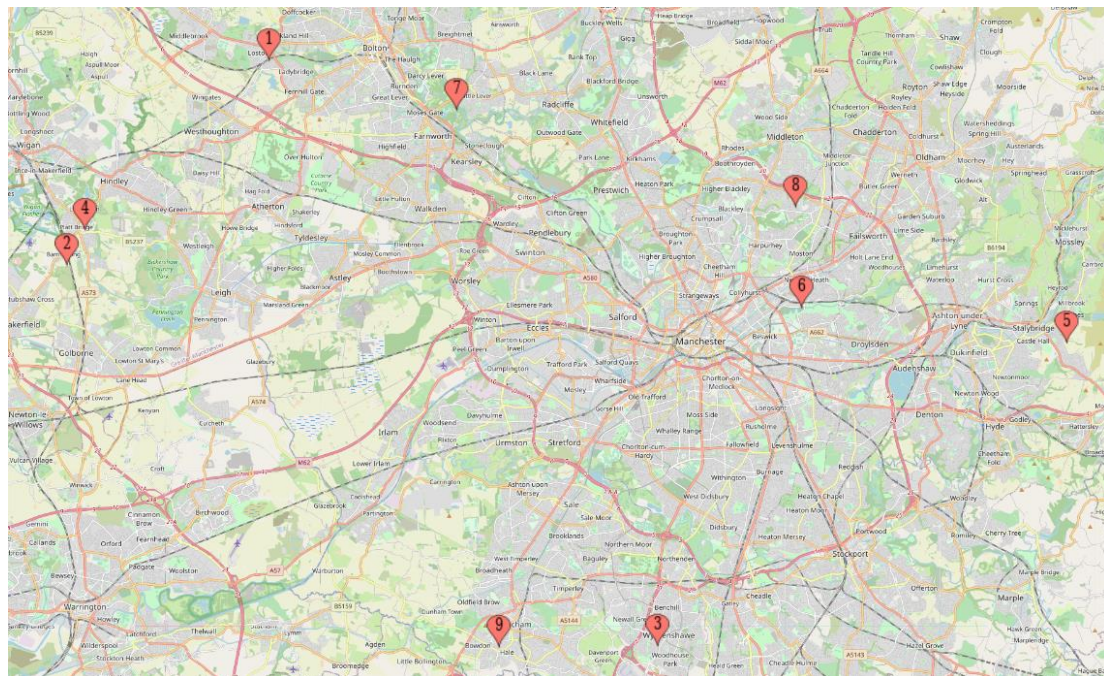


Figure 1: Map of schools from the teachers' survey

⁴⁸ Department for Education, “Ofsted inspections highlight high proportion of good or outstanding schools”, October 30, 2020, <https://educationhub.blog.gov.uk/2020/10/30/ofsted-inspections-illustrate-high-proportion-of-good-or-outstanding-schools>.

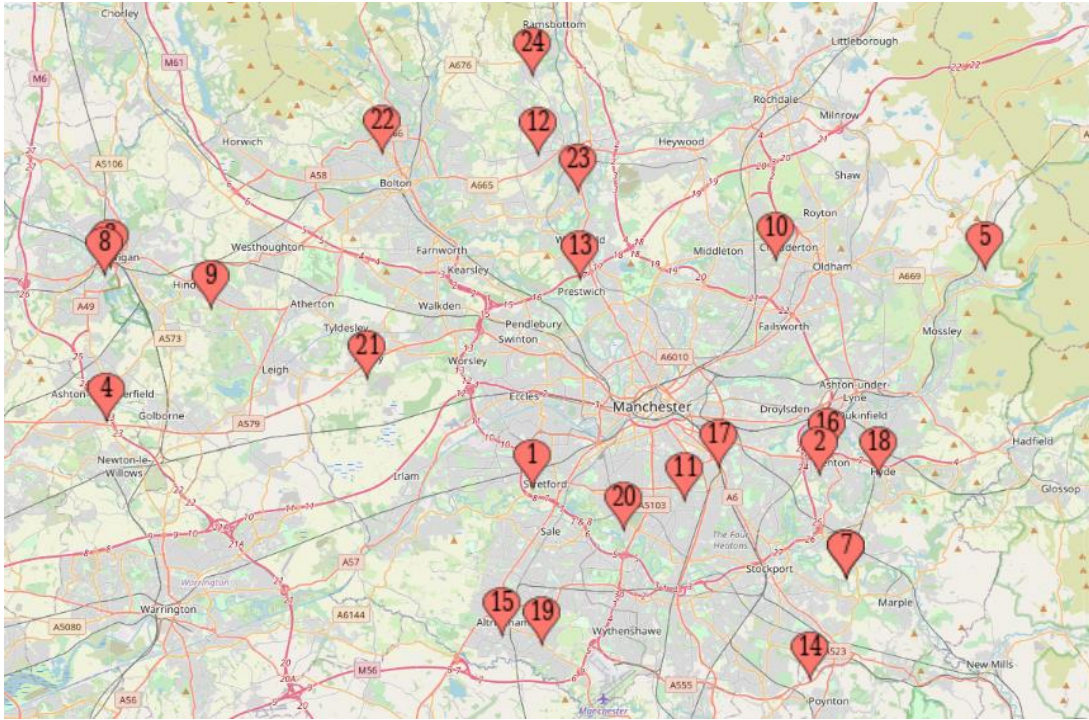


Figure 2: Map of schools from the parents' survey

1) Impact of the lockdown on teaching

Timetables

Both the teacher and parent surveys confirm that the first lockdown brought significant reductions in teaching. 22% of teachers reported no live lessons, compared to 59% of parents. Across both surveys, only one respondent (from the parents' survey) reported that their children had a full timetable during the first lockdown. The disparity in figures is likely due to the fact that the surveys covered different samples of schools. However, it is also possible that this reflects the confusion felt more generally around this time and the issues with communication that surrounded the hasty launch of online teaching. Either way, these are worryingly high figures.

Whilst the second lockdown brought further challenges, both parents and teachers agree that the situation improved significantly, although a much lower proportion of parents report a full timetable (38%) than teachers (67%). This improvement shows how schools were able to adapt to the new circumstances and in some cases even establish a full timetable. This is a major success which is testament to the hard work of teachers and school leaders.

Despite this improvement, it is concerning that a minority of schools still struggled to provide a full timetable during the second lockdown, many months into the pandemic. One parent even reported that their children had no live lessons during the second school closure period. This indicates that there were much more challenging barriers to online learning than simply inexperience with and difficulties in setting up technology. It is likely that the significant minority of pupils who experienced timetable problems over both lockdowns will have continued to fall behind, worsening the attainment divide in education outcomes post-lockdown.⁴⁹

The ability of schools to offer a full timetable does not merely depend on the skill and motivation of the teacher. Instead, it is very much dependent on pupils' home environment. It is difficult to provide a full timetable in classes where a significant number of pupils are using shared devices or have to share study space at home. This is one reason why the experience of the schools closures, whilst difficult for everyone, hit the most deprived families hardest. For reference a summary of the results is provided in the table below:

	First school closure period	Second school closure period
Parents	Full timetable 2% (1 respondent) Reduced timetable 38% No live lessons 59%	Full timetable 38% Reduced timetable 59% No live lessons 2% (1 respondent)
Teachers	Full timetable 0% Reduced timetable 67% No live lessons 22%	Full timetable 67% Reduced timetable 33% No live lessons 0%

Extracurriculars

The survey results show a mixed picture of the provision of extracurricular activities during the school closures. 56% of the schools were able to facilitate extracurricular activities online. These schools were able to deliver PE, dance, music, reading and cooking classes virtually. One of the schools (Wise Owl Trust) even sent the required equipment to the

⁴⁹ Sean Coughlan, "A-levels: warning over private and state school gap", BBC News, August 11, 2021, <https://www.bbc.co.uk/news/education-58172292>.

student's home prior to the lessons taking place. This is an encouraging figure, suggesting innovative practice that is worth sharing to support the remaining 44%.

However, it is notable that only 26% of parents report extracurricular activities online. This suggests that most pupils continued to miss out and that the teacher surveys are more likely to be at schools that managed to offer these. However, it is also possible that the discrepancy may be partially due to a communication breakdown with parents, suggesting a need for greater awareness-raising of the activities on offer.

Moreover, teachers mentioned that staff capacity and resources are two of the key reasons for their inability to provide extracurricular activities online. This suggests there are structural barriers to increasing this figure which may depend on the level of additional needs of the pupils.

Extracurriculars are not merely an optional extra. However, other research suggests many pupils were isolated from other people and struggled to stay physically fit and mentally healthy.⁵⁰ In the parents' survey, one respondent shared how their child's lack of socialisation during this period had a detrimental effect on their mental health and caused anxiety. Another commented how a lack of physical activity has led to their student's physical health to deteriorate. It is vital that the Government provides enough resources to allow extracurricular activities to help alleviate these problems, and this survey shows there is plenty of good practice that can be drawn on.

Parent-Teacher Communication

All teachers report that they were able to organise at least one parents' evening. Video conferencing tools such as Microsoft Teams and phone calls were the most popular tools for conducting these meetings. However, it is concerning that 8 parents reported that there hadn't been a parents' evening, suggesting either a lack of communication or that some schools weren't able to provide this vital service.

⁵⁰ "Covid Impact On Young People With Mental Health Needs," YoungMinds, accessed on August 15, 2021, <https://www.youngminds.org.uk/about-us/reports-and-impact/coronavirus-impact-on-young-people-with-mental-health-needs>.

Schools have clearly been adaptable, offering multimodal communication to stay in touch with parents during lockdown, including emails, phone calls and social media channels such as Facebook and Twitter announcements. Additionally, schools provided doorstep visits to families who required it.

2) Issues with learning online

Broadband Devices and Connectivity

Problems surrounding internet connectivity was a major issue for parent respondents' children in accessing online learning. The most common problem they encountered in terms of devices were sharing a family device (37%) followed by mobile phone limitations (27%) and faulty device issues (18%). Otherwise, the most common issues faced by students in terms of internet connectivity issues were sustained Wi-fi access (32%) followed by slow shared Wi-fi (26%), cellular data connectivity issues (16%) and lack of data (16%). 56% of parents reported problems with internet access overall.

The UK is one of the most digitally-connected countries in the world with 96% of households online⁵¹. However, the survey results confirm that household internet connectivity is not the whole picture, and the issues of connectivity raised are probably more to do with insufficient bandwidth than a complete lack of it. One parent noted “broadband issues with multiple devices connected simultaneously”, whilst another reported the same issue, “due to two other family members working from home”. Extensive usage in homes will worsen the quality of individual connections.

Fast and reliable internet is integral to good quality online learning. If households have inadequate broadband connections, students will be unable to follow classes taught live, potentially missing out on key parts of their curriculum. This issue becomes especially problematic once widespread disparities in households' broadband coverage are laid bare. Across Greater Manchester and within neighbourhoods there is great variability in the quality of broadband connections families can enjoy. The map below shows the average download speed (Mbit/S) for all property types in every Output Area (OA) across the region, with

⁵¹ Office for National Statistics, “Internet access – households and individuals, Great Britain: 2020,” accessed August 7, 2020, <https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/bulletins/internetaccesshouseholdsandindividuals/2020>.

lighter shades depicting areas that receive lower broadband speeds and darker shades depicting areas getting higher ones. OAs encompass areas of roughly 100 people.

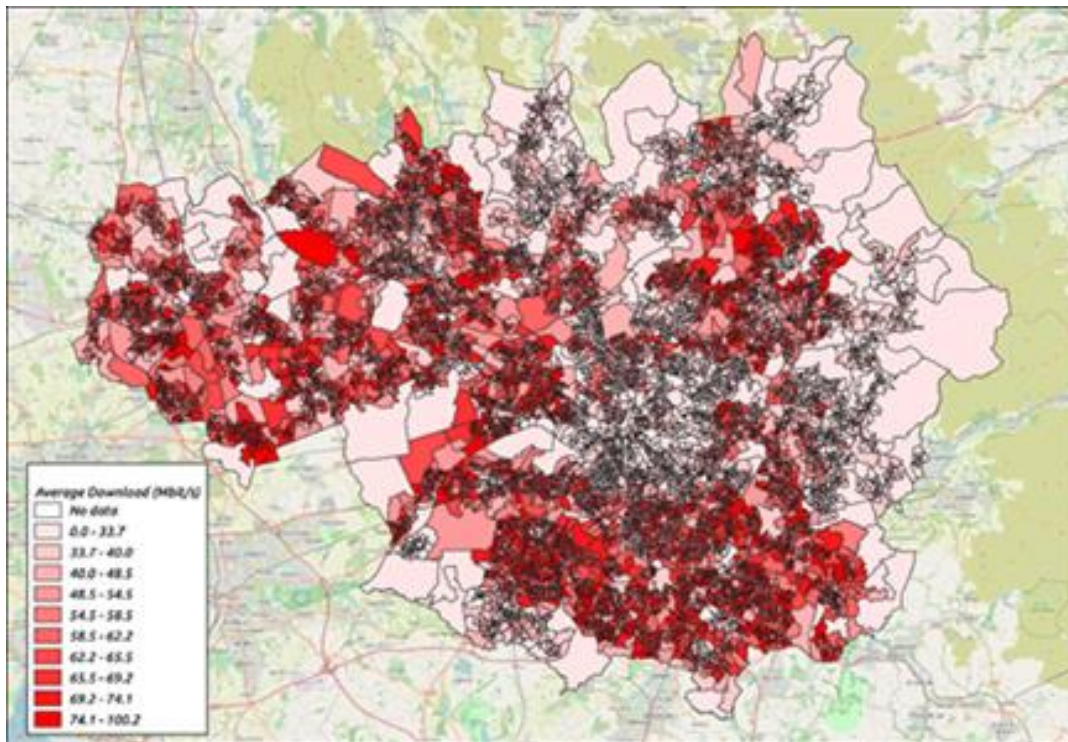


Figure 3: Map of Greater Manchester's broadband coverage

This map illustrates the inconsistent nature of broadband coverage across the city region, showing huge variation at a very low geographical-level. This draws from data that is also available for all local authorities in the UK in the GMCA's Digital Exclusion Risk Index.⁵² This leads some students in Greater Manchester to enjoy a considerably richer online education than others, even those attending the same school. Students in areas with faster speeds benefit from uninterrupted lessons and easy communication with their teachers. Students in less-connected areas will likely fall behind in what is essentially a postcode lottery.

However, it is unlikely that the quality of broadband coverage is random. As the map shows, outlying areas on the edge of towns are more likely to suffer from weaker internet connection. Moreover, the relative wealth of households is likely to have some effect.

⁵² Greater Manchester Combined Authority, "Digital Exclusion Risk Index", GMCA, accessed on June 2, 2021d, https://www.gmtableau.nhs.uk/t/GMCA/views/DigitalExclusionRiskIndexv1_1/BroadbandScoredashboard?%3AisGuestRedirectFromVizportal=y&%3Aembed=y

Households with more disposable income can spend more on their internet connections or on boosters to provide a better connection to multiple devices in a household. Research has shown a link between higher levels of deprivation and lower broadband speeds across postcodes in Glasgow, a major UK city of a similar size to Greater Manchester⁵³. Analysis conducted by PI found no relationship between average download speeds and deprivation at the LSOA level in Greater Manchester, although this may be more reflective of variations within LSOAs (roughly 1500 people) than of no relationship at all. To confidently identify the relationship between deprivation and broadband coverage in Greater Manchester a highly-localised study would need to be carried out.

Through online learning, unequal levels of internet connectivity along socioeconomic lines are likely to exacerbate existing educational inequality. Relative to better-off peers, disadvantaged students with poor connectivity will struggle to excel when learning online, reducing their educational successes and limiting their life chances. Policymakers concerned with digital exclusion must address how online learning and poor connectivity can translate into growing educational inequality. Moreover, the Government should recognise the internet as an essential utility that is necessary for social inclusion. Broadband poverty should have similar political salience as fuel poverty given the importance of an internet connection for modern social participation.

Engagement with Online Learning

During the research, parents expressed significant problems with accessing online learning, specifically relating to pupil engagement. Issues frequently raised include ‘lack of motivation’, ‘disengagement’, ‘distraction and background noise’ and ‘a lack of suitable workspace’. 40% of parents reported some combination of disengagement and lack of motivation, making it distinguishable as the most important reason for problems

These results point to serious problems with students engaging with their lessons at home that go far beyond connectivity issues. Ensuring pupils are interested and immersed in their learning is a key role for teachers, something that is made considerably harder through a computer screen. One parent reported that their student “found the online lessons hard to

⁵³ Gillian Anderson, Covadonga Gijon, Jason Whalley et al., “Exploring the Differences in broadband access speeds across Glasgow”, *Telematics and Informatics* 33:4 (2016): 1167-1178, <https://doi.org/10.1016/j.tele.2015.11.003>.

concentrate on due to no interaction”, something they highlighted that wasn’t a problem with in-person teaching at school. It was also noted that pupils struggled to follow their online learning when working in a noisy/distracting environment. The presence of other family members in the house, loud household appliances and sharing desks at home disrupted student’s learning.

Problems with engagement reduce the quality of students’ online education, which can considerably alter further educational attainment. Moreover, these impacts are likely to be felt unevenly, given that higher income and wealth affords people higher quality housing. As family income is positively correlated with the quality of home environments⁵⁴, it is likely that students from disadvantaged backgrounds will suffer from distracting conditions more than their advantaged peers. Consequently, poorer students may see a considerably less fruitful online education, leading them to obtain worse educational outcomes and reduced life chances, relative to their better-off peers. Moreover, it is likely that students with learning difficulties such as ADHD will find concentration in an online classroom environment even more difficult than in a physical classroom.⁵⁵

Therefore, existing inequalities may be exacerbated due to issues of distraction affecting certain students more than others. Policymakers must work to remove such obstacles to effective online learning in order to counter educational inequality. These issues cannot be separated from wider issues of housing and income inequality and measures taken by schools can only go so far to alleviate this problem.

Support with Online Learning Engagement

Mitigating problems with engagement and concentration can be difficult, given that they are to some extent an inevitable result of online learning. However, camera policy is one approach schools can take to tackle this issue of engagement. If students are required to keep their cameras on, teachers can more easily monitor their attention and engagement with lessons. At the same time, while students may benefit from seeing each other on screen, this

⁵⁴ Eric Dearing and Beck A Taylor, “Home improvements: Within-family associations between income and the quality of studentren’s home environments”, *ScienceDirect*, 28:5-6 (2007): 427-444, <https://doi.org/10.1016/j.appdev.2007.06.008>.

⁵⁵ Ofsted, “COVID-19 series: briefing on special education needs and disability provision”, Gov.uk, November 11, 2020, <https://www.gov.uk/government/publications/covid-19-series-briefing-on-local-areas-send-provision-november-2020>.

could also cause additional distraction. 18% of the schools stated they required students to keep their cameras on whereas 27% required students to keep their cameras off and a further 27% of the schools reported offering individual choice to students concerning cameras.

This implies that there is no one consistent approach regarding camera policy and schools should be able to decide on a case-by-case basis what is best for students. One school is reported to have operated a 'hybrid' policy on this matter, requiring students to keep their cameras off for group intervention and on if they were having one-on-one classes or wellbeing support in small groups. The different approaches here point to trade-offs of both a 'cameras on' and 'cameras off' approach. Although privacy is a concern, it is important to consider the impact of a 'cameras off' policy on students with special educational needs. The hybrid policy seems to present a sensible compromise.

Another remedy to the issue of disengagement is differentiated learning whereby teaching is tailored to the needs of specific individuals and groups of students. All teachers stated that their schools were able to provide differentiated learning for both higher-achieving and lower-achieving students. One of the teachers described setting up different lessons with different tasks to suit students' abilities. For lower-achieving and special educational needs (SEN) students, the school's support staff also developed physical resources to aid learning.

However, one school mentioned that whilst they were able to provide differentiated learning, it was limited due to associated difficulties with tailoring content to different levels of need which is resource-intensive. However, it is also essential to make sure pupils with additional needs are not left behind. It is worth considering how online learning offers some additional options in this regard. Timetables can be shifted and lessons shortened with independent activities planned for pupils who are able to do them and additional time for pupils who are struggling, due to options such as virtual breakout rooms. It is a positive sign that some teachers achieved this.

It is clear that supporting pupils to overcome distraction is difficult, particularly when external factors like home conditions are causing problems. However, the pandemic has also shone a light on problems that existed before the pandemic and made it difficult for many pupils to complete homework or revise for exams at home. Schools should ensure that they identify pupils who may fit into this group and provide resources and catch-up support to their pupils and parents alike.

Additional Support provided with Online Learning

Once the issues surrounding online learning and connectivity became widely recognised, schools, charities and the Government began to provide support to students across the UK. 55% of teachers surveyed stated their school had an official policy to support families without sufficient laptop or internet access. The parent/guardian survey yielded comparable results, with 57% (26/45) of respondents reporting that their school had an official policy. These policies included “laptops provided for students” and “dongles for the internet”. However, this does not imply that the schools without an official policy did not support disadvantaged families. Support was likely to be given on a more informal, case-by-case basis. Indeed, one teacher stated the policy “developed over time as availability [of resources] increased.” This respondent’s school had to adapt by applying for Government schemes and running their own local “donate an old device” scheme to fulfil demand. Thus, the support given by the school evolved over time.

Among parents who responded that the school did not have a policy, parents generally explained they did not have any issues, so therefore no help was required. This further illustrates that certain families are considerably better resourced in terms of internet connectivity, access to devices, and home environment than others. Furthermore, the results in this section of the parents’ survey confirm the survey does not represent parents who needed additional help.

The survey results also indicate that schools received an acceptable level of support. 89% of teachers in the survey reported that their schools received assistance from local authorities or the Government. The Government targeted pupils who needed the most assistance through their schools. This is corroborated by the parents’ survey results, as only one parent reported receiving support directly from local authorities or the Government.

However, one teacher stated they received a ‘very limited amount of laptops’, and another saying the school received 10 (this respondent’s school has 950 students). Therefore, it is unclear whether the support was enough to cover overall need.

Two thirds of the teachers said they received no help from charities, businesses and community groups. The respondents that did receive support explained this was primarily from foodbanks. One teacher reported that some businesses offered old devices, but these were of limited use because they ‘couldn’t strip down and reconfigure them’. This indicates that well-meaning initiatives to share old devices⁵⁶ are unlikely to work without quality checks to ensure the devices distributed are functioning, and technical support to assist in setting these devices up.

In regard to parent/guardian respondents, none of them said they received support from charities, businesses or community groups. One said “I have had no contact or help from anyone other than the school itself”. This indicates that, quite reasonably, businesses and community groups focussed their efforts on communicating with schools directly, allowing them to distribute resources to families. Due to the limited number of responses in this section of the survey, it is not possible to make generalisations. These organisations are likely to allocate resources on a case by case basis and parents who responded are unlikely to be in the target group for this support.

Did Parents feel Supported?

30% of parent respondents said they did not feel supported by the school with online learning, compared to 42% who said they did. Evidently, schools struggled with capacity as teachers had to support families alongside their normal responsibilities. However, schools may want to consider how to ensure that families feel supported through uncertain and disruptive times. The structure of secondary school learning, with specialist teachers teaching hundreds of pupils, makes this difficult. Therefore, this may mean a greater role for form tutors to ensure that parents can access the support they need, as existing pastoral staff are unlikely to be able to absorb the additional burden.

⁵⁶ Greater Manchester Combined Authority, “The Greater Manchester Technology Fund,” accessed on June 5, 2021e, <https://www.greatermanchester-ca.gov.uk/what-we-do/digital/get-online-greater-manchester/greater-manchester-wide-support/the-greater-manchester-technology-fund>.

Schools should also consider reviewing support for students who are struggling to access online resources in normal times. The vast majority (76%) of parent respondents were unaware of whether schools had a policy for families without access to computers/internet access, while 18% said they did not. Although this may be because respondents did not need help personally, this suggests more work needs to be done to ensure parents are aware of support on offer. This could include after-school use of school libraries/IT suites or links to charities and local authorities that distribute equipment or provide free or subsidised internet access. For example, BT now provides internet access at a reduced cost for people in receipt of benefits.⁵⁷

3) The Legacy of the Pandemic

School Structure

The majority of schools expressed that they intend to continue to assign homework online, even once the pandemic subsides. 71% of schools stated they had plans to improve online education. Two teachers specifically detailed that their schools planned to provide access to devices for disadvantaged students. Furthermore, they want to develop a more comprehensive online safeguarding policy. One school invested in technology such as cameras and headsets to improve pupils' remote learning workstations.

It is encouraging to observe that schools are actively working on improving their online learning capabilities. However, schools should engage with parents as far as possible when designing this new educational environment. 41% of parents responded with 'no' when asked if there should be more online learning. Given the pressures of the pandemic on domestic life, it is perhaps even surprising that 21% of parents said they would like more online learning provision. It would be interesting for future research to identify what this group of parents value about online learning, as this positive response is often missed. Overall, however, opinions regarding online learning appear to be negative. Schools must provide reassurance and ensure that online learning provision is designed thoughtfully and equitably. Otherwise, there is a risk that schools will fail to realise the potential of their pupils and lose the trust of parents.

⁵⁷ Nadeem Badshah, "BT to offer under half-price fibre broadband to people on benefits", *The Guardian*, 03/05/21, <https://www.theguardian.com/business/2021/may/03/bt-to-offer-under-half-price-fibre-broadband-to-people-on-benefits>.

Moreover, 29% of teachers who reported that their schools do not plan on improving access to online education stated they cannot think of any improvements beyond existing online provision, and that they simply wanted to return to classroom pedagogy. It is understandable that some schools could only focus on adapting to short-term crises and disruption. However, the pandemic shed light on existing inequalities of online access that likely impacted pupils trying to complete homework even when learning was not formally online. Negative experiences of online learning throughout the pandemic should not lead schools to avoid making full use of the opportunities around online learning that other schools are developing. With this in mind, schools should consider how to further develop their online learning offer and ensure everybody can benefit. These should be led by the successes of teachers and other schools as well as the specific needs of pupils and parents in the school's catchment area.

Ofsted ratings do not appear to have affected most of the areas of the survey's interest. Pupils at schools with higher ratings were just as likely to face internet connectivity and device issues as those at schools with lower ratings, and the same applies to school timetables during the first school closure period. However in some areas, Ofsted ratings appeared to have a significant effect. For example, by the second closure, all of the Ofsted-rated 'Outstanding' schools were able to run a full timetable. This was not the case in 'Good' schools, which varied greatly in how close to a full timetable they were able to offer, with ~34% offering a full timetable, ~44% offering a slightly reduced timetable, ~18% offering a significantly reduced timetable and ~3% with no live online lessons at all. The schools rated 'Requiring Improvement' fared just as poorly, with 60% of respondents reporting a slightly reduced timetable and the other 40% operating at a full timetable. Lastly, the respondents from 'Inadequate' schools all reported that their timetables were still 'significantly reduced' during the second school closure.

Here it is apparent that the quality of a student's school had a significant part to play in the extent to which quality education was provided during the pandemic, with better schools able to offer more, thereby exacerbating existing educational inequalities.

There was a similar state of affairs regarding the provision of extracurricular activities, with 75% of Outstanding schools still offering these, whereas ~75% of the Good schools reportedly did not. This shows that the existing quality of teaching and management in schools had a major impact on their ability to adapt to online learning. Research during the pandemic finds that teachers have performed best during the disruptions of the pandemic where they have felt part of an enabling environment and have been supported by school management and local authorities to exercise their personal and collective agency.⁵⁸ It is possible that Ofsted results act as an effective proxy for this level of support.

⁵⁸ Melanie Ehren, Paul Armstrong et al., “*Teaching in the COVID-19 era: understanding the opportunities and barriers for teachers’ agency*”, *Perspectives in Education*, 39:1 (2021), pp.61-76, <https://doi.org/10.18820/2519593X/pie.v39.i1.5>.

Policy Recommendations

There are some important policy lessons to draw from the parent and teacher survey responses. Teachers, parents and pupils alike struggled through lockdown and schools may understandably want to try to put the two periods of school closure behind them. However, the possibility remains of new COVID-19 variants, further pandemics and unexpected crises in the future. Moreover, the pandemic exposed underlying inequalities that will remain even after we have moved beyond the COVID-19 pandemic. Therefore, schools, local authorities and the Government alike should ensure that lessons are learnt from the school closures.

These include the following:

1. An internet connection needs to be considered as an essential utility and broadband poverty should be considered as being a similarly important policy priority as fuel poverty.⁵⁹
 - Problems with internet connection are widespread despite high levels of internet coverage on paper, and it is clear that household networks were overwhelmed during the height of the pandemic. This shows that a high speed, resilient broadband network in every borough is essential to maximise social inclusion and economic resilience.
 - Many schemes have emerged during the pandemic to provide devices to pupils, and this should be welcomed. However, it is important that these schemes are designed with effective implementation in mind, making sure the devices are appropriate and ready to use.
2. The Internet is not the whole story. Housing poverty and food poverty make it much more difficult for pupils to engage regardless of the quality of internet connection, so it is important that the Government takes a holistic approach to tackling poverty and disenfranchisement.
3. Teachers need to be supported in offering differentiated learning, not just because of different levels of ability but also different levels of need at home. Many teachers felt unable to provide this, indicating a need to share best practice and ensure that all teachers feel empowered to do so.

⁵⁹ Holmes and Burgess, "Pay the wi-fi or."

4. Teachers perform best in schools with strong leadership and an enabling environment. Teachers have a lot of skills and ability to innovate and need support to be able to do so and to share best practice.
5. Schools may want to consider a hybrid approach to camera policy during online learning, where cameras are on during smaller group sessions and one-to-ones, helping to maximise engagement and minimise distraction.
6. Schools should ensure that they clearly communicate to parents what is on offer for students who are struggling to access online resources, such as free devices or access to library services out of school hours.
 - They may also want to consider providing clear information about other help that is available, such as accessing reduced internet packages for low-income families or voluntary sector organisations that provide support.
7. Many schools were able to offer a programme of extracurricular activities throughout the pandemic, and other research suggests this can have a positive effect on mental health. Schools who were not able to do so might want to consider what they could learn from schools that did and continue to prioritise their extracurricular offer.

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