

Written evidence submitted by Institute of Fiscal Studies

Home learning in the COVID-19 lockdown¹

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The authors of this submission are researchers based at the Institute for Fiscal Studies (IFS) and the Institute of Education. The (IFS) is Britain's leading independent microeconomic research institute. IFS publications are free to view on our website (www.ifs.org.uk), where you can also find more information about our research, governance and funding.

With funding from the Nuffield Foundation, we have carried out a survey of families with school-aged children about their home learning experiences during lockdown. We have prepared this submission to highlight findings from our research that speak to some of the Committee's areas of interest.

¹ This submission draws on the research previously published in Andrew et al. (2020), as well as new forthcoming evidence. The authors are grateful to the Nuffield Foundation for funding this work (grant EDO/FR-000022584) and to the ESRC-funded Centre for the Microeconomic Analysis of Public Policy (ES/M010147/1) for co-funding. Sevilla additionally thanks European Research Council for funding her time through the PARENTime project.

Representative, real-time data

Researchers at the Institute for Fiscal Studies and the Institute of Education fielded an online survey of parents with school-aged children in England. The survey asked parents about how they and their children spent their time during a weekday and about the resources (both from their schools and at home) that children had available for home learning. The survey was completed online by over 4,100 parents of children aged 4–15 between 29 April and 12 May 2020.² We collaborated with an online survey company to ensure that our respondents came from a mix of genders, regions, and social and economic backgrounds. We then reweighted our data to ensure that it is as representative as possible of families with school-aged children in England.

In this submission to the Education Select Committee, we highlight some of the results of our survey that are most relevant to the committee’s inquiry. We focus our attention on the questions of the consistency of school support and information to families during the lockdown, and on the experience of disadvantaged students and what this could mean for educational inequalities going forward.

Consistency of school support

Parents were asked which of a set of resources their child’s school had provided (whether or not they had accessed them). Figure 1 summarises the share of students at primary and secondary school who reported being offered each resource, among the 81% of children who were not physically attending school the day before they were surveyed.

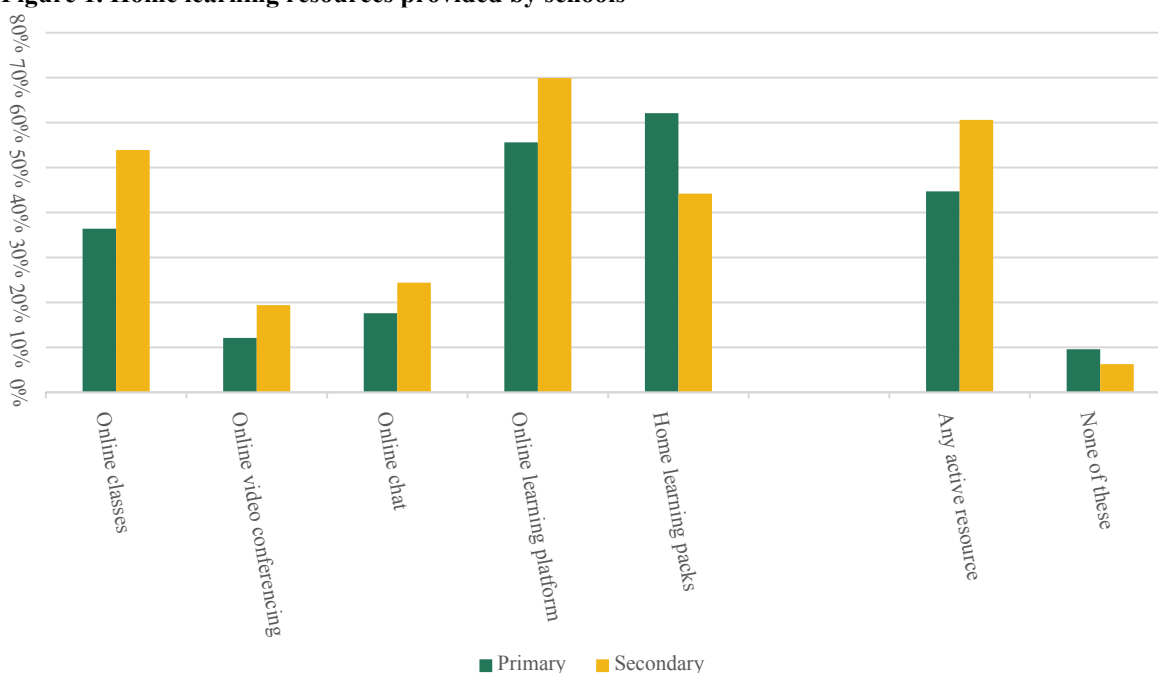
Overall, around 8% of students are not being offered any support through online classes, video or text chat, online learning platforms to set and collect work, or home learning packs (such as worksheets). While this is a relatively small group of students, these children are likely to be significantly disadvantaged from their time

² The survey continued to run until 20 June, receiving around 1,000 more responses. In this briefing we focus on the earlier sample so that our results refer to as similar a period of time as possible for all children. The children in our survey were due to enter Reception for the 2020/21 school year, or were currently in Reception or Years 1, 4, 5, 8, 9 or 10.

in lockdown, without access to school resources to support their learning or maintain ties to their school.

On the other hand, just over half of students – 61% of secondary and 45% of primary students – are being offered some form of active learning (which includes online classes, video conferences, or chats). These forms of support may be the closest substitute to a regular class structure that children would have experienced pre-lockdown.

Figure 1. Home learning resources provided by schools



Note: Sample excluding children in school the day before the survey. Active learning resources include online classes, online video conferencing, and online chat. Based on data collected between 29 April and 12 May 2020.

We find evidence of a clear gradient with age, with older children more likely to receive active learning resources and less likely to be offered lower-tech resources like home learning packs. Importantly, lower-tech resources are not always more accessible; these resources tend to require more input from parents (to supervise children and to explain and answer questions on the content). Children whose parents have less time available or less confidence with the material might therefore be disadvantaged by these resources.

We also asked parents whether they received information emails from their child's school. Only 55% of primary school students and 65% of those in secondary school were receiving these information emails. While we did not directly ask about other methods of communicating with the school, such as phone calls or dedicated information on the school website, these figures raise a concern that some parents may be missing out on information from their child's school.

Effects on inequalities

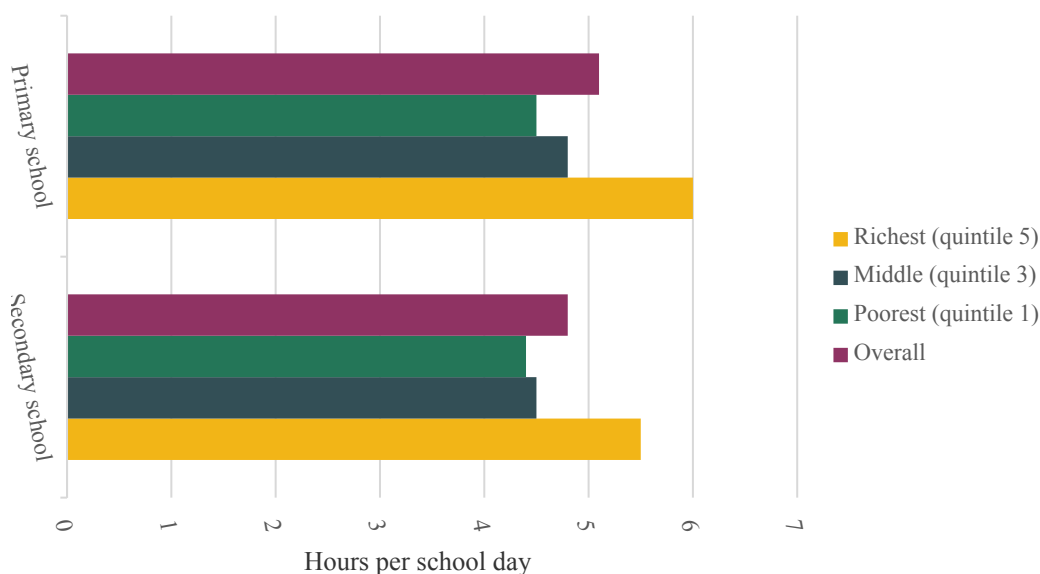
Our survey focused on understanding the home learning environment during lockdown, including the amount of time that children spent on educational activities and the resources available to them, both from schools and at home. We find strong socio-economic gradients in all of these.

Learning time

Figure 2 summarises the amount of time that children are spending on educational activities. It includes the time spent on online classes (provided or suggested by the school); other work assigned by the school; time with a paid private tutor; and time on other educational activities. We show the average time both overall and splitting by family income. We define family income groups based on equivalised pre-pandemic earnings, and consider families in the bottom 20% ('poorest'), the middle 20% ('middle') and the top 20% ('richest').³

Figure 2 highlights the inequalities in learning time. Secondary school children from better-off families (those in the top fifth of the distribution of family earnings) spend, on average, 5.5 hours a day on educational activities. This is over 1 hour more a day than the 4.4 hours a day spent by children in the lowest-income fifth of families. The gaps at primary school are even larger, equivalent to 7½ hours per week (around 1½ hours per day). For both primary school and secondary school children, the biggest gaps are between children in the richest 20% of families and the rest of their peers.

³ See Box 1 of Andrew et al., 2020 for further detail on how these measures are constructed.

Figure 2. Children's daily learning time during lockdown

Note: Based on data collected between 29 April and 12 May 2020.

Of course, inequalities in time spent on educational activities pre-date the lockdown. Forthcoming research by our team compares time use during the lockdown to time use in 2014-15, when the last UK Time Use Survey was conducted. We find that inequalities in learning time by family earnings have not dramatically increased during the lockdown.

School resources

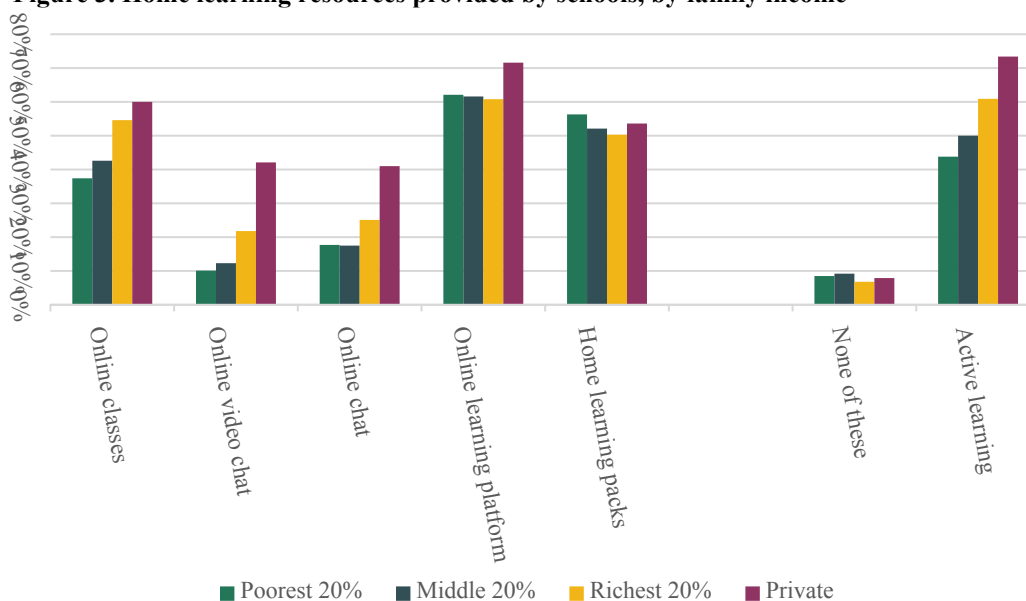
However, the lockdown means that there are much bigger differences in how children are spending the learning time they do have. Previously, a large part of a child's educational time was spent at school. While there are of course inequalities between schools (Hutchinson, 2016), schools are regulated against a common framework, and the school funding system directs more resources to more disadvantaged children (Belfield, Goll and Sibieta, 2018).

During the lockdown, there has been an enormous divergence in the resources that schools have offered to their students. Figure 3 show that students from lower-earning families attend schools that are less likely to be offering active learning. Inequalities between children in private and state schools have been documented (e.g. TeacherTapp, 2020; Cullinane and Montacute, 2020). However, our survey also finds evidence that, even among children attending state schools, those from better-off families have better access to home learning resources.

There are many possible reasons for this; for example, schools with a more disadvantaged intake might be less likely to use online resources in regular times and so less able to scale them up during the lockdown, or they might be concerned about unequal access to technology within their student body. While these lower-tech resources might support equity within a student body, this should be balanced against the inequalities that come from some students being offered these resources while others are not.

Of course, these data reflect the picture in late April and early May 2020, between five and seven weeks after school closures began (and at least ten days after the government announced a package of support for online learning). It is possible that schools have subsequently improved the home learning resources they deliver, though the socio-economic inequalities we document here are large enough that we would expect some gaps to remain even later in the lockdown.

Figure 3. Home learning resources provided by schools, by family income



Note: Sample excluding children in school the day before the survey. Active learning activities include online classes, online video conferencing, and online chat. Based on data collected between 29 April and 12 May 2020.

Home resources

During lockdown, children were asked to do most of their learning at home. Families differ in the type of learning environment that they are able to provide.

There has been significant concern about the impact of the ‘digital divide’ on children’s learning. Our survey finds that around one in ten students at primary school, and one in eight at secondary school, does not have access to a computer or a tablet, so uses a phone or no device to access online school materials. Especially at primary school, there are inequalities in this measure; 12% of students in the poorest fifth of families do not have a computer or tablet, compared to 7% of those in the richest fifth of families.⁴

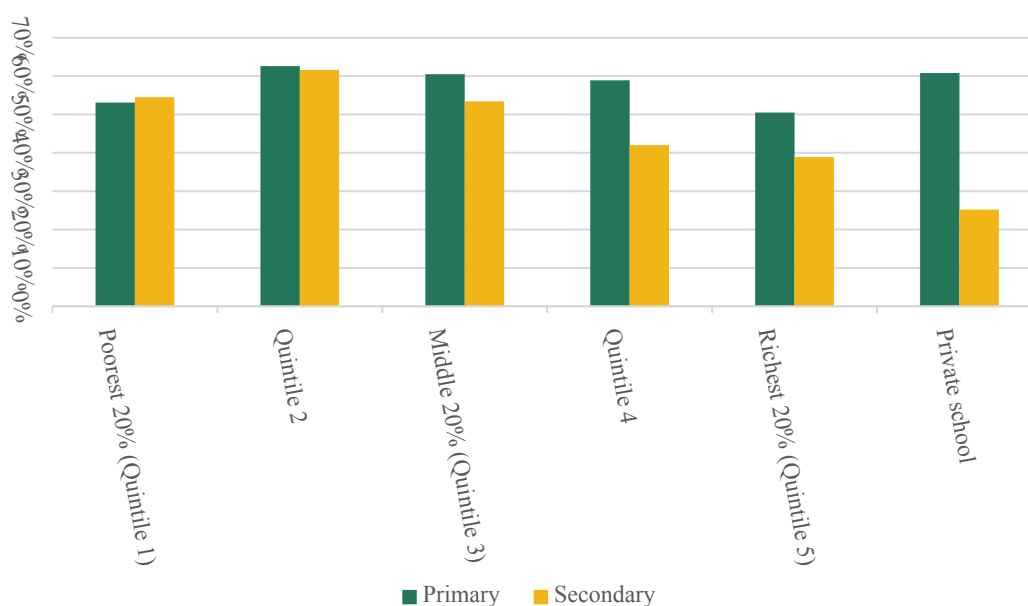
Another important resource is the availability of a quiet, dedicated study space at home for students to do their school work. Especially at primary school, this appears to be a bigger constraint than access to technology; 22% of primary school students do not have any access to a quiet space to study. This is a significant concern since a space for focused work is important regardless of the resources that schools provide, and this is not easily addressed by policymakers in the short term.

The final home resource that we considered was parents’ ability to support their children’s learning. As shown in Figure 4, over half of parents report that they are finding it quite or very difficult to support their child’s learning, with 58% of parents of primary school children struggling.

Among those with primary school children, there is not a clear pattern in how difficult parents are finding supporting their child by socio-economic status. Most notably, parents of private-school children are the second-most likely group to report difficulty.

By contrast, at secondary school there is a very clear pattern that the parents in poorer families are finding it more difficult; 39% of parents in the richest fifth are finding supporting home learning hard, compared to 55% of poorer parents. The parents of secondary school children in private school stand out: only a quarter of them are finding it quite or very difficult to support their child’s learning.

⁴ Our survey was conducted online, so we know that all of the parents in our sample would have had at least one internet-enabled device. This question focused on the child’s access to technology and looked specifically at computers and tablets vs. mobile phones (the most common device used to access our survey). However, our survey methodology will exclude families with no access to technology, so these figures might in practice be somewhat higher.

Figure 4. Parents finding it quite or very difficult to support child's home learning

Note: Sample excluding children in school the day before the survey. Based on data collected between 29 April and 12 May 2020.

These patterns could indicate that the kinds of support children need changes as they get older. Younger children might need more in-person supervision to help them stay on-task with their school work. This might be easier in families where children are spending less time on school work, and it might also be easier for parents with lighter workloads to provide.

In secondary school, the need for in-person supervision is likely to fall as older children can be more independent in completing their schoolwork. However, answering questions or teaching new concepts is likely to be more challenging as students learn more advanced material. Parents from poorer families might struggle more to offer this kind of support to their children, either because they are less comfortable with the material themselves or because their children's schools are not providing as many teaching resources like online lessons.

Conclusions and future work

Our survey provides detailed information about how families with school-aged children spent their time during lockdown, and what resources children have from their schools and their families to continue learning at home.

On average, children spent a fair bit of time on home learning – around five hours a day. However, the distribution of learning time has widened; while around 1 in 10 children is learning during eight or more hours each day, a similar share of children is doing learning during just one hour or not at all.

These differences map on to existing socio-economic inequalities. Children from poorer families are spending less time on educational activities. They are receiving fewer resources from their schools to support their learning. And they are less likely to have access to the technology, study spaces and parental support at home to help them make the most of this time.

COVID-19 is therefore not only causing children to lose the protective and (at least partly) equalising environment of schools, but also magnifying the importance of the home environment for their learning. In this situation, it seems very likely that the combination of differences in home environment and school support will have exacerbated inequalities in children's outcomes.

We are currently fielding a follow-up survey that will explore how time use and school resources have changed as some children have returned to school in-person. This survey will also allow us to investigate how these factors relate to children's mental health. In the longer term, we will analyse the data that we have collected alongside children's academic records.

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