Implications of school re-openings in the UK

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The unprecedented closure of schools and early years settings due to the Covid-19 pandemic deprived most children of school education for many months. In this Box we explore evidence on the impact of school closures to date, and the benefits and risks associated with the recent reopening of schools.

There are significant concerns about the impact of school closures, particularly for children from disadvantaged backgrounds, which extend beyond effects on educational attainment to broader concerns for wellbeing as well as long-term consequences. There are also inevitably effects on parents as a result of the need to spend more time providing education and care. Reopening schools should therefore bring benefits but it raises questions about the impact on infection rates. All these factors have implications for both health and the economy.

Impact on education

It is likely that school closures in the early months of the pandemic have halted and possibly even reversed recent progress towards reducing the disadvantage gap (EEF, 2020). A switch to remote learning will have contributed to this, as the 'digital divide' represents a major obstacle for many children. Approximately 60,000 students aged II-18 have no internet access at home (ONS, 2020), with between 1.1 and 1.8 million children in the UK having no access to a laptop, desktop or tablet (Ofcom, 2020). Based on interviews with around 5,500 parents of school-age children, Andrew et al. (2020a) find that children spent an average of 4.5 hours a day on home learning; representing a 25 per cent and 30 per cent reduction in pre-pandemic learning time among primary and secondary school children respectively (figure 1).

While it is difficult to quantify the attainment loss due to reduced learning hours, Burgess and Siervertsen (2020) estimate that the loss of three to four hours tuition in maths for twelve weeks could result in an attainment loss of approximately 6 per cent of a standard deviation. Evidence suggests the impact will be largest for children from disadvantaged backgrounds. At primary level, children from the richest families spent an extra 4.5 hours per week on learning compared to children from the poorest families; at secondary level, the gap is measured as one hour (Andrew et al., 2020a) (figure 2). Moreover, the negative impact may be particularly large for younger children given the importance of early years education for the development and improvement of cognitive and non-cognitive skills (Burgess and Vignoles, 2020).

Effects extend beyond those on attainment. Around two in five parents felt homeschooling negatively affected their child's wellbeing (ONS, 2020b), while the Children's Commissioner (2020) suggests wellbeing has been particularly negatively affected in specific cohorts e.g. children with Special Educational Needs and Disability (SEND). Furthermore, some 2.2 million children are living in households

Figure 1. Total number of hours spent per weekday on educational activities, before and during lockdown

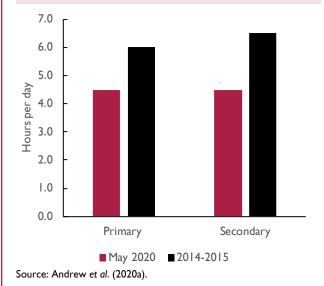
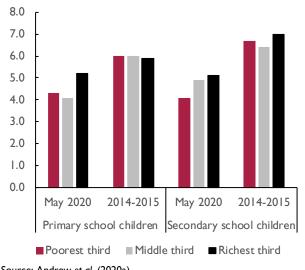


Figure 2. Differences in average, daily time spent on educational activities, before and during lockdown



Source: Andrew et al. (2020a).

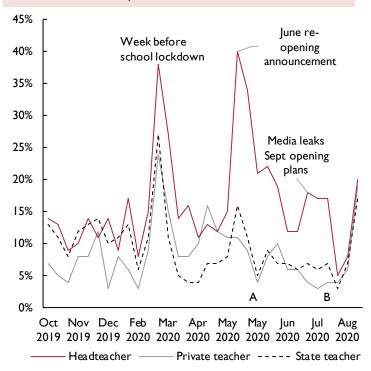
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affected by family issues linked to domestic abuse, severe parental mental health issues, and parental drug and/or alcohol dependency. For these children, school closures can have a particularly negative impact on mental and physical wellbeing.

In the longer term, OECD (2020) suggests the possibility of a 'hysteresis' in education with students struggling to maintain their learning pace, the erosion of their academic skills during the lockdown, and difficulty in re-engaging with education activities. Simulations by the World Bank suggest that in the absence of effective government action, each student whose primary or secondary education has been disrupted by school closures could face an average reduction in yearly earnings of \$872, equivalent to \$16,000 in lifetime earnings at present value (Azevedo et al., 2020).

The reopening of schools would therefore seem a positive step, but teachers face an ever-increasing workload in helping children adapt to new routines (Roberts, 2020; Speck, 2020). Survey information and research on teacher wellbeing indicates much higher anxiety levels which could have an uncertain long-term effect (TES, 2020, Allen et al., see figure 3). The continued pressure could decrease teaching quality and lead to teachers leaving the profession exacerbating existing teacher shortages. However, in times of economic uncertainty, teaching can also prove to be a more attractive career option, given fewer other opportunities (Fullard, 2020).

Figure 3. Work-related anxiety experienced by teachers during the 2019/20 academic year



Source: Allen, Jerrim and Sims (2020). Notes: A: Some primaries re-open to years I and 6. B: Some secondaries open to years I 0 and I 2.

Impact on labour supply

A significant part of the effect of the pandemic and the lockdown on labour supply and productivity has been associated with school closures. For parents with children usually in educational settings, the lockdown imposed additional duties related to both education and childcare. Between April and mid-May parents spent on average 3 hours of their day engaged in paid work compared to the 6.5 hours reported in the 2014/15 UK Time Use Survey (Andrew et al., 2020b). Among parents in work, 30 per cent stated that homeschooling was negatively affecting their job (ONS, 2020b), while many adapted their working patterns to provide additional childcare (ONS, 2020c).

DfE figures for I October 2020 show that almost all (99.8 per cent) of state-funded schools in England were open, with 92 per cent "fully open" i.e. able to provide face-to-face teaching for all pupils for the full school day, with no groups of pupils asked to self-isolate. Attendance rates stood at around 90 per cent of pupils in state-funded schools (DfE, 2020). With most schools open, this should help parents to return to work, or enable greater time for seeking work among those unemployed.

There is mixed evidence regarding the effects of school re-opening on infection rates. Studies suggest low transmission rates in school settings (Macarthy et al., 2020; Heavey et al., 2020), particularly in children under ten years (Park et al., 2020). Epidemiological evidence suggests children do not generally suffer from severe symptoms. However, in a modelling exercise studying the optimal strategy for re-opening schools, Panovska-Griffiths et al. (2020) found that even a partial re-opening of schools in September would lead to increased work-related and other contacts in adults that could result in a second wave of infections. In contrast, recent evidence from *Insights for Education* suggest no correlation between school reopening and either a rise or fall in infection rates (Crowder et al., 2020).

Potential economic benefits from re-opening schools extend beyond those on education and the labour supply; for example, higher retail sales associated with demand for goods purchased in relation to school re-opening and increased footfall as parents

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and children resume school journeys. Impacts on labour supply will also affect family finances and thus their spending power. But if labour demand is also affected, particularly with further rises in infections, as well as from actions to suppress the virus, the balance of such effects is not clear.

Overall, there remains considerable uncertainty about the longer-term implications - the pandemic is still unfolding, and the eventual effects will depend in part on actions undertaken in response. Research is already underway to understand more about the effects of school closures and how these may be mitigated, but there is clearly much still to be learnt.

Notes

- * Thanks to Jagjit Chadha and Adrian Pabst for their comments.
- I Differences in impacts vary by gender: mothers undertook more hours of childcare during lockdown than fathers (ONS, 2020c). Women were also more likely to lose or leave their job, or to be furloughed (Andrew et al., 2020a). Re-opening schools could reduce gender inequalities within the labour force that developed as a result of Covid-19 and lockdown.

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