



POLICY BRIEF

National Income Dynamics
Study (NIDS) – Coronavirus
Rapid Mobile Survey (CRAM)

Changes in education: A reflection on COVID-19 effects over a year

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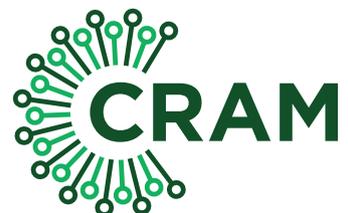
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N.i.D.S.
NATIONAL INCOME DYNAMICS STUDY



CORONAVIRUS RAPID MOBILE SURVEY 2020

Changes in education: A reflection on COVID-19 effects over a year

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This policy brief summarises findings from four waves of the National Income Dynamics Study – Coronavirus Rapid Mobile Survey (NIDS-CRAM) panel data (collected between May/June 2020 and February/March 2021) to estimate changes in and the determinants of adult concern, child hunger, and access to school meals amongst respondents residing in households with learners in the compulsory schooling system.

The brief also highlights evidence using panel data from the Early Grade Reading Study (EGRS) II on the estimated learning losses experienced by grade 4 learners in 2020. Finally, we present new analysis of deaths amongst teachers using government administrative data comparing the trends of 2020 (and the known peaks of COVID-19 infections) to those of the previous year.

The main takeaways

What has happened to learning?

The 2020 school year was marked by unexpected school closures and drawn-out periods of no schooling, especially for lower grades. The phased reopening of public schools and the implementation of rotational attendance timetables for learners meant that learners in grades 1 to 5 lost an estimated 60% of a possible 198 school days. While in other contexts, learning at home or accessing education by virtual means is possible, in the socio-economic context of South Africa, school-based classrooms are where almost all curricular learning occurs for the majority of learners. Using data from EGRS II collected in 2020, and comparing to comparable studies—namely, EGRS I and the Story-Powered Schools (SPS) intervention—we estimate that the **overall learning loss for grade 4 learners was 76% in Home Language (HL) and 48% in English as a First Additional Language (EFAL)**. Otherwise stated, these figures indicate that **learners learnt roughly a quarter of what would normally be learnt for Home Language, and just about half of what they would normally have learnt for EFAL**. This is especially concerning as rotational attendance continues to be implemented in 2021.

How worried are parents?

In the first quarter of 2021, 57% of parents and caregivers indicated that they were very worried about sending their child/ren to school, down from 74% six months prior. Overall, 62% of respondents reported feeling very worried about learners' return to school at least two of the three times they were asked over the past year.

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Roughly a third (32%) of adults living with children were very worried about school return across all three waves of NIDS-CRAM, and 16% remained a little or not worried at all time points. We can, therefore, conclude that at least half of adults experienced a change in attitudes over time. In terms of transitions between states of worry, approximately a third of respondents who were “not worried” or “a little worried” in July 2020 had transitioned to “very worried” by February 2021. Similarly, a third of respondents who were “very worried” in July 2020 had transitioned to “not worried” or “a little worried” by February 2021.

However, in November/December 2020, a time at which learners of all grades were permitted to attend school, **the majority of parents and caregivers in South Africa (58%) agreed that children should be able to attend school every day, rather than on rotational timetables.**

So, what influences worry? Adult worry about returning to school was shown to be related to socio-economic factors, especially household food shortages. As seen in previous NIDS-CRAM data collections, levels of high concern were two to three times higher amongst the poorest 40% of households compared to the wealthiest 10% of households. If children received a free school meal in the last week, levels of parental worry were significantly lower compared to otherwise comparable households. We further found attitudes towards contracting COVID-19 and feelings of hopelessness and/or depression to be a significant factor influencing household worry.

What about hunger?

Levels of hunger have stayed consistently high relative to pre-COVID times. According to Wave 1 of NIDS-CRAM (collected between May and June 2020), 49% of adults living with children indicated that their household had run out of money for food during the month prior to the interview. This declined to 39% in Wave 2 of NIDS-CRAM, but increased to 43% and 45% in Waves 3 and 4, respectively. Overall, **72% of adults living with children reported that their households had run out of money to buy food the month prior to being interviewed in at least one of the four waves of NIDS-CRAM.** We further find food insecurity to be strongly related to child hunger: roughly 1-in-3 adults residing in households with insufficient money to buy food report child hunger. This is compared to levels of reported child hunger amongst households with sufficient money to buy food of around 5%.

What about school meals? Wave 4 data collection began whilst public schools were still closed. Therefore, as expected, lower levels of school feeding were observed. Overall, only 25% of adults interviewed in Wave 4 reported that a learner in their household received a school meal in the previous week. However, there is a clear change in responses comparing data collected either side of the official date of public-school reopening (15 February 2021). While only 17% of respondents interviewed before this date indicated receiving a school meal, this figure jumps to 43% in we consider interviews that took place from 17 February onwards. **This suggests that access to free school meals declined (although not significantly) from 49% in November/December 2020 to 43% in February/March 2021.**

Are schools spreading COVID-19?

The reason cited for disruptions to schooling in 2020 and 2021—including phased reopening, social distancing within classrooms and rotational attendance by learners—is the COVID-related health risk to learners, teachers and the rest of society that school attendance might pose. As was noted in the previous NIDS-CRAM papers on education, the local and international evidence continues to show that the health risks posed by COVID-19 to (especially young) children are much lower than the risks to adults, and low relative to other factors responsible for child deaths. Using an excess deaths approach and teacher payroll data (PERSAL), we estimate that of the 401 327 teachers in the database, approximately 1 600 teachers have passed away due to COVID-19, with the vast majority

of these deaths occurring during the first and second waves of the pandemic in July 2020 and January 2021. It is noteworthy that schools were mainly closed during these times of high mortality, while excess teacher deaths were low between September and November when schools were open. Therefore, our excess deaths analysis confirms what the NICD has found for the population as a whole: that there is no clear association between the timing of schools being open and increased spread of the virus (NICD, 2021).⁵

Considering this together with the evidence of substantial harm caused to children by the disruptions to schooling, we believe there is a strong case for keeping schools open as far as possible and moving towards full time attendance, especially at the primary school level where the health risk is lowest, and the educational and nutrition risks may be greatest.

5 NICD. 22 January 2021. COVID-19 Special Public Health Surveillance Bulletin. Volume 18, Issue 7.

1. Introduction

When the COVID-19 pandemic first hit in early 2020, countries all over the world instinctively closed schools. With little known about the novel SARS-CoV-2 virus, this seemed an obvious means of protecting children and limiting the spread of the virus. However, following more than a year of research, the evidence is becoming clear: school attendance has not significantly worsened the pandemic, but the disruptions to schooling have been extremely detrimental to children, with possibly lifelong consequences. This next section provides a summary of how we have come to this conclusion.

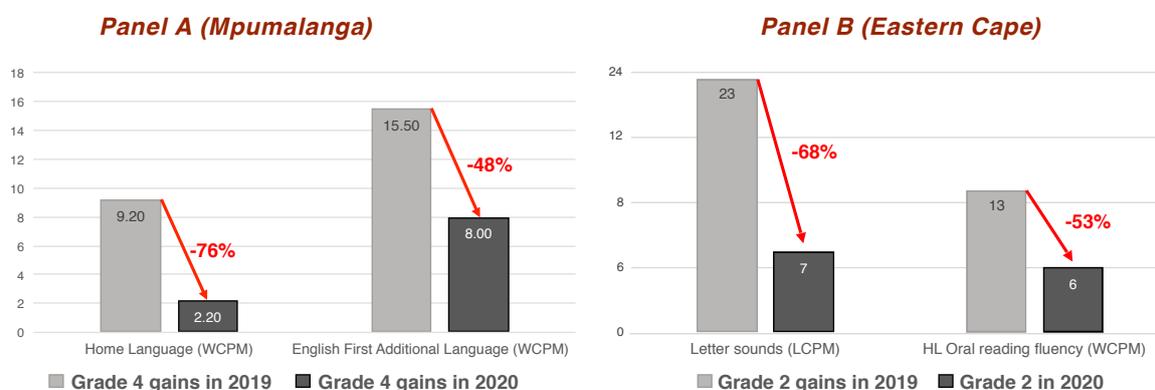
2. Learning loss

Global concerns are being raised about the potentially disastrous effects on children caused by missing so much school during 2020. This is seen across both developed country contexts, where access to remote online learning is more commonplace, as well as developing countries where the majority of learning may only take place in schools. The same concerns exist in the South African context.

Learners attending more than 70% of public schools come from resource-poor households where, if not provided through the school, very few opportunities for learning exist. When guardians of learners in the EGRS II sample were asked whether they owned a computer, only 12% responded that they did. Additionally, only 39% of the children in this sample lived in a household where the main caregiver had a completed matric. Therefore, options like using technology are not viable for the majority of schools and households. Our analysis of the First and Second Early Grade Reading Studies (EGRS I and II)⁶ data, however, shows that not much was done during 2020 to provide learners with resources to learn at home.

Opportunities for contact learning have been severely limited and continue to grow given initial school closures in response to the pandemic, as well as the phased-in re-opening and ongoing rotational system. Figure 1 summarises the comparisons of learning gains in Home Language (HL) and English as First Additional Language (EFAL) in the EGRS II study to the learning gains in the EGRS I and SPS interventions. The dramatic loss in opportunities for learning has translated into severe learning losses, shown to be as much as 75% for HL reading in grade 4, and almost 50% in EFAL in Mpumalanga (Panel A). A further study covering 57 no-fee schools in the Eastern Cape—the Funda Wande Evaluation—found similar learning losses at the Grade 2 level for HL. Depending on the task assessed, learning losses across the 57 no-fee schools ranged from 53% to 68% (Panel B). These gaps are expected to continue to grow if school attendance continues to be restricted.

Figure 1: Learning losses in Grade 3 to 4 using EGRS (130 no-fee schools in Mpumalanga) and Funda Wande (57 no-fee schools in the Eastern Cape)



Source: EGRS II data (2020), EGRS I data (2019), SPS data (2019) and Funda Wande (2019, 2020).

6 The first Early Grade Reading Study (EGRS I) targeted Setswana Home Language literacy and the second study (EGRS II) targeted English as a First Additional Language (EFAL). In both EGRS I and II, a sample of 20 learners per school were randomly selected at the start of grade 1 and tracked through to grade 4 as a longitudinal study.

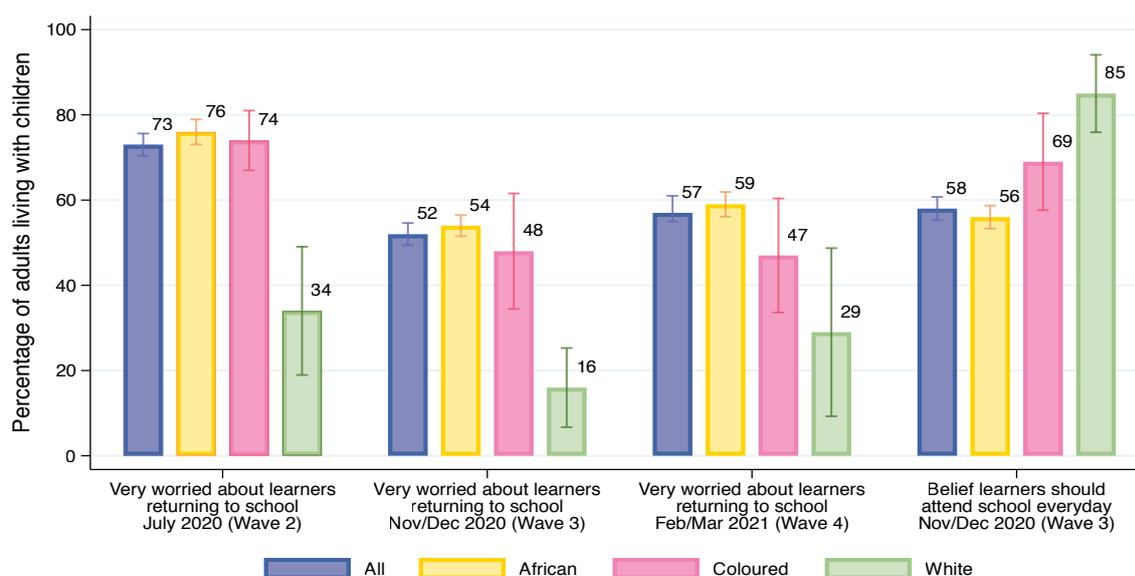
3. How worried are adults about learners returning to school?

Although worry amongst parents and caregivers has remained high, it has been decreasing, with the most drastic decrease observed between Wave 2 and Wave 3 of NIDS-CRAM from 74% to 52%. These declines can be linked to changes in lockdown levels, with less worry correlated with fewer restrictions. Worry is significantly higher amongst adults living in food insecure households, as well as those adults who perceive themselves to be at risk of getting COVID-19 and report feelings of hopelessness and/or depression. Food insecurity and risk perceptions are also significantly related to transitioning from “little or not worried” to “very worried”. Child access to meals at school is related to diminished worry.

Analysis of high worry over school return by the demographic (race) group of respondents indicates that white adults living with children report significantly lower levels of high concern about school return than either African or Coloured adult respondents (see Figure 3). In July 2020, levels of high worry amongst African, Coloured and White adult respondents were 76%, 74% and 34%, respectively. In November/December 2020, worry across all population groups fell significantly, although a 30-40 percentage point gap remained between White and African and Coloured respondents. This gap narrowed to 20-30 percentage points in February/March 2021.

In Wave 3 (November/December 2020)—a time at which the least stringent lockdown protocols (Level 1) were in place—respondents were additionally asked their opinion on whether learners should be allowed to attend school every day, as opposed to on a rotational basis that satisfies social distancing protocols. Here too strong racial differences emerged, with 85% of White adults responding that they felt that children should be able to attend school every day, compared to 56% and 69% of African and Coloured adults, respectively. Overall, more than half of adults (56%) felt that children should be able to attend school every day as opposed to rotational timetables. Agreement with this statement could signal a desire for the relaxation of COVID-19 mitigation measures in schools, perhaps because parents are confident in their child/ren's schools' ability to manage risk and ensure child and teacher safety. This is, in itself, a reflection of structural differences in access to quality schooling.

Figure 2: Parent and caregiver worry about school return and beliefs about school attendance, by race (July 2020 – February 2021)



Source: NIDS-CRAM data, Waves 2 and 3 (2020) and 4 (2021).

Notes: Unbalanced panel samples used with data weighted appropriately. 95% confidence intervals indicated.

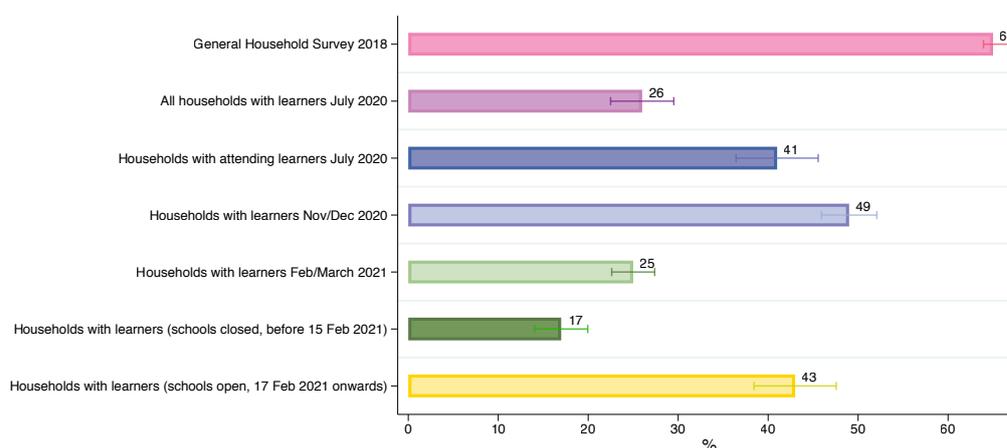
4. Lost nutrition:

One of the most important core services that has been provided by the Department of Basic Education (DBE) for more than 20 years is daily meals to eligible learners through the National School Nutrition Programme (NSNP). According to the 2018 General Household Survey, approximately two-thirds of households with learners attending Grades R to 12 reported that children received a school meal at least once a week, and of these, 85% reported access to school feeding daily.

When examining households over time, we find that more than 70% of adults living with children reported that their households had run out of money to buy food the month prior to being interviewed in at least one of the four waves of NIDS-CRAM. This is concerning as roughly 1-in-3 adults reporting food insecurity also report recent incidences of child hunger in the household.

The timing of NIDS-CRAM Wave 4 data collection did not overlap fully with the reopening of public schools. Therefore, we would expect overall school feeding levels to be lower in Wave 4 than in Wave 3. This is confirmed by an estimated 23% of adults interviewed in Wave 4 reporting that a learner in their household received a school meal in the week prior. However, there is a clear discontinuity at the time of the reopening of public schools, with proportions jumping from 17% before 15th February 2021, to 43% after 17th February 2021. Note, however, that this 43% figure derives from responses from 942 individuals (compared to 2 606 before 15th February).

Figure 3 Percentage of adults residing with children who received a meal at school



Source: NIDS-CRAM data Waves 2 and 3 (2010) and Wave 4 (2021), and GHS (2018).

Notes: The unbalanced sample of respondents is used. Data is weighted appropriately. 90% confidence intervals shown.

NSNP only takes place during the school term. Over the past year, the significantly reduced school year meant that school holidays were longer than in pre-COVID-19 years. Overall, at least 55 days of school meals were lost between March 2020 and March 2021 due to no schooling. However, based on rotational timetabling and reported challenges in the provisioning of meals even during the school term, 55 days of lost meals is likely to be an underestimate. While learners could come to school for meals even on days when they were not attending school, according to our analysis and DBE reports, this was not the case across schools. In the case of alternate-day attendance, this estimate could be increased by half of the schooling days—i.e. 78 days out of the 156 days—making total lost days of meals as high as 133 out of 211.

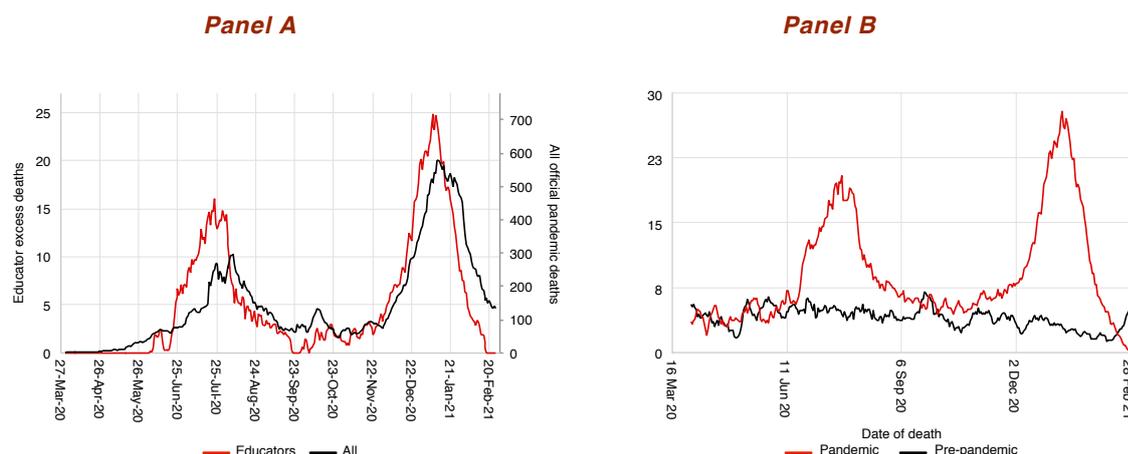
5. The risk of reopening schools

There is evidence that children, especially young children, appear less likely to contract the virus, and are much less likely to become seriously ill from it. They are also unlikely to be the primary spreaders of the virus. Whereas about 3 000 children aged 5-9 die annually in South Africa due to a variety of causes, only 23 children aged 5-9 died from COVID-19 between 5 March 2020 and 10

April 2021 (over a year). This is compared to 7 553 people between the ages of 60 and 64.

Turning to teachers, we provide an estimate of the number of deaths amongst publicly employed educators attributable to COVID-19 using administrative data. We compared the numbers of daily deaths amongst teachers reported in the year before the pandemic (2019) to the numbers reported at the same time of year during the pandemic (2020 and January 2021). This is illustrated in Figure 3 below. Overall, excess deaths are estimated to be 1 678 out of 401 327 teachers on the public-school payroll. The South African Medical Research Council estimated a total of 125 744 excess deaths by January 2021. Therefore, teacher excess deaths represent 1.3% of the overall total.

Excess teacher deaths (red line) in comparison to overall COVID-19 deaths in SA (Panel A) and teacher deaths pre-pandemic (2019) (Panel B)



Source: Calculations by Martin Gustafsson, using monthly teacher payroll data (PERSAL) for 2019 and 2020. For the population figures, the OxCGRT dataset was used

6. Policy options: What can policymakers do about this?

Return to full-time school attendance, at least at the primary school level: Overall, the evidence available suggests that school attendance has not contributed to a substantial increase in the health risks posed by COVID-19 in South Africa. Meanwhile, there is evidence of substantial harm to children caused by the disruptions to schooling. Although the initial school closures and measures to facilitate social distancing seemed wise at the time, going forward it appears imperative to keep schools open as far as possible, as well as to maximize the possible teaching time received by children. This should be the primary strategy within government’s plans for the recovery of learning. In a context such as ours, where distance learning alternatives are not an effective option for most children and schools, protecting teaching time at school is critical. The practice of rotational timetabling that is causing significant additional losses in teaching time should be reconsidered, especially at the primary school level. Health and safety protocols that do not result in lost teaching time, such as sanitizing and wearing masks, should be continued.

Ensure that children receive their daily meals at school: Aside from the effects on learning, a further reason that emerges for maximising school attendance is nutrition. The negative impact of this pandemic on child hunger has highlighted the important role that the National School Nutrition Programme plays in South Africa. At the times of the NIDS-CRAM surveys, we see that the percentages of households with children receiving meals at school has still not returned to normal pre-pandemic levels. It is clear that when schools have been closed, children were much less likely to receive school meals. But even at times when schools were open, school feeding was not at its normal level—this may have to do with rotational timetabling. This paper has also shown that not receiving school meals could be a factor contributing to worry amongst parents and caregivers about their children.

For further information please see [cramsurvey.org](https://www.cramsurvey.org)