



Looking back on Nigeria's COVID-19 School Closures: Effects of Parental Investments on Learning Outcomes and Avoidance of Hysteresis in Education

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Background

The spread of and containment measures against COVID-19 such as school closures have severely affected education systems globally. UNESCO estimated in spring 2021 that two-thirds of an academic year had been lost worldwide due to COVID-19 school closures, and this number can only have increased since then. The World Economic Forum estimates that 1.6 billion children were out of the classroom at the initial peak of the pandemic in about 200 countries. The time children spent out of school likely led to learning losses similar to a "summer slide," a phenomenon in which academic performance decreases after summer breaks. Empirical evidence largely from developed countries has already found huge learning losses from school closures despite the transition to remote learning. There is a growing concern around potential learning losses especially for children in developing countries who are already facing chronic learning deficits.

The Nigerian government implemented school closures in March 2020 in response to the first cases of COVID-19. Schools remained closed until September 2020. During this six-month period, at least 22.4 million public elementary school students, 6.8 million lower

Key Points

- Scholars are concerned that COVID-19 and related school closures have led to learning losses globally.
- The Nigerian government implemented mandatory school closures in March 2020 in response to the first cases of COVID-19. Schools remained closed until September 2020.
- National survey data collected by the Nigerian Bureau
 of Statistics on alternative learning methods used
 during this time show that e-learning tools were less
 popular than low-cost educational interventions such
 as increased parental involvement and private tutoring.
- A RISE survey of 73 low-cost private schools in Abuja found that student performance decreased by about .65 and .6 standard deviations in maths and English, respectively, relative to performance prior to school closures. These numbers equal the amount of learning we would expect students to lose by missing 5-6 months of classes in other contexts.
- RISE survey data also reveals that schools experienced extreme financial hardship as a result of the pandemic, resulting in difficulty paying and retaining teachers.

secondary school students, and 1.7 million undergraduate students did not participate in conventional in-classroom learning. At-home learning was adopted during the initial peak of the pandemic as the primary alternative for in-school learning. As school closures continued, radio and television learning platforms were also adopted, especially for children from relatively wealthy homes. The government reopened schools in phases starting in September 2020 with reopening guidelines intended to prevent further spread of the COVID-19 virus in schools. These measures included reductions in class size, social distancing, shortened school days, and basic preventive measures such as use of hand sanitiser and hand washing.

In this Insight Note, we explore how COVID-19 and related school closures impacted Nigerian schools, parents, and students. National data collected by the National Bureau of Statistics in 2020 through a monthly phone survey show that children had extremely limited contact with the education system during this time, and that families preferred low-cost alternatives such as in-home tutoring and increased parental involvement in education to e-learning tools. Additional data collected by the RISE Nigeria Team in a survey of 73 low-cost private schools in Abuja suggest

that some schools did maintain contact with students during mandated school closures, that students experienced absolute learning losses equivalent to about 5-6 months of school missed in other contexts (Cooper et al, 1996), despite participation in alternative learning activities, and that the pandemic led to severe financial hardships for schools and teachers.

Results from the NBS Survey

In April 2020, the Nigerian National Bureau of Statistics launched the National Longitudinal Phone Survey (NLPS), a phone survey of a nationally representative sample of 1,950 households. This survey was conducted four times between April and August 2020 and was focused mainly on the economic impacts of COVID-19 and associated policies. NLPS data provides insight into how students, families, and educational systems across Nigeria responded to COVID-19 and related school shutdowns. Overall, it suggests that technological learning interventions were less popular than low-tech options such as private tutoring and increased parental involvement in education.

NLPS data show that after the initial school closures in March 2020, about 38 percent of students were not involved in any educational activities and only 19 percent had contact with their teachers. Although improvements were seen over the course of the school closures, as 36.1 percent of students had contact with their teachers by July 2021, most children were still disconnected from the school system and the share of children not engaged in any educational activities remained around 38 percent at this time (see Figure 1). We can thus extrapolate that learning losses occurred among students due to reduced learning activities caused by COVID-19 and associated school closures.

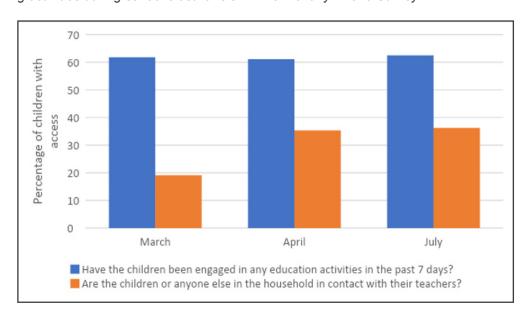


Figure 1. Learning activities during school closure: COVID-19 Monthly Phone Survey

Source: National Bureau of Statistics (NBS, 2020)

Though free e-learning tools were provided to Nigerian students as part of the government's policy response to COVID, survey results show that the effectiveness of this response was limited and does not account for the gradual increases in educational participation seen during school closures. The use of mobile learning apps peaked at around 24 percent of students covered in the NLPS in June 2020 (see Table 1). Completing assignments provided by teachers, studying/reading on their own, and being taught by a parent or other household member were much more popular ways to continue learning during school closures. Notably, the percentage of students participating in sessions with paid tutors increased from about 15 percent in March to 54 percent in July.

The relative lack of popularity of remote learning apps can likely be explained by Nigeria's economic situation, as most low-income Nigerians lack access to the digital tools and internet connectivity to accommodate distance learning. These problems are further intensified by Nigeria's unstable electrical supply. Low-cost alternatives such as students studying/reading on their own and increased parental investment in education were the more popular options for continuing learning outside of school.

Table 1: Medium of learning during school closure in Nigeria (all numbers are percentages of students surveyed)

	March	April	May	June	July
Completed assignments provided by the teacher	17.09	33.64	37.3	47.79	46
Used mobile learning apps	6.2	17.89	20.46	23.73	15.99
Watched educational TV programmes	15.5	30.69	39.02	46.68	35.72
Listened to educational programmes on radio	20.48	45.18	44.86	51.09	46.16
Studying/reading on their own	67.4	80.07	77.26	77.2	77.69
Taught by parent or other household member	56.06	75.35	73.25	72.83	72.2
Session/meeting with lesson teacher (tutor)	15.94	32.92	45.76	60	54.17
Other activity	3.08	2.22	2.07	4.44	1.16

Source: National Bureau of Statistics (NBS, 2020)

While increases in at-home tutoring and parental involvement in students' education seem promising, it should be noted that the NLPS does not provide information on the *quality* of at-home tutoring. Especially in Central and Northern Nigeria, some of this tutoring may have taken a form similar to Qur'anic education, which typically does not include basic skills such as literacy and numeracy. UNICEF suggests that 29 percent and 35 percent of Muslim children in the northeastern and northwestern states, respectively, receive Qur'anic education. Hence, home tutoring in these areas may not have had the same impact on conventional learning as in other areas.

NLPS data also indirectly suggest that COVID-19 exacerbated the risk of student dropout caused by increased economic hardship. Results from the final round of the survey show that over 67 percent of households' total incomes (from three sources—wages, agriculture, and non-farming enterprises) decreased compared to the same period in 2019. These income decreases increase the risk that children could join the labour force in a bid to elevate household income. Girl students are especially vulnerable since they are more likely to be burdened with work for household income and domestic chores. The majority of Nigerian pupils leave primary school without basic numeracy and literacy skills—these already-low returns to education combined with the economic impacts of COVID have likely led to increased dropout among girls and other vulnerable student groups.

Results from the RISE Survey

The RISE Nigeria Team conducted surveys in 73 low-cost private schools in Abuja as part of a study that provided cheap supplemental tutoring to mitigate learning losses from school closures. Data collection focused on students in primary school Grades 2 to 4. 1,010 parents of schoolchildren, 59 school owners (59 out of the 73 school owners participated in the survey), and 214 teachers were also surveyed on the impacts of the pandemic on households, schools, and teachers. Student data was collected in four phases, starting with pre-pandemic testing data collected from schools, and continuing with baseline testing at the beginning of the intervention, midline testing one month in, and endline testing at the end of the two-month intervention. The goal of the student surveys was to measure learning losses and whether the tutoring intervention mitigated or erased these losses. The baseline survey took place in September 2020 after schools were allowed to reopen—this allowed the team to compare baseline and pre-pandemic results to measure learning losses.

The surveyed schools had the following characteristics:

- Tuition fees of about NGN 15,000 (\$50) per term.
- Average student/teacher ratio of 20 to 1.
- Average of four teachers per school.

These low-cost private schools were some of the most impacted by Nigeria's 2020 school closures because they did not receive any government support. That said, 46 out of the 59 private schools for which head teachers were surveyed held face-to-face tutoring in small groups during the compulsory school closures (see Figure 2). These results suggest that learning did not completely cease even in these low-cost private schools, and that schools were not under strict monitoring by governmental education authorities and may not have complied with all aspects of Nigeria's mandatory school closure policies. It is likely that the main goals of these tutoring sessions were to retain students and collect tutoring fees, as private schools faced severe financial hardship during school shutdowns.

No 13

Yes 46

Figure 2. Number of private schools that held face-to-face tutoring in small groups during school closures

Source: Nigerian CRT COVID-19 supplemental study.

These financial hardships led to an inability to pay and/or retain teachers. 54 of 59 of the surveyed head teachers said that their school could not pay teachers' full salaries between March and September 2020. Only 14 out of the 59 head teachers were able to retain their full staff of teachers during this time. Schools that were able to pay salaries to teachers during the school closures paid less than 50 percent of their monthly salaries. Most teachers surveyed reported that they were considering not returning to teaching when schools reopened due to a lack of salary payment during the school closures. 34 of the 59 schools in which head teachers were surveyed had at least one teacher resign during school closures, and two of these schools had their full teaching staff resign.

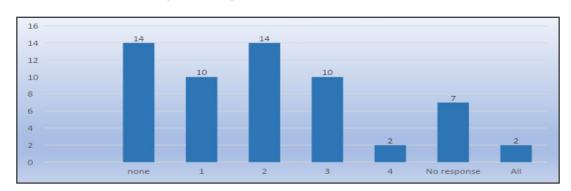


Figure 3. Number of teachers that resigned during school closures

Source: Nigerian CRT COVID-19 supplemental study.

As in the NLPS, survey results also pointed to a link between the economic hardships caused by the pandemic and increased risk of school dropout. The majority of households surveyed had a below-average family income (NGN 25,000 or about \$60/month USD). About 96 percent of households reported their family income was affected as a result of the pandemic, roughly 80 percent of households reported that their family monthly income was significantly reduced, and 60 percent of parents said that their children may not be able to return to school when schools reopen. Many of these families struggled to pay the fees for small-session tutoring, exacerbating the schools' financial problems as well.

Overall, by tracking the performance of the same students over time, we estimated that the magnitude of learning losses from school closures was equivalent to previous estimates from Global North contexts of learning losses from being out of school for 5-6 months of class time. Student performance decreased by about .65 and .6 standard deviations in math and English, respectively, relative to performance prior to school closures. We can infer that actual learning lost was in fact greater than these estimates, since students would have gained additional knowledge from being in school for the time period missed in a "business as usual" setting. These types of learning losses are important not only in the short term, but due to their propensity to persist over time. To take one example from the literature, Kaffenberger (2020) showed that reducing learning by one-third of a school year in Grade 3 reduces later learning by a much greater amount by the time pupils reach Grade 10. By this time, their learning is on average a full

year behind what it would have been without external shocks causing missed school.

RISE survey data also points to a link between parental education levels and learning losses. About 23 percent of parents surveyed did not have formal education, and the majority had only some primary school education. This suggests that parents may not have been able to cover for the missed learning during school closures. We aggregated students into three groups—no education for both parents, some education for one parent, and both parents educated. Students from households where a single parent had some education tended to perform better over the course of the survey phases when compared to students whose parents had no education. Interestingly, children whose mother had some education tended to perform better than those whose father had some education, probably because mothers are more involved in their children's education than fathers in these families.

Conclusion

Nigeria's education system was already faced with a multitude of problems before the COVID-19 pandemic—these problems were only exacerbated by compulsory school closures. School-aged children in low-cost primary schools were unfamiliar with online learning platforms and had difficulty adapting quickly. Children from the lowest-income families suffered the most, with wider learning losses when schools reopened, because parents were busy engaging in income-generating ventures and could not provide time for their children's education. RISE survey data at low-cost private elementary schools in Abuja suggests that learning losses during the pandemic were large, and that COVID-19 caused severe financial stress for both schools and families. This financial stress likely damaged learning outcomes as well, as schools were unable to pay or retain teachers, and students may have been forced out of school and into the labour force.

At-home tutoring proved to be a popular alternative for conventional education during school closures. To prepare for future external shocks, parents should be invited to become more involved in their children's education, so they can themselves help tutor their children, or so that they can understand the necessity of private tutoring and demand it. An increased social safety net could also help to mitigate learning losses, as parents with less income stress could devote more time and energy to educating their children. Building up the infrastructure for more high-tech learning strategies could also help to prepare for future shocks. However, the effects of these types of investments would be limited by the large number of low-income households who are unlikely to benefit.

Though the RISE study in Abuja found that learning losses were large during school closures, the same study also provides some more optimistic news—initial findings suggest that a low-cost tutoring programme was effective in mitigating learning losses, and that students can quickly recover from these types of external shocks. These findings will be explored in more detail in a forthcoming working paper.

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