How is the COVID-19 pandemic affecting educational quality in South Africa?
Evidence to date and future risks

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The policy brief draws from the full paper:
Education

- **COVID-19 can erode the learning gains made in schools over the last two decades.** As the poor will be most affected, inequality in education could widen with social and economic implications in the long term. The data shows that education in South Africa has improved over the last two decades, especially for children in poor communities. COVID-19 threatens to undermine the progress seen in both national and international assessments of numeracy and literacy. Learners in poor households have lower levels of access to digital devices, internet for remote learning, nutrition, reliable water and sanitation, and are more likely to need catch-up educational programmes to minimise learning losses when they return to school. Households with poor and vulnerable learners have been most affected by the pandemic. Learning gains of Grade 4 learners could drop to levels seen in 2016 or worse, given a loss of between 14% and at least 33% of the total number of school days depending on the grade in 2020.

- **Prioritising quality improvement in the face of budget cuts and poverty.** The qualitative improvement in schools has most likely been driven by clearer curriculum documents and expectations, a shift towards viewing learning outcomes as an indicator of performance, better access to books, higher participation in pre-school institutions, and more skilled, younger teachers joining the profession. Expanding access to books and other materials in households, expanding pre-school participation, and effective teaching is more important than ever before, given the large numbers of children and adults likely to suffer from the negative impacts from the pandemic. Even before COVID-19, education budgets in education had been under pressure. The loss of jobs will affect the affordability of child-care, and this can result in a reduction in the number of children attending pre-schools.

- **If support for learning in the foundation phase, and catch-up programmes are not fast-tracked in the coming years, learning gains will be rolled back by at least four years in the primary grades and twice as long in the secondary grades of school.** These losses threaten to be more for schools with Learners with Special Education Needs, and in schools with a weak culture of accountability for effective teaching and learning.

### 1. What was education sector performance in South Africa before COVID-19?¹

The global development narrative has highlighted the importance of education in social and economic development. The policy debates about education have shifted from a preoccupation with school participation and attendance to what children and young people learn in school, and what they know and can do as a result. In addition, the Sustainable Development Goals adopted in 2015 have focused attention on the effectiveness of the world’s schooling systems in ensuring that learning outcomes improve for all children.

Following decades of reliance on the end-of-school examinations as the leading indicator of performance, countries have expanded work on developing their national assessment systems, to rigorously assess learning outcomes well before young people leave school to join the world of work and further education. Global concerns about education quality have also given rise to international assessments of learning outcomes, which typically assess competencies in mathematics, language and life skills in addition to subjects as diverse as science, digital technology, and social or civic studies.

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South Africa’s recent experiment with national assessments which ended in 2015, has contributed to focusing the schooling system on learning outcomes. The country participates in three international assessments which all point to progress of a similar magnitude: TIMSS\(^2\), in Grade 9 mathematics and science since 2002; PIRLS\(^3\), in Grade 4 reading since 2006; and SACMEQ\(^4\) in Grade 6 mathematics and reading since 2000.

All three of these assessments confirm that in South Africa, even though levels of education quality have remained stubbornly low in comparison with other middle income and developing countries, the country’s rate of improvement has been among the fastest over the last two decades. The largest improvements have been seen among the lowest-performing schools, meaning inequality in the system has also reduced.

To show the nature of the improvement, we use an intuitive measure of learning progress, annual years of schooling gained, focusing on performance in reading as this has been an area of weakness in the South Africa. The data confirm that South Africa’s Grade 4 reading levels in PIRLS, though low in comparison to other countries have been improving each year by one-tenth of a year’s worth of learning. By 2030, Grade 4 learners would have been reading at the levels of a Grade 5 learner in 2020.

Figure 1 shows the pre-COVID-19 PIRLS trend and levels, from confirmed results, along with future projections of South Africa’s trend, assuming the historical improvements are sustained albeit at slightly lower annual learning gains in the outer years. ‘Confirmed’ is from the PIRLS 2006, 2011 and 2016 results we have, ‘Projected’ assumes that the historical trend can be maintained. Though it is not visible in the graph, the annual gain in the projection falls gradually, from 10% of a year’s worth of learning in 2016-2017 to 8% in 2039-2040, in line with the international evidence. The pre-COVID 19 trajectory placed South Africa’s reading in 2040 on a par with that of Iran in 2016 and Indonesia in 2011 (Indonesia did not participate in PIRLS 2016).

What is driving these improvements at the system level? The likely contributors are an increased focus on learning outcomes, access to pre-school education since the turn of the millennium, better access to books and texts by young people, the entry of skilled young teachers into teaching, and a stable curriculum policy with more explicit expectations. The National Development Plan Vision 2030, and the Basic Education Sector Plan, Action Plan 2024 Towards the Realisation of Schooling 2030, note these systemic policy changes have to be matched by changes at the school level. Even before COVID-19, the capacity to apply effective teaching methods which results in learning, and

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2 Trends in International Mathematics and Science Study.
3 Progress in International Reading Literacy Study.
4 Southern and Eastern Africa Consortium for Monitoring Educational Quality.
the capacity to use information on learning progress to improve and account for performance was lacking in too many schools, especially in the early grades.

2. What is the best estimate for how this has changed since COVID-19?

School closures and learning losses: The actual learning losses suffered by children due to disruptions such as school closures can be considered to be higher than those attributed to the number of days schools are closed. For these projections, we have inflated the values by 25%. Thus 40 days of school closures would result in the loss of 50 days’ worth of learning, in line with the evidence from developing and developed countries. What is not clear in the data is whether learning losses seen immediately after learners return to school, worsen, stay the same, or shrink, over time. Two South African pandemic-induced scenarios are worth noting, one where learning losses remain unchanged for the rest of each learner’s schooling, another where there is a catching up to the pre-pandemic trajectory after three years. Without catching up, the skills of Grade 12 graduates would be lower than in the no-pandemic scenario for a decade up to 2031. In contrast, the catching up scenario takes the quality of graduates back to the no-pandemic trend in 2023.

Figure 2: Projected impacts of COVID on Grade 12

Even this is a worrying loss, but much better than negative pandemic-related quality impacts being felt for a whole decade. Catching up for lost time is possible, either through well-designed system-wide interventions, including the partial cancellation of holidays beyond 2020, or through more effective work of individual teachers and schools. Learning losses are inevitable, but they can be reduced if schools use the relatively long school year effectively, as South Africa’s school year is relatively long by international standards.
With COVID-19, Grade 4 learners will reach the previously projected levels only four years later, in 2024 as long as dedicated catch-up programmes are in place. We will only know where reading levels in the country are in 2022, when the results of PIRLS 2021 are released. At this stage, we will tell how close we are to the green line in Figure 4, which signifies pre-COVID-19 learning projections.
3. Education and COVID-19 in South Africa: National

**Lockdown and re-opening:** At the end of March, South Africa took the bold step of locking down the whole country, but has moved to re-open schools quickly along with many other countries. Once it became clear that unlike adolescents and older adults, young children seldom fall ill from the virus, and they were weak transmitters of the coronavirus, education systems started again. However, it has been challenging to balance concern for health risks with the need to restart schooling, especially for children from poorer households and communities where there are fewer opportunities for remote learning.

Coronavirus fatalities have been high in China, Europe, and the US, and these deaths, widely reported in social media, have weighed heavily in the psyche of South African communities who have also been at the centre of the HIV and Aids pandemic since the 1990s. South Africa has historically faced a quadruple burden of disease resulting from infectious diseases such as HIV/AIDS and TB; maternal and child mortality; Non-Communicable Diseases such as hypertension and cardiovascular diseases, diabetes, cancer, mental illnesses and chronic lung diseases like asthma; as well as injury and trauma according to the World Health Organization. Almost all of these diseases predispose South Africans to the more severe effects of COVID-19.

As schools in South Africa re-opened in June 2020, they have had to quickly adapt their logistics, space and timetables to accommodate the urgent need to ensure physical distancing, infection control, and manage health risks while ensuring that teaching, learning, and other school logistics such as nutrition and transport are in place. In this context, planning and managing schools in the context of the differential effect of the coronavirus on older and younger children in schools is a tall order.

It is difficult for schooling systems to be flexible in the absence of local or international data on the effects of school re-opening on transmission in children of different ages, and in the absence of guidance on how to open pre-school and child-care facilities, from international agencies.

**Measures by schools to reduce infections:** The science of reducing transmission should underpin any attempts to manage the coronavirus in schools. However, management and practices vary internationally with little guidance on how countries can manage infection risks by ensuring physical distancing, wearing of masks, using thermometers, cleaning, and dealing with teacher and learner co-morbidities. COVID-19 provides an opportunity for closer cooperation between health and education, but also better infection control policy and risk management based on scientific evidence.

“Teachers are not at high risk of being infected by children. Teachers are at a higher risk of contracting the virus from other adults (e.g. colleagues), at home or in the community (outside school). Teachers with comorbidities are at increased risk for severe Covid-19.” The South African Paediatric Association (2020):

“85% of respondents in rural areas and poor townships were very concerned about their children not being in schools, while the figure for those in what would be the top income quintile was just 52%” Rule et al., 2020.
4. Policy options: What can policymakers do about the effects of COVID-19 on schools in South Africa?

- **Policy options for the next 1-3 months (July-Sept 2020)**
  
  a. **Dealing with education shocks**: schools and poverty alleviation: Better targeting and monitoring of the resources of the National School Nutrition Programme (NSNP) is more important than ever in addressing the high levels of hunger in the country, especially as the NIDS-CRAM data show that half of the households surveyed have not been able to feed their children properly since April. Improving the provision of food to children is essential.

  b. **Protect drivers of improvement in learning as budget cuts loom**: Spending on non-personnel recurrent items by education departments, which includes spending on books and other materials, could easily be affected by the expected budget cuts. Pre-school participation is also likely to suffer due to household income losses, which will impact negatively on learning losses in subsequent grades. Before the pandemic, there were plans to expand public spending on pre-school education. Convincing budget arguments will need to make this a reality, as the economic effects of the pandemic worsen.

  c. **Innovation 1: Use COVID-19 to innovate and scale up what works in classrooms.** The guidance from global bodies such as UNESCO focusses on the need to use the pandemic as an opportunity to accelerate necessary innovation to facilitate the achievement of SDG targets around learning outcomes. Innovation had already been occurring in South Africa before the pandemic, and this work should continue. Firstly, South Africa has come far in exploring and evaluating practical ways in which the teaching of reading in the early grades can be improved in class. These new methods enjoy broad support, and the priority should be to take them to scale, and to monitor that they do result in better reading competencies among learners in African languages. Reading is the central pillar for everything else in education, and catch up programmes in the Foundation Phase must include a strong focus on teaching reading using these methods as the core for post-COVID recovery.

- **Policy options for the next 3-6 months (July-Sept 2020)**
  
  a. **Innovation 2**: Build more effective school accountability systems linked to improvement: The National Development Plan offers an excellent framework for building more effective school accountability systems. Such systems, which must be fair and take into account the socio-economic contexts of schools, have been shown around the world to be a prerequisite for educational progress, yet they remain weak in South Africa. Data systems are essential in a post-COVID schooling system, but they need to be more responsive, more accurate, with faster turn-around times. The pandemic has shown that better use of information at the level of the school can help in the management and reporting of teacher and learner attendance, vulnerabilities, and learning outcomes at the school, and in the broader schooling system.

“Ensuring effective teaching, protecting budgets for materials as well as maintaining pre-school participation will protect learning post-COVID-19. Prioritising reading and how schools manage and account for learning will address educational poverty and inequality and reduce the learning losses expected as a result of COVID-19.”