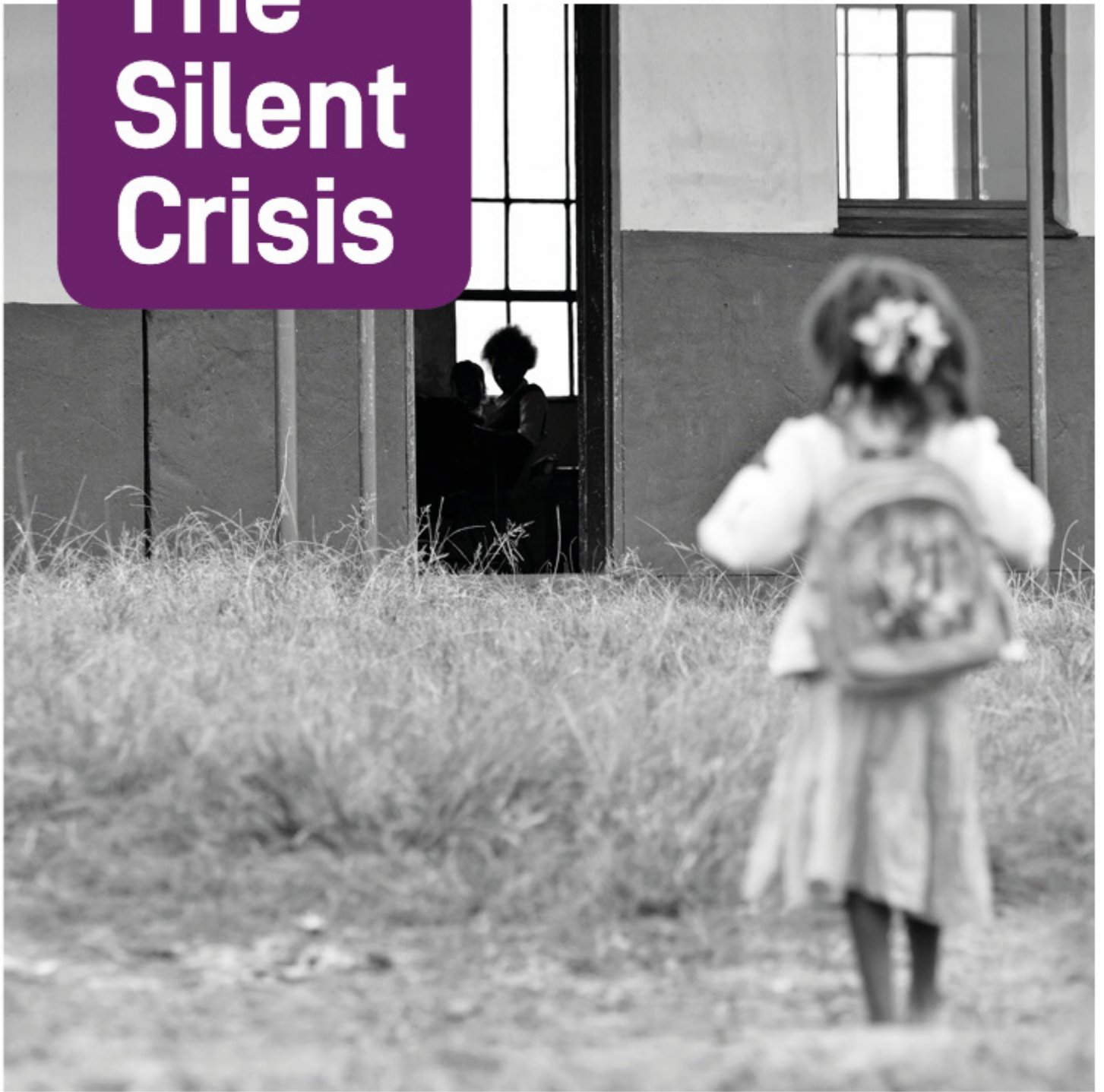


# The Silent Crisis



**ONE**

**South Africa's  
failing education  
system**



## **About CDE**

The Centre for Development and Enterprise (CDE), an independent policy research and advocacy organisation, is South Africa's leading development think tank. Since its establishment in 1995, CDE has been gathering evidence, generating innovative policy recommendations, and consulting widely on issues critical to economic growth, employment and democratic consolidation. By examining South African and international experience, CDE formulates practical policy proposals outlining ways in which South Africa can tackle major social and economic challenges.

CDE has a special focus on the role of business and markets in development. CDE disseminates its research and proposals to a national audience of policymakers, opinion formers and the wider public through printed and digital publications, which receive extensive media coverage. Our track record of successful engagement enables CDE to bring together experts and stakeholders to debate the policy implications of research findings.

Series Editor: Ann Bernstein

This report was written by CDE research director Dr Stefan Schirmer and policy analyst Rehan Visser.

Photo credit: A young South African girl stands outside of school, nervous to enter on her first day of class, by Getty Images

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## **The Silent Crisis**

The failure to meaningfully transform South Africa's dysfunctional schooling system, despite significant public expenditure, is the quiet crisis and disaster of the democratic era. Tragically, while some reform measures in the 2000s proved successful, these gains did not last and have now been reversed during Covid. South Africa remains at the bottom of all international tables on learning outcomes: reading, maths, science. As a result, the majority of poor, mainly black, children in South Africa still do not receive the education they need to escape poverty. This is a national emergency that must be addressed.

In this series of reports, CDE identifies the root cause of this failure and makes the case for fundamental, systemwide reform that focuses on improving the quality of learning in the classroom. South Africa needs a President committed to education reform as a priority and a Minister and team of education leaders who can design and implement an effective reform agenda. This will require decisions that disrupt the status quo and those who benefit from the current dysfunction. It will also require all those South Africans who will benefit from and care about a much more effective and more equal education system of good quality, to mobilise in favour of reform.

This report is one of five in a CDE series on diagnosis, priorities and recommendations for basic education reform.

- **ONE: South Africa's failing education system**
- TWO: What's wrong with our education system?
- THREE: The forgotten story of state capture in education
- FOUR: Lessons for education reformers
- FIVE: Time to fix South Africa's schools

## List of acronyms in this series

ANA	Annual National Assessment
CAPS	Curriculum and Assessment Policy Statement
DAS	Development Appraisal System
EE	Equal Education
EGRS	Early Grade Reading Study
FET	Further Education and Training
HLO	Harmonised Learning Outcomes
IQMS	Integrated Quality Management System
MPAT	Management Performance Assessment Tool
NAPTOSA	National Professional Teachers' Organisation of South Africa
NECT	National Education Collaboration Trust
NEEDU	National Education Evaluation and Development Unit
NEIMS	National Education Infrastructure Management System
NIAF	National Integrated Assessment Framework
NIDS-CRAM	National Income Dynamics Study – Coronavirus Rapid Mobile Survey
NSNP	National School Nutrition Programme
PEU	Professional Educators' Union
PILO	Programme to Improve Learning Outcomes
PIRLS	Progress in International Reading Literacy Study
PISA	Program for International Student Assessment
SACE	South African Council for Educators
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SADC	Southern African Development Community
SEA	Schools Evaluation Authority
SNTE	Sindicato Nacional de Trabajadores de la Educación
TIMSS	Trends in International Mathematics and Science Study
UNE	Unión Nacional de Educadores

# South Africa's failing education system

## Introduction

In this report, we examine the extent of the country's failure to produce acceptable levels of learning in our schools. How bad is it? Have there been improvements? How do we compare with other countries? What do our performance levels tell us about what is needed to turn the situation around?

South Africa devotes a significant proportion of government revenue – 13 percent – to basic education.<sup>1</sup> To justify such outlays in a context of rising fiscal pressures we should expect globally competitive learning levels; a reduction in learning inequality; new opportunities for children from poor households; and a large, trainable workforce. In reality, very little of that happens.

South Africa's basic education spending is uniquely ineffective.

According to one of the world's leading development economists and specialist on education reform Professor Lant Pritchett, South Africa is the single biggest learning underperformer relative to GDP per capita among low and middle income countries.<sup>2</sup> In short, we get extremely poor education outcomes despite our high levels of public expenditure.

The distance between our performance and Singapore's, one of the richest and best learning-outcome performers in the world, is equivalent to "a whole generation of schooling loss".<sup>3</sup>

South Africa does worse than Kenya or Tanzania, which have GDP per capita less than one-fifth of South Africa.<sup>4</sup> Our spending commitments are equivalent to some high performing Scandinavian countries, but our learning outcomes are worse than neighbouring Eswatini.

## Children in buildings? South Africa's poor education outcomes

As educationists around the world have increasingly come to realise, simply placing a child inside a school building does not equate to giving them a decent education. While the DBE has achieved impressive gains in access to schooling, South Africa lags far behind peer countries on the quality of education. The evidence points to very low levels of learning, even before the challenges created by Covid-19 placed additional strain on the system. Some revealing data include the following:

- **More than three-quarters of Grade 4 learners cannot read for meaning.** According to the Progress in International Reading and Literacy Study (PIRLS), an international benchmark test, 78 percent of 10-year-olds in South Africa cannot "retrieve explicitly stated information and make straightforward inferences".<sup>5</sup> Adjusting for post-Covid learning losses, it is now thought that 82 percent of Grade 4s cannot read for meaning.<sup>6</sup> Top education researchers have found that upwards of 30 percent of primary school learners

**"South Africa is the single biggest learning underperformer relative to GDP per capita among low and middle income countries"**

could be defined as functionally illiterate.<sup>7</sup> Even in Grade 6, only 35-46 percent of learners tested in the large-scale Early Grade Reading Study (EGRS) could achieve the Grade 3 benchmark in reading fluency, depending on their home language.<sup>8</sup> This lack of literacy starts young. At the end of Grade 1, between 30 and 55 percent of learners cannot read a single word in their home language.<sup>9</sup> Almost a third of all Grade 2 learners do not know all the letters of the alphabet midway through the year.<sup>10</sup>

- **Nearly half of all schools are 'cognitive wastelands'.**<sup>11</sup> Assessments undertaken in the mid-2010s revealed that in 45 percent of South African primary schools, not a single learner could read or make simple inferences. In 47 percent of secondary schools in 2015 not a single child could reach the intermediate benchmark in an international mathematics assessment (in Botswana only 2 percent of schools performed this badly).<sup>12</sup> These schools produce almost no learning.

**“Adjusting for post-Covid learning losses, it is now thought that 82 percent of Grade 4s cannot read for meaning”**

As the IMF put it in 2019, “A South African learner can expect 9.3 years of basic education by the age of 18, but when adjusted for quality, this is equivalent to 5.1 years of learning.”<sup>13</sup> The fact that 78 percent of learners in Grade 4 cannot read for meaning is deeply troubling. This deficit has severe knock-on effects. All the international evidence suggests that learners who struggle to read in lower grades will find it extraordinarily difficult to learn other subjects or to catch up in later years. The importance of this point has been recognised by President Cyril Ramaphosa in

his promise to get every 10-year-old to read for meaning by 2029: “Early reading is the basic foundation that determines a child's educational progress, through school, through higher education and into the workplace. All other interventions ... will not produce the results we need unless we first ensure that children can read.”<sup>14</sup> If more than three-quarters of the country's learners are unable to read properly, it is no wonder that so few of them progress to pass their school leaving exams.

Learning inequalities remain deeply entrenched in the system. While it is globally the case that poor areas tend to contain bad schools and rich areas tend to contain good schools, the disparities are particularly stark in South Africa.<sup>15</sup> For example, in the poorest 80 percent of schools, learners are on average 2.5 years behind the curriculum by the end of Grade 3.<sup>16</sup> In other words, after three years of schooling, the typical child at a no-fee school has learnt no more than what they should have learnt in half a year in Grade 1 in a functional school. Inequality in the early years of schooling has lasting impacts for the duration of a child's school career. Only 24 percent of Grade 12 learners at the poorest schools (quintile 1) matriculated in 2018 versus 73 percent of learners at the richest schools (quintile 5).<sup>17</sup> The spread of learning performance is so uneven that in 2017, the top 200 high schools in the country (185 of which charge 'significant fees') produced more than half of all the Grade 12 mathematics distinctions.<sup>18</sup>

Too many children are being left behind. A large proportion of South Africans may be defined as poor, but these results are not acceptable. Nor are they inevitable. Andreas Schleicher, Director of Education and Skills at the Organization for Economic Cooperation and Development, argues that “deprivation is not destiny”.<sup>19</sup> Data from international tests such as the OECD's Programme for International Student Assessments (PISA) and others show that school systems in poor countries can improve rapidly.

## How do South Africa's learners compare with international peers?

South Africa has participated in several international benchmark assessments over the past two decades, such as PIRLS, which tests Grade 4s in reading and literacy; the Trends in Mathematics and Science Study (TIMSS), which tests Grade 4s and 8s (Grade 5 and 9s in South Africa) on mathematics and science; and the Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ), which tests Grade 6s in literacy and mathematics. These assessments indicate that we perform considerably below other middle-income countries and even some much poorer countries.

- **Grade 4 reading literacy (PIRLS 2016):** Out of 50 participating countries, South Africa had the lowest average reading literacy score with 320 points. Only 22 percent of learners were able to reach the low benchmark of 400 points. At this low benchmark, students reading simple literary texts can "retrieve explicitly stated information and make straightforward inferences", i.e., they can read for meaning. South Africa was outperformed on both average scores and low benchmark achievement rates by three poorer countries: Georgia, Morocco and Egypt.<sup>20</sup>
- **Grade 5 mathematics (TIMSS 2019):** 64 countries tested their Grade 4 mathematics results. South Africa – testing Grade 5s – received an average score of 374 points, above only Pakistan and the Philippines. This score represented a decrease from South Africa's 2015 TIMSS score of 376 points. Only 37 percent of South African learners reached the low benchmark of 400 points, at which point they "have some basic mathematical knowledge". Three poorer participating countries – Albania, Kosovo and Morocco – outperformed South Africa both in average scores and low benchmark achievement rates.<sup>21</sup>
- **Grade 5 science (TIMSS 2019):** In science, South Africa – again testing Grade 5s whereas other countries were testing Grade 4s – received an average score of 324 points, above only Pakistan and the Philippines. Only 28 percent of South African learners reached the low benchmark of 400 points, at which point they "show limited understanding of scientific concepts and limited knowledge of foundational science facts". South Africa was outscored again by poorer Albania, Kosovo and Morocco.<sup>22</sup>
- **Grade 6 reading and mathematics (SACMEQ 2013):** 15 countries participated in the fourth installation of SACMEQ. South Africa scored an average of 538 points in reading and 552 points in mathematics, both up significantly from 495 points in 2007. In spite of these advances, we were still outperformed by Botswana, Kenya and Eswatini, all of which are far poorer countries.<sup>23</sup> However, it is worth noting that Professor Nic Spaul and other experts familiar with the technical aspects of the study have expressed reservations about the data quality of this round of SACMEQ, with suggestions that South Africa's performance may have been vastly inflated.<sup>24</sup>
- **Grade 9 mathematics (TIMSS 2019):** Out of 39 participating countries, South Africa's Grade 9 learners – on a test designed for Grade 8s – placed 38<sup>th</sup> (second last) with a score of 389 points, one more than Morocco. 59 percent of South Africans could not reach the low international benchmark of 400 points, at which point learners "have some knowledge of whole numbers and basic graphs". Poorer Georgia and Egypt achieved better results in average scores and low benchmark achievement rates.<sup>25</sup>
- **Grade 9 science (TIMSS 2019):** South Africa came in last (39<sup>th</sup>) position with a score of 370 points, despite testing Grade 9s instead of Grade 8s. At the low benchmark of 400 points, students "show limited understanding of scientific principles and concepts and limited knowledge of science facts". 64 percent of South African learners failed to meet this threshold. Our performance was bettered by Georgia, Morocco and Egypt.<sup>26</sup>

**"The typical Grade 6 child in Kenya is around two to three years of learning ahead of a Grade 6 learner in the Eastern Cape"**



Moreover, South Africa does worse on learning than Kenya, which is much poorer than South Africa.<sup>27</sup> Calculations by Professors Brian Levy, Robert Cameron, Ursula Hoadley and Vinothan Naidoo show that the typical Grade 6 learner in the Eastern Cape performs far worse (0.7 of a standard deviation) than a child with the same home background and socioeconomic status in the Western Cape. Yet even after controlling for socioeconomic differences and teacher knowledge and experience, the typical Grade 6 pupil in Kenya performs moderately better (0.27 of a standard deviation) than that same Western Cape child. This implies that the typical Grade 6 child in Kenya is around two to three years of learning ahead of a Grade 6 learner in the Eastern Cape.<sup>28</sup>

All of this evidence clearly demonstrates that South Africa's schooling system is uniquely inefficient.

### The implications of past progress

South Africa has come a long way since the dark days of apartheid. The democratic government's initial focus was on consolidating the 19 apartheid education systems into one coherent organisational structure and ensuring that all South African children had access to school and the same curriculum. In many ways, the Department of Basic Education (DBE) can be proud of its schooling access policy, which ensured that 99 percent of 7–15 year-olds were enrolled in schools in 2018, compared to only 89 percent in 1996. About two-thirds of all learners now come from households that are not required to pay fees.<sup>29</sup> 10 million of the 13 million learners countrywide qualify for a free daily school meal. These are substantial gains.

**“Even with the improvements we have seen over the past two decades, the system is not yet delivering real learning to the majority”**

In addition, there is evidence that South Africa's performance in TIMSS, PIRLS and SACMEQ improved substantially between the early 2000s and the mid-2010s. Education researcher Professor Martin Gustafsson has shown that these advances are near the 'speed limit' of the fastest possible rate of improvement observed internationally.<sup>30</sup> This is a remarkable achievement.

Gustafsson and the DBE's Dr Stephen Taylor believe that these gains are caused by a variety of factors, including an increased focus on learning outcomes within the education system, prompted in part by the standardised Annual National Assessments (ANAs) for Grades 1 to 6 and 9; improved initial teacher education; increased provision and use of workbooks in classrooms; and a new stable curriculum.<sup>31</sup>

There are however several caveats to a narrative of unmitigated progress. It is important to note that the international 'speed limit' only refers to countries that have international data on learning outcomes for their improving periods. For example, Vietnam's first participation in the OECD's Programme for International Student Assessment (PISA) was in 2009, when it was already a high performer – its rapid learning gains were simply not measured. Similarly, the improving phases of high achieving post-Soviet countries are not included because there are no data for them.<sup>32</sup> Moreover, the extent of South Africa's progress may well have been overstated, thanks to problems with data in international tests.<sup>33</sup>

As should be clear from our discussion of South Africa's weak performance in international tests, improvement in key subjects has not gotten us off the foot of most tables or changed the fact that learning outcomes



remain shockingly low. In a review of the PIRLS data, Gustafsson found that South Africa made larger gains between 2011 and 2016 than was initially thought, but only because the earlier results were actually worse than reported.<sup>34</sup>

Perhaps the most important proviso is that progress has tailed off from the mid-2010s onwards, as seen in a decline in the Grade 5 TIMSS mathematics results from 2015 to 2019.<sup>35</sup> Even before Covid-19 disrupted the schooling system, our education outcomes may have already hit a 'low ceiling'. Numerous education experts, including Nic Spaull and Stephen Taylor, believe that ongoing improvements in learning outcomes, the kind of improvements that would start pushing us off the bottom of international tables, are only possible if the system in which teaching and learning takes place is fundamentally reformed. Without those changes learning improvements will stay below the 'low ceiling' that our current performance represents.<sup>36</sup>

Thus, even with the improvements we have seen over the past two decades, the system is not yet on the way to delivering real learning to the majority of learners. As the minister herself put it, "Just because there has been progress, further progress is not guaranteed."<sup>37</sup> The bottom line is that most South African learners continue to perform at unacceptably low levels.

### **NSC results and what they do or don't reveal**

National Senior Certificate (NSC) results suggest that South Africa has seemingly registered steady learning improvements over the past 28 years. In 1994, the Grade 12 pass rate was 58 percent; this rose to 81 percent in 2019, before dropping slightly to 80 percent in 2022, in spite of the hugely negative impact of Covid-19.<sup>38</sup> However, this statistic hides the reality of large numbers of learners dropping out or staying behind for a year or more before writing their final set of exams.<sup>39</sup> Martin Gustafsson shows that only 55 percent of young people aged 23 to 27 successfully completed 12 years of schooling, although he argues that this level of attrition is typical for a middle-income country.<sup>40</sup> A 2021 paper by education experts at the University of Stellenbosch found that between 55 and 59 percent of learners are overage in Grades 10 to 12.<sup>41</sup> This reflects an enormous inefficiency, costing up to R29 billion per annum.

**“Ongoing improvements in learning outcomes, that would start pushing us off the bottom of international tables, are only possible if the system in which teaching and learning takes place is fundamentally reformed”**

It is furthermore difficult to compare Grade 12 outcomes across so many years, owing to the many changes in curricula. It also does not speak to the low standards needed to pass the NSC introduced in 1996 (40 percent for three subjects, including Home Language, and 30 percent for three other subjects). Finally, there are serious concerns by top education experts that NSC examination standardisation by Umalusi has been too lenient.<sup>42</sup> RESEP researchers Dr Gabrielle Wills and Professor Servaas van der Berg have raised questions about the “more lenient promotion policies introduced in response to the Covid pandemic [which] drastically reduced repetition and caused massive increases in the numbers of matriculant[s] and ... bachelor passes”. They worry that “[t]hese enormous increases, despite the learning losses caused by the Covid pandemic ... may seriously erode public confidence in the matric results and thereby endanger the integrity of the NSC examinations”.<sup>43</sup>

## Well-paid teachers, poor teaching

Discussing the link between teaching and learning, Schleicher makes the point that "the quality of a school system will never exceed the quality of its teachers."<sup>44</sup> It should be no surprise, given low levels of learning, that teacher subject content knowledge in South Africa is extremely low.

### **The shortage of Mathematics teachers and declining NSC passes**

In 2004, CDE called for the number of Higher Grade Mathematics passes to double from 25,000 to 50,000 within five years. (See our reports, *From Laggard to World Class: reforming maths and science education in South Africa's schools* and *Doubling for Growth: Addressing the maths and science challenge in South Africa's schools*.) Since 2008, there is no longer a distinction made between Higher Grade and Standard Grade subjects; instead, the subject is now taken in Grades 10 to 12 as either Mathematics or Mathematical Literacy. In 2021, 149,177 learners passed their NSC Mathematics exam (scoring a minimum of 30 percent), but only 34,451 passed it with 60 percent or more, the mark needed to qualify for entrance into a Bachelor of Science degree at university.<sup>77</sup> We fell far short of the NDP's target of 191,952 learners with Bachelor Passes in Mathematics by 2022, a target which rises to 450,000 by 2030.

Increasing the number of learners who receive Bachelor Passes for Mathematics remains a key component of improving South Africa's human capital to generate the economic growth we need. However, this will be difficult in a context where we have insufficient mathematics teachers and ever fewer people are being trained to teach the subject. Founder of Future Nation schools Sizwe Nxasana argues, "We can't produce more children who are taking maths when the system is producing declining numbers of teachers in the subject."<sup>78</sup> According to researchers Mncedisi Maphalala and Nhlanhla Mpofu, as of 2019, "the country's initial teacher institutions graduate 15,000 new teachers per year. This is below the 25,000 mark required to maintain an effective teacher-pupil ratio."<sup>79</sup> Although the data indicating subject specialisations of teachers are more than 10 years out of date, comments like those of Nxasana's suggest that the shortcoming is particularly apparent in Mathematics. Unless something is done to counteract this, the shortfall will likely be worsened by the looming teacher retirement wave: approximately half of the country's existing teacher cohort is set to retire by 2030.<sup>80</sup>

Yet instead of doing all it can to attract skilled teachers in specialist subjects, provincial education departments (PEDs) in Limpopo and the North West, which are responsible for hiring teachers, refused to renew contracts for 465 foreign educators "without permanent residence permits" (despite some of them having permanent residence permits and South African identity documents).<sup>81</sup> These short sighted actions contribute to the dire shortage of qualified personnel, with some mathematics and sciences classes having to double up to accommodate up to 66 learners at a time.<sup>82</sup>

CDE, 2023

**“There are serious concerns by top education experts that NSC examination standardisation by Umalusi has been too lenient”**

The 2013 SACMEQ study found that only 41 percent of Grade 6 mathematics teachers in South Africa had “good proficiency in mathematics”, compared to 87 percent in Zimbabwe and 95 percent in Kenya. Only 37 percent had mastered reading, lower than the share of teachers in Eswatini, Botswana, Zimbabwe, Kenya and the Seychelles.<sup>45</sup> According to Spaul, four out of five teachers in public primary schools lack the content knowledge and pedagogical skills to teach mathematics. In a nationally representative sample of primary schools, 79 percent of Grade 6 Mathematics teachers failed to score 60 percent on a Grade 6 test.<sup>46</sup>

Poor teaching knowledge starts with poor selection and inadequate teacher training. In one 2018 study, final year Bachelor of Education (B.Ed) students averaged 54 percent on mathematics tests containing primary school level questions, only marginally better than the 52 percent average scored by first year students.<sup>47</sup> This suggests that almost no mathematics knowledge is being imparted to would-be teachers during their degrees. Research published in December 2022 by Stellenbosch University’s Research on Socio-Economic Policy (RESEP) unit reveals that younger teachers (aged 18-35) have significantly higher subject content knowledge than older teachers, many of whom were trained under the apartheid regime. This is less a cause for celebration on the subsequent gains than it is an indictment on the previous system.

Despite poor performance, teachers earn very well. More than three-quarters of the education budget is allocated to salaries for teachers. Research conducted by Intellidex in 2020 revealed that South African “teachers’ salaries are nearly 50 percent higher than the OECD average” and “only Germany and Luxembourg paid teachers more”.<sup>48</sup> In 2020, South African teachers were paid on average R42,700 per month before tax, including benefits. And teacher salaries have not been stagnant. Between 2008 and 2019, salaries increased by an average of 9.2 percent per annum, while inflation averaged 6.2 percent per annum.<sup>49</sup> Although there has been a slight decrease in real terms in recent years, teachers remain highly paid professionals: they are in the top 5 percent of the country’s income distribution.<sup>50</sup> The South African public should be expecting more from them.

### **Pumping air into a punctured tyre: Why spending more is not the answer**

South Africa spends a vast amount on basic education. The 2023 National Budget allocated R294 billion to basic education for the fiscal year, equivalent to 13.5 percent of government expenditure.<sup>51</sup> Despite a continuing trend of declining real spending per pupil, from R20,000 per learner in 2009 to R16,500 in 2021,<sup>52</sup> this still compares very favourably with other upper middle-income countries, which according to World Bank figures on average utilise the same proportion of government expenditure on basic and higher education together (i.e., schools and tertiary institutions).<sup>53</sup> While South Africa may need to spend more than its middle-income peers because of infrastructure backlogs, spending efficiency per learner, in terms of learning outcomes, should be much better. As researchers Joel Gondwe and Gabrielle Wills conclude, “education systems [in South Africa] can do better with what they have and given the poverty levels of the children they serve.”<sup>54</sup>

**“Although there has been a slight decrease in real terms in recent years, teachers remain highly paid professionals: they are in the top 5 percent of the country’s income distribution”**

As highlighted in the introduction, World Bank data reveals South Africa to be the biggest learning underperformer in the world relative to income among countries with a GDP per capita under US\$10,000 (as of 2011).<sup>55</sup> In Figure 1 and Table 1, CDE compares how much South Africa spends per year on average for every primary school learner, adjusted for purchasing power, with a set of poor countries in Africa and middle-income countries in Latin America. While we spend \$2,275 per learner, more than most of them (and almost as much as Mexico), our primary school education results are far worse (as captured by the World Bank’s Harmonised Learning Outcomes (HLO), a composite score reflecting all country results in international

benchmark tests from 2000 to 2017). This fact reflects the relative inefficiency of our education spending. Kenya, an extreme outlier, spends a seventh of South Africa's outlay, yet achieves better learning outcomes, showing how much more efficient we could be.

**Figure 1: The inefficiency of South Africa's spending per learner (source: World Bank)**

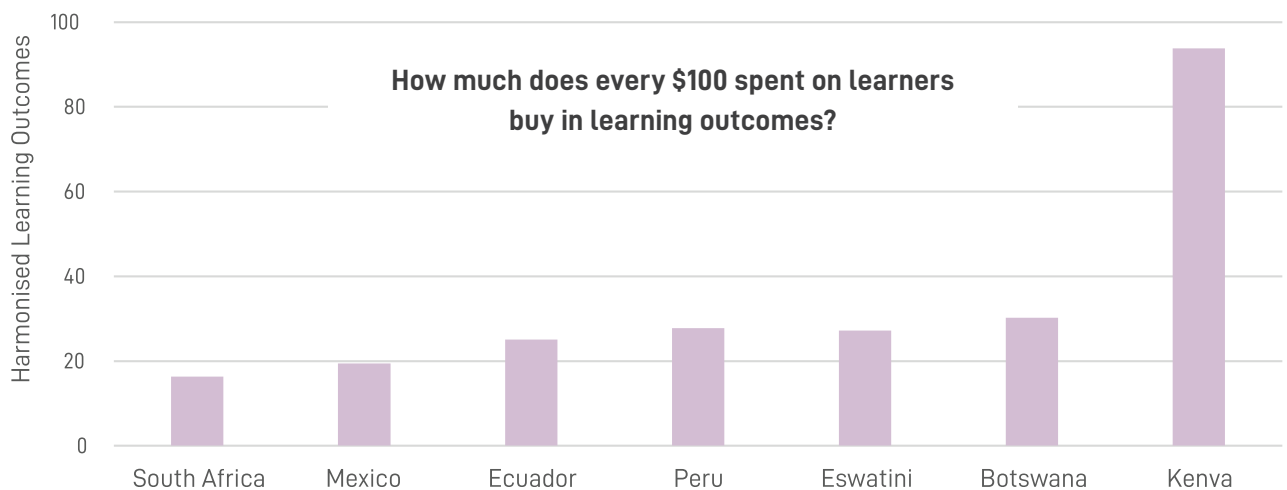


Table 1 <sup>56</sup>	SA	Mexico	Ecuador	Peru	Eswatini	Botswana	Kenya
PPP\$/learner	2 275	2 320	1 628	1 497	1 557	1 351	446
Average HLO	371	450	407	415	423	408	418

CDE, 2023

In Figure 2 and Table 2 below, we compare the spending on annual salaries for primary school teachers in the public education system, adjusted for purchasing power, across South Africa, a comparable upper middle-income country in the Caribbean and a set of former socialist republics in eastern Europe. Of these countries, the annual net teacher salary of \$47,086 is highest in South Africa, but our HLO scores are by some distance the worst. This demonstrates the relatively high inefficiency of our spending on teachers: countries like Latvia and Hungary are almost three times as effective as South Africa.

**Figure 2: The inefficiency of South Africa's spending on teachers (sources: World Bank, National Budget, OECD Stat Library)**



Table 2 <sup>57</sup>	SA	Costa Rica	Czechia	Slovakia	Latvia	Hungary
Annual teacher salary (PPP\$)	47 086	39 988	34 830	27 426	27 387	26 648
Average HLO	371	453	526	520	541	534

CDE, 2023

**All the evidence points to a South African system that does worse than any other similar system and fails to deliver what it is supposed to: quality learning for the majority of school-goers.** Throwing more money into such a system will continue to generate large amounts of waste. Even if we could afford it, which CDE has argued we cannot (see our report, *Running out of Road: South Africa's public finances and what is to be done*), merely adding more money to a system that functions as poorly as ours will not move the dial adequately to address the scale of the challenge we face.<sup>58</sup> As Professor Lant Pritchett puts it,

If your bicycle tire has a hole, pumping in more air won't do much good. This isn't because you don't need air in the tire; it is because you have to fix the hole first, and then add the air. Pumping more books, more teachers, or more training into existing systems is just a palliative measure.<sup>59</sup>

Increasing teacher salaries, which are already comparatively high in South Africa, is unlikely to improve learning results. For example, in Indonesia, doubling teacher salaries led to no improvement in learning outcomes after three years.<sup>60</sup> This is because it was not accompanied by systemwide changes tackling the root causes of dysfunction, something which has become all the more urgent in South Africa following the disruptions caused by Covid-19.

### The devastating consequences of Covid-19

The Covid-19 pandemic has hugely exacerbated the many challenges already faced by the country's basic education system. Apart from the impact on the health of those who contracted Covid-19 and the school

closures that resulted, the effects of the pandemic can be seen in the loss of learning throughout the 2020 and 2021 school years, higher levels of absenteeism, worse matric results and budgetary constraints. The Covid-19 crisis is the biggest shock to the country's public education system of the democratic era.

However, the crisis also represents an opportunity for a complete rethink on how we deliver education in South Africa. Given the devastation that has been wrought, it is harder to ignore how dysfunctional and unequal South Africa's basic education system is, and how desperately change is required.

### **Death and illness**

The most obvious way in which Covid-19 affected the education system is through death and illness. Up-to-date figures are not available, but on 24 July 2021, basic education minister Angie Motshekga revealed that more than 1,650 teachers had died from complications due to the coronavirus.<sup>61</sup> These are terrible tragedies. They have also been severely disruptive for schools – when teachers died, they often left significant gaps in subject-specific expertise and institutional memory at individual schools and throughout whole districts and even provinces. It is not clear how the DBE has acted to address these gaps. Also disruptive have been the many cases of Covid-19 amongst children and teachers.<sup>62</sup> Even where learners and staff were not incapacitated by illness, their non-attendance had huge ramifications for time spent teaching and learning.

### **What happened with school meals?**

Malnourishment in children is especially injurious, leading to physical and mental stunting in the medium-to-long term. More than 10 million learners depend on the National School Nutrition Programme (NSNP), which provides free daily meals at schools. Yet when schools were closed at the start of the initial lockdowns in March 2020, the programme was shut down by the DBE across the country. (The Western Cape continued to operate a reduced NSNP, despite opposition from both the DBE and the South African Democratic Teachers Union (SADTU). When schools reopened, not all learners received their meals. The DBE was forced to reinstate the NSNP for all learners after Equal Education took it to court in July 2020. The basic education minister and eight of the nine provincial heads of education (the Western Cape's MEC excepted) were judged to have failed in their constitutional duties. Mandatory monthly reports, the last of which were filed in March 2021, showed that more than 1.5 million learners were still not receiving their meals.<sup>63</sup> It is not known whether this shortfall has been rectified since.

CDE, 2023

### **School closures and rotational timetabling**

Since South Africa first shut its schools in March 2020, an average of 54 percent of teaching time was lost in 2020 and 22 percent was lost in 2021, adding up to 155 school days in total, or three-quarters of a school year.<sup>63</sup> However, even when schools reopened, learners still faced reduced instructional times, owing to rotational timetabling. Many learners thus only attended school every second day (or in some cases, every second week). Only 11.7 percent of schools offered remote learning options nationally.<sup>64</sup> Spaul believes that during the initial



2020 school closures, "for the poorest 80 percent of learners in South Africa" virtually no curricular learning took place.<sup>65</sup>

### **Absenteeism and dropouts**

There were high rates of absenteeism once schools reopened. Estimates in August 2020 by the DBE were that more than 50,000 Grade 7s and nearly half as many Grade 12s will have dropped out in 2020.<sup>66</sup> NIDS-CRAM researchers calculated in July 2021 that 522,000 additional learners had dropped out of school since the first pandemic-induced school closures, bringing the total of absentee school-aged children to 750,000, 6.5 percent of the relevant age groups.<sup>67</sup> Subsequent research has found that overall dropout rates have declined since the pandemic; however, there were 27,000 fewer first-time enrollees than expected in 2021, suggesting dropouts in the initial school grades.<sup>68</sup>

### **Learning losses**

All these challenges have contributed to learning losses larger than those identified in international reviews of Covid-19 impacts.<sup>69</sup> NIDS-CRAM researchers estimated that by June 2021, learning losses for children in no-fee schools (76 percent of public schools) were between 70 and 100 percent of a year's worth of learning.<sup>70</sup> DBE research found in a study conducted in the North West from September to November 2021 that learners in Grade 4 were more than 15 months behind in their home language.<sup>71</sup> A RESEP paper on learning losses in the Western Cape indicated mathematics losses of around 100 percent of a school year between 2019 and 2021.<sup>72</sup>

Children in 2023 are estimated to be a full year behind same-age children from 2019. Spaul has modelled future trajectories of learning, which indicate that at the pre-pandemic improvement rate, only 27 percent of Grade 4 learners will be able to read for meaning by 2031. Reaching 95 percent will take until 2108 if the status quo remains. If significant reform is undertaken, then at the fastest rate of improvement achieved by a small number of countries around the world over a 10-15 year period, we could reach 60 percent by 2031.<sup>73</sup> This would be a worthy goal for the country.

**"Big improvements are, in principle, possible with the financial resources we already have"**

The RESEP data also reveal that educational inequalities have greatly increased as a result of the pandemic, with the richest schools experiencing the lowest levels of reversals. Even where children at richer schools did not progress their learning, they were able to sustain prior learning levels to a greater extent. Learning losses, which are not easy to recover, have increased significantly for children at poorer schools. This will have severe repercussions for learning outcomes in the foreseeable future. Learning losses at a foundational level can have a cascading impact across a child's life. Weaker learners are more likely to drop out in Grades 10 through 12.

Global studies have revealed that learners who experience a protracted gap in their education experience long-term disadvantages relative to their peers who missed no schooling, including substantially poorer educational results, lower life earnings and fewer economic opportunities. When a large segment of the school-going population misses out on learning for an extended period of time, societies lose out on skills that contribute to economic growth.<sup>74</sup>

At the same time, it is worth remembering that learning was slow before the pandemic struck. Thus, the possibility exists to rapidly recover lost ground and accelerate learning trajectories if major changes are made to the way the education system as a whole functions.

## **Conclusion: The challenge of a dysfunctional system**

South Africa has the national education spending commitment of some Scandinavian countries, but worse learning outcomes than many other much poorer countries.<sup>75</sup> It is true that South Africa is substantially more unequal than Morocco, Vietnam, Kenya and other developing countries and that this has important implications that cannot be fully captured in simple cross-country comparisons using GDP per capita. However, it is still unacceptable that we perform as badly as we do in spite of the large amounts we spend on education.

If there is a positive to be drawn from our analysis of South Africa's underperformance it is that big improvements are, in principle, possible with the financial resources we already have. This should be reassuring given the dire state of our public finances.

In the 28 years since the transition to democracy, South Africa has seen some important progress in its basic education outcomes. This needs to be applauded. But given that this progress plateaued before Covid-19 and has subsequently reversed, even holding onto earlier gains will prove difficult.

Something is deeply wrong with our education system. We must act urgently to rectify this. We cannot solve this complex, multi-layered challenge simply by throwing more money at it. To give our learners the education they deserve and need we will have to undertake system-wide reforms that shift the entire system into a higher gear. This shift requires a series of coordinated, interlocking efforts to change structures and organisations, standards and norms of accountability, and human capital within the system.<sup>76</sup>

## **Next report**

In the second report in this series we explore some of the fundamental factors undermining the effectiveness of South Africa's education system. We focus especially on the country's legacy of inequality, low teacher capabilities, poor accountability enforcement and the compromised education bureaucracy.

## **The Silent Crisis**

- Report 1: Presents key facts about our uniquely underperforming education system, with a particular focus on our comparative learning failures and the scale of the challenge.
- Report 2: Identifies the root causes of system dysfunction and analyses why we need system reform.
- Report 3: Shows how corruption and cadre deployment by unions undermines the education bureaucracy's ability to deliver learning.
- Report 4: Explores the challenges and opportunities for reform by looking at recent case studies from Latin America and elsewhere.
- Report 5: Summarises CDE's findings and sets out our priorities for action.

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5 Eton Road, Parktown, Johannesburg 2193, South Africa | PO Box 72445, Parkview, 2122  
Tel +27 11 482 5140 | [info@cde.org.za](mailto:info@cde.org.za) | [www.cde.org.za](http://www.cde.org.za)