basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

A 25 Year Review of progress in the basic education sector

2019

Compiled by the Department of Basic Education:
Directorate: Research Coordination, Monitoring & Evaluation

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Introduction

April 2019 denotes the 25th anniversary of the advent of democracy in South Africa. In order to mark this significant milestone, Cabinet has directed the Department of Planning, Monitoring and Evaluation (DPME) to initiate and coordinate a 25-year review of progress with service delivery at each historical epoch of our democracy. The 25th anniversary of the democratic dispensation requires government departments and institutions to pause and reflect on the journey to date, and review the achievements, challenges experienced, and actions taken to address these challenges since 1994.

The key objective of the 25-year review is to assess the extent to which government has succeeded in delivering on the promise of a *better life for all South Africans*. Specifically, the review aims to assess the extent to which:

- government is on track towards achieving the priorities set out in the National Development Plan (NDP) 2030;

- non-state actors such social partners, civil society, labour, the private sector and other non-state actors have contributed towards accelerated progress towards achieving the goals set out in the NDP;

- specific constraints and obstacles have impeded progress towards the set objectives and targets and the extent to which this has occurred;

- and effective strategies have been developed to address identified constraints and obstacles.

This report serves as an addendum to the consolidated DPME 25-year review. The DBE's "Action Plan to 2019" has 27 goals – 13 which state the educational outcomes we aim to achieve and 14 which relate to activities that must be done in order to achieve those outcomes. The structure of this review is similar. The opening section reviews the educational outcomes that have been achieved over the past 25 years, with a focus on the themes of access to schooling, efficiency of the school system, the quality of learning outcomes, and equity in educational outcomes. Thereafter, the majority of the report assesses progress in regard to key building blocks of the basic education sector, using the six sub-outcomes for Outcome 1 (Basic Education) within the government's Medium Term Strategic Framework (Department of Planning, Monitoring and Evaluation, 2014) to structure the discussion:

1. Improved quality teaching and learning through development, supply and effective utilisation of teachers;
2. Improved quality teaching and learning, through provision of adequate, quality infrastructure and LTSM;
3. Improving assessment for learning to ensure quality and efficiency in academic achievement;
4. Expanded access to ECD and improvement of the quality of Grade R, with support for pre-Grade R provision;
5. Strengthening accountability and improving management at school, community and district level; and
6. Partnerships for educational reform and improved quality.

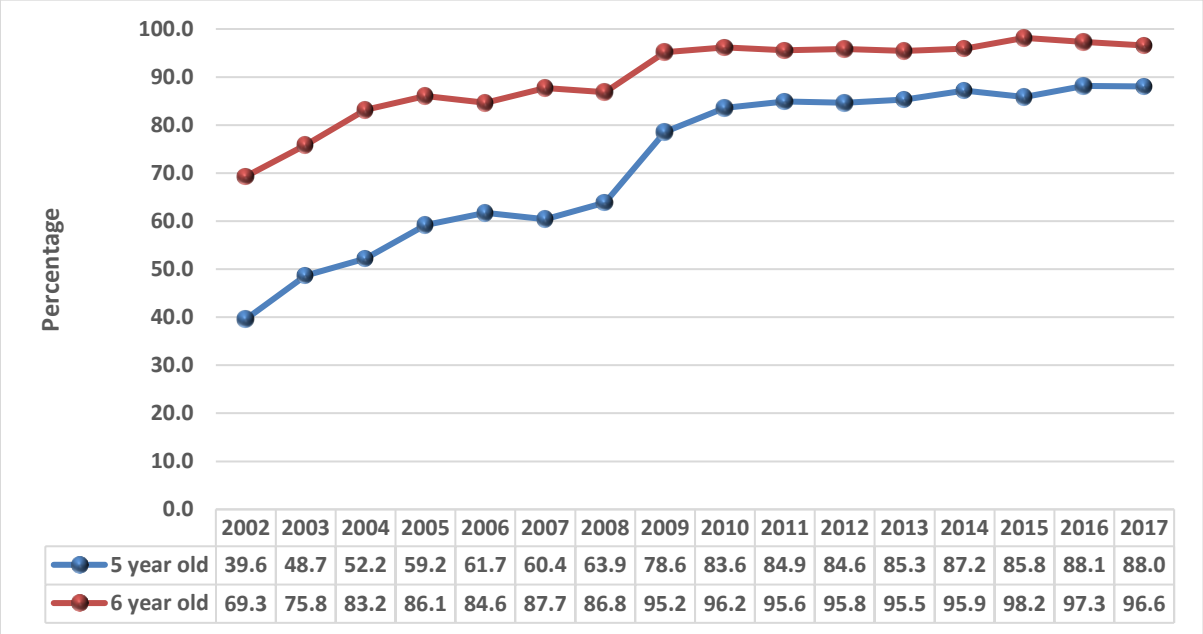
Throughout, the report aims to highlight the significant achievements within the sector as well as grapple with the constraints and challenges that plague the sector. Some suggestions are made about how to improve the provision of basic education into the future, but this report is a review rather than a comprehensive plan.

Overview: Trends in educational outcomes

Access to school

The most dramatic improvement in access to education has been in the area of pre-school attendance, driven mainly by the expansion of the Grade R programme since the White Paper of 2001. The numbers of children enrolled in Grade R in schools has increased from 241 525 in 2001 to 839 515 in 2017. When one looks at the daily activities of 5 and 6 year-old children in South Africa, this has clearly had a massive impact. As Figure 1 shows, about 40% of 5 year-olds were attending an educational institution in 2002, but by 2017 this figure is approaching 90%. Amongst 6 year-olds there is now almost universal attendance of an educational institution, and approximately 95% of children entering Grade 1 have previously attended Grade R (according to 2017 General Household Survey data).

Figure 1: Percentage of 5 & 6-year-olds attending an educational institution, 2002-2017

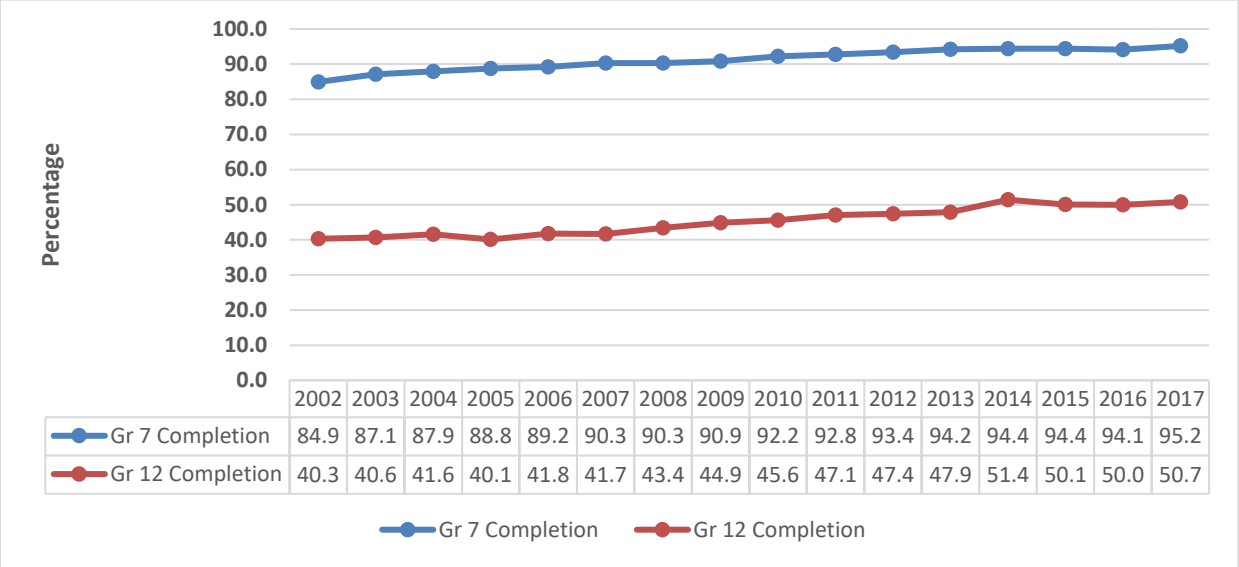


	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
5 year old	39.6	48.7	52.2	59.2	61.7	60.4	63.9	78.6	83.6	84.9	84.6	85.3	87.2	85.8	88.1	88.0
6 year old	69.3	75.8	83.2	86.1	84.6	87.7	86.8	95.2	96.2	95.6	95.8	95.5	95.9	98.2	97.3	96.6

Source: Statistics South Africa, General Household Survey (GHS), DBE own calculations

In 2017 approximately 99% of 7 to 15 year-olds were attending educational institutions, up from about 96% in 2002. Amongst 16 to 18 year-olds the participation rate is about 86%, indicating that it is within this age range that school dropout begins to occur in large numbers, although this figure has also been steadily improving over the years. Primary and secondary school completion rates yield a similar trend, as illustrated in Figure 2. Whilst primary school completion has increased from about 85% in 2002 to about 95% in 2017, the secondary school completion rate has increased from about 40% to just over 50%. These are significant improvements yet there is clearly much work to be done in order to reach the NDP's vision for secondary school completion. Figure 3 puts this in an international perspective. South Africa achieves high rates of secondary school completion relative to most African countries but lags behind many countries in Asia, Eastern Europe and South America.

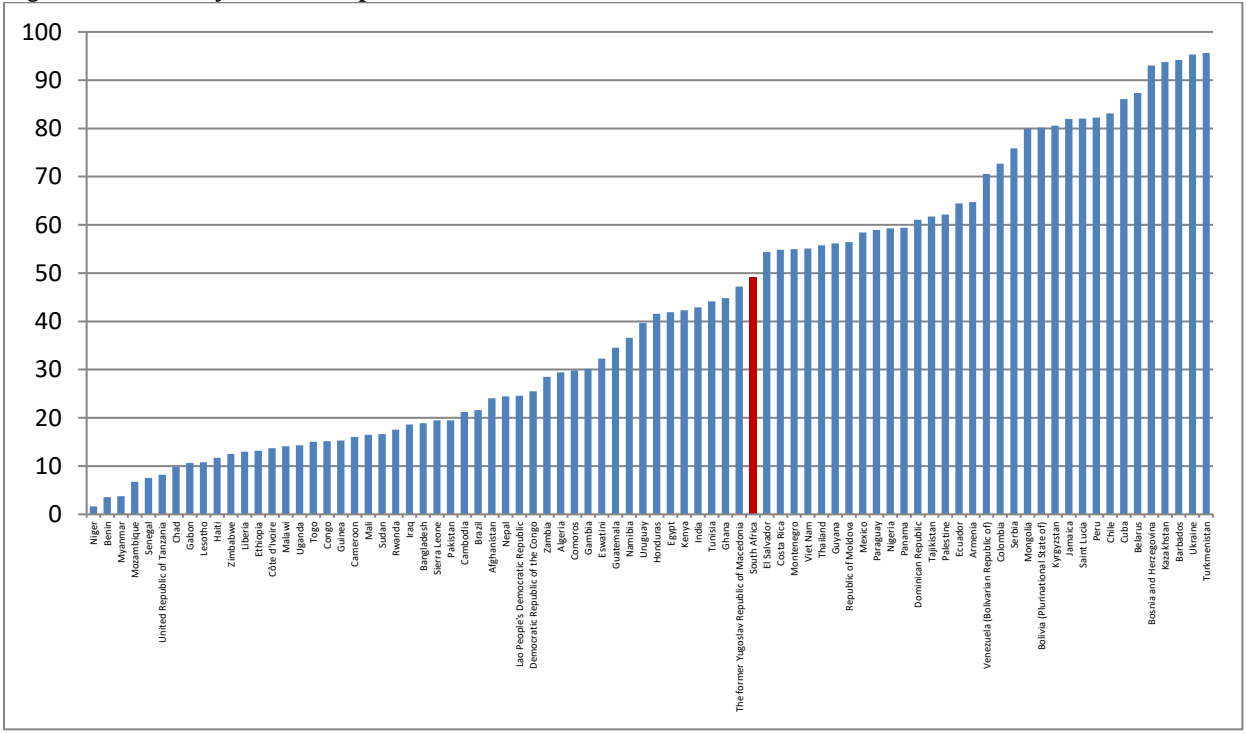
Figure 2: National Primary and Secondary completion rates



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Gr 7 Completion	84.9	87.1	87.9	88.8	89.2	90.3	90.3	90.9	92.2	92.8	93.4	94.2	94.4	94.4	94.1	95.2
Gr 12 Completion	40.3	40.6	41.6	40.1	41.8	41.7	43.4	44.9	45.6	47.1	47.4	47.9	51.4	50.1	50.0	50.7

Source: Statistics South Africa, General Household Survey (GHS), DBE own calculations
Note: For Grade 7 completion age 16 to 18 used and for Grade 12 completion age 22-25 was used.

Figure 3: Secondary school completion rates



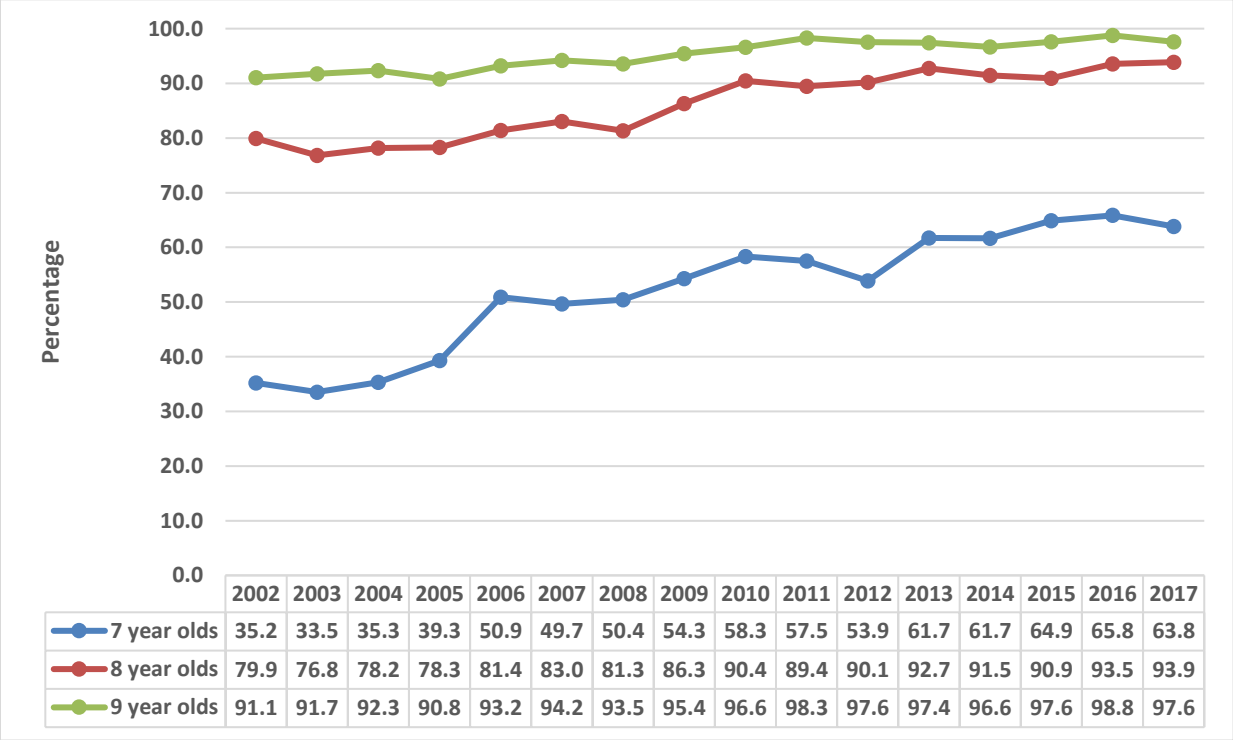
Source: Graph compiled using data extracted from UNESCO Institute for Statistics database
Note: Data is for 2011 to 2016, depending on the country.

Efficiency in school progression

When children do not participate in school, or drop out before achieving their potential, this is a grossly inefficient use of a country's human capital. On the other hand South Africa's schooling system has struggled with inefficiency caused by high levels of grade repetition, low levels of learning achieved by those in school, and high dropout late in the school programme (Grades 10 – 12). In effect, this means many years of per student funding per matric pass. Late entry into school is also inefficient since crucial formative phases would have been missed and by the time these children reach secondary school they are more likely to drop out of school due to family responsibilities, pregnancy or the pressure to find work.

One important achievement in recent years is that fewer children are entering school late. Figure 4 shows that the percentage of 7 year-olds surveyed in the GHS who have already completed Grade 1 has increased from about 35% in 2002 to about 64% in 2017. Similarly, the percentages of 8 and 9 year-olds who have completed Grade 1 has increased significantly.

Figure 4: Proportion of children having completed grade 1 by age, 2002 - 2017



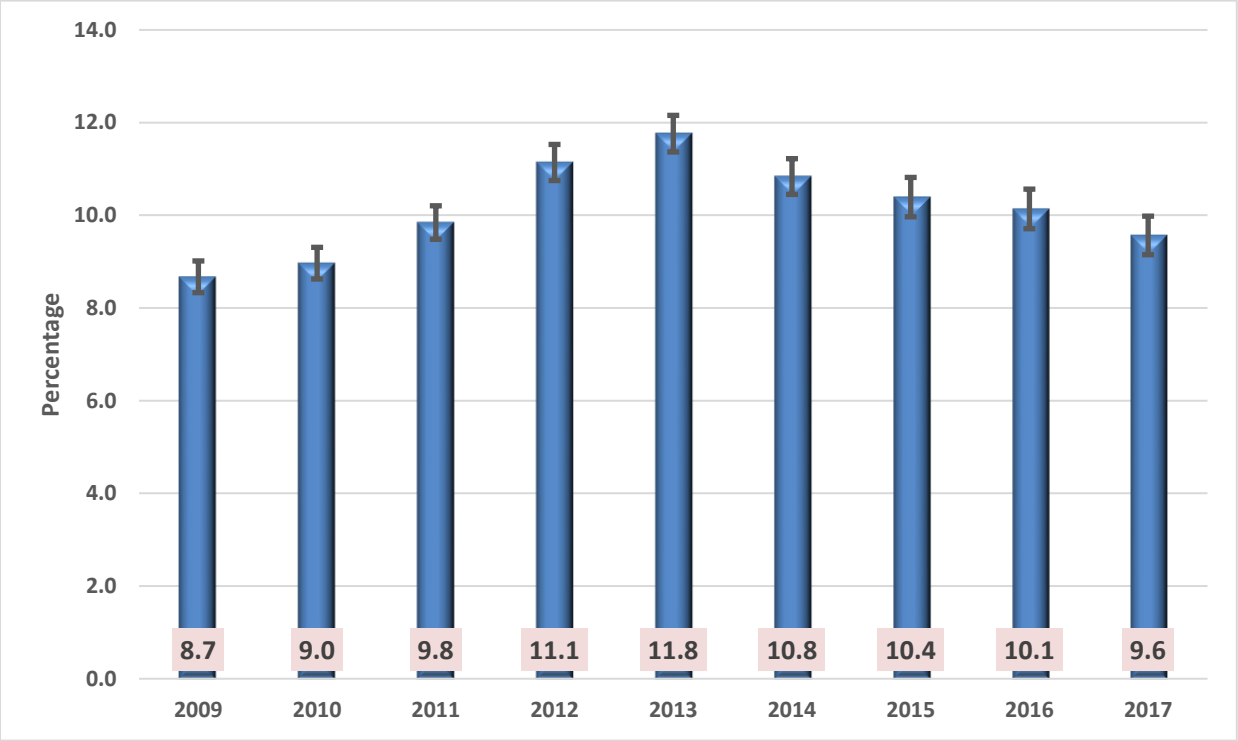
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
7 year olds	35.2	33.5	35.3	39.3	50.9	49.7	50.4	54.3	58.3	57.5	53.9	61.7	61.7	64.9	65.8	63.8
8 year olds	79.9	76.8	78.2	78.3	81.4	83.0	81.3	86.3	90.4	89.4	90.1	92.7	91.5	90.9	93.5	93.9
9 year olds	91.1	91.7	92.3	90.8	93.2	94.2	93.5	95.4	96.6	98.3	97.6	97.4	96.6	97.6	98.8	97.6

Source: Statistics South Africa, General Household Survey (GHS), DBE own calculations

Grade repetition has historically been high in South Africa, though not in comparison to most other countries in the region. SEACMEQ data indicated that in both the 2000 and 2007 surveys, smaller percentages of South African Grade 6 children had repeated at least one grade compared to the regional average. Between 2000 and 2007, the percentage of South African Grade 6 children who

had already repeated a grade decreased from 42% to 29%. Figure 5 below shows grade repetition rates (all grades combined) according to the GHS since 2009. After an increase in grade repetition between 2009 and 2013, the average repetition rate has returned to a little under 10%.

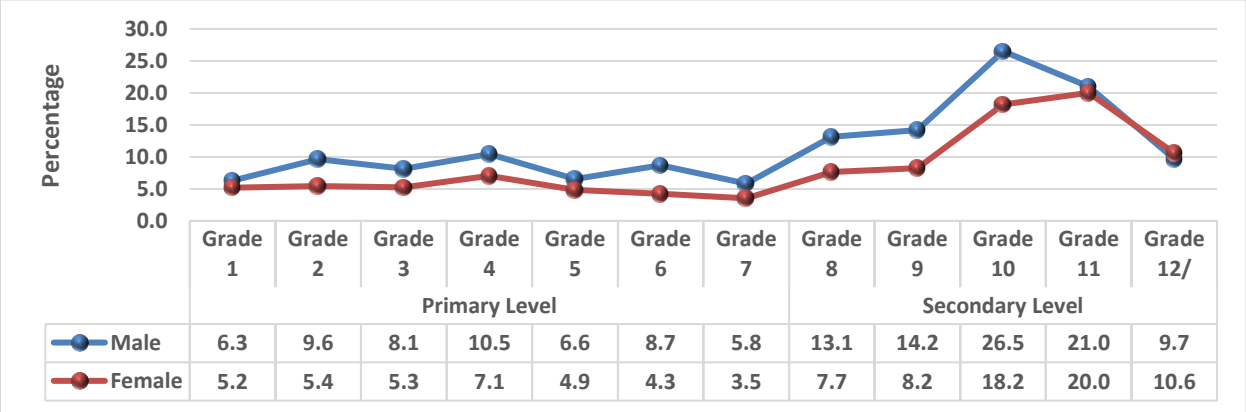
Figure 5: Percentage of learners who were repeating a grade, 2009- 2017



Source: Statistics South Africa, General Household Survey (GHS), DBE own calculations

Despite the improvements in grade repetition rates, the problem is more prevalent amongst boys than girls. Figure 6 shows that boys are always more likely to repeat than girls, across the grades.

Figure 6: Percentage of repeaters by grade and gender, 2017

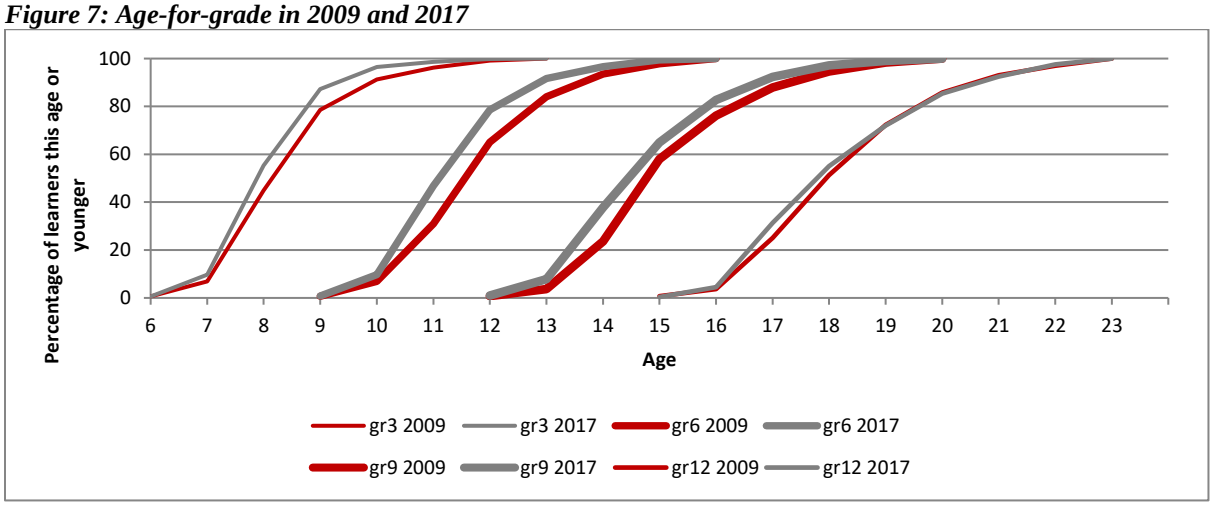


	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12/
	Primary Level							Secondary Level				
Male	6.3	9.6	8.1	10.5	6.6	8.7	5.8	13.1	14.2	26.5	21.0	9.7
Female	5.2	5.4	5.3	7.1	4.9	4.3	3.5	7.7	8.2	18.2	20.0	10.6

Source: Statistics South Africa, General Household Survey (GHS), DBE own calculations

Perhaps as a result of decreasing late entry into school and declining grade repetition rates, there has also been an improvement in age-for-grade distributions. Figure 7 shows the age ranges for grades 3, 6, 9 and 12. It is evident that for all of these grades, the age range was younger in 2017 than in 2009, although the difference is least noticeable at the grade 12 level. For example, in 2009 only 65% of grade 6 children were 12 or younger, but this figure improved to about 79% in 2017.

Figure 7: Age-for-grade in 2009 and 2017



Source: Statistics South Africa, General Household Survey (GHS), DBE own calculations

The recently introduced so-called "progressed learner policy" may also have an impact on the efficiency of learner progression through the schooling system, although this requires closer analysis. Under this policy learners are only permitted to repeat at most one grade per phase. The result of this policy is that, since the 2015 NSC examinations, there have been large numbers of NSC candidates sitting for the examinations despite not having fulfilled the formal requirements for passing Grade 11. Historically, we observe high repetition rates and high dropout rates in grades 10, 11 and 12. Therefore, it is important to understand that many of the so-called "progressed learners" would probably have dropped out of school without sitting for the NSC examination after repeating several times – a highly inefficient outcome. Although the matric pass rate for progressed learners has been lower than that for non-progressed learners, many progressed learners did pass matric. It seems likely, therefore, that the overall effect of this new policy will be to increase the numbers of matriculants annually, by discouraging overly restrictive grade repetition leading to dropout.

Quality of learning

In a country like South Africa, where the quality of education provision is in the public eye and gets a lot of critique, a perception may exist that education quality is stagnant or even deteriorating. Meanwhile, there is now global recognition that widening access to schooling does not always equate to satisfactory levels of learning, and yet there is mounting evidence of how important

acquiring basic cognitive skills in school is for a country's subsequent economic growth. For these reasons, it is critical to undertake careful analysis of the best available data sources to gauge whether the system is making progress in the core business of learning outcomes.

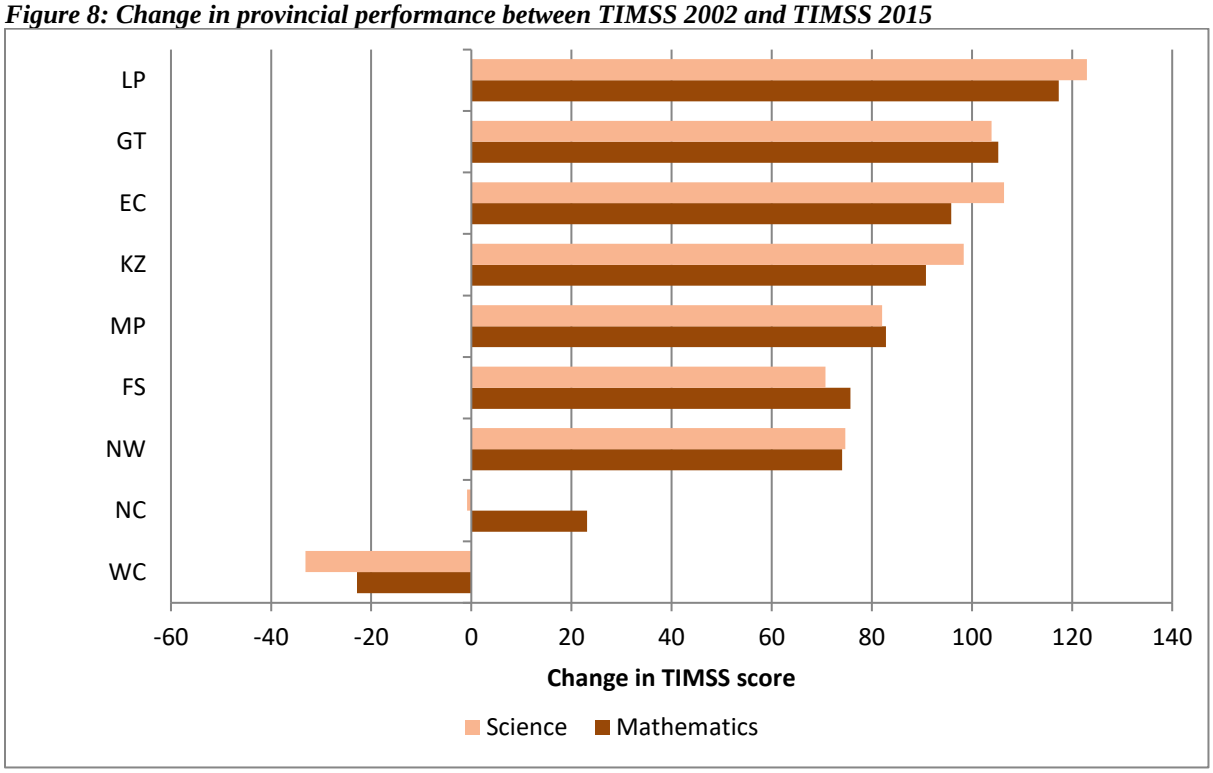
The best available data sources designed explicitly for measuring trends in learning at a national level come from three international assessments in which South Africa has participated – TIMSS (in 1995, 1999, 2002, 2011 and 2015), PIRLS (in 2006, 2011 & 2016) and SEACMEQ (in 2000, 2007 & 2013)[1]. These surveys have been instrumental in raising awareness throughout the sector that the levels of learning in primary school maths, reading and literacy as well as mathematics and science in junior secondary school are worryingly low in South Africa. The PIRLS assessments, for example, have revealed that large proportions of South African children reach grade 5 without having learned to read with comprehension.

The good news is that in recent rounds of TIMSS, PIRLS and SEACMEQ we have observed that the country's levels of learning have been on an improving trend. In the TIMSS assessment (grade 9 mathematics and science), South Africa has been the fastest improving country between the surveys of 2002, 2011 and 2015. There appears to have been a significant improvement in the country's PIRLS results between 2006 and 2011, although no significant change between 2011 and 2016. In SEACMEQ, a large improvement at the grade 6 level was noted between 2007 and 2013 in both mathematics and reading.

Figure 8 shows the changes in TIMSS mathematics and science performance between 2002 and 2015 for each province. Large improvements appear to have taken place, especially in some of the lowest-performing provinces. It should also be noted that the Western Cape probably did not actually regress over the period – analysis conducted by the HSRC has suggested that the sample for Western Cape schools was not really comparable between 2002 and 2015. However, despite these important improvements, the absolute levels of learning achieved are still substantially below desirable levels.

[1] TIMSS stands for Trends in International Mathematics and Science Study. PIRLS stands for Progress in International Reading Literacy Study. SEACMEQ stands for the Southern and East African Consortium for Monitoring Educational Quality.

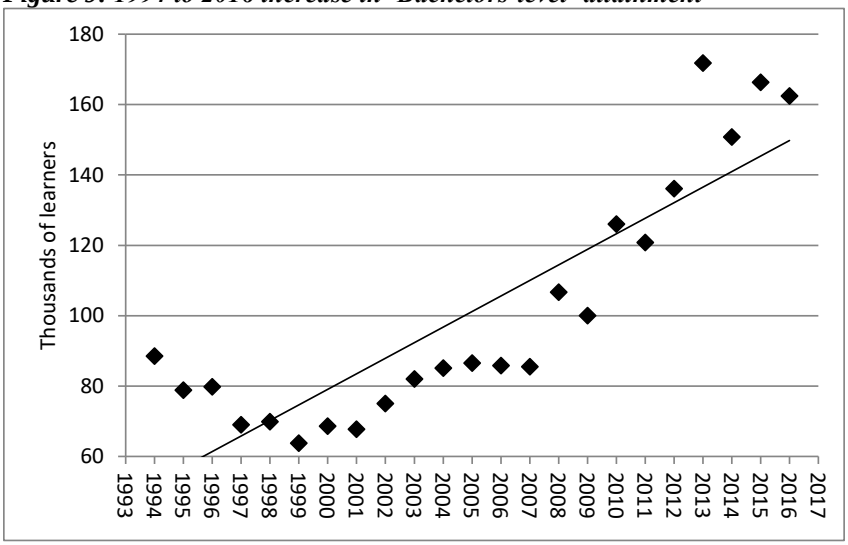
Figure 8: Change in provincial performance between TIMSS 2002 and TIMSS 2015



Source: Graph adapted from Human Sciences Research Council presentation on the release of TIMSS

The NSC results have also shown consistent improvements in recent years, both in terms of pass rates and the numbers passing every year. One important reflection of quality in the system is the numbers of NSC candidates achieving a "Bachelors-level" pass each year as this is required for access to a degree programme at university. Figure 9 shows that this number fluctuated a bit but was relatively stagnant between the mid-1990s and 2007. However, the number of Bachelor passes has roughly doubled since 2007. Encouragingly, increases in the number of Black African bachelor passes almost entirely accounts for the overall improvement. This leads to the next section on equity in educational outcomes.

Figure 9: 1994 to 2016 increase in 'Bachelors-level' attainment



Source: Department of Basic Education (2017) National Senior Certificate Examination Report

Equity in educational outcomes

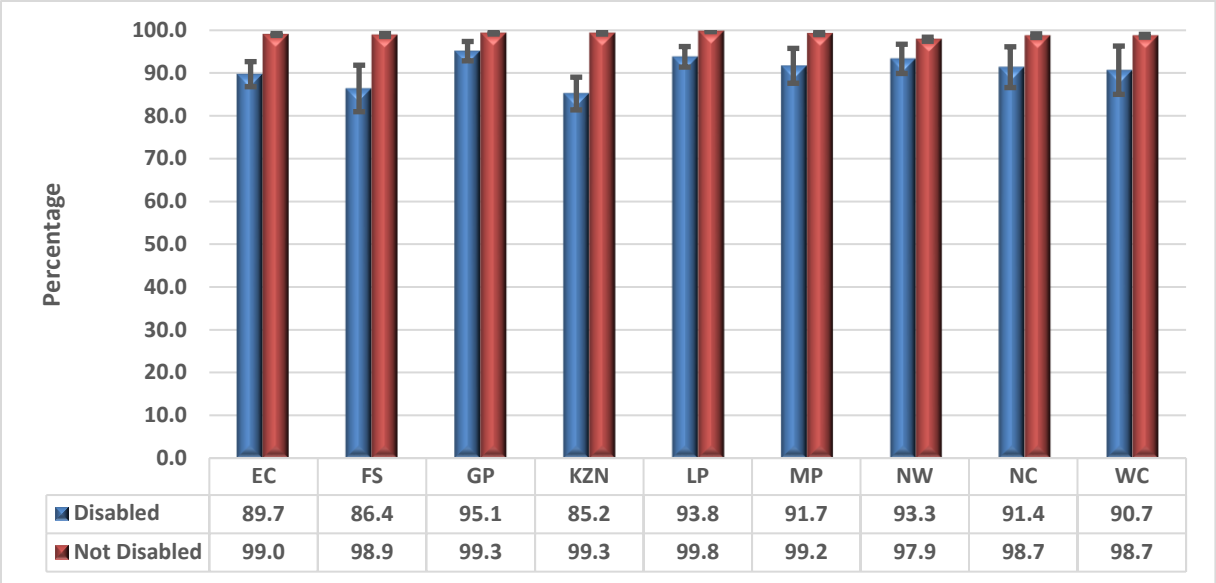
South Africa's history of institutionalised inequality on the basis of race has left a persistent legacy of inequality, which manifests starkly in educational outcomes. In the 2017 NSC examinations, for example, more than 80% of Quintile 5 schools (fee-charging schools serving mainly a middle class population) achieved pass rates of 80% or higher. In Quintile 1 to 3 schools (non-fee schools serving mainly black children in less affluent communities) less than a third of schools achieved pass rates of 80% or more.

A major focus of education policy and planning since 1994 has, therefore, been on introducing and extending pro-poor programmes, and this section will indicate that these interventions are bearing fruit even though the inequalities in outcomes are still considerable. Key pro-poor programmes include the introduction of no-fee schools since 2007 to the point where about two-thirds of children now do not pay fees, the provision of daily meals to over 9 million children through the National School Nutrition Programme, the expansion of the Learner Transport Programme to ensure that children in remote areas arrive at school safely, on time and ready to learn, and a number of initiatives to provide suitable learning opportunities for children with special needs.

Access to schooling has improved consistently since 1994, and this has also been the case for learners with disabilities. However, there remain gaps in school participation rates between children with disabilities and those without disabilities. Figure 10 indicates that whereas school participation is approaching 100% for 7 to 15 year-old children without disabilities, for those with disabilities (which is approximately 4% of the school-aged population as classified in the General

Household Survey of 2017) the participation rate ranges between 85% and 95% depending on the province.

Figure 10: Percentage of 7 to 15 year old with disabilities and those without disabilities attending educational institutions by province, 2014-2017



	EC	FS	GP	KZN	LP	MP	NW	NC	WC
Disabled	89.7	86.4	95.1	85.2	93.8	91.7	93.3	91.4	90.7
Not Disabled	99.0	98.9	99.3	99.3	99.8	99.2	97.9	98.7	98.7

Source: Statistics South Africa, General Household Survey (GHS), DBE own calculations
Note: Data for 2014 to 2017 pooled together to overcome small sample challenges

Although the critical inequalities in the sector are along racial and socio-economic lines, the important trend to note is that the improvements we are witnessing are being driven by the historically disadvantaged parts of the school system. For example, the TIMSS improvements since 2002 were largest at the bottom end of the performance distribution and in poorer provinces. The annual numbers of Black and Coloured NSC bachelor passes has roughly doubled since 2008, whilst the numbers of White and Indian NSC bachelor passes was stagnant over the same period, thus indicating that the former improvement is genuine and unlikely to be reflective of changing standards.

Another important equity dimension to consider is gender. Whilst a lot of work still has to be done to address numerous forms of violence and barriers to educational success that affect females in particular, many of the standard indicators of gender parity with regard to educational outcomes are now favouring girls in South Africa. We observe substantially higher literacy scores amongst girls across the grades – in PIRLS 2016, for example, female learners outperformed boys by the equivalent of a grade level of learning on average nationally. Boys are more likely to repeat grades than girls and more likely to drop out of school prior to Grade 12. The end result of this is that there are considerably more female NSC passes annually than male passes – in 2017, for example, 217 387 females passed matric compared to 184048 males. Research by Van Broekhuizen and Spaull (2017) demonstrates how the female advantage compounds the further along the academic

path to the point where 66% more females complete a bachelor degree at university relative to males.

There have clearly been improvements in the equity of educational outcomes since 1994, whether one considers racial gaps, socio-economic gaps, children with special needs or gender. However, the magnitude of the inequality that still remains means that the challenge of creating a more equitable schooling system will be with us for many years to come.

Equity in expenditure

There are two distinct reasons why education funding should be pro-poor. Firstly, the poor are less able to pay for the various costs associated with receiving an education; and secondly, it has been extensively demonstrated that learners with less educated parents require more extensive, and hence, more costly support than advantaged learners. Moreover, it is a basic tenet of progressive fiscal policy, which has been pursued by South Africa since 1994, to target tax incidence to the more affluent and to target government expenditure to the poorer sections of the population.

The fact that a large proportion of government spending on education goes to personnel spending (teachers and non-teaching staff), and the reality that better qualified teachers who enjoy moderate pay benefits tend to work in more affluent schools limits the extent to which such spending can be pro-poor. However, studies on fiscal incidence in South Africa have found that education spending has become well-targeted to the poor, which can be largely attributed to the effects of non-personnel spending (Van der Berg S. , 2009; Gustafsson & Patel, 2008).

The National Norms and Standards for School Funding, introduced in 2000, stipulated that poorer schools within each province should receive greater allocations of non-personnel spending. This was refined in 2006 by the Education Law Amendment Act, which categorised schools into nationally divided poverty quintiles – where the breakdown into five quintiles is according to some indicator of poverty or socio-economic status, and made the poorest 40% of schools "no-fee schools" (Quintile 1- 2 schools). The generally positive reception to the no-fee policy has led to this being expanded to include Quintile 1 – 3 schools (which is in fact more than 60% of schools and children).

Government targets have clearly been pro-poor, however, the amounts actually received by schools were slightly less pro-poor than intended. Potential reasons for this include funds intended for non-personnel spending being used by schools to supplement personnel spending, financial transfers coming through late, and schools receiving departmentally purchased goods and services too late. Private spending through fees dramatically increases the total expenditure for the richest quintile. The resource base of quintile 5 schools is, therefore, considerably better than that of

poorer schools, but this is due to private spending, with public spending serving to counteract this to some extent.

The next sections review the various inputs that go into building an effective schooling system capable of improving the educational outcomes that have been discussed above. The sections are organised according to the six sub-outputs linked to Outcome 1 of the Medium Term Strategic Framework.

Output 1: Teacher development, supply and effective utilisation of teachers

1.1) Introduction/ Problem Statement

Teachers are the cornerstone of our education system. The successful functioning of schools depends on teachers being trained, recruited, and placed in schools effectively. Policies regulating teacher development, teacher supply and the effective utilisation of teachers are, therefore, central to ensuring improved quality teaching and learning. The Sustainable Development Goals (SDG) recognise the importance of teacher development and teacher supply and has lent support to this priority area through SDG Target 4.c: "By 2030, substantially increase the supply of qualified teachers".

Aligned to the SDG goals, the National Development Plan (NDP) provides a four-pronged strategy to ensuring an adequate supply of skilled teachers in the system: (1) Produce more and better qualified teachers through the university and other systems; (2) Develop in-service strategies and support systems that will continually develop the skills of teachers; (3) Cooperate with professional bodies and teacher unions to enhance member expertise and commitment and; (4) Ensure an appropriate pay structure which also rewards good teachers (NPC, 2013: p70).

The NDP strategy is translated in the Medium Term Strategic Framework (MTSF) in Sub-Outcome 1: "Improved quality of teaching and learning through development, supply and effective utilisation of teachers". The MTSF lays out various targets to realising this outcome including the average number of hours teachers spent on professional development, the number of qualified Grade R-12 teachers aged 30 and below entering the public service as teachers for the first time, the number and percentage of Funza Lushaka bursary holders placed in schools within six months of their completion of studies, teacher absenteeism, and the percentage of schools where allocated teaching posts are all filled.

The quality of teacher development and effective teacher recruitment and management strategies are government policy priorities – as demonstrated in the NDP, the MTSF and the Action Plan to 2019. It is recognised that teacher salaries comprise approximately 80% of the education budget

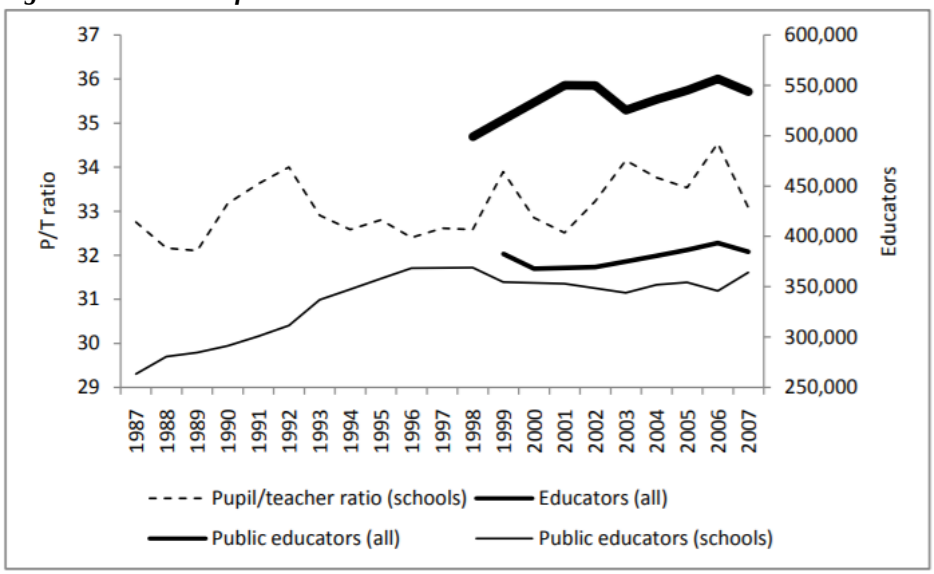
and that teachers are the custodians of classroom practice. Teacher development, supply and the effective utilisation of teachers are, therefore, integral to improving teaching and learning in South Africa.

1.2) Achievements and journey since 1994

At the advent of democracy, resource distribution in terms of teacher remuneration, teacher qualifications and learner-educator ratios were severely skewed. Massive strides have since been made in the redistribution of available resources, especially in terms of teacher numbers and teacher remuneration. Figure 11 illustrates the steady increase in the number of teachers for the period 1987 until 2007. In response to the enrolment increases that took place during the same period, the number of teachers increased by 100,000, thereby allowing the system to maintain constant learner-educator ratios (Gustafsson & Patel, 2008).

The relatively constant learner-educator ratios mask the redistribution between schools, in favour of previously disadvantaged schools. Much of the redistribution was achieved through teacher rationalisation in the period following 1994. The rationalisation entailed the movement of educators from areas of oversupply to areas of need, as well as the option of voluntary severance packages for teachers who were not willing to be part of the rationalisation.

Figure 11: Number of educators 1987 - 2007



Source: Gustafsson & Patel (2008)

The 1998 Post Provisioning Norms specifies how the total number of educator posts to schools in a provincial department should be calculated. The norms have evolved over time, with a focus on the equality of inputs and poverty ranking, weighted by the number of learners to ensure fairness in the distribution of teacher posts. In order to achieve quality teaching and learning for all learners, policymakers must ensure that all schools are provided with the required number of teaching staff

as specified by the policy. Key to implementing this policy is a thorough understanding of how many vacancies exist, where they are, and what the most recent trend is over time.

The School Monitoring Survey 2017/18 reports the percentage of schools in which allocated teaching posts are filled. The results reveal that the percentage of primary and secondary schools combined where all allocated teaching posts were filled improved from 69% in 2011 to 78% in 2017. A substantially lower proportion of primary schools in the Eastern Cape, compared to the national average for primary schools, had all their posts filled. In Gauteng, KwaZulu-Natal and the Western Cape the situation seemed to be better than the national average for primary schools. In secondary schools, lower proportions of schools in the Eastern Cape and the North West had all their teaching posts filled, in comparison to the country average for secondary schools. In KwaZulu-Natal and the Northern Cape, the situation seemed to be better than the national average (Department of Basic Education, 2018).

Table 1: The percentage of primary and secondary schools combined where allocated teaching posts were filled in terms of categories of compliance level by province

Province	50%-74%	75%-99%	100%	Unknown	Total
EC	5,4%	30,9%	63,4%	0,2%	100,0%
FS	0,0%	22,4%	77,2%	0,3%	100,0%
GT	0,0%	15,6%	83,7%	0,7%	100,0%
KZN	0,5%	10,8%	88,3%	0,3%	100,0%
LP	0,5%	22,9%	76,6%	0,0%	100,0%
MP	0,2%	20,1%	79,7%	0,0%	100,0%
NC	0,0%	16,9%	81,1%	2,1%	100,0%
NW	0,0%	26,2%	72,7%	1,1%	100,0%
WC	0,0%	13,5%	86,5%	0,0%	100,0%
SA	1,5%	20,3%	77,9%	0,3%	100,0%

Source: School Monitoring Survey 2017/2018, Summary Report

The establishment of the Education Labour Relations Council (ELRC) has also contributed to the redistribution of resources and teachers have directly benefited through the signing of collective agreements. In the mid-1990s, the salaries of most teachers rose dramatically, with the real increase in the minimum pay notch for black teachers with four years of post-secondary education being approximately 25%. This shift was due to a post-apartheid pay equalisation that essentially brought all teachers up to the favourable level enjoyed by the minority of white teachers in the past (Gustafsson & Patel, 2008). More recently there has been further large increases, with the average salary of teachers increasing by about 28% in real terms between 2007 and 2012 (Department of Basic Education, 2015). These increases have typically been attributed to agreements with unions relating to the Occupation Specific Dispensation emanating from the ELRC Resolution 1 of 2008 and Resolution 4 of 2009. Although these increases has been a positive development from an

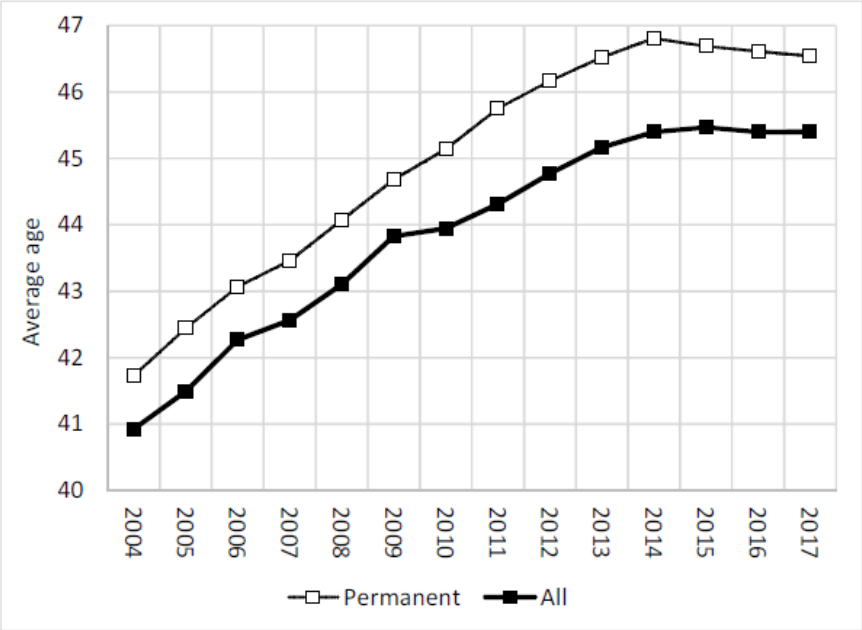
educational perspective, these increases have limited provincial departments in their ability to hire more educators and spend on non-personnel items.

Teacher development also experienced major changes since 1994. Teacher training in public institutions was generally fully funded by the government before 1994. However, from 1995 to 2005 bursaries were abandoned for teacher training, thereby introducing a financial barrier for many individuals who may have considered teaching as a potential career. To add to the financial burden, the 110 teacher colleges were merged into the 22 higher education institutions in 2002, which subsequently led to a further increase in tuition fees. This resulted in fewer previously disadvantaged African individuals pursuing teaching as a career choice and it was understood that a key reason was the unaffordability of teacher training. A further unintended consequence of the dissolution of teacher colleges in the rural areas was that student teachers were less likely to return to the rural areas to teach after completing their studies at university.

By 2009, a departmental analysis of teacher demand and supply signalled that the overall number of teachers was increasing, marked by the annual supply of qualified educators exceeding the annual replacement demand of qualified educators (Department of Basic Education, 2009). However, only a minority of qualified educators joining the education system each year were aged 30 and below. The average age of educators also increased from 40.7 in 2004 to 42.7 in 2008, indicating that the system was experiencing an ageing workforce. The fact that there were so few young graduates available to join the system was considered to be a potentially serious supply problem in the future, and this prompted increased monitoring of young joiners and interventions to encourage young joiners.

The ageing workforce trend has been evident ever since. Figure 12 illustrates the increase in the average age of teachers from around 41 years in 2004 up to almost 45.5 years in 2014. In this figure, the years 2014 and 2015 represent an important turning point in the schooling system, with the dropping of the average age of teachers after a long period of increases (Department of Basic Education, 2018).

Figure 12: Average age of educators 2004 - 2017



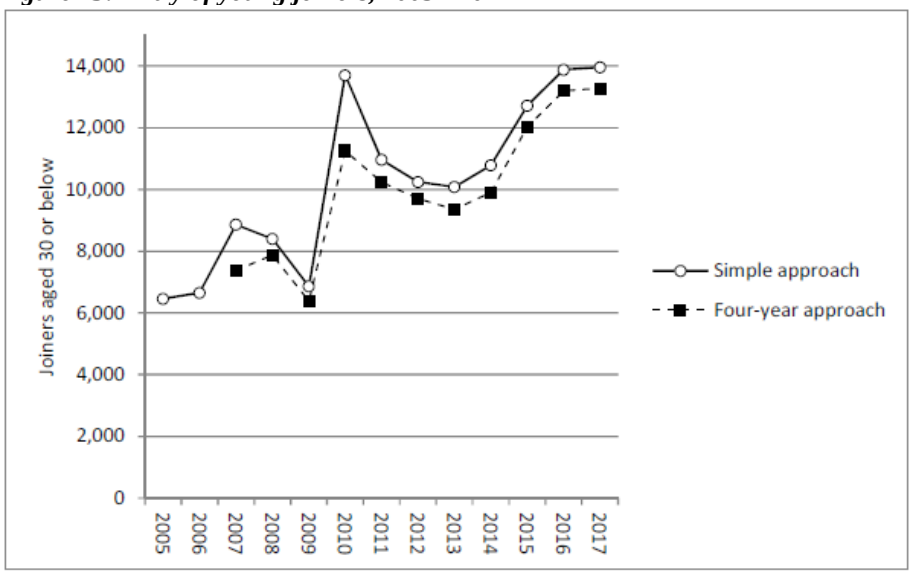
Source: Department of Basic Education (2018) Basic education remuneration issues, Internal DBE document

In response to this crisis, government initiated several efforts to increase the development of new teachers, including launching the Funza Lushaka Bursary Programme (FLBP) in 2007. The FLBP has made a considerable contribution by improving the attractiveness of teaching as a choice for many South African youth. Between 2007 and 2017, the programme has awarded 120,511[2] Funza Lushaka bursaries at a cost of R7.21 billion to prospective teachers. An implementation evaluation of the FLBP in 2016 indicated that the programme has made an important contribution to the substantial increase in enrolment in Initial Teacher Education (ITE) since its introduction, with FLBP students constituting on average 15% of the total ITE student intake. The programme was further deemed successful in attracting quality students to become teachers.

Since 2005 we have also seen a steady increase in the number of young joiners from around 6,000 up to almost 14,000 in 2017 (Figure 13). The FLBP was seen as one of the mechanisms contributing to this increase by enhancing access for high achieving students to qualify as teachers, thereby alleviating some of the pressure on the demand for teachers (Department of Basic Education, 2018).

[2] The number of Funza Lushaka bursaries awarded include bursaries awarded to new applicant and returning students. It is therefore possible that a student will receive more than one award until the student graduates. The Funza Lushaka Policy stipulates a maximum of five (5) awards.

Figure 13: Entry of young joiners, 2005 - 2017



Source: Department of Basic Education (2018) Basic education remuneration issues, Internal DBE document

It is important to note that approximately two-thirds of teachers currently working in public schools received their ITE before the reforms in the early 2000s. It is, therefore, especially important to offer Continuous Professional Teacher Development (CPTD). Teachers require the ongoing updating of their skills, in part because teaching methods evolve as new technologies emerge. More importantly, teachers with weak ITE foundations require particularly good support. Emerging evidence from around the world suggests that it is especially difficult to change classroom practices through CPTD (World Bank, 2003), however, some approaches tend to work better than others. This has led to a strong emphasis on evaluating existing programmes, and a keen interest in the use of Professional Learning Communities (PLCs) which are needs-driven and stimulate collaborative learning (VVOB, 2017).

Previously, there has been little to no evidence on the types of teacher support mechanisms to impact on early grade reading outcomes in South Africa. The DBE's Early Grade Reading Study (EGRS) has systematically aimed to provide evidence on alternate models of teacher support for the teaching of reading. After two years of implementation, formal impact evaluation results revealed that the largest impact on reading outcomes was observed when the form of professional support to teachers included on-site coaching. Instructional coaching in schools is when mentors, considered experts in their field are paired with individual teachers to provide hands-on, ongoing support on matters of curriculum and pedagogical practice (Department of Basic Education, 2017).

Over the past 25 years, key developmental priorities have been addressed through various policies and initiatives, including:

1. The development of a new and strengthened **Integrated Strategic Planning Framework for Teacher Education and Development in South Africa, 2011–2025.** The framework puts forward improved and expanded teacher education and development opportunities in order to improve the quality of teaching and learning in schools.

2. The enactment of the **Employment of Educators Act, 1998 (Act 76 of 1998),** which provides for the employment of educators by the state and for regulation of the conditions of service, discipline, retirement and discharge of educators. This act and the resultant professional council, the **South African Council of Educators (SACE)** has played a significant role in developing teacher professional standards and supported the broader professionalisation of teaching.

3. The introduction of the **Advanced Certificate in Education: School Leadership**, which is a two-year qualification aimed to prepare aspirant principals to be qualified and competent for the role as a Principal. The certificate is set to be replaced by an Advanced Diploma in Leadership and Management and it is envisaged that this qualification will become a mandatory qualification for the appointment of school principals.

4. The development of the **Framework for the Induction of Newly Appointed Principals** to ensure uniformity in the sector in the way that principals are prepared for their new responsibility.

5. Improving the quality of education through ensuring **equitable distribution of educators** by maintaining reasonable learner -educator (LER) ratios within the context of financial constraints.

6. For over a decade, the **Integrated Quality Management System (IQMS)**, has governed the way educators assess their own capabilities and have this peer reviewed by colleagues and managers. The system is comprised of the Development Appraisal, Performance Management and Whole School Evaluation. IQMS scores have been found to be well correlated with HoD promotions, which suggests that on the whole, the IQMS is able to gauge teacher quality and that more capable teachers are being promoted – pointing to better teacher accountability in the system.

1.4) Challenges and how to improve

The continued shortages of young graduates available to join the system represents a serious supply problem, especially in light of increasing learner enrolment numbers. In addition, the ageing workforce in conjunction with the rising unit costs of teacher salaries has placed immense pressure on provincial expenditure- leading to the instability of provinces to spend more on

learning activities. However, the expected increase in the number of young joiners will bring down the average cost of an educator in real terms as younger educators cost less than older educators (due to experience-related remuneration benefits).

Further, evidence has pointed to younger teachers being better equipped to teach than their older peers who received their initial training in the previous system. Results from mathematics and language teacher tests in SEACMEQ 2007 and 2013, point to younger teachers displaying a level of subject knowledge which was considerably higher than that of older teachers. It is likely that stronger subject knowledge among younger teachers would have played some role in improving outcomes for learners. Yet the systemic impact of this would be limited as it takes time for older teachers to be replaced by younger teachers.

In tracking the Department's performance towards the MTSF outcome of improved quality of teaching and learning through the development, supply and effective utilisation of teachers, various indicators have been measured in 2011 and again in 2017 through the School Monitoring Survey (SMS). The results suggest that some improvement have been made, but that a lot more work can be done towards achieving the outcome.

In terms of the effective utilisation of teachers, the SMS measured the percentage of schools that had all their teaching posts filled, as well as teacher absenteeism. Although there has been an approximate[3] improvement from 69% to 78% in the percentage of schools that had all their teaching posts filled, it is recognised that the 2017 level is still below the target of 95% that was set-out in the MTSF. Furthermore, teacher absenteeism also remained relatively consistent between 2011 and 2017, with 10% of teachers being absent on an average day.

To evaluate the changes in teacher development between the 2011 and 2017 surveys, the average number of hours that teachers spent on professional development was measured. In 2017, significant increases in the average hours spent on professional development was evident among secondary school teachers, with the overall average improving from 28 hours to 44 hours. For Limpopo, the increase was 18 hours on average, for Gauteng 34 hours on average and the Western Cape reported an increase of 51 hours on average. Nevertheless, across the country, teacher on average spent 40 hours on professional development, half the specified target of 80 hours.

The Funza Lushaka bursary programme is key to ensuring the effective supply of teachers. The implementation evaluation of the Funza Lushaka bursary programme, however, highlighted some challenges in the programme that needs to be addressed. The main intended outcome of the

[3] A comparison between 2011 and 2017 is only an approximation, since there was ambiguity in the 2011 SMS questions, and temporarily filled allocated posts may or may not have been reported as vacant.

programme is for graduates to be placed in priority subject areas and in identified geographical areas of need. The evaluation found that the intention to place Funza Lushaka bursary programme graduates predominantly in rural and poor schools has not been achieved. Greater attention will have to be paid to modernised information management systems and improved provincial human resources planning to inform teacher recruitment and the placement of graduates.

Furthermore, it is recognised that the implementation model of the Funza Lushaka bursary programme in the context of free higher education must be re-engineered. Options such broadening school based initial teacher education models linked to rural and/or "difficult to teach" contexts should be explored. The emphasis should be on strict identification and selection criteria, deepened content knowledge linked to early exposure to classroom practices with planned mentoring opportunities.

Output 2: Improved quality teaching and learning, through provision of adequate, quality infrastructure and LTSM

2.1) Problem statement

The development of children is influenced by the physical and social environments they find themselves in. In the education sector, school infrastructure is important in facilitating the delivery of education and creating an atmosphere conducive for learning. Infrastructure may be categorised into what the Medium Term Strategic Framework 2014-2019 (MTSF) refers to as "hard infrastructure", for example, school buildings, desks and sanitation, as well as "soft infrastructure", for example, books and computers. Sub-outcome 2 in the basic education MTSF 2014-2019, "Improve the quality of teaching and learning through the provision of infrastructure and learning materials", provides the required actions and targets for the schooling sector.

Goal 19 and Goal 20 of the DBE's Action Plan address the provision of a minimum set of textbooks and workbooks required according to national policy, and increased access to a library or multimedia centre fulfilling certain minimum standards.. These are generally referred to as Learning and Teaching Support Materials (LTSMs)[4]. Goal 24 is about ensuring that the physical

[4] The DBE refers to LTSMs under the following definitions and contexts: (i) LTSM: a variety of learning and teaching materials used in classrooms. These range from teacher and learner created resources to commercially produced classroom resources, such as wall charts, workbooks, textbooks, e-books, readers, stationery, science kits, dictionaries etc.; (ii) e-LTSM: an e-book composed in or converted to digital format for display on a computer screen or handheld device; (iii) Core-LTSM: the category of LTSM that is used to teach the entire curriculum of a subject for a grade. This would generally be comprised of textbooks/learner workbooks and teacher guides; (iv) Supplementary LTSM: refers to LTSM that accompanies core LTSM and is generally used to enhance a specific part of the curriculum.

infrastructure and environment of every school inspires learners to want to come to school to learn, and teachers to teach.

These mandates and plans demonstrate government's commitment to supporting the infrastructure needs in education. Notwithstanding this, the historical absence of specific norms for physical infrastructure, and backlogs in the provision of sanitation have been an area of public contention and controversy resulting in several court cases, particularly over the past five years. The provision of LTSMs was also initially plagued with similar controversies which have included court cases and extensive coverage in the media. However, the development of standards for textbook quality, interventions in procurement and the development of LTSM provisioning systems over the past five years have positively changed the discourse in the sector.

2.2) Achievements and journey since 1994

Hard Infrastructure

In 1996, two years after the democratic transition, the then Department of Education (DoE) launched the first ever school register of needs (SRN) survey. The survey was the first of its kind as it included every school in the country and reported on the conditions of school buildings and available facilities. The survey provided an invaluable baseline database on the provision of school infrastructure and basic services. This baseline database indicated that the majority of learners were taught in decrepit and unsafe buildings; their schools had no electricity, safe water, sanitation, telephones, or co-curricular facilities and equipment.

According to the SRN, in 1996 the country had 26 734 ordinary schools with an average learner-classroom ratio of 43:1. Out of these, only 11 000 were reportedly in good or excellent condition. Approximately 55% of learners (6.6 million) were in schools without toilet facilities and the learner-toilet ratio was 41:1, while 35% of learners did not have access to water at school. Nationally, only 42% of schools had access to electricity; 40% had access to telephones and only 9% (2 330 schools) had access to computers for learning and teaching. The SRN also surveyed what was then known as "Education for Learners with Special Education Needs (ELSEN)" schools. Out of the 270 ELSEN schools surveyed, 20% of the schools were reportedly in good or excellent condition and only 33% had wheelchair ramps. Approximately 5% of ELSEN schools reported no access to water and 4% had no toilets.

Based on this endowment in 1996, the key policy challenge was to deal with imbalances in the basic mix of educational resource inputs that constitute an enabling physical teaching and learning environment. In response, the sector provided infrastructure through several initiatives. Two recent programmes are the Provincial Schools Building Programme and the Accelerated School infrastructure Delivery Initiative (ASIDI). The Provincial Schools Building Programme is

implemented by Provincial Education Departments (PEDs) and is funded through the Education Infrastructure Grant (EIG) and provincial contributions through the standard National Treasury funding mechanisms. The ASIDI is driven by the DBE to address inappropriate structures and basic services and is funded through the Schools Infrastructure Backlogs Grant and accounts for 25% of the EIG spend. Some of the key ASIDI areas include construction; maintenance; upgrading and rehabilitation of new and existing infrastructure in education, including district and circuit accommodation; providing infrastructure to match curriculum requirements; replacing inappropriate schools; provision of basic services; addressing damage to infrastructure caused by natural disasters; extending existing schools with additional classrooms/facilities; addressing the achievement of the targets set out in the minimum norms and standards for school infrastructure; and enhancing capacity to deliver infrastructure in education.

The first development in consolidating information on the state of schools following the SRN was the developments of the National Education Infrastructure Management System (NEIMS) in 2006. Following a comprehensive audit of public ordinary schools[5], the NEIMS report details information, including digital photographs, about every school. This includes the land and buildings and their condition as well as teacher and pupil numbers. This information is also mapped using Geographic Information Systems (GIS), which provides a useful overview of the spatial location and distribution of schools. The first pivotal policy developed over the past 25 years are the gazetted 2010 National Policy for an Equitable Provision of an Enabling School Physical Teaching and Learning Environment (Department of Basic Education, 2010) which was initially drafted in 2008 along with the Draft National Minimum Uniform Norms and Standards for School Infrastructure (Department of Education, 2008). The norms were, however, not published in 2010 with the national policy.

The first sector plan (Action Plan to 2014: Towards the Realisation of Schooling 2025), published in 2010, reported that the shortfall of classrooms was estimated to be 63 000 nationally (there are approximately 390 000 classrooms across all public schools), and that approximately 10 000 of the country's almost 25 000 public schools had libraries in the form of a separate room dedicated for this purpose. In 2011, the DBE commissioned a nationally representative School Monitoring Survey (SMS) to measure progress in the sector (Department of Basic Education, 2013). According to this independent survey, 55% of schools met the nationally determined minimum infrastructure needs. Gauteng had the highest level of compliance at 90% while Eastern Cape had the lowest at 33%. The 10 260 schools, affecting approximately 3.45 million children, that did not comply were mainly in Eastern Cape, KwaZulu-Natal and Limpopo. The table below provides the

[5] Schools in South Africa are classified into ordinary, special education, specialisation and technical, and independent schools.

number of schools that complied with nationally determined minimum physical infrastructure needs, by province (Department of Education, 2008).

Table 2: Number and percentage of schools which complied with nationally determined minimum physical infrastructure needs in 2011, by province

Province	Do not comply		Comply		Unspecified/ Missing		Total	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
EC	3 475	67	1 722	33	15	0	5 212	100
FS	525	39	824	61	0	0	1 349	100
GP	182	10	1 704	90	0	0	1 886	100
KZN	2 805	51	2 638	48	30	1	5 473	100
LP	1 662	44	2 106	56	0	0	3 768	100
MP	637	39	982	61	0	0	1 619	100
NC	217	39	344	61	0	0	561	100
NW	571	38	931	62	0	0	1 502	100
WC	186	14	1 115	85	8	1	1 309	100
Total	**10 260**	**45**	**12 366**	**55**	**53**	**0**	**22 679**	**100**

Source: Department of Basic Education. (2013). Report on the National School Monitoring Survey

The promulgation of the Minimum Uniform Norms and Standards for Public School Infrastructure only took place in 2013 as an out of court agreement following sustained public pressure, media coverage and a 2012 court case compelling the basic education sector to publish the norms. For the first time ever it became the law that every school must firstly, have water, electricity, working toilets, safe classrooms – with a maximum of 40 learners, security, and thereafter libraries, laboratories and sports facilities. The norms also provided minimum uniform standards in the design and construction of new schools and additions, alterations and improvements to schools which exists. The provision of incremental deadlines for meeting specific targets in the eradication of infrastructure backlogs and new infrastructure was also a landmark feature of the norms.

There have been several recent court cases, from 2017 to date, on the inadequate implementation of the norms and standards and the loss of life that has resulted from inadequate sanitation. In July 2018 the Bhisho High Court[6] ruled that there are unconstitutional components of the norms and standards which the DBE should amend. The main area of contestation was the provision for

[6] Equal Education v Minister of Basic Education (2018).

compliance subject to the availability of resources and co-operation of other government agencies[7]. The tension between the provision of basic education by the DBE and infrastructure by the Department of Public Works as well as the need to collaborate with PEDs was judged to be an insufficient justification for the delay in implementing the norms. The Court also ruled that the implementation plans received from PEDs should be made publically accessible by the DBE within reasonable timeframes as the last publication of these plans was in 2015.

In terms of hard infrastructure, the MTSF (2014-2019) has indicators in relation to eradicating inappropriate school structures, constructing new structures and providing infrastructure facilities – particularly in relation to the number of schools built through ASIDI. In addition, with regards to infrastructure facilities, the MTSF targets are in relation to the number and percentage of public ordinary schools provided with water supply, electricity, and sanitation facilities in line with agreed norms and standards. Each of these targets were set at 100% in the 2016/17 financial year (Department of Planning, Monitoring and Evaluation, 2014).

The historical backlog in physical infrastructure has required substantial efforts, while the seriousness of the challenge has resulted in societal pressure to respond urgently and promptly. Significant progress has been achieved over the past 25 years. The number of schools with electricity has increased from 11 174 in 1996 to 99% of all schools in 2018, according to the NEIMS database (Department of Basic Education, 2018). Substantial improvements have also been recorded in the number of schools with access to running water and the number of schools with some form of sanitation. However, this includes pit latrines which are now regarded by the sector as unacceptable.

The strategic objective of ASIDI is to provide basic infrastructure services, namely, water, sanitation and electricity. The second component of the objective is to replace schools built using inappropriate materials on an annual basis (Department of Basic Education, 2018). The audited figures, according to the DBE Annual Report for 2017/18 for the total cumulative delivery of ASIDI (Department of Basic Education, 2018) are 425 schools provided with appropriate sanitation, 615 provided with access to water, and 306 provided with access to electricity. According to the same source, 179 inappropriate structures have been replaced. These schools are new, but were intended to replace schools built from inappropriate material either partially or in their entirety. In the 2017/18 financial year, a total of 36 new and replacement schools, 1 624 maintenance or upgrading projects, 819 water projects, 659 sanitation projects, 208 electricity projects, 199 fencing projects, 26 libraries, 89 laboratories, 2 299 additional classrooms, 551 Grade R classrooms, and 36 administration blocks were provided through the Provincial Schools Building Programme (Department of Basic Education, 2018). The overall figure cited internally at the time of writing for new and replacement schools through this provincial programme is 784. In the case of this provincial programmes new and replacement schools is a combination of

[7] Regulations Relating to Minimum Uniform Norms and Standards for Public School infrastructure (2013) Sub-regulation 4 (5)(a).

inappropriate schools that have been replaced as well as completely new schools that have been built.

The 2011 School Monitoring Survey set the baseline values and targets for the indicators in the Action Plan to 2019. According to the 2017 School Monitoring Survey, 59% of schools complied with all the determined minimum physical infrastructure standards and it was evident that certain important facilities were not universally available (only 76% of schools had running water and 80% had adequately functioning sanitation). This value was only marginally improved from 2011. These figures are lower than what is suggested by NEIMS since they reflect the functionality of these facilities on the day of the fieldwork, as opposed to whether the facilities have at some point been installed. The table below provides further details.

Table 3: Percentage of primary and secondary schools combined, by province, where certain facilities were available, 2017

Province	Running water	Perimeter fence	Electricity	Internet	Adequate toilets
EC	74.2%	81.8%	79.6%	43.9%	69.9%
FS	78.4%	78.4%	96.3%	77.4%	71.9%
GT	95.9%	97.6%	95.0%	88.7%	97.8%
KZ	54.6%	89.9%	86.9%	28.8%	77.2%
LP	87.4%	86.2%	98.2%	55.5%	76.8%
MP	80.2%	78.5%	94.2%	66.0%	91.7%
NC	91.0%	92.7%	99.4%	76.5%	89.1%
NW	77.0%	93.5%	87.3%	71.7%	81.5%
WC	94.3%	92.7%	98.8%	98.4%	96.3%
SA	75.9%	87.2%	89.9%	55.3%	79.9%

Source: School Monitoring Survey 2017/2018

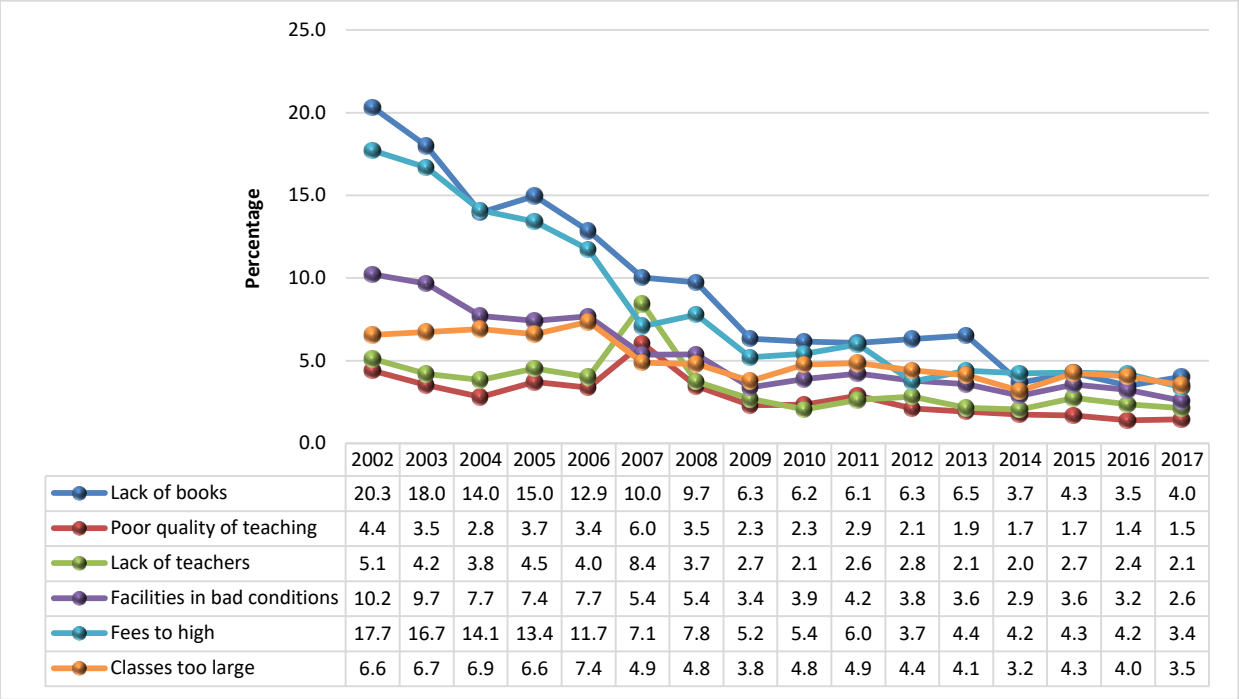
The Action Plan to 2019 refers to the use of modern Information and Communication Technologies (ICTs) as one of two key areas of innovation in the delivery of schooling. The MTSF focuses on providing learners with access to information through schools' connectivity, including broadband connectivity. The country as a whole has made progress in terms of the percentage of the population accessing the internet, which was at 8% in 2007 – slightly below the middle-income country average, which increased to 56% in 2017, slightly exceeding the global average (World Bank Group, 2019). Yet, progress with regard to internet access in schools has been slow. According to the 2017 School Monitoring Survey, access to the internet by principals, teachers and learners in secondary schools was at 68%, 59% and 21% respectively. These figures were slightly better in primary schools at 72%, 66% and 36% (Department of Basic Education, 2018). These figures are reported by the school principal, in the case of learners, specifically for Grade 6 and 12.

The 2011 Trends in International Mathematics and Science Study (TIMSS) data confirms that over the past decade and a half, access to computers in schools has improved substantially. In 2011, 49% of Grade 9 learners had access to computers in schools against 28% in 2002. However, the same TIMSS data reveals that South Africa was considerably behind other developing countries in 2011 at 49%, compared to 86% in Botswana, 78% in Ghana and 82% in Indonesia (Department of Basic Education, 2015). While there has been continuing progress, it has been at a slow pace. The 2015 TIMSS data confirms that around half of Grade 5 and Grade 9 learners had access to a tablet or computer in schools. This puts South Africa roughly on par with other middle-income countries at the primary level, but below the average of these countries at the secondary level.

The 2017 School Monitoring Survey provides valuable information which is roughly in line with the findings emerging from TIMSS. In public schools, of Grade 12 learners are in schools which have a computer laboratory. However, this figure remains skewed in favour of the historically advantaged i.e. at 93% for learners in quintile 5 schools and 40% for learners in quintile 1 schools. The survey also found large inter-provincial differences, in particular, this figure was at 91% for the Free State, a successful province in this regard, while it was at 25% for Limpopo.

In reflecting on the provision of infrastructure, understanding the public's perception is important. High profile court cases and mainstream media have highlighted some of the infrastructure challenges already referred to. The General Household Survey (GHS), however, provides a nationally representative picture of public perceptions around educational facilities. According to this source the developments in infrastructure provisioning have been seen positively by the public. The GHS asked whether any member in the household who was attending an educational institution experienced any problems at the institution over the last six months. In 2017, only 2.6 percent of households complained about inadequate school facilities, which is a significant decrease from 10 percent in 2002 (Department of Basic Education, 2018).

Figure 14: Complaints about education, 2002 – 2017



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Lack of books	20.3	18.0	14.0	15.0	12.9	10.0	9.7	6.3	6.2	6.1	6.3	6.5	3.7	4.3	3.5	4.0
Poor quality of teaching	4.4	3.5	2.8	3.7	3.4	6.0	3.5	2.3	2.3	2.9	2.1	1.9	1.7	1.7	1.4	1.5
Lack of teachers	5.1	4.2	3.8	4.5	4.0	8.4	3.7	2.7	2.1	2.6	2.8	2.1	2.0	2.7	2.4	2.1
Facilities in bad conditions	10.2	9.7	7.7	7.4	7.7	5.4	5.4	3.4	3.9	4.2	3.8	3.6	2.9	3.6	3.2	2.6
Fees to high	17.7	16.7	14.1	13.4	11.7	7.1	7.8	5.2	5.4	6.0	3.7	4.4	4.2	4.3	4.2	3.4
Classes too large	6.6	6.7	6.9	6.6	7.4	4.9	4.8	3.8	4.8	4.9	4.4	4.1	3.2	4.3	4.0	3.5

Source: Statistics South Africa, General Household Survey (GHS), DBE own calculations

Soft Infrastructure

According to the 1996 SRN, textbook provisioning was adequate in only 50% of schools nationally and varied across provinces with the highest adequacy of provisioning found in Free State, 63%, and the lowest in Eastern Cape, 38%, and North West, 39%. Although in six provinces 60% of schools did not have any materials, it is unclear what material is referred to in the report. As indicated in the following table, the worst affected province was KwaZulu-Natal, at 78%.

Table 4: Provision of school resources by percentage, 1996

Provinces	**Media Equipment**			**Materials**			**Stationary**			**Textbooks**		
	Adequate	Inadequate	None	Adequate	Inadequate	None	Adequate	Inadequate	None	Adequate	Inadequate	None
Eastern Cape	3	6	91	6	21	73	62	36	2	38	60	2
Free State	8.1	10	81.9	14.6	17	68.4	78.6	18.4	3	62.9	35.1	2
Gauteng	22.9	21	56.1	26	27.5	46.5	64.3	31.3	4.4	45.2	51.4	3.4
KwaZulu-Natal	6	5	89	8	14	78	62	35	3	55	43	2
Limpopo	2	3	95	6	21	73	46	47	7	47	50	3
Mpumalanga	5	15	80	6	24	70	63	36	2	53	45	1
Northern Cape	15	20	65	29	35	36	64	34	2	55	43	1
North West	5	9	86	6	19	75	60	36	4	39	58	2
Western Cape	34	27	39	41	39	20	76	23	1	53	45	2
South Africa	11	13	76	16	24	60	64	33	3	50	48	2

Source: Own calculations based on "The condition of education". Pretoria: HSRC, 1998.

When comparing the 2000 SEACMEQ II to the SRN, provisioning of textbooks seems to have largely been similar at 50% in the SRN and 46% for reading and 41% for Maths in SEACMEQ. Provisioning was below 50% across most provinces with North West having the least at 35% for reading and 25% for Maths. This challenge was compounded by the changes in curriculum and the need to provide quality LTSMs. The availability of teacher guides was fairly high at 73%, and 70% for dictionaries. Since there was no prior measure of these resources it is not possible to assess whether this represents an increase or not. That being said the significance and legal mandate of LTSM provisioning was emphasised by the South African Humans Rights Council (SAHRC) in their charter of basic education rights (South African Human Rights Council, 2012), which pronounced on the right to teaching and learning support materials and equipment. According to the SAHRC, the responsibility for delivering this right lies with the national and provincial departments of education.

Table 3: Percentages for Essential Classroom Resources for South Africa in 2000 (SEACMEQ II)

	TEACHING AND LEARNING MATERIALS												**EQUIPMENT & FACILITIES**									
2000	Teacher Guide (Reading)		Teacher Guide (Math)		Dictionary		Exercise Book & Pen/ Pencil & Ruler		Own Reading Textbooks		Own Math Textbooks		Writing Board		Learner Sitting & Writing Place		Teacher Table & Chair		Library (Class/ School		Radio	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Eastern Cape	68.8	9.23	66.8	9.75	66	9	65	5.4	42	5	42	4.8	95	4.9	88	4	79	8.2	54.1	10	16	6.7
Free State	78.3	14.67	59.8	15.02	61	15	69	5.7	61	9	49	12	85.1	14	97	1	92.8	7.2	51.7	15	73	13
Gauteng	81.3	9.6	90.5	6.75	93	4	81	6.3	55	11	51	12	97.8	2.2	100	0	93.3	4.7	77.1	12	46	15
KwaZulu-Natal	85.8	7.63	66	10.97	77	9	77	5.4	40	7	40	7.7	96.1	3.9	95	2	91.3	6.2	84.2	7.1	47	10
Mpumalanga	61	14.13	58	14.12	36	13	48	11	45	8	35	6.5	100	0	97	1	85.1	9.1	36.5	14	92	7.8
Northern Cape	47.8	13.32	78.2	10.66	84	11	66	6.3	30	8	28	7.2	75.3	13	99	1	75.3	13	60.4	13	32	13
Limpopo	61.3	11.52	50.6	11.57	50	11	51	8.7	44	6	43	7.4	100	0	95	3	73.4	11	63.7	11	42	11
North West	55.4	14.35	54	13.8	66	14	77	6.4	35	6	25	6.5	100	0	97	1	82.4	11	56.3	14	57	14
Western Cape	84.7	10.47	84.7	10.47	100	0	71	6.9	49	11	37	9.2	100	0	98	1	100	0	100	0	70	14
South Africa	73.1	3.85	67.4	4.06	70	4	68	2.6	46	3	41	3	96.6	1.5	95	1	86.2	2.9	67.8	3.9	48	4.2

Source: (Moloi & Chetty, 2011)

It is important to be cognisant of the various seasons of development that accompany curriculum change, and specifically, the LTSM provisioning models which complements each of these. Since the dawn of democracy, this included the introduction of the Curriculum 2005 in 1997, the Revised National Curriculum Statement in 2002, the National Curriculum Statement in 2006 and the Curriculum and Assessment Policy Statement (CAPS) in 2012. A Ministerial Committee was established in 2010 for Learner Teacher Support Material, largely to serve as a roadmap towards the implementation of CAPS. The committee arrived at several recommendations which can be summarised as follows: (i) develop a national LTSM catalogue, per grade and subject; (ii) a system of nationally centralised ordering of LTSM, drawing on the school-based choice of LTSM. Sub-recommendations relate to the key building blocks such as providing sufficient information for decision making decentralised delivery and tracking; (iii) establishing a research and development unit focusing on LTSM; and (iv) reconfigure the role of government and private companies in LTSM provision (Department of Basic Education, 2010).

The DBE is mandated to develop the national catalogues of textbooks, while the responsibilities of PEDs are to procure for schools in their provinces as well as to ensure that the procured books are delivered to each school. The responsibility of monitoring lies with both the PEDs and the DBE, with the DBE providing support and oversight to all PEDs. South Africa has traditionally relied on the publishing industry for the development of textbooks while government maintained the role of developing the curriculum. The centralisation of the development of the national catalogue for textbooks, where emphasis is placed on the educational merit as well as compliance to the curriculum of textbooks, was a major development and departure from this practice. In addition, clause 11 of the Basic Education Laws Amendment (BELA) bill (Department of Basic Education, 2017) seeks to amend Section 21 of the South African Schools Act (1996) to empower the Head of Department to centrally procure identified learning support materials for public schools – after consultation with the governing body, and on the basis of efficient, effective, and economic utilisation of public funds. This amendment was introduced to bring about economies of scale.

Based on the recommendations stemming from the Ministerial Committee for Learner Teacher Support Material, the process began, in 2011, with the national catalogue for Grades 1-3 and 10; Grades 4-6 and 11, in 2012 and, lastly, Grades 7-9 and 12, in 2013. The national workbooks remain a vital means not only for improving access in the classroom to high quality texts with stimulating graphics, but also serves as a resource for learners to take home. The national workbooks initiative has been heralded as one of the most ambitious and most successful projects ever undertaken by government. The number of workbooks, textbooks and study guides printed and distributed by just the national government for the 2011 to 2013 school years was around 117 million. In addition, in response to the Incremental Introduction of African Languages (IIAL), The DBE has developed Grade 1 – 3 Second Additional Language (SAL) resources which include anthologies, workbooks,

lesson plans, big books, and posters in ten languages. These resources have been distributed to schools that are implementing the IIAL.

The 2008 Foundations for Learning Campaign, gazetted (Department of Education, 2008) by the then DoE, was another pivotal response to the right to resources, stating that "Every teacher must have sufficient resources to ensure the effective teaching and learning of Literacy and Numeracy. This should include wall charts, number and phonic friezes, writing materials, suitable apparatus for teaching concepts, textbooks, reading series, workbooks and writing materials". The policy furthermore recommended minimum resources for Grades 1 to 6, categorised as resources for the classroom, learners and the teacher in Literacy/Language and Numeracy/Mathematics. These minimums were then extended to other grades. Generally these would comprise of textbooks, workbooks, learner books and teacher guides. However, for the Foundation and Intermediate Phases, these include graded readers, while in the Senior Phase these include a core reader for the teaching of literature.

In order to supplement LTSM provisioning in response to concerns about the quality and effectiveness of textbooks and poor learners' performance throughout the system, in 2011, the DBE developed and delivered the first set of workbooks for Grade 1 to 9 and Siyavula textbooks for Grade 10 in Mathematics and Physical Science. These were intended to assist teachers and learners directly in the classroom through the provision of worksheets; activities to reinforce Language and Literacy, Mathematics and Numeracy and Physical Science skills; frameworks for teachers to monitor learner performance; lesson plans; and an appropriate pace for curriculum coverage. An independent formative evaluation of the workbooks and Siyavula textbooks was undertaken by the Australian Council for Educational Research (ACER) starting in 2012. The key findings of the evaluation (Department of Basic Education, 2013) are summarised as follows:

- Learners, teachers and Heads of Departments (HoDs) indicated that workbooks are used daily
- Workbooks are seen as an effective teaching and learning tool but indicated that they see it as supplementary to the textbooks and teaching notes they were already utilizing
- Workbooks and textbooks are perceived to cover a sufficient range of activities
- The sequence of teaching is largely aligned to the sequence of the workbooks
- The independent researchers assessed the workbooks and textbooks against a quality rubric considering a range of factors and concluded that they were of good quality.
- Challenges for full utilisation included a lack of delivery or late delivery, the absence of a user guideline, and insufficient teacher orientation to the workbooks and textbooks.

Even with the existence of these policies and guidelines, LTSM provisioning has been fraught with poor and inconsistent access, receiving huge media coverage in 2012 following specific

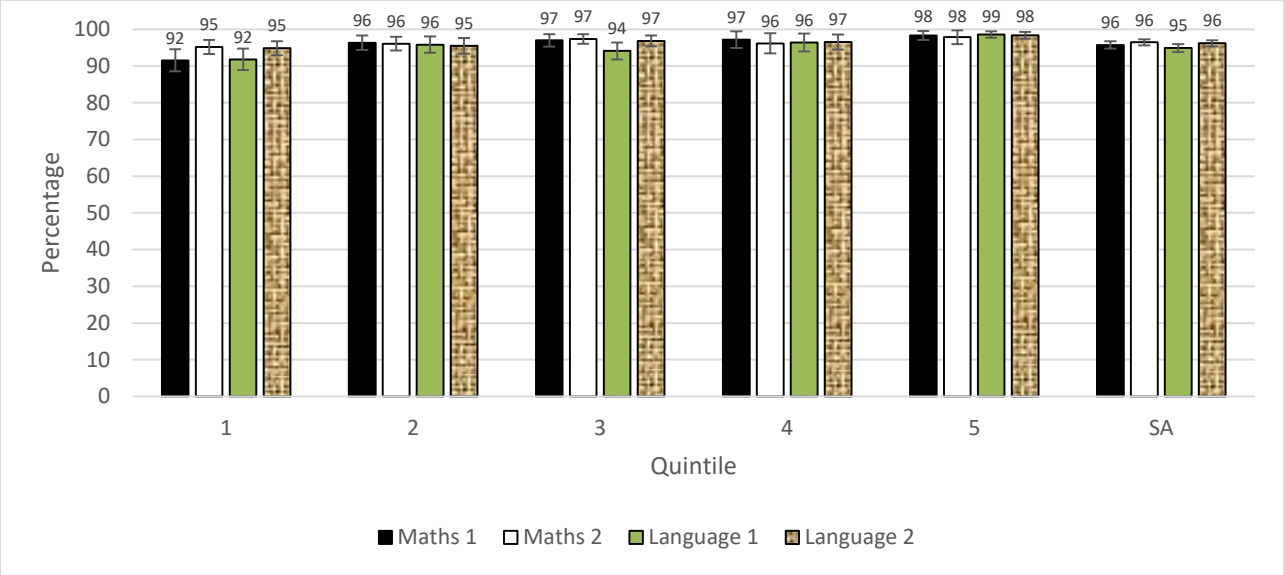
shortcomings in Limpopo in that year. This led to several civil society campaigns and court cases. A Presidential Task Team was established to verify the reported challenges in Limpopo. The recommendations from the task team cited poor communication and coordination between different stakeholders including schools, provinces and the DBE, a lack of comprehensive monitoring and recording of LTSM provisioning and the lack of capacity to manage national procurement and provisioning. The DBE accepted these recommendations. The matter was also investigated by the SAHRC in 2013 (South African Human Rights Commission, 2013). The SAHRC investigation focused on establishing the extent to which other provinces had the same provisioning shortcomings as Limpopo. The recommendations were that an audit should be undertaken to establish the logic framework of provisioning and identify specific gaps, a separate investigation should be undertaken for provisioning learners with special needs, and monitoring at the national level should be continuous and uniform, facilitated through an electronic system. Subsequent business processes and polices that have supported LTSMs were developed and strengthened following these 2012 challenges.

In strengthening monitoring from 2013, efforts were undertaken to standardise provincial textbook provisioning functions and to provide oversight and support to provinces. This internal document is known as the Basic Education Sector Management Plan for the Procurement and Delivery of Textbooks. In line with this plan, the DBE receives regular written reports (quarterly or weekly) from provinces on the progress in the provincial textbook procurement and delivery process and also engages with provinces telephonically. A current tension is the different mechanisms for LTSM procurement between Section 20 and Section 21 schools. Section 20 Schools receive books through central procurement which includes advantages such as bulk orders made by the Provincial Education Departments resulting in cheaper unit costs. Section 21 Schools have the right to complete their own LTSM procurement, but this makes the monitoring of the quantity and quality of materials a challenge. The average cost of the 2011 national catalogue textbook in the Foundation Phase (Grades 1-3) was estimated at R 74.00, R60.62 for the Intermediate Phase, R96.54 for the Senior Phase and R132.89 for the FET Phase.

The DBE has demonstrated commitment to ensuring that every learner and teacher has access to the minimum set of materials required to implement the national curriculum. The “Action Plan to 2019” states that learners should be provided with a textbook for each subject and- the same mandate is stipulated in the 2014-2019 MTSF. The baseline figure in the Action Plan for both textbook and workbook provisioning was 61% in 2011 with the goal of 95% provision in 2018/19.The current figures for workbook provisioning are near 100% in delivery and coverage as reflected in several research studies including the ACER evaluation mentioned above. The DBE Annual Report for 2017/18 (Department of Basic Education, 2018) reflected that delivery of Grade R and Grade 1 workbooks was at 100%. A total of 59,779,360 Volume 1 and 2 Grade 1-9 workbooks were printed and delivered to 23,712 public schools in all languages in Literacy/Languages and Numeracy/Mathematics during the financial year. The first set of Braille

workbooks were provided to 22 special schools in 2017/18 for Grades 1 and 2 in Life Skills and Mathematics. It is worth noting that this only refers to workbooks, not textbooks. The nationally representative School Monitoring Survey 2017 confirmed the near universal provisioning across provinces and quintiles. The figure below shows that workbooks have been accessible regardless of the poverty status of schools.

Figure 15: Percentage of Grade 3 learners with Mathematics and Home Language workbooks 1 and 2 by quintile, 2017



Source: School Monitoring Survey 2017/2018

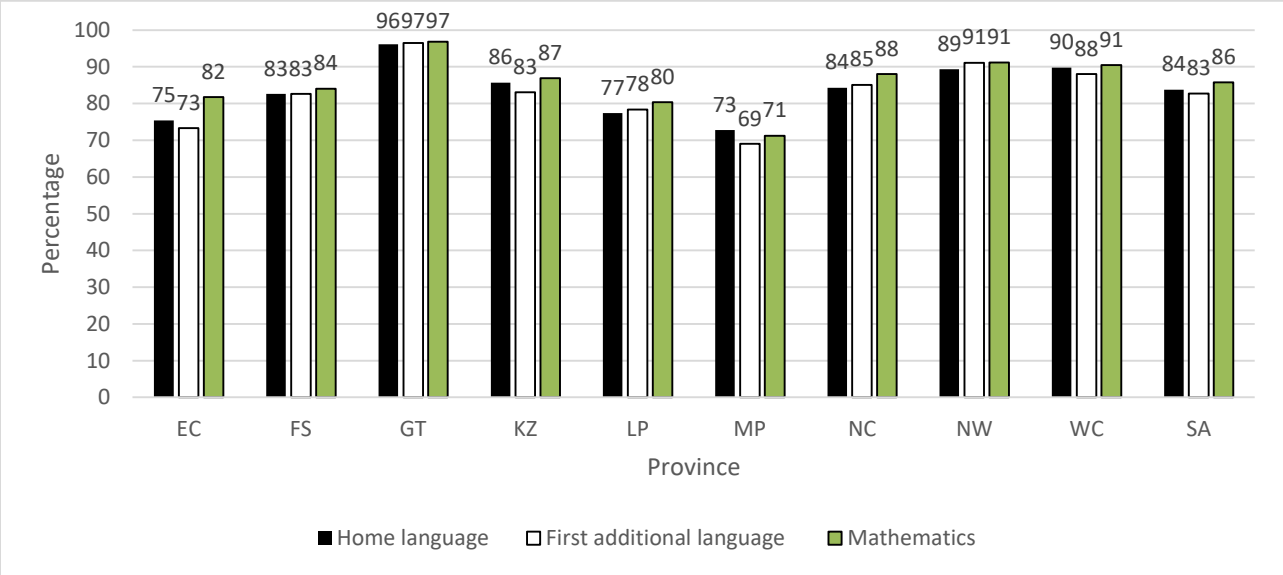
Access to textbooks has also seen improvements primarily through the development of the national catalogue, the development of sound monitoring practices as well as the increased development of state textbooks. National coverage of LTSMs excluding workbooks but including textbooks was at 93% in 2016/17 (Department of Basic Education, 2017), exceeding the sector plan target for that year, while retention and retrieval were at 85%. The development of state textbooks has included the Siyavula textbooks mentioned earlier and is increasingly a focus with the latest textbooks developed for Grade 12 Technical Mathematics and Science, Grade 1-3 Graded Readers and Big Books (Department of Basic Education, 2018).

The Mind the Gap study guide series for Grade 12 learners has also proven to be a significant development. Study Guides were initially produced in both English and Afrikaans for Accounting, Economics, Geography and Life Sciences and then later expanded to a total of 25 subjects (Department of Basic Education, 2017). Each study guide provides explanations of key terminology, simple explanations and examples of the types of questions that learners can expect to be asked in an exam. Model answers are included to assist learners in building their understanding. The study guides also refer to specific questions in past national exam papers and exam memos that are available on the Department's website. Through a randomised control trial,

(Department of Basic Education, 2013) the DBE measured the impact of the Mind the Gap study guides. Learners who received the study guides in Geography scored 1.9 percentage points more than they would have had they not received the guides. For Life Sciences the impact was 2.17 percentage points. Results in Accounting and Economics did not indicate statistically significant differences between learners who received the study guide and those who did not. A simulation exercise using NSC 2010 data demonstrates that 5,609 children who did not pass matric in 2010 would have passed matric had the Geography and Life Sciences study guides been distributed nationally. This demonstrates the material significance and achievements of the sector as well as the strategic importance of LTSM inputs into the sector, particularly in view of the situation observed in the 1996 School Register of Needs.

The figure below shows a substantial increase in textbook provisioning across all provinces for home language, first additional language and mathematics in grade 6; this is substantially higher than the figures from 1996 or even from 2000. The national averages for these are above 80% in all three subjects. However, these figures should be at 100%.

Figure 16: Percentage of Grade 6 learners per province with access to home language, first additional language and mathematics textbooks (Indicator 4), 2017



Source: School Monitoring Survey 2017/2018

With regard to the use of technology for learning in the classroom, there have been significant strides made by the DBE to produce digital learning materials. In particular, building on the success of the national workbooks, the DBE has worked with partners to produce an even greater variety of materials that can be freely copied and distributed. In addition, many of the national workbooks have been converted to interactive digital materials and are in the process of being piloted. The advantage of interactive materials is that it is easier for different learners to progress at their own pace, assess themselves, and repeat specific tasks in line with their learning needs.

However, the migration to such materials requires careful planning and testing, as well as ensuring that teachers are adequately capacitated for their use.

2.4) Becoming better as a state to overcome the challenges in infrastructure

Despite the sustained interventions through the ASIDI and the EIG, there are still substantial numbers of schools with unsafe facilities that do not comply with the Schools Infrastructure Norms and Standards. The greatest publically cited challenge is the large number of schools with undignified and unsafe pit toilets, as well as non-functional or inadequate sanitation infrastructure. The latest sanitation audit (Department of Basic Education, 2018) reflects that there are currently 3 898 schools which still have pit latrines or another form of inappropriate sanitation. The figure is largest in Eastern Cape at 1 598 followed by 1 365 in KwaZulu-Natal. It is not clear from the audit how many learners are affected by this. When comparing this to the School Monitoring Survey (Department of Basic Education, 2018) only 80% of schools nationally have access to appropriate sanitation in line with the infrastructure norms. Confirming the sanitation report findings, the lowest figures for compliance were found in Eastern Cape at 70% while the highest was in Gauteng at 97%; when considered by quintile, the lowest compliance was in Quintile 1 schools at 75% while 94% of Quintile 5 schools complied. The urgency of responding to this challenge particularly amongst less resourced provinces and lower quintiles has been highlighted by recent deaths resulting from children using pit latrines. The response from the public and private sector has seen the initiation of several public-private partnerships to fund these specific areas of infrastructure. These include the recently launched Sanitation Appropriate for Education (Safe) initiative by the President of South Africa and the Minister of Basic Education. In terms of improving current practice there needs to be mechanisms in place for joint planning of common programmes. That would save resources and avoid duplication of programmes and efforts. Furthermore, system-wide and specific inhibitors for implementation by PEDs need to be addressed. These include providing additional planning and monitoring tools and techniques aimed at improving implementation of infrastructure programmes. This can only be possible with a better understanding of the implementation issues in PEDs which can only be achieved through strengthened monitoring.

The second challenge is poor maintenance of school infrastructure, which significantly contributes to the early deterioration of new school infrastructure, in particular sanitation facilities. Poor maintenance of education facilities is one of the well-acknowledged and most spoken about problems on infrastructure delivery. The ongoing neglect exposes learners to danger, de-motivates educators and costs the state more as buildings deteriorate further and collapse. While there is a wide coverage of maintenance related requirements of public assets legislatively and in the general literature, maintenance of facilities, particularly in the public sector, remains one of the most elusive infrastructure interventions. Challenges associated with poor upkeep and maintenance arise in new and old facilities alike, although the nature of these challenges and their extent may differ. The strengthening of this area through embedding routine monitoring and evaluation as an

integral part of planning and building is necessary. Furthermore, the current information systems should be updated to enable the availability and use of better information and better monitoring of the implementation of the norms and budget for maintenance at the school level through funds that have already been allocated. Finally, vandalism and theft have also been contributing factors in the dilapidation of schools infrastructure. This requires ownership and improvements in community collaboration so that schools are seen as community assets.

While sanitation continues to be an issue, the availability of classrooms to enable policy compliance in learner-teacher ratios should receive equal attention. According to the infrastructure norms and standards, there should be a classroom for every 40 learners enrolled in the school in Grades 1 to 12 and a classroom for every 30 Grade R learners. According to the School Monitoring Survey (Department of Basic Education, 2018) only 67% of schools complied with this standard. The lowest compliance was in North West at 53% and 55% in Mpumalanga. Classroom adequacy was highest in quintile 5 primary and secondary schools at 84% and 91% respectively and lowest in quintile 3 schools at both the primary, at 61% and secondary schools at 58%. Addressing class size particularly amongst poorer schools would arguably create the required environment for more equitable learning and teaching conditions.

Further, there are several implementation challenges which are largely related to the poor services offered by implementing agents. For example, during the 2017/18 financial year, the DBE experienced challenges with contractors who were either not qualified to do the job, or were liquidated at some point during the year. (Department of Basic Education, 2018). Poor contractor performance in many provinces, and the time consuming procedures to replace contractors also contributes to under-expenditure. The DBE has identified the needs for improved record management, information sharing, administrative procedures, and planning in the area of infrastructure provisioning at the levels of the school, province and nationally.

The access and provisioning of LTSMs demonstrate sustained and consistently improving efforts to fulfil the minimum guidelines and policies both in letter and spirit. There have also been efforts to assess the quality of the resources as well as usage, although these have been harder to measure. The current areas of work remain as improving the quality of LTSMs through revisions of the national catalogue but with a greater emphasis on specifications on graded readers in African languages. The expected quantity of provision of these in home language and English requires revisiting based on developments in the understanding of resources needed for effective teaching as well as benchmarking against material resourcing in Quintile 5 schools. A further area to guide the quality of LTSMs may be developing more detailed guidelines on the content for African language material especially in the Foundation Phase.

The efforts to develop state textbooks is an area of development which would allow for further reduction of costs through state owned content as well as economies of scale through centralised

provincial and national textbooks where publishers produce resources. The tension in procurement responsibility between Section 20 and Section 21 materials is an area that should continue to be reviewed.

The quality of workbooks should continue to be reviewed and considered, particularly as this seems to be the main resource used in the Foundation Phase. The manner in which they are used, as the core Foundation Phase material rather than a supplementary resource may require rethinking of the content, structure and sequence. This may entail the provision of extended reading texts to offer learners a range of texts at the individual level, considering the current limited graded reader provisioning.

Further, the introduction of ICTs is a complex area of innovation. Technologies are continuously changing, there are many stakeholders involved and the cost-benefit dynamics are complex. There is a need for a national strategy to clarify the following: (i) how technological innovations should be aligned to the aim of improving learning outcomes; (ii) what are the available technologies and their likely costs and benefits; and (iii) how different stakeholders should work together to promote e-education (Department of Basic Education, 2015).

Output 3: Improving assessment for learning to ensure quality and efficiency in academic achievement

3.1) Problem statement

The benefits of improved education quality are wide-ranging, however, despite the progressive funding regime, prioritisation of public investment in social services and the expansion in schooling access over the past two decades, low and inequitable levels of learning outcomes still prevail in South Africa. The *World Development Report 2018* highlights that education systems have little systematic information on who is learning and who is not, and as a result, it is impossible to generate an impetus for action, or simply plan (World Bank, 2018). Measuring progress in learning outcomes is, therefore, an essential part of monitoring development at a country-level in the education system, and this provides the rationale for strengthening efforts to better measure progress through assessments.

The rise of evidence-based and accountability-focused reforms also provides a reason for the increased interest in measuring the quality of learning outcomes. In addition, the NDP calls for a ‘reliable system-wide measure’ of learning outcomes in primary schools to target support to schools and advance school-level accountability and planning in general (National Planning Commission, 2013). This call in the NDP is translated through the Sub-Outcome 3 in the MTSF: “Regular annual national assessments to track improvements in the quality of teaching and learning, ANA”.

The sector plans provide an extended discussion on the importance of assessment; both in the initial *Action Plan to 2014: Towards the Realisations of Schooling 2025* and the latter version, *Action Plan to 2019: Towards the Realisation of Schooling 2030.* Though innovation is needed in many areas of the basic education sector, the ANA, and e-education have been selected as innovation priorities. The consistent availability of assessment data at the learner level across selected subjects underpins several Action Plan goals. The importance of assessments is also reflected as one of four outputs, "Output 2: Undertake regular assessments to track progress" in the Minister of Basic Education's Delivery Agreement with the President.

While Sub-Outcome 3 of the MTSF places a strong emphasis on the ANA, this chapter reflects on the full assessment journey in the last 25-years. Assessment as a tool for improving teaching and learning has evolved over the last 10-years, and important lessons have been learnt which will help shape the way forward. Measuring progress in learner outcomes is essential for monitoring development at a country-level. It provides the rationale for strengthening measurement through assessment.

3.2) Achievements and journey since 1994

Democratic South Africa inherited a racially differentiated education system, with 19 different departments of education, each maintaining different standards and administering its own examinations (The Presidency: Republic of South Africa, 2014). Further, the only systemic assessment instrument in the pre-Apartheid system was the Grade 12 (matriculation) examination (Muller, 2004), which was inconsistent in quality, had little emphasis on school-based formative assessments, and was administered in different forms in the various departments using a fragmented curriculum framework (Lubis & Murphey, 2002).

With the birth of the new political administration in 1994, the 19 education departments were integrated into a single national Department of Education which was tasked with establishing a single national examination system - with common content and common standards for examinations, administration, moderation, analysis, and certification. The African National Congress's (ANC's) *Policy Framework for Education and Training* articulated for democratic South Africa in 1994 advocated for a comprehensive and integrated system of assessment to be introduced in the democratic dispensation (ANC, 1994). The policy proposed a new national qualification system, and radically sought to introduce a General Education Certificate (GEC) which marks an exit point/completion of general education (10 years of schooling). Further, the policy insisted that the three-year post-compulsory stage (up to the current Grade 12) should be redesigned in order to provide for a variety of options leading to the award of a Further Education Certificate, intended to replace the Grade 12 Senior Certificate. The GEC was not implemented, however, consultations are underway to consider future implementation (Department of Basic Education, 2014).

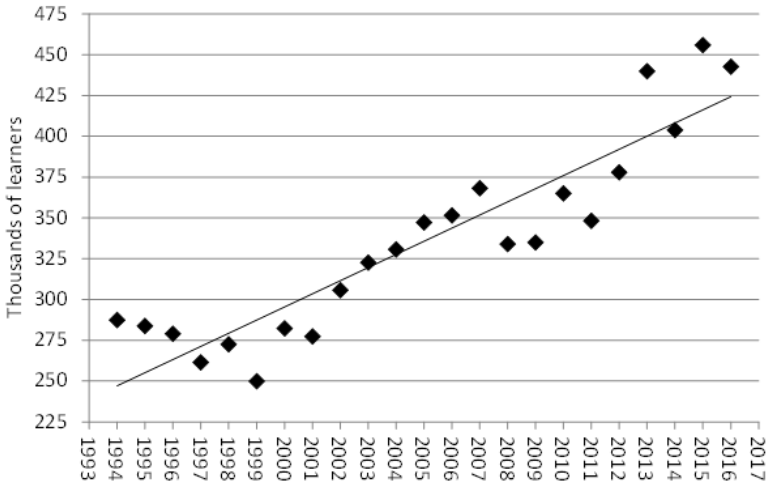
In South Africa, examinations which occur at the end of twelve years of schooling have been administered for a long period of time before the dawn of democracy and was largely used to select candidates for post-schooling opportunities. From 1994, the provincial administration of the Grade 12 Senior Certificate examination was effected as a feature of the education system.

Between 2000 and 2007, provincially based examinations still took place, but standardised and centrally developed common papers were introduced for the Grade 12 Senior Certificate - initially for high enrolment subjects, and expanded to all subjects in 2008 through the National Curriculum Statement. With the introduction of the National Curriculum Statement (NCS) in 2008, the Department of Education took responsibility for setting all Grade 12 examination papers, with well-documented processes and procedures which are standardised in order to provide improved reliability, validity and a minimisation of assessment bias. This also enables a fair comparison of performance across provinces.

The standard of the NSC has improved and is generally measured against the quality of the question papers developed. The DBE has benchmarked the NSC question papers and qualifications against international institutions. Particularly, in 2007, 10 NSC subjects were benchmarked against those of the Scottish Qualification Authority (SQA), Cambridge International Examinations (CIE) and the Board of Studies in New South Wales (BSNSW) Australia. In 2011, 7 subjects were benchmarked with the SQA, CIE, BSNSW and Higher Education South Africa (HESA). In 2016, 10 NSC subjects were benchmarked with Universities South Africa (USAF) and 2017, 6 subjects were benchmarked with CIE. There is a consensus among these institutions that the questions are well designed by international standards and do assess what they purport to assess. The three international assessment bodies have also confirmed that the content assessed by these questions are in the main, comparable to the CIE, SQA, and BSNSW (Department of Basic Education, 2017).

The 2017 Grade 12 examination results point towards a long-term trajectory with far more youths having access to a school qualification which enables them to participate meaningfully in the economy. Since the advent of democracy, South African schools have become more inclusive with far more learners remaining in school till Grade 12. By 2016, around 58% of the youth were successfully obtaining the NSC or an equivalent qualification from a college (Department of Basic Education, 2017). As illustrated in the figure below, the number of learners obtaining what was colloquially known as “Matric” or formally known as the NSC today, increased from around 275 000 in the late 1900s to over 400 000 in recent years.

Figure 17: The number of students obtaining the 'Matric', 1994 – 2016

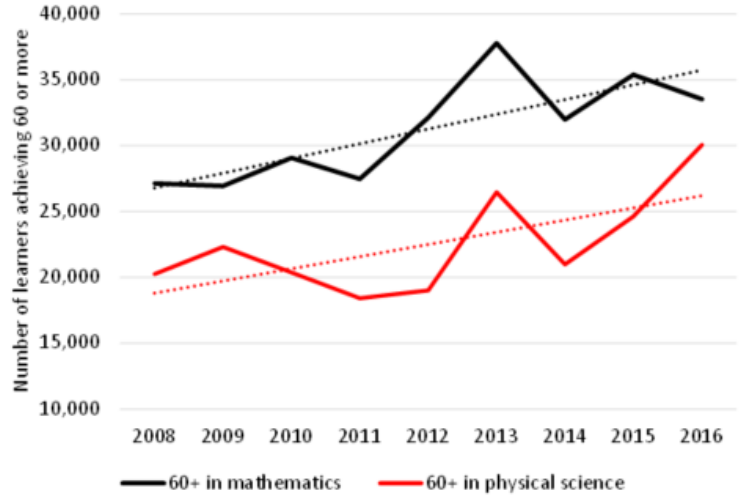


Source: Department of Basic Education (2017) National Senior Certificate Examination Report

In addition, the number of learners attaining a Matric which would allow them to study for a Bachelors degree has grown even more (in percentage terms) than the number of learners attaining a Matric. In particular, whilst the number of Matrics grew by around 50% over the period under consideration, 'Bachelors-level' passes grew by around 100%.

An analysis of Grade 12 mathematics and physical science examinations data in 2016 (adjusted for slight fluctuations in the levels of examination difficulty across years) reveals an increase in the number of learners reaching critical performance thresholds, such as marks of 50, 60 and 70 percent in either subject. This is depicted in the figure below. In addition, the number of black learners obtaining a mark of 60 in mathematics increased by as much as 65%, reflecting that this trend has been towards diminishing racial inequalities. The DBE has also initiated the Second Chance Programme which provides support to learners who have not met the requirements of the NSC or extended Senior Certificates.

Figure 18: 2008 to 2016 Grade 12 mathematics and science trends



Source: Gustafsson. M (2017) An update on improvements in schooling outcomes in South Africa, Addendum to report on progress in the schooling sector against key learner performance and attainment indicators (August 2016)

In addition to the NSC, examinations have also been supplemented by large-scale sample-based surveys of educational inputs and learning outcomes. Of particular importance are the three international assessments South Africa participates in, which are the Trends in International Mathematics and Science Study (TIMSS) in Grade 8 mathematics and science conducted in 1995 and 1999, Grade 8 and 9 in 2002, and Grade 9 2011 and 2015 – South African also participated in TIMSS Numeracy in Grade 5 in 2015; the Southern and Eastern African Consortium for Monitoring Educational Quality (SEACMEQ) for Grade 6 reading and mathematics conducted in 2000, 2007 and 2013; and the Progress in International Reading and Literacy Study (PIRLS) in Grade 5 conducted in 2006, 2011, and following on from 2011, PIRLS 2016 in South Africa included the Grade 4 learners taking the pre-PIRLS assessment and sub-populations of Grade 5 learners (learners writing in Afrikaans, English and isiZulu) participating in PIRLS as benchmarking participants (Howie, et al., 2017).

The TIMSS 2015 results confirmed noteworthy growth patterns, which when compared with other countries since 2003 at the Grade 9 level, South Africa has shown the largest improvement. However, South Africa is still one of the lower-performing countries in mathematics and science in comparison to other TIMSS participating countries. Average performance in the public school system and among historically weaker provinces have clearly improved, but most Grade 9 learners are yet to achieve a minimum level of competency in mathematics and science (Zuze, Reddy, Visser, Winnar, & Govender, 2017).The SEACMEQ IV study results further affirmed the upward trends and showed that for the first time, South African learners at the Grade 6 level achieved Reading and Mathematics scores above the significant centre point of 500 points. More importantly, the largest gains were evident within the historically disadvantaged sections of the school system, that is, quintiles 1-3 schools.

The response of Government to low, but improving, achievement levels in the cross-national and regional studies, particularly TIMSS and SEACMEQ, has been to conduct regular national assessments at key stages. Since 1994, the Department of Education has made use of two types of national assessments to report the results of learner performance. Following on the designs of the cross-national and regional studies, the first type involved Systemic Evaluations (SE) conducted on a five-year cycle on random samples of public schools at either Grade 3, 6 or 9 (Department of Basic Education, 2014). This became a six-year cycle for on grade only (Grade 3). The SE was the pre-cursor of what emerged as the Annual National Assessment (ANA) in 2011.

The ANA was introduced in 2011 in Grades 3 and 6 and in 2012 Grade 9, and were based on a similar framework to the previously conducted systemic evaluations, but targeted a more diagnostic interpretation of learner achievement. One important aim of the ANA programme was to measure learner performance in a standard manner, so that comparisons across schools, districts and provinces, and over time, become possible. The Universal ANA, which was conducted in all schools in the country, was primarily focused on providing information to teachers, parents, and schools for use in improving learning and teaching practices.

The introduction of ANA was seen a significant milestone in the education sector, as it sought to provide valuable information on the performance of the system at the level of the school, district, and province, as well as provide useful information on the performance of the individual learner, which is meant to be used to identify critical areas of weakness, and subsequently develop relevant interventions for improving teaching and learning in schools. In essence, it served as an accountability tool at the national level, as well as lower levels to a large extent, and played a more diagnostic role at the ground level. The Action Plan to 2019 in discussing innovations in assessments focussed on better test design, scoring and feedback approaches in the ANA programme.

The ANA programme was discontinued in 2015 due to disagreements between education departments and teacher unions over the purpose and way forward for the programme. Government favoured gradual design improvements without suspending the programme, however, teacher unions favoured suspending the programme until the redesign had been completed. During the four years in which the ANA as implemented, it played a major role in bringing to the fore the quality of learning and teaching in the national debates, as well as at the local level. School principals, parents and district officials were able to compare the quality of learning in schools – in particular, primary schools, in ways which had not been possible previously. However, following an intensive evaluation of the strengths and weaknesses of ANA (Department of Basic Education, 2016), stakeholders have agreed that there were specific problems in the design of ANA – problems which should be avoided in the future.

The ANA is now, however, evolving into what is known as the National Assessment Programme (NAP)[8] which is using a sample-based systemic evaluation tool to measure progress and report against indicators. The NAP is comprised of three tiers, namely: (i) The **Systemic Assessment,** which will be sample-based, and administered in Grades 3, 6 and 9, once every three years - this will provide the Basic Education Sector, especially those involved in planning and evaluation, with valuable data on the health of the system and trends in learner performance; (ii) The **Diagnostic Assessment**, which will be administered by teachers in the classroom to identify learning gaps, and to plan remedial measures early in the learning process, so as to avoid learning deficits; and (iii) The **Summative Assessment**, which will be a national examination, administered in selected grades (with an emphasis on Grade 9) and subjects to provide parents and teachers with a national benchmark to measure the performance of their children. It will also be used for promotion/progression purposes (Department of Basic Education, 2017).

The new national assessment system is currently under development and is planned to be administered in 2019 for the first time. However, this will at least initially be conducted in a sample of schools, which will serve certain important national and provincial monitoring and evaluation functions, but there remains a need for better information and accountability for learning at a school level. In time, it may be worth including a universal summative assessment to one primary school grade and then using innovative school report cards to share the information with parents and school communities. Over time, a lot has been learnt in terms of assessment systems. These learnings have facilitated the development and improvement of the national system as a whole, and will continue to do so as the system evolves.

The significant role of Umalusi, the Council for Quality Assurance in General and Further Education and Training needs to be acknowledged since its establishment in 2002. The main functions of the assessment unit are to set standards for assessment of qualifications on the General and Further Education and Training Qualifications Framework and to ensure that assessment for certification in schools, Further Education and Training Colleges and Adult Education and Training Centres is of the required standard.

3.4) Becoming better as a state to overcome the challenges in assessments

The United Nation's Sustainable Development Goals (SDGs) formalised a strong global commitment to tracking progress over time in the learning outcomes of children, and to having evidence inform education quality interventions. The SDGs were adopted by United Nations members in 2015 and the SDG indicators in 2017. A key indicator in relation to assessments is *"4.1.1. Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and*

[8] What has previously been referred to as the National Integrated Assessment Framework (NIAF) has, since 2019, been referred to as the National Assessment Programme (NAP)

(c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex" – there is a clear need for innovations to monitor progress against this indicator.

Above all, a world-class national assessment is required to gauge whether the desired improvements in learning outcomes are being achieved. This needs to involve sophisticated planning and management, specifically in relation to sampling, test design, using secure anchor items which are repeated across years, and generating meaningful reports which bring about better education policy discourse. Note that effective assessments improve teachers' ability to teach, and provide vital information for managers in the system to take action and be held accountable.

The lessons from the recent past need to be carefully considered if innovative ways of tracking progress in learning outcomes are to be realised – in particular, the weaknesses in the design of the ANA. These include the limited comparability over time of the ANA results – a critical issue if progress is to be monitored, and an insufficient use of contextual and background information when results were presented. The absence of a clear policy stating the overall role of ANA was arguably at the heart of disagreements between departments and teacher unions. It was not clear how information emerging from the ANA should, and should not, be used to inform programmes and hold various actors accountable.

The NAP will also include the re-introduction of the sample-based Systemic Evaluation as a focal tool for measuring progress and reporting against national targets and the SDG target on learning proficiency. A key strength of the Systemic Evaluation was that it included background questionnaires administered to learners, teachers, the school principal, and in some cases to parents. This allowed for reporting on learning outcomes relative to socio-economic context. However, there were also problems which the Systemic Evaluation which should not be repeated. The time lag between assessments of the same grade were long and the depth of analysis in the national reports was insufficient. Many of these problems can be traced to limited capacity to run assessments.

The NDP's call for reliable measures of learning outcomes for every primary school requires both technical and societal innovations which need to be carefully managed. Accountability mechanisms, such as school report cards should be informed by the experiences of other countries and tailored to the South African context, while also being carefully negotiated with teacher unions. School-level reliable measures should be taken into consideration together with the socio-economic background of the school in order for accountability to be seen as being fair and effective. In addition, the burden of 'assessment overload' in schools should be avoided. The observation made by the 2009 curriculum implementation review (Department of Basic Education, 2009), that there was too much 'layering' brought about by different layers of administration running similar initiatives in parallel, is to some extent still a problem.

In addition, the Grade 12 pass rate has been subjected to mounting criticism, since the pass rate used refers to candidates obtaining the NSC divided by all candidates, which can be widely distorted by differences across schools in terms of who becomes a candidate i.e. those who make it to Matric and do not drop out before. There is an innovation need in relation to how statistics are presented and used, something which the DBE's new inclusive basket of NSC indicators is intended to address.

Output 4: Expanded access to ECD and improvement of the quality of Grade R, with support for pre-Grade R provision

4.1 Introduction/ Problem Statement

The early years of a child's life are critical for the acquisition of concepts, skills and attitudes that lay the foundation for lifelong learning. These include acquiring language, perceptual and motor skills required for learning to read and write, basic numeracy concepts and skills, problem-solving, self-regulation, executive functioning and a love of learning. Internationally, the importance of early childhood development (ECD) is signalled through the priority focus that the Sustainable Development Goals (SDGs) have placed on quality care. Explicit mention is made in SDG Target 4.2 which states that by 2030 countries should: 'ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education'.

In line with the SDG goal, South Africa has placed an equal importance on ECD through the National Development Plan (NDP), the Medium Term Strategic Framework (MTSF) 2014 – 2019 and the Action Plan to 2019: Towards the realisation of schooling. The NDP outlines the vision for ECD in South Africa as high quality, universal ECD for the two years preceding Grade 1. In order to achieve this vision, the NDP emphasises the need for increased resources in the sector, as well as increased investment in training ECE practitioners. The Action Plan concretises the NDP through making "Improved access of children to quality Early Childhood Development below Grade 1" a specific goal. To ensure that the Department of Basic Education (DBE) systematically moves towards achieving this goal, the MTSF measures four indicators pertaining to both the access and quality of ECD provided through Grade R.

Early childhood development in South Africa applies to all children from birth to nine years of age. Until 2019 the Department of Social Development has been responsible for the overall oversight and coordination of ECD until the child enters formal schooling, whereas the Department of Basic Education has been responsible for Grade R – 12. South Africa's commitment to expanding access to ECD for five-year-olds, through the provision of Grade R, has been a remarkable achievement over the past 25 years, with participation rates more than doubling over this period. However, considering the policy imperatives laid out by the NDP, Action Plan and

MTSF, two main policy pressures stand out. Firstly, the quality of Grade R needs to be strengthened and secondly, access should be expanded so that all children can eventually have access to the year of education preceding Grade R. Both these priorities require particularly complex planning, specifically in terms of physical and human resource management.

4.2) Journey since 1994: Early Childhood Development Policy

Policy formulation for ECD in South Africa started in the early 1990s as one of the focus areas of the 1992 National Education Policy Investigation (NEPI, 1992). Drawing on the recommendations of this investigation, the 1994 ANC policy framework for Education and Training included ECD as a separate component (ANC, 1994). This has meant that ECE was recognised as a key element in the process of reconstruction and human resource development. The 1995 White Paper on Education and Training recognised early childhood as the foundation for human development and committed Government to provide free and compulsory schooling, starting at the reception year for 5-year olds. For children aged zero to four years, the White Paper prioritised the development of a strategic plan for inter-sectoral collaboration (Department of Education, 1995). This collaboration was incorporated into the National Integrated Plan for ECD zero to four years, published in 2005 (Department of Education, Department of Health, Department of Social Development, 2005).

Following the Integrated Plan, the National Early Learning Development Standards (NELDS) were developed and released in 2009. The NELDS is a curriculum-related policy initiative focusing primarily on the early learning needs of children from birth to four years and provides early learning standards expressed as desired results, indicators and competencies of expected learning achievements for young children in a designated age range (Department of Basic Education, 2009).

More recently, in 2015, the DBE released the National Curriculum Framework (NCF) for children from Birth to Four. The NELDS and the NCF from Birth to Four provide guidance for the design of early learning programmes. The NCF builds on the NELDS, taking account of the norms and standards in the Children's Act and the Department of Social Development Guidelines for Early Childhood Development Services. It also indicates the relationship with the Curriculum and Assessment Policy Statements (CAPS for Grade R).

Finally, during the same period, the 2015 National Integrated Policy for Early Childhood Development was developed and released. The policy incorporates the goals highlighted in the National Development Plan and clarifies the roles and responsibilities of the departments collaborating in the delivery of ECD services (Department of Social Development, 2015). The policy is aimed at transforming ECD service delivery in South Africa, in particular, to address critical gaps and to ensure the provision of a comprehensive, universally available and equitable early childhood development services. The policy covers the period from conception until the year

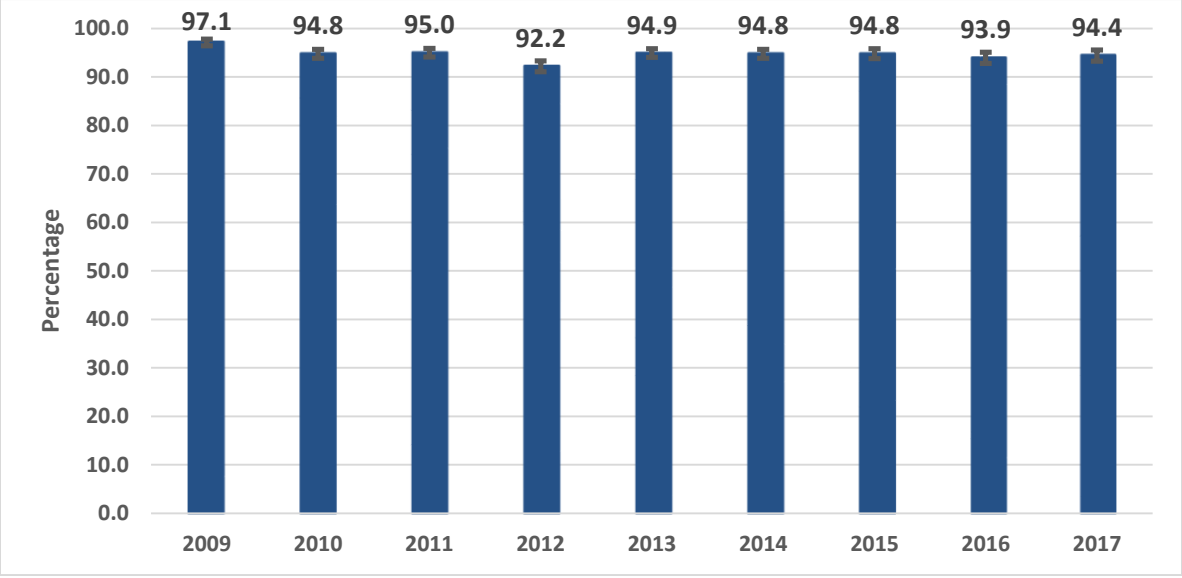
before children enter formal school or, in the case of children with developmental difficulties and disabilities, until the year before the calendar year they turn seven, which marks the age of compulsory schooling or special education.

4.3) Achievement: Participation in Early Childhood Development (ECD) programmes and Grade R

Over the last decade, the main ECD policy priority for the DBE has been providing Grade R to all five to six-year-old children. This policy was implemented in 2001, with the target of making Grade R compulsory for all children of the appropriate age by 2010. As described in the section on trends in educational outcomes, General Household Survey (GHS) data illustrates that trends in the overall participation rate of five and six-year-olds has increased substantially. The proportion of five-year-olds attending an educational institution has increased dramatically from about 40% in 2002 to just under 90% in 2016. Disaggregating the trends by province show that Limpopo had the highest percentage of five to six-year-olds that participated in educational institutions in 2016, whereas KwaZulu-Natal had the lowest percentage.

Another way to analyse participation in ECD is to look at those learners in Grade 1 who attended Grade R. The method used to calculate the number of learners who attended Grade R entails dividing the number of Grade 1 learners who reported that their highest grade attained is Grade R, by the number of Grade 1 learners whose highest Grade attained is reported as being either Grade R or 'No Schooling' in the GHS. Using this method, it is evident that in recent years we have witnessed a fairly constant percentage of Grade 1 learners who have attended Grade R and it has remained above 90% across the past eight years (Figure 22).

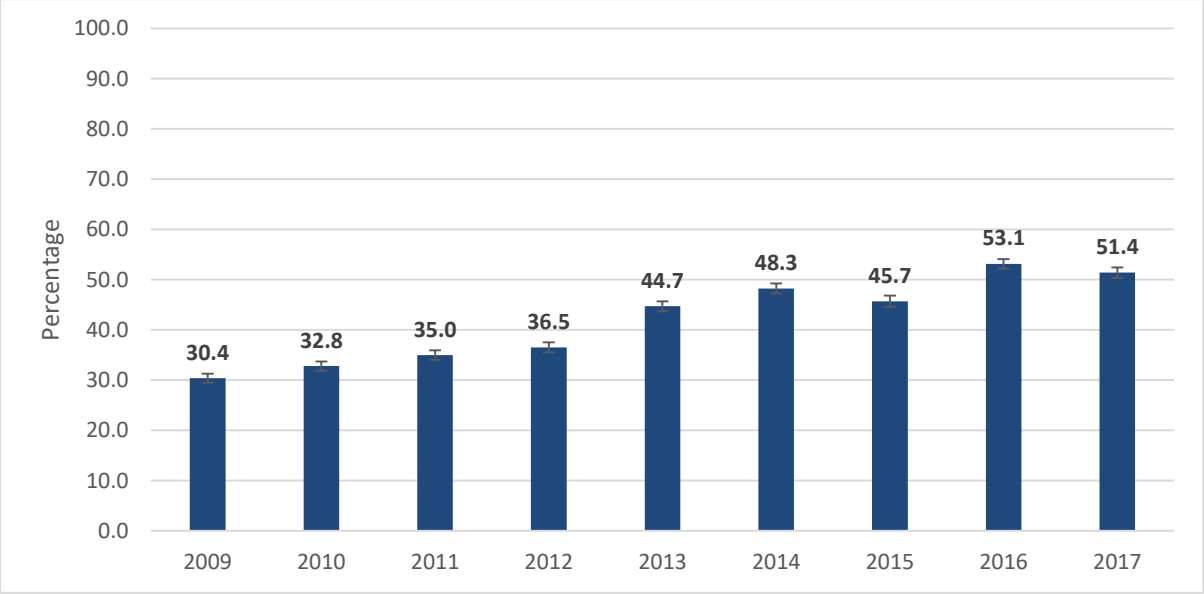
Figure 19: Percentage of learners in Grade 1 who attended Grade R, 2009-2017



Source: Department of Basic Education, General Household Survey (GHS): Focus on Schooling 2016

To gain a better understanding of the ECD of learners younger than five years old, the GHS questionnaires ask parents with children in this age group whether their children attend day-care centres, crèches, playgroups, nursery schools, a day-care-mother or gogo, or pre-primary schools. Figure 23 shows that the attendance of ECD programmes among four-year-olds had been increasing over time with a small drop in the participation rate in 2015. A part of this drop can be ascribed to the questionnaire change in 2015, which entailed the addition of a specific module on ECD which asked households with individuals younger than 6 years old which institution their child is attending.

Figure 20: Percentage of 4-year-olds attending ECD facilities, 2009-2017



Source: Statistics South Africa, General Household Survey (GHS), DBE own calculations

A further priority for the DBE has been the training of practitioners in terms of the implementation of the NCF, as well as upgrading the qualifications of Grade R practitioners. The DBE started to monitor and support the training of Pre-Grade R practitioners towards NQF Level 4 from 2014. The provinces were given a mandate of training the Pre-Grade R practitioners, and by March 2019 20,102 Pre-Grade R practitioners have at least obtained a NQF Level 4 ECD qualification.

4.4) Challenges: Quality of Service Provision

It is evident that there has been a remarkable expansion in the provision of Grade R in South Africa. However, in the same way that increasing *access* to education is no guarantee for an increase in *learning* (Pritchett, 2013), a place in Grade R does not automatically boost the requisite early learning skills.

An impact evaluation of the introduction of Grade R was conducted in 2013 and showed that Grade R does indeed improve learning in both mathematics and in the home language. The results,

however, indicated that the effects of attending Grade R were quite small and also differentiated across the system. On average, the effect found was equivalent to only 6% of a year of learning in mathematics and 25% for home language. These effects were also the strongest in the traditionally stronger provinces and wealthier schools, particularly in quintile 5 schools. Learners attending schools that have the largest deficits (quintile 1 to 3 schools) unfortunately did not gain as much by attending Grade R, indicating that the quality of Grade R provision is critical to learners benefiting from the additional year of schooling (Department of Planning, Monitoring and Evaluation, 2013). This evaluation, considered the period 2005 to 2011 and ever since important quality enhancement initiatives have been implemented, including the introduction of the Grade R workbooks.

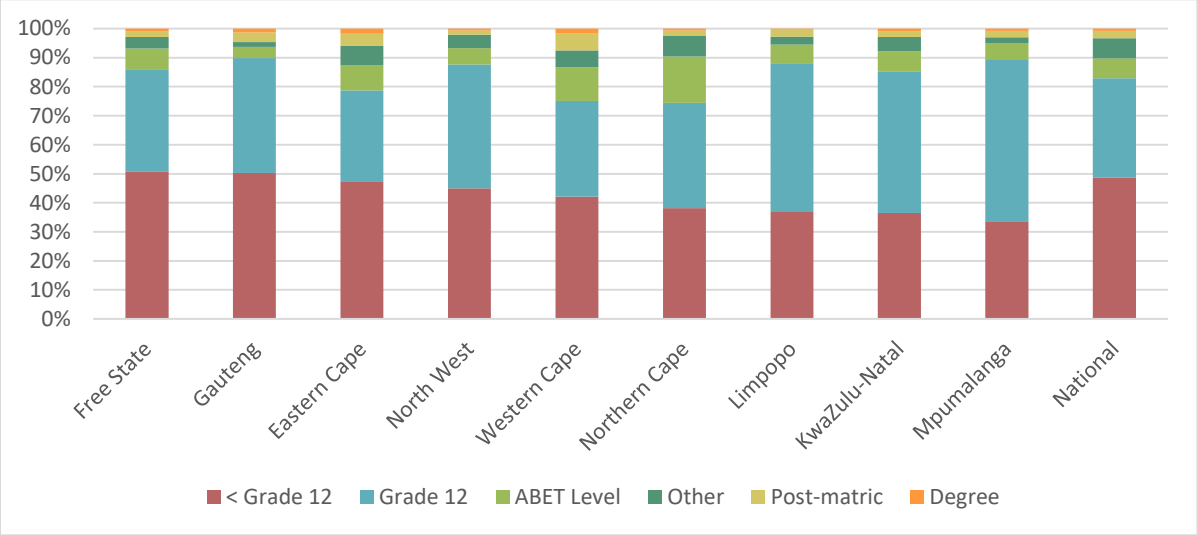
The findings of this impact evaluation point to problems of implementation in the quality of Grade R, despite the great success with access and roll-out. Although many factors influence the quality of pre-school or Grade R provision, the evaluation suggest that there are two key quality dimensions that may differ across the different parts of the system. The first relates to teacher training, the quality and support they receive from both the department and their schools, their qualifications and the pedagogical rigour of these, and their knowledge of *how* children learn and how to facilitate learning through structured play in order to achieve Grade R learning outcomes. The second quality dimension pertains to the curriculum, and specifically, practical curriculum guidelines and standards, and confidence in teachers' knowledge and understanding of the curriculum. That is, the practical implementation of '*how'* to achieve the learning outcomes stipulated in CAPS (Department of Planning, Monitoring and Evaluation, 2013).

It is currently not possible to gain a clear sense of the qualifications of Grade R practitioners which are employed in schools. However, in considering the policy of extending ECD to two-years before Grade 1, it is necessary to gain a realistic picture of the current ECE practitioners.

Using data from the 2013 ECD audit, Figure 24 illustrates the distribution of ECD practitioner qualifications by province. It is evident that almost half of ECD practitioners nationally have not completed Grade 12, and that a further third of practitioners have obtained Grade 12, but has no further qualifications. Only 2% of ECD practitioners have any post-matric qualifications, and only 1% have a degree. Although the same pattern exists across the provinces, it is clear that certain provinces (Northern Cape, Eastern Cape and Western Cape) have a slightly larger proportion of practitioners (at least 20%) who have some post-school qualifications compared to the other provinces. With regards to ECD practitioners' specialisation in early childhood care and education, the picture is even bleaker with roughly 70% of practitioners nationally, not having any specialised training in working with children. This proportion decreases to 50% in provinces such as Western Cape, Northern Cape, Eastern Cape and KwaZulu-Natal, with practitioners being more likely to have a certificate specialising in ECE than in the other provinces. Given these percentages, it is clear that ECD practitioners are mostly un- or under-qualified individuals and lack the knowledge

and skills necessary to provide children with the required cognitive and physical stimulation at that critical age.

Figure 21: Practitioner Qualifications by Province



Source: 2013 ECD Audit data. DBE own calculations
Notes: The majority of responses under the category "Other" mention the attendance of some training received through an NGO.

To address the quality in practitioner training concern, the new Policy on Minimum Requirements for Programmes Leading to Qualifications in Higher Education for Early Childhood Development Educators was published in March 2017 (Department of Higher Education and Training, 2017). The purpose of the new Policy is to establish a set of qualifications for prospective or existing ECD educators who are delivering or assisting in delivering ECD programmes. Each of the qualification types specified by the Policy involves a work-integrated learning component which should take place in an ECD environment where registered programmes are offered. The new Policy also introduces a Bachelor of Education in Early Childhood Care and Education Degree which will equip graduates with the required knowledge, theory and methodology to enable them to demonstrate competence and responsibility as academically and professionally qualified ECD educators.

Tied to the low levels of qualification among practitioners, wages and benefits for ECD practitioners are also particularly low in South Africa. This, in turn, contributes to a host of problems that impact the quality of services, such as high turnover rates and low educational levels among teachers. ECD centres are currently funded through fees charged and subsidies from the Department of Social Development. ECD practitioner salaries are then paid from this funding. . Using the 2013 ECD Audit data, it is possible to get a rough indication of the average hours that practitioners work as well as the daily income that practitioners earn. Assuming that ECD practitioners do not work shifts, the operating hours will constitute a teachers' work hours. Using this information, it is evident that the average ECD practitioner works nine hours a day. The

questionnaire further asked staff members to state their monthly gross salary.[9] The minimum monthly salary reported by an ECD practitioner was R 500 per month, whereas the highest salary was R 6 100 per month. On average, ECD practitioners reported receiving a monthly salary of R 1 431. The average daily wage is calculated by dividing the average monthly salary by the average number of working days per month (20 days). This results in an average daily wage of R 71.55 per day for the average ECD practitioner.

The final challenge lies in the lack of credible information systems relating to ECD. This challenge is two-pronged, characterised with weak information for both monitoring and planning purposes, as well as deficient information on learners' early learning outcomes. Nationally agreed upon sets of indicators exist. What does not appear to exist is collation at one national point (this could be either the Department of Basic Education or the Department of Social Development) of key figures from the provincial reports, together with some commentary on the validity and comparability of the provincial statistics. This need not be a costly process, but it is one that could greatly assist planning and the policy discourses relating to ECD. The lack of standardised measures of early learning outcomes further means that both practitioners and researchers do not have any information to measure the quality of programmes or to determine whether learners are sufficiently prepared to start Grade 1. Quality measurement tools which can be used by practitioners and provinces to self-assess would add immense value in targeting support to where it is most needed. In 2018 the DBE has embarked on a process to develop a standardised measure to evaluate early learning outcomes. It is envisaged that this tool would enable provinces to better target their training initiatives to ensure that practitioners are confident in preparing children for schooling.

Grade R and ECD practitioners are in a unique position to develop the fundamental skills and knowledge that children will need for the transition into the first years of formal schooling, regardless of whether the children come from impoverished or wealthy environments. Practitioners, therefore, have the potential to make an invaluable contribution to the early development of children and it is imperative to ensure that they have the training, tools and motivation to undertake this task.

[9] Generally in household or labour market surveys, questions regarding salary levels are not very well answered, since respondents often do not report accurate figures, or the more wealthy respondents refuse to answer the question. In the 2013 ECD Audit data no outlier responses were given, but 25% of assistant practitioners and 22% of practitioners did not respond to this question. The response rate, however, was lower for ECD principals and supervisors, where 40% did not respond to this question. Given the low response rates of principals and supervisors, the average daily salary of only the ECD practitioners in particular were calculated.

Output 5: Strengthening accountability and improving management at school, community and district level

5.1) Introduction/ Problem Statement

The fifth sub-outcome in Basic Education's Medium Term Strategic Framework is "Strengthening accountability and improving management at school, community and district level" (Department of Basic Education, 2016: 18). This outcome envisages a credible, outcomes-focused planning and accountability system and aims to build the capacity of the state to intervene and support quality education.

Although learning happens in classrooms throughout the country as learners engage with teachers and their peers, the extent to which this interaction can happen effectively is influenced by the quality of support provided by the state in numerous ways and at various levels – legislation, policies and plans and the way these are implemented by national, provincial and district-level administration as well as within schools themselves.

Research shows that the quality of administrative support provided to schools matters. A paper by Gustafsson and Taylor (2018) found that the quality of support provided by provincial education departments had a significant impact on National Senior Certificate examinations results. It was possible to measure this by looking at schools which experienced a change in their provincial department as a result of provincial boundary changes that occurred in 2006. Schools moving to a better administration improved by more than nearby schools remaining in the original province.

When the capacity to support quality education is limited, the impact of otherwise good policies and programmes is restricted. For example, an impact evaluation of the Grade R programme found that the effect of attending Grade R on later learning outcomes was negligible in Quintile 1-3 schools located in less well-performing provinces (Van der Berg, et al., 2013). Similarly, it has sometimes been argued that the effectiveness of additional resources to schools may depend on the quality of school management (Van der Berg S. , 2008). For these sorts of reasons, many feel that the main challenge now is about effective implementation rather than about new or better policies (for example, OECD, 2008).

One particular challenge to navigate in the area of state capacity to support education is related to the fact that, according to the constitution, national government and provincial governments are concurrently responsible for the provision of basic education. This leads to coordination challenges and makes good planning systems imperative. There are six specific concurrent functions:

1. Curriculum and assessment management and delivery.

2. Supply, monitoring and professional development of education personnel.
3. Provision of teaching and learning support materials and equipment.
4. Leadership and management at school, district and head office level.
5. Financial management at school and provincial level.
6. Provision and management of physical infrastructure.

The challenge to improve state capacity is well recognised in the National Development Plan as well as basic education sector plans (the Strategic Plan and the Action Plan). The Action Plan to 2019 has specific goals around improving school management practices and about the quality of district support provided to schools.

5.2) Achievements and journey since 1994:

When South Africa became a democracy, it inherited a racially fragmented education system, comprising thirteen different departments organised along racial lines with vast inequalities throughout the system. Funding was disproportionally allocated according to race. At the height of apartheid, government was spending nine times more on white learners than on black African learners in homelands. As a result of this poor and unequal support offered to schools, the education of black Africans was characterised by low quality and limited resources evidenced in high learner-teacher ratios, inadequate infrastructure and ill-prepared teachers.

Therefore, a vast amount of policy development work had to be done in the early years of democracy to reform public spending on education, the school curriculum, and the ways in which a unified Department of Education would operate and coordinate around concurrent responsibilities with provincial education departments. There are three key pieces of legislation governing basic education that have been passed and amended since 1994: the National Education Policy Act of 1996 (NEPA), the South African Schools Act of 1996 (SASA) and the Employment of Educators Act of 1998 (EEA). The development and subsequent amendments of this legislation as a key component of the state's capacity to support quality education represents an important achievement within the sector.

The NEPA specifies the responsibilities of national and provincial education departments. The Minister is given the authority to set standards for the provision of education as well as to monitor and evaluate the sector. This latter role of the national department is one which may not have received sufficient attention up till now but one which creates an imperative for a key aspect of building state capacity to implement quality education through strengthening accountability and coordinating the work at provincial, district and school management levels. The NEPA has been amended several times (1997, 1999, 2007, 2011, 2016), culminating with the Policy on the South African standard for principals in 2015.

The SASA ascribes rights and responsibilities to schools and the duty of parents to send their 7-15 year-old children to school. The rights and rules about school funding and management is important to note, especially the 2006 amendment on national norms and standards for school funding. The EEA prescribes the Ministers right to determine salary scales and the MEC's responsibility to announce a set of posts for each school. One area of current debate that will have important implications for effective school management surrounds whether to reduce the responsibilities of the School Governing Body relative to the employer (the PED) when it comes to appointing senior managers in schools.

Education spending is one key enabler through which the state has capacity to support education provision. Government has demonstrated considerable prioritisation of education in the budgets ever since 1994, spending between 5 and 6% of GDP on education. Historically, there were massive differentials in spending on children from different race groups. Analyses of fiscal incidence (Gustafsson and Patel, 2006; Van der Berg, 2009) have demonstrated that most of these spending differentials had been eliminated by 2000 and that there were virtually no spending differentials remaining by 2005. Since then, the picture has become even more pro-poor with the introduction of non-fee paying schools, which receive considerably higher per learner funding allocations than fee-charging quintile 4 and 5 schools. General Household Survey data shows that by 2016 approximately two-thirds of children attending schools were not paying fees. Personnel spending, however, has not been pro-poor given the salary scales and post-provisioning policies. A case could potentially be made to investigate ways to make personnel spending more progressive either through lowering learner-teacher ratios in non-fee paying schools or through targeted support staff, such as specialist reading coaches which have been shown to positively impact on learning outcomes.

The introduction and development of an Education Management Information System (EMIS) in the late 1990s was an important component in building the capacity of the state to monitor and support education provision. In particular, the Annual Schools Survey and the SNAP surveys were run for the first time in 1997 and these have provided critical system information. More recently, the development of a Learner Unit Record Information Tracking System (LURITS) has increased the analytic capability of the state. This has also allowed the department to share its information with other government departments like Home Affairs and Social Development to improve other forms of support available to children.

The capacity of the state to monitor the quality of education provision has also benefited from the regular participation in highly respected independent international assessments. Our participation in the Trends in International Mathematics and Science Studies (TIMSS) of 1995, 1999, 2003, 2011 and 2015, and in the Progress in International Reading Literacy Study (PIRLS) of 2006, 2011 and 2016, and in the Southern and East African Consortium for Monitoring Education Quality (SEACMEQ) surveys of 2000, 2007 and 2013, have revealed alarmingly low levels of learning

outcomes in South Africa but has also empowered us with information about what is happening in our schools and potential ways to address the shortcomings. More recently, the School Monitoring Surveys of 2011 and 2017 have collected information linked to the various goals and indicators contained in the DBE's Action Plan to 2019. Human capacity within the ten departments to use data has probably also increased in recent years, but here much still needs to be done.

Improving accountability systems within schools is an area that needs considerable attention, but there are certain points of progress that can be noted. The Integrated Quality Management System (IQMS) has gradually expanded and strengthened since its inception in 2003, and has an important role to play in promoting teacher professionalism. The 2012 national IQMS report, the first of its kind, indicated that within schools there is some degree of differentiation in the way teachers are rated. The majority of teachers are in schools where at least two of the four IQMS levels were assigned to teachers, whilst a quarter are in schools where three different levels were assigned. This is relevant to note since the IQMS ratings are based largely on self-assessments, though peers at the school influence the final rating. This means that school leaders can be aware of which teachers have the strongest need for further professional development, which is a prerequisite for effective teacher development programmes.

A prerequisite for a capable state and an effective accountability system is good planning through government. The production of the National Development Plan, through an extensive process of research and consultation, represents a significant step towards effective planning. The NDP sets strategic direction for the Medium Term Strategic Framework and the DBE's sector plan, known as the "Action Plan", The first "Action Plan to 2014" was developed in 2011 and was followed up by the "Action Plan to 2019", which had extensive continuity from the first Action Plan. These plans are also based on a rich process of research and consultation, and commit the department to very specific goals with measurable indicators allowing for the tracking of progress.

Following on good legislation, policies and plans, an effective accountability system requires good monitoring and evaluation systems. Whilst various information systems for monitoring have already been mentioned above, it is worth highlighting the development of the National Evaluation System (NES) by the Department of Planning, Monitoring and Evaluation (DPME), in which the DBE has been an active participant. Through the NES, which was developed since 2011, the DBE has evaluated a number of key programmes (the Grade R programme, the National Schools Nutrition Programme, and the Funza Lushaka Bursary Programme, amongst others). It is only in recent years that the value of programme evaluation for ensuring better use of government resources is being recognised.

In bringing to a close this section on the achievements of the last 25 years with respect to the capacity of the state to provide quality education, it is worth considering what factors contributed to the improvements in quality that were observed through the TIMSS, PIRLS and SEACMEQ

assessments. Although there is no research that has been able to convincingly demonstrate what caused the improvements, the DBE has suggested at least three plausible factors: (1) better access to books amongst learners (something which was a clear policy priority with for instance the DBE Workbook programme and which can be observed in TIMSS data), (2) strong signals sent out through standardised testing about the centrality of acquiring basic skills (even if the ANA testing system was imperfect), and (3) more suitable curriculum documents following the introduction of the Curriculum and Assessment Policy Statements (CAPS). All three of these factors can be considered elements of the state's capacity to support schools.

5.3) Challenges and how to improve:

This section considers the challenges and areas for improving accountability and capacity to support education provision at the levels of school, district offices, provincial education departments and the national department. An overarching theme is that learning is the core business of the education system and, therefore, that there needs to be accountability and capacity specifically to support learning.

A first point to note is that if the system is to be orientated around learning one should start by measuring learning, as the 2018 World Development Report has argued. The NDP recommends externally administering a national assessment for at least one primary school grade in all schools so that there is a reliable measure of performance available for each school. The NDP also recommends providing meaningful information to parents about school performance. This forms part of a proposal in the NDP to create a results oriented mutual accountability between schools and communities. Whilst the Annual National Assessments (administered in all schools for grades 1-6 and 9 between 2011 and 2014) were by no means perfect in their implementation, they did serve a basic function of communicating to all school communities that learning outcomes matter and providing a measure of learning at each school in the country.

A new national assessment system is currently under development and is planned to be administered in 2019 for the first time. However, this will at least initially be conducted in a sample of schools, which will serve certain important national and provincial monitoring and evaluation functions, but there remains a need for better information and accountability for learning at a school level. In time, it may be worth including a universal summative assessment to one primary school grade and then using innovative school report cards to share the information with parents and school communities.

The South African Schools Act assigns important school governance and leadership functions to School Governing Bodies (SGBs), which comprise representatives of both school staff and parents. A 2016 report by a Ministerial Task Team to investigate allegations about the selling of

educator posts by members of teacher unions pointed to serious weaknesses and corruption linked to promotion posts in many SGBs, and consequently recommended reducing their powers to appoint level 2 posts and above.

One of the Action Plan indicators is the percentage of SGBs meeting minimum functionality requirements (being correctly comprised, meeting regularly, etc.). Although this indicator seems to have improved from 54% of schools in 2011 to 62% in 2017, improving the functioning of SGBs should remain one important part of improving the capacity of schools to support quality education.

Another critical aspect of school capacity relates to the appointment of school principals. A lot of research as well as the NDP highlight the crucial role that principals play as managers and as curriculum leaders within schools. Research by Wills (2015) points to the large impact of a new principal on school academic performance and shows that a large number of South African principals are approaching retirement, which means we are now entering a window period during which many new appointments will need to be made. In light of this, the recently published 'South African standard for school principals' is an important contribution in that it provides, for the first time, a statement of the competencies required of a school principal.

However, one of the commitments within the NDP and the DBE's Action Plan has not yet been implemented, namely competency assessments for school principals to ensure that everyone who is appointed into a school principal post fulfils at least the minimum requirements for this job. This has been delayed by negotiations with teacher unions about how it will be implemented. It remains an important opportunity for improving capacity at the school level through better principal appointments and more informed support to existing principals.

One of the indicators in the DBE's Action Plan is the percentage of schools with the required set of management documents. The 2017 School Monitoring Survey indicates that only 31% of schools had the full set of required management documents. Whilst this may be a rather compliance-oriented indicator, what is concerning is that one of the most commonly missing documents was an academic improvement plan, which may reflect a lack of focus on learning outcomes as the core business of schools.

The first level of external support and accountability to schools is the education district offices, and the smaller area offices and circuits. Two indicators of the quality of district-level support to schools are explicitly targeted in official plans, namely the percentage of schools receiving at least two visits from district officials in a year, and the percentage of school principals who are satisfied with the quality of district support.

According to the School Monitoring Surveys of 2011 and 2017 the percentage of schools receiving at least two visits a year has been roughly constant at 86% (2011) and 84% (2017). In 2017, 78% of principals rated the quality of district support as satisfactory. However, key components of district support may still be lacking. For example, the proportion of Foundation Phase teachers receiving curriculum-specific support is considerably lower, especially in certain provinces, due to very high ratios of Subject Advisors to schools. There is also a need to strengthen the capacity of district officials to effectively use data for their planning, monitoring and evaluation purposes.

The NDP envisages strengthening of the two-way accountability between districts and schools. Districts need to provide support and services which schools find useful, and schools need to account to districts for the quality of schooling offered to the community. Moreover, two-way accountability between schools and parents are also needed. Schools need to report in better ways to parents on how well children learn, and parents need to demonstrate that they provide support in the home. These lines of accountability are crucially dependent on having reliable measures of learning outcomes in schools which everyone can use to gauge progress.

While schools are accountable through various means to districts and provincial authorities, there is a need for a holistic school accountability framework to bring together the various strands, and identify critical gaps. Existing accountability elements include the annual school improvement plan, each school's annual report, the increasing use of SA-SAMS, and the Whole School Evaluation (WSE) programme[10] run in certain provinces.

A recent internal DBE analysis of expenditure trends suggests that there appear to be fairly substantial within-quintile and across-district inequalities in expenditure and concludes that in Eastern Cape these are large. This reflects that some districts are less successful than others in the filling of posts. This boils down to a matter of district as well as provincial management capacity.

The administration of post provisioning is a provincial function, yet it may require improved monitoring and guidance from the national department. A Deloitte review conducted in 2013 found that a lack of clarity around how national policy applies led to undesirable differences across provinces in the way post-provisioning is applied.

[10] Whole-school evaluation is the cornerstone of the quality assurance system in schools. It enables a school and external supervisors to provide an account of the school's current performance and to show to what extent it meets national goals and the needs of the public and communities. This approach provides the opportunity for acknowledging the achievements of a school and for identifying areas that need attention. Whole-school evaluation implies the need for all schools to look continuously for ways of improving, and the commitment of Government to provide development programmes designed to support their efforts

Another important provincial function is to ensure that schools receive the correct allocation of non-personnel funding. This is especially important for non-fee paying schools which receive considerably higher per learner allocations than quintile 4 and 5 schools and are highly dependent on these allocations in the absence of school fees. Analyses of School Monitoring Survey data suggests that the percentage of schools actually receiving the allocated amounts may have decreased slightly from 75% in 2010 to 70% in 2017. Where schools do not receive the full allocated amount, this probably reflects the overall financial pressures on the basic education sector, which are exacerbated by weak financial management in certain provincial departments.

The majority of education spending and implementing responsibilities lie with the provincial education departments. It is not surprising, therefore, that the quality of provincial education administration matters for schooling outcomes (Gustafsson & Taylor, 2018). A cursory reading of the Auditor-General of South Africa's provincial reviews indicates that except for the Western Cape and Gauteng, most provinces have serious problems of financial mismanagement, which have adverse effects on service delivery, and that education departments tend to feature strongly in the reported problems.

There is much that can be done at the national level to support better implementation of policies and programmes in provinces. This includes better guidance around and monitoring of norms and standards, outcome targets and indicators. Beyond monitoring, there is a need for more technical capacity to design, implement and evaluate programmes. The DPME's recently developed guidelines for new implementation programmes is a step in the right direction to reduce poorly designed and hastily implemented programmatic responses. Government departments such as the DBE are expected to adopt these guidelines thus committing to careful diagnostic analysis, costing exercises, piloting and evaluation of new programmes.

Perhaps one of the most strategic areas where better monitoring work at the national level is required is of education expenditure trends. A 2017 DBE internal analysis revealed some fairly dramatic recent trends in education expenditure, but such analyses need to be conducted more regularly and more widely understood. A number of findings from this analysis deserve mention.

Over the last few years, there have been substantial declines in educator numbers at the same time as increases in enrolment numbers. Enrolment increases, which have occurred largely as a result of an increase in births of around 10% in the years 2003 to 2005, have been concentrated at the primary level, but are moving up the grades and have begun affecting secondary schools in 2018. The consequence of these trends is that learner-educator ratios have increased 2012, with schools serving poorer communities having had the largest increases.

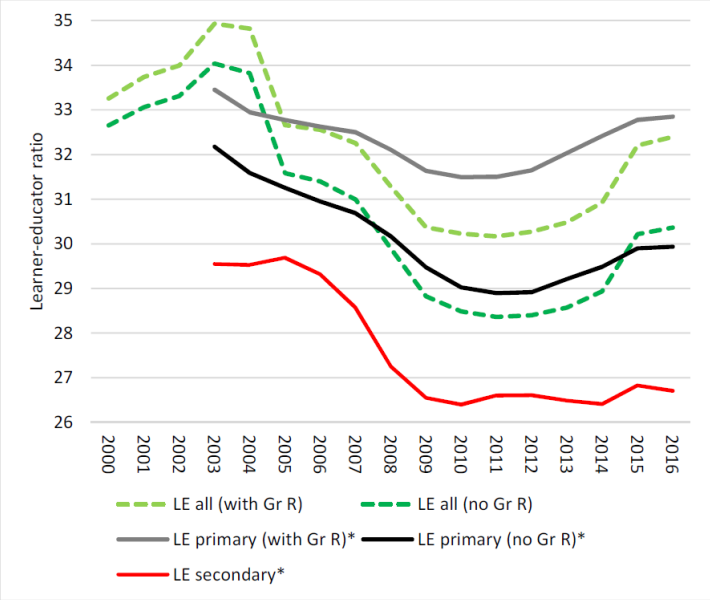
Though the current (non-capital) budgets of the provincial departments have grown slightly in real terms (using the official consumer price index) since 2013/14, and are expected to continue to

grow in the next few years, this growth is too slow to keep up with the price inflation of the inputs used in education, in particular personnel, whose price increases are based mainly on wage agreements.

In response to these budget pressures some provinces have responded by filling fewer promotion posts. As a result, the number of people in school management posts declined by 8% between 2012 and 2016. This is bound to have a detrimental effect on school management at schools.

These trends illustrate the importance of sufficient education expenditure and the value of understanding such trends for policy-making, something which needs to become more widespread.

Figure 22: Learner-educator ratios 2000 - 2016



Source: DBE internal analysis using SNAP survey data 2000 - 2016

Clearly, better monitoring of trends in expenditure, education personnel, and learner enrolments, partly through improved data systems, is needed. Detailed recommendations are laid out in a 2017 report on data use in the schooling sector conducted as part of National Treasury's Financial Management Improvement Programme.[11] This report recommends, inter alia, that steps be taken to increase connectivity in South African schools, to improve the digital competency of school administrators, and ensure that a new web-based South African School Administration and Management System (SA-SAMS) follows standard systems development procedures. However, the report also cautions that human capacity is critical to the sustainable functioning and use of good data systems. It is also important that the primary users of systems such as SA-SAMS (school principals and administrators), experience these systems as beneficial to their work rather than

[11] This report titled, "Final summary report for the schooling sector data use project", is not publicly available.

merely as a burden undertaken for the sake of compliance. A report by the Dell Foundation suggested that the use of SA-SAMS could be significantly improved to inform planning and decision-making within schools and district offices, instead of merely being used to submit school data to PEDs.

Significant growth has been reported in the use of SA-SAMS by schools, as well as better organised provincial and national warehousing of SA-SAMS data. The Data Driven Districts (DDD) initiative, involving education departments, developed by the New Leaders Foundation with support from the Dell Foundation and other stakeholders has provided valuable lessons on harnessing technology in the sector. The DDD dashboard provides data and information down to individual learner levels, thus giving School Management Teams as well as district and provincial officials essential information to give learners the support they need. The 2017 School Monitoring Survey indicates that outside the Western Cape, usage of SA-SAMS by school principals has been high – at least 97% in six provinces, with a slightly lower 94% in KwaZulu-Natal and 86% in Gauteng. The Western Cape has historically used its own provincial system for housing school information. The fact that 58% of principals using SA-SAMS said that they used it for financial management indicates that the management functionality of the tool, as opposed to simply using the data collection functionality has become a reality (Department of Basic Education, 2019).

A number of responses to the need for better capacity are clearly needed, including better monitoring activity. However, in doing so there may be a risk of overburdening officials and imposing compliance-oriented accountability systems that end up distracting from core functions. Examples of these dangers include teachers spending more time uploading assessment records in the correct format than on tailoring their teaching in response to those assessment results, district officials responsible for curricular support ending up being consumed by administrative engagement with schools, or provincial officials responsible for monitoring and evaluation being primarily driven by pleasing the Auditor-General. The sector would benefit from a shared understanding of planning, monitoring and reporting processes between the ten education departments, the DPME (custodian of the NDP) and the Auditor-General (which audits reporting on performance indicators and targets). These processes can be extremely time-consuming, are fraught with technical and coordination challenges, and can ultimately distract from the core functions of education departments. Some of the risks and unintended consequences of these systems include the narrow pursuit of certain indicators (e.g. Grade 12 pass rates), the contradiction of ambitious long term targets (for political considerations) but “safe” short term targets (for audit considerations), or the removal of educationally important objectives from planning processes due to the risk of adverse audit findings.

Output 6: Partnerships for educational reform and improved quality

6.1) Problem statement

Education in South Africa is founded on the premise of a 'social compact' between the different spheres and departments of government, higher education institutions, teacher unions, teacher training institutions, parents and School Governing Body (SGB) organisations, business and civil society organisations, and local and international agencies, governments and donors. Outcome 1 of government, "Improving the quality of basic education", can only be realised through committed partnerships that are well coordinated. The strength of these partnerships has direct implications for whether the goals of education may be realised and how soon this may happen. The Medium Term Strategic Framework (MTSF) 2014-2019 recognises the strategic significance of partnerships, highlighting 'partnerships for a strong education system' as one of its six sub-outcomes. The sub-outputs of this outcome focuses on ensuring support, monitoring and learning from collaborations and partnerships with the independent and voluntary sector, while also emphasising on the National Education Collaboration Trust (NECT) delivering against its approved plan.

The sector plan for Basic Education, Action Plan to 2019: Towards the Realisation of Schooling (Action Plan 2019) also places an emphasis on partnerships, for example, through better partnership between the departments of Basic and Higher education (DBE and DHET), Higher Education Institutions in policy, and teacher training programmes; and places an emphasis on funding disadvantaged learners and responding to the challenges of poor learning outcomes.

6.2) Achievements and journey since 1994

The private sector's engagement in the education sector in South Africa has deep historical roots which are linked to the key role that education plays in the country's social and political transformation, and in providing the critical skills required for economic growth. A number of public-private partnerships have been established over the years to address the schooling system, whereby corporations and their affiliated foundations have invested significantly in the sector through interventions to support the system as well as through supplementary parallel activities.

An example of a civil society organisation that demonstrated the corporate sector's contribution to education pre-democracy was the Urban Foundation. The Foundation was established in 1976 after 180 business leaders gathered and pooled resources from 80 corporations to provide housing and

schools for poor communities. This was in response to the student demand that led to the 1976 Soweto Uprising[12]. The organisation was, however, closed in 1995.

Three local organisations stand out as pivotal partnership mechanisms during, or soon after the transition to democracy. The first is the Joint Education Trust (JET) established in the early 1990s. JET was a partnership between trade unions and black political organisations established to support the democratically established government to coordinate efforts in education and serving as a centralised mechanism between corporates, trade unions and political organisations. Since 1992 JET has spent over R1 billion on education programmes (Besharati, 2015). The second is the South African Grant-Makers Association (SAGA), established in 1995 at the transition to democracy with a budget of R1. 2 million. Unfortunately, it was closed in 2006 due to a lack of funding. The organisation's membership consisted of 80 members from corporates, foundations, trusts, private foreign grant-making organisations, and local and international statutory bodies (Legodi & Leat, 2001). One of the main contributions of SAGA was a set of "guidelines for good grant- making", publishing a donor directory and the development of training on philanthropy for corporates. The third is the National Business Initiative (NBI), established in 1995 by former President Nelson Mandela to support government. The membership consists of about 100 national and multinational companies and focuses on housing, local development, schooling and further education and training.

In addition to domestic support, following the 1994 elections, international donors had largely shifted their focus away from civil society – preferring to formulate bilateral and multilateral agreements with the new government. Overseas (official) development assistance (ODA) to South Africa was seen to be increasing between 1994 and 1997 – peaking at R3.8 billion.. The main reasons cited for the increase was a focus on strengthening government's ability to transition at the start of a democratic South Africa. Between 1995 and 1998, South Africa's largest multilateral donor, the European Union, targeted the Reconstruction and Development Plan. Specific areas of priority included health, education, and good governance. The decline in funding from 1999 has been attributed to the international community's growing confidence about South Africa's ability to govern and fund its own programmes and policies. However, it is important to note that the ODA mentioned above supports a range of sectors, and is not only targeted to education.

In light of the various partnership mechanisms, the DBE has consolidated the coordination of partnerships through the establishment of a Partnerships Directorate at the *national* level. The directorate is mandated to close the gap of inequalities in education and supporting the DBE by sourcing, negotiating and managing funding and sponsorships directed to the department;

[12] On June 16 1976 15 000 young people marched against the Apartheid government in opposition to the language policy as well as other educational inequalities (Marjorie, 1982; Grundlingh and Huigen, 2011). They marched in opposition to the language policy proposing the use of Afrikaans in additional subjects as well as other educational inequalities.

coordinating and monitoring local donor funded education projects and partnership programmes – both nationally and provincially; and developing and facilitating feasible partnership business plans and monitoring respective spending. These programmes are situated and implemented in various branches of the DBE. The Directorate has developed norms, guidelines and protocols to standardise and formalise partnerships in the sector. For internal use, partnership frameworks and internal protocols have been developed to assist DBE officials in understanding what constitutes a partnership and how to initiate and manage a partnership within the DBE. To enhance external engagements partnership implementation protocols for public institutions and organisations have been developed.

The DBE has adopted a multidimensional approach to partnerships, including the following non-mutually exclusive pillars: (i) volunteering and technical capabilities; (ii) monetary support through purely financial contributions; (iii) focus on priority pillars through monetary and non-monetary contributions to key DBE programmes, such as infrastructure, teacher development, curriculum support, early childhood development, school safety, school sport and enrichment projects, the National School Nutrition Programme as well as Special Ministerial Projects, such as the National Teaching Awards, Mandela day, the annual announcement of Matric Results and disaster relief in schools; (iii) research, innovation and support; and (iv) advocacy.

The enabling environment for the partnerships directorate within the department is facilitated through the NDP, MTSF and Action Plan, as well as the National Economic Development and Labour Council (NEDLAC) Accord on Basic Education and the establishment of the National Education Collaboration Trust (NECT). The NEDLAC accord on Basic Education was signed in 2011 by leaders of organised labour (including Cosatu, Fedusa and Nactu), Business Unity South Africa, Community Constituency, and the Minister of Basic Education on behalf of government. The accord is aimed at galvanising South Africans to support all schools, especially poor-performing schools, in the pursuit of quality basic education outcomes.

In the 2013/14 financial year the contribution of domestic partnerships was R42 million mostly towards the National School Nutrition Programme and the provision of mobile libraries, benefitting approximately 560 000 learners across the country. In 2016/17 the estimated contribution of partnerships had more than doubled to approximately R113 million. The figure for 2017/2018 was the highest to date at R277 million. The table below provides a breakdown of funding received in 2017/18 and how this has been allocated.

Table 5: DBE Partnerships funding in 2017/18

Areas of focus	Number of schools	Number of learners	Total funded
Literacy interventions	527	304 706	R 64 469 340.00
School enrichment interventions	204	13 424	R 9 547 201.15
Educational support interventions	788	546 597	R 203 101 674.00
Totals	**1519**	**864 727**	**R277 118 215**

Source: DBE Annual Report 1 April 2017 – 31 march 2018

The NECT was established in 2013 and is intended to strengthen partnerships within civil society and between civil society and government in the basic education sector. The scope of work for the NECT has been set out in an Education Collaboration Framework (ECF) which was developed in consultation with government and social partners seeking to influence and support the implementation of the education reform agenda. The ECF was a response by civil society in the education field to government's call for collaboration to accelerate the pace of national development, in accordance with the NDP. The NECT's point of departure is that government and civil society have different but complementary roles to play in relation to education. The provision of basic education for the general population is the responsibility of the government which is uniquely equipped to fulfil this overarching mandate. Civil society, with its diversity and flexibility, is able to support government by innovation and accelerated delivery. Civil society becomes more relevant and more influential when channelling its efforts in a coordinated way into the national education system. The NECT, therefore, receives financial support from a range of funding partners, including government, business and philanthropic trusts and foundations. It channels its efforts into six themes for collective action i.e. (i) professionalisation of the teaching service; (ii) supporting courageous leadership; (iii) improving government capacity to deliver; (iv) involving parents and communities in education; and (v) enhancing support from learners and promoting their well-being.

The NECT's footprint has reached five provinces i.e. Limpopo, Mpumalanga, North West, KwaZulu-Natal and the Eastern Cape through the provision of Structured Learning Programme toolkits and has reached all nine provinces through the Primary School Reading Improvement Programme (PSRIP) which focuses on improving the teaching of English as a First Additional Language (EFAL), specifically reading – reaching close to two-thirds of the national education system (National Education Collaboration Trust, 2019). Four years since its inception, the NECT has reached 14 769 schools and trained 600 Subject Advisors across 24 districts (National Education Collaboration Trust, 2018).

In 2018, the NECT received approximately R260 million which increased from approximately R117 million received at inception. The table below provides a breakdown of the income and the respective sources of revenue between 2014 and 2018.

Table 6: NECT funding amounts and sources, 2014-2018

		2014	2015	2016	2017	2018
Income (ZAR)		116 532 852	186 542 790	182 774 681	275 582 398	259 582 398
Sources of Income	Government & SETAs	67%	65%	47%	51%	60%
	Business	31%	31%	39%	22%	24%
	Foundations and Trusts	2%	4%	9%	6%	3%
	Special Projects			5%	21%	12%

Source: NECT Annual Report 2017
Notes: The contributions from Labour and other sources of income are not documented since constitute less than 1%

The significant contribution to the education sector through Corporate Social Investment (CSI)[13] needs to be acknowledged. In 2018, the total estimated CSI expenditure was R9.7 billion – a 2.5% real increase from the R9.1 million estimated spend in 2017 (Trialogue, 2018). Across several development sectors, education received support from 92% of companies and received 44% of CSI expenditure in 2018. School-level education i.e. general education and training and further education and training received 50% of education spend, while tertiary education received 29% and early childhood development received 18% (Trialogue, 2018). Bursaries, scholarships and university chairs continues to be the most popular type of education intervention supported by corporates, receiving 24% of education spend. Additional learner programmes received 19%, infrastructure, facilities and equipment received 15% while teacher development received 12%.

National Association of Social Change Entities in Education (NASCEE) was established in 2018 as a voluntary member-based collaborative structure of education non-profit organisations (NPOs), which are working towards maximising the contribution of NPOs towards the NDP goals relating to education. The main objective of the Association is to build a high quality equitable education system for all South Africans by forging a strong collaboration between education NPOs; setting up networks; strengthening the capacity of education NPOs; promoting and raising awareness of the work of education NPOs; and advocating for quality education by harnessing the knowledge and information from the sector to influence education policy (National Association of Social Change Entities in Education, 2019).

At a continental level, a particularly noteworthy development has been the strengthening of regional and continental partnerships for education. South Africa has been a member of the Association for the Development of Education in Africa (ADEA) since 2006. ADEA is a policy

[13] CSI spend is based on data from the 74 large companies that participated in Trialogue's primary research survey.

dialogue forum meant to improve coordination amongst development agencies and the continent. Similar efforts have been undertaken through collaborations with the Southern African Development Community (SADC) and the African Union. The specific funding mechanisms and a pooling of financial resources is not mentioned as a common practice, however, this may be an important area for further coordination.

Partnerships and funding received from international donors are managed by the International Relations and Grant Implementation, Monitoring and Reporting Chief Directorate in the DBE. Internationally, the European Union has continued to provide support to the DBE. One of the main financing agreements was negotiated and signed in 2010, entitled Primary Education Sector Policy Support Programme (PrimED SPSP). The agreement was intended to offer sector budget support in line with the basic education sector plan. The total cost of the programme was €122 680 000 (estimated at R1 216 450 000). The overall objective of the programme was to contribute to improving learner performance in literacy and numeracy at primary school level. The programme strengthened fundamental elements of the General Education and Training Programme with a special focus on expanding access to quality Early Childhood Development (ECD) opportunities, especially for poor communities; effective implementation of the Curriculum; and attracting and ensuring appropriately qualified and competent teachers in all learning areas at all levels, with special focus on scarce skills. The emphasis of the PRIMED SPSP was to support initiatives that demonstrate innovative approaches and create an enabling environment for development and skills transfer. The final tranche of funding was disbursed in 2015 and the agreement concluded in 2017.

In addition, the United Nations also provides support to the DBE, largely through a rolling work-plan with the United Nations Children's Fund (UNICEF). With the acknowledgement that significant progress has been made in improving access to education, UNICEF's support to the DBE is centred on improving learning outcomes through improving the quality of education, reducing inefficiencies and inequity in the system and promoting innovation. There are three components of the programme i.e. Early Childhood development; quality education and adolescent development.

Furthermore, in terms of international partnerships, the DBE has established bilateral agreements with several countries, including China for the teaching of Mandarin in South African schools, and Cuba for the recruitment of Cuban Mathematics and Science specialists, focusing on teacher training and support material for the DBE. Other partner countries with which the DBE has bilateral agreements include Venezuela, France, Angola, Sri Lanka, Korea and the United States of America. The DBE also has a range of multilateral agreements with organisations such as the World Bank, Japan International Cooperation Agency, and United States Agency for International Development (USAID).

6.3) Challenges and how to improve:

The sector has successfully built on the legacy of collaboration and partnerships, with more organisations involved than before. The funds committed and the increase in these over time demonstrates a sustained shared responsibility for delivering quality education. The coordinating mechanisms and funding from local and national partners has also increased considerably.

The improved coordination and standardising processes within the DBE, through the establishment of the Partnership Directorate, is an important development in the Department. However, there are internal coordination mechanisms within the department which need to be improved. In particular, between the Partnerships Directorate which deals with national partners and the International Relations and Grant Implementation Monitoring and Reporting Chief Directorate – which have different mandates.

An area that could be enhanced would be greater specification of areas that require funding through systematic reviews of current and possible programmes with clearer alignment to the basic education sector plan. There is also generally a gap in evaluating the implementation or impact of the various funded programmes, reporting generally focuses on inputs. By establishing a culture of evaluating rigorously, the DBE could use the lessons learnt to inform future programmes and inform the selection of priorities.

There is also a need for better information sharing to establish funding coalitions in specific areas and leverage the allocated funds by pooling them together. The same applies to the activities and efforts of civil society in the sector. The balance between the role of the DBE, funding the DBE directly through existing mechanisms, such as the Partnerships Directorate, and funding the NECT should be carefully balanced to achieve maximum impact in the sector without creating competition. A better account for areas of work and distinction between what the DBE delivers compared to the NECT is important.

Finally, the establishment of bilateral agreements across different countries and continents provides an opportunity to learn from other education systems, however, the exact activities and modus operandi has not been clear. It is also not always clear how best to collaborate across governments in a way that responds to South Africa’s educational priorities.

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