

# BUDGET

## CHILDREN AND SOUTH AFRICA'S EDUCATION BUDGET



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### KEY MESSAGES

- High enrolment rate in primary and secondary schools, but poor learning outcomes: 58% of Grade 4 learners could not read for meaning and 29% could not read at all.
- There is widespread recognition that many educators in South Africa lack the necessary skills and knowledge, yet spending per educator on teacher development averaged only R1,625 in 2015/16.
- In 2016/17, provinces allocated less for learner and teacher support materials than in 2013/14, even before adjusting for inflation.
- There is substantial variation across provinces in funding of Grade R, with North West allocating more than double what Limpopo does per learner. For the country as a whole, the Grade R amount is only about two-fifths of the primary school amount.
- There has been some progress in funding school infrastructure, but more than half of Eastern Cape schools remain without adequate sanitation.

**This brief is one of four that explore the extent to which government budgets in South Africa address the needs of children under 18 years in the country.** The briefs aim to describe the shape and size of the relevant budgets, and highlight some of the key funding-related issues. The objective is to contribute to informed advocacy and decision-making.

This brief looks at education budgets. It first presents and describes a set of key indicators. It then describes the structure of provincial budgets and source of funds. This is followed by discussion on budgeting for the foundation years, teachers, teaching and learning support materials, Grade R and infrastructure.

# 112%

South Africa's  
estimated  
primary  
school gross  
enrolment rate



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## Key indicators

Primary school gross enrolment rate, 2015	112%
Female	109%
Male	116%
Secondary school gross enrolment rate, 2015	118%
Female	121%
Male	115%
Education as % of consolidated budget, 2016/17	20%
Primary education as % of education budget, 2016/17	36%
Secondary education as % of education budget, 2016/17	27%
Personnel as % of education budget, 2016/17	65%
Primary school annual budget per capita of enrolled in public schools, 2016/17	R12,231
Secondary school annual budget per capita of enrolled in public schools, 2016/17	R15,718
Tertiary annual budget per capita of enrolled in public institutions, 2016/17	R33,169
Official development assistance as % of total education budget, 2016	1.2%



South Africa's primary school gross enrolment rate is estimated to be 112% in 2015, if one uses Statistics South Africa's General Household Survey.<sup>1</sup> The fact that the rate is higher than 100% reflects the relatively large number of learners who are outside the age group 7–13 years. The higher male than female rate – at 116% versus 109% – reflects higher rates of repetition for boys than girls.

At secondary level the gross enrolment rate is 118%, with the female rate (121%) higher than the male rate (115%). Here, large numbers of learners over the age of 18 explain the rates exceeding 100%. The gender pattern reflects the higher likelihood of young women continuing with their education while young men are more likely to drop out.

Overall, there were 12 million children enrolled in Grades 1 through 12 in 2015.<sup>2</sup> Of these, 7.4 million were in primary grades and 4.6 million in secondary grades. Public schools accounted for 96% of all enrolments at both primary and secondary levels. The percentage of learners in public schools ranged from 89% in Gauteng to 99% in Northern Cape.

Provincial departments provide funding for both public and independent schools. However, the per-learner amounts provided by government are much lower for independent schools. Provinces with a higher percentage of public school learners face a greater average budgetary burden per learner if their allocations for public and independent schools conform to the national norms and standards.

1 Gross enrolment rate calculations that use the Department of Basic Education's *School Realities 2015* give different estimates, in large part because the General Household Survey records about 2 million more children in school than the Department does.

2 Department of Basic Education. (2015) *School Realities 2015*.



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**Table 1. Summary of national and provincial education budgets, 2016/17 (Rm)**

Department	National	Provincial	% of total
DHET total budget	49,188		18%
DBE total budget	22,270		8%
DBE transfer to provinces	-16,213		-6%
Combined provincial education		212,086	79%
Eastern Cape		31,170	12%
Free State		12,297	5%
Gauteng		38,514	14%
KwaZulu-Natal		45,497	17%
Limpopo		27,248	10%
Mpumalanga		18,387	7%
Northern Cape		5,458	2%
North West		14,342	5%
Western Cape		19,173	7%
<b>Total education budget</b>	<b>267,331</b>		<b>100%</b>

In the national sphere, two departments have direct responsibility for education. The Department of Basic Education (DBE) is responsible for policy-making, coordination and oversight in respect of primary and secondary education and Grade R (the reception year immediately preceding Grade 1 of primary school). The Department of Higher Education and Training (DHET) is responsible for all aspects of post-school education and for most adult education. The nine provincial departments of education are responsible for delivery of the educational levels and types over which the DBE exercises oversight.

As seen in Table 1, in 2016/17, DHET has a budget of R49.2 billion, the DBE's budget is R22.3 billion (of which R16.2 million is transferred to provincial departments), and the nine provincial departments have a combined budget of R212.1 billion. Together, these 11 departments account for 18% of the consolidated national and provincial budgets for 2016/17.

Provincial education departments account for 79% of the combined allocations of national and provincial education departments. DHET accounts for 18% of the total education amount, while the DBE accounts for 8% before deduction of transfers to provincial departments and only 2% after deductions. Provincial education departments effectively account for 97% of allocations for education for children, i.e. if one excludes DHET's budget.

Nearly two-thirds – 65% – of the combined education budgets is explicitly allocated for personnel employed directly by government. This amount provides for teaching and support staff, including managers. The actual percentage spent on staff is even higher than this because the staff costs incurred by entities that receive transfers from the departments are not itemised in the budget. Instead, the transfer is shown as a lump sum. The 65% therefore excludes, for example, the costs of personnel at universities and colleges. Personnel costs account for 93% of expenditure within public ordinary school education. This leaves limited funds available for other expenditure items.

Each of the provinces has separate budget subprogrammes for primary public schools, primary independent schools, secondary public schools and secondary independent schools. Some expenditure in other budget subprogrammes also supports primary and secondary education. In particular, there are

infrastructure and conditional grant allocations in other subprogrammes. However, the share of these other supporting subprogrammes going to primary and secondary schooling is not shown in budget documents.

Across all provinces combined, the two primary school subprogrammes have an allocation of R95.8 billion in 2016, equivalent to 36% of consolidated national and provincial education budgets. The two secondary school subprogrammes have an allocation of R72.5 billion, equivalent to 27% of consolidated education budgets.

The annual primary school allocation per enrolled learner is R12,231 in 2016, and that for secondary school is R15,718 if both public and independent schools are included and if we use the allocations for the primary and secondary school budget subprogrammes and enrolments for 2015. (As discussed below, for at least one province the division between primary and secondary school budgets seems incorrect.) The total allocation for tertiary education is calculated by adding DHET allocations for subsidies for university and technical and vocational education colleges and allocations for the National Student Financial Aid Scheme. With total enrolment of 1.02 million students, the annual per student allocation is R33,169 at tertiary level. This is more than double the secondary per learner amount.

The DBE records a total of R0.3 million in donor funding in 2016/17, as against nearly 1,000 times as much – R314.5 million – for the DHET. Combined, these funds amount to only 1.2% of the combined budgets of the national and provincial departments of education. The DBE’s donor funding is from the European Union to support improvements in learner performance at primary level.

## HOW ARE PROVINCIAL EDUCATION BUDGETS STRUCTURED?

The provincial education budgets use a standardised structure of six programmes, each of which has a number of subprogrammes. Table 2 indicates, with bold italics, the programmes and subprogrammes discussed in this brief.

Figure 1 reveals that the public ordinary school education programme accounts for more than 70% of all provincial budgets in 2016/17. Northern Cape allocates the smallest proportion of its budget to this programme, in part because of a relatively large allocation for infrastructure development. In contrast, Limpopo allocates close on 90% of its budget to public ordinary school education. This leaves very little funding available for other areas of expenditure.

Across all provinces combined, public ordinary school education gets 79% of allocations, independent schools get 1%, early childhood development (primarily Grade R) gets 6% and infrastructure development 12%.

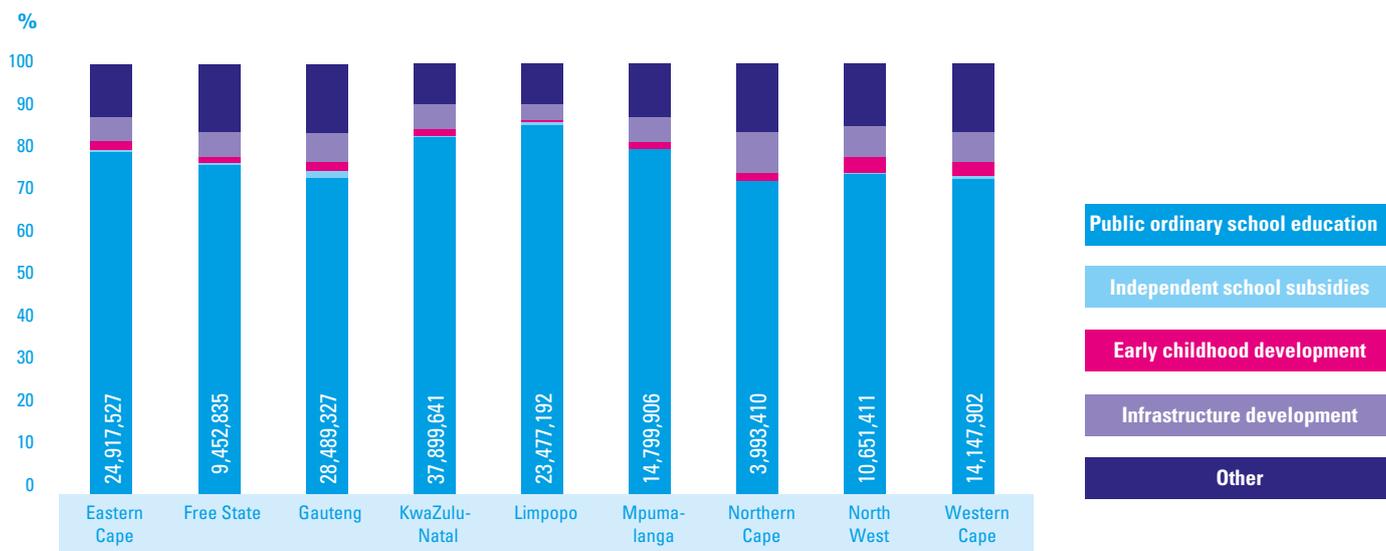
## IS FUNDING EQUITABLE ACROSS AND WITHIN PROVINCES?

The per capita amounts reported above include both public and independent (private) schools. Figure 2 shows the allocation per primary and secondary learner in public schools in 2015. Eastern Cape is excluded because the allocations in its budget do not seem to be correctly divided between the primary and secondary school subprogrammes. If we exclude Eastern Cape, the amounts are relatively similar across provinces. The similar pattern for the other provinces suggests that

**Table 2. Budget structure for provincial education departments**

Programme	Subprogramme
Administration	
Public ordinary school education	<b><i>Public primary schools</i></b>
	<b><i>Public secondary schools</i></b>
	Human resource development
	School sport, culture and media services
	Conditional grants
Independent school subsidies	<b><i>Primary phase</i></b>
	<b><i>Secondary phase</i></b>
Public special school education	
Early childhood development	<b><i>Grade R in public schools</i></b>
	<b><i>Grade R in community centres</i></b>
	Pre-Grade R training
	Human resource development
<b><i>Infrastructure development</i></b>	
Examination- and education-related services	

**Figure 1. Distribution of programme allocations by province, 2016/17**



**Figure 2. Per learner allocation for public school education, 2015**



national standardisation of the amounts to be paid per learner in public schools is effective in avoiding large disparities, at least at this level of aggregation.

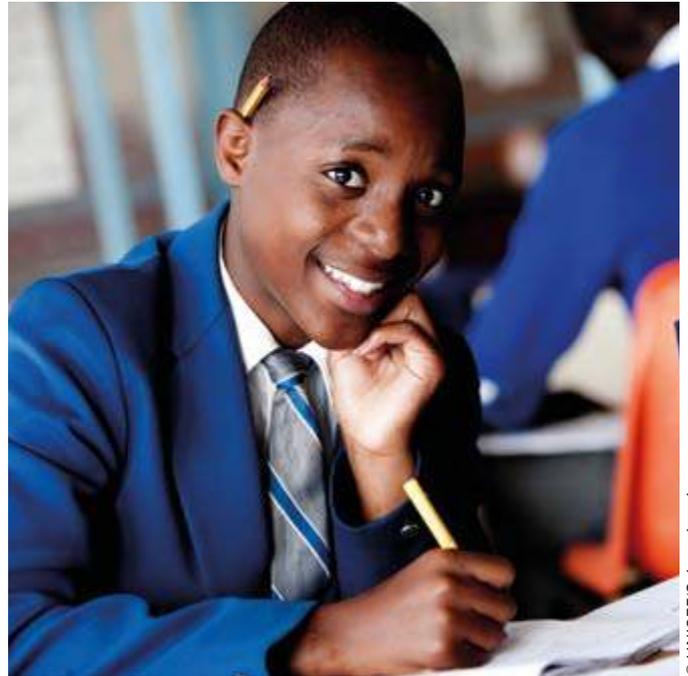
Public schools are classified into five quintiles on the basis of the average household income in the area in which they are located. Differences in the amounts across provinces could be explained by factors such as varying proportions of combined school learners in primary and secondary grades and differing distributions of learners across the five income quintiles, as well as differences in allocations of provincial funds across personnel, capital and other spending. Quintiles are important because the size of

the subsidy allocated to a school is determined by the quintile in which it is placed. The placement, in turn, is determined by the relative wealth of the surrounding community.

Schools classified in the three poorest income quintiles are no-fee schools; they may not charge fees. Government allocations to schools in these quintiles are therefore intended to cover all the basic non-personnel and non-capital costs of schooling. In 2016, the norms and standards state that provinces must allocate R1,177 per child in quintiles 1, 2 and 3; R590 per child in quintile 4; and R204 in quintile 5. However, not all provinces comply. Further, because the quintiles are determined

# 58%

## Percentage of Grade 4 learners who could not read for meaning



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nationally, the proportion of schools in each quintile differs noticeably across province. As a result, Gauteng and Western Cape, for example, provide the larger subsidies for a smaller proportion of their public schools than provinces such as Limpopo and Eastern Cape.

The allocations for schools do not cover personnel costs. Teachers are on the government payroll and receive their pay directly from government. Teacher salaries introduce inequities if schools in the wealthier quintiles have higher teacher:learner ratios. There are further inequities if the teachers in the wealthier schools are more highly qualified as a standard qualification-related pay scale is used across all schools and quintiles.

Children who are beneficiaries of social grants should not be charged fees even if they attend schools in quintile 4 or 5. Provinces are meant to compensate schools for the fees foregone as a result. However, in 2016 not all provinces are providing this compensation.

### WHAT IS HAPPENING IN THE IMPORTANT FIRST YEARS OF SCHOOLING?

The analysis above shows government spending per learner that is higher for secondary than primary school learners in six of the nine provinces. This pattern is common internationally, where it in part reflects higher salaries for secondary than primary school teachers. In South Africa, however, the pay scales for primary and secondary school teachers are the same. Standard salaries for primary and secondary school suggest that primary schooling is seen as just as important – if not more important – than secondary. However, the level of pay for individual teachers is based on both length of

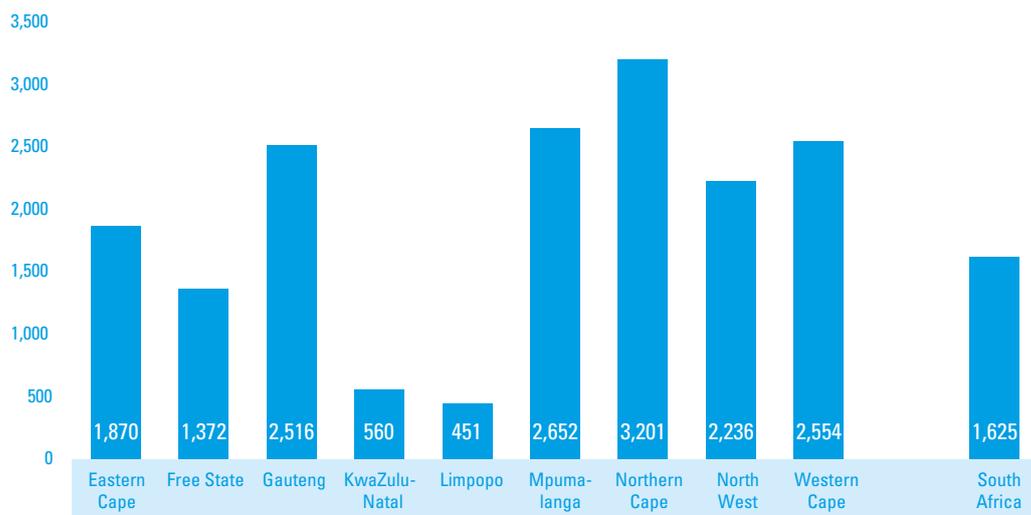
experience and level of qualifications. Because primary school teachers tend to have lower level qualifications than secondary school teachers, the pay at primary school level tends to be lower.

Educationalists have long been aware that if children do not 'learn to read' in their first years of schooling, they will not subsequently be able to 'read to learn' in all their subjects. Recent research in South Africa<sup>3</sup> found that the provincial patterns of results in the annual national assessment tests for Grade 4 were very similar to those for Grade 12 (the final year of schooling), and were also strongly influenced by the quintile in which the learner's school fell. In particular, learners in the wealthiest quintile strongly out-perform others. The latter has race implications, as children generally attend schools near their homes, and residence still largely follows apartheid patterns.

The researchers found that overall, 58% of Grade 4 learners could not read for meaning and 29% struggled to read at all. In Limpopo, 83% could not read for meaning with 50% struggling to read at all. Government's post provisioning norms prescribe a learner:teacher ratio of 35:1 for the first four grades. Across the country, the majority of schools had numbers exceeding this. The researchers' recommendations include, among others, addressing the problem of class size and lack of adequate skills among teachers and greater use of workbooks as a complementary tool to textbooks.

<sup>3</sup> Spaul N, van der Berg S, Wills G, Gustafsson M & Kotzé J. (2016) Final report to the ZENEX Foundation on poor student performance in Foundation Phase literacy and numeracy.

**Figure 3. Spending on teacher development per educator, 2015/16**



### HOW DO THE BUDGETS CONTRIBUTE TO ADEQUACY OF EDUCATORS?

Quality educators are clearly an essential factor in providing a quality education. In 2015, the nine provincial education departments employed a total of 464,512 personnel. Of these, 381,851 – 92% – were educators. The educator share of personnel ranged from 91% in Limpopo to 75% in Gauteng. Gauteng was the second best performing province in terms of matric results in 2015, while Limpopo was the third worst performer. This pattern confirms that the educator share of personnel is not the only, or even most important, factor that determines performance. A high share could also indicate that there are insufficient support staff at schools, resulting in teachers spending too much of their time on administrative and other non-teaching tasks.

The educator numbers are strongly correlated with the number of learners enrolled in public ordinary schools. The learner:teacher ratios, therefore, have a relatively small range, from 30:1 in Free State and Northern Cape to 35:1 in Eastern Cape. These ratios suggest that learner–teacher ratios may conform to a resolution of the Education Labour Relations Council in 1995 which provided a guideline of a ratio of 40:1 in primary schools and 35:1 in secondary schools. Similarly, the post provisioning norms of 2002 stipulate a maximum class size of 35 for Grades R to 4, 40 for Grades 5–6, and 37 for Grades 7–9.

In practice, however, if teachers have free periods and/or teachers are not appropriately distributed across schools, the actual ratios will exceed the norms. This explains the finding of the recent research cited above that the majority of children were in classes with more than 35 children. Northern Cape was the ‘best’

performing province on this measure, but had only 43% of its children in classes that met the norm. Even in Gauteng, one of the better performing provinces, only 21% of children were in classes with 35 or fewer learners. Overcrowding in Gauteng reflects, at least in part, larger annual increases in the child population than are experienced in any other province.

The number of educators does not tell the full story. There is widespread recognition that many educators in South Africa lack the necessary skills and knowledge. Yet Figure 3 shows that spending per educator on teacher development averaged only R1,625 in 2015/16. The amount ranged from only R451 per educator in Limpopo to R3,201 in Northern Cape. These disparities may in part be explained by provinces differing in whether and how they record different expenditures on teacher development. Provinces may also differ in the extent to which they benefit from teacher development that is funded from other sources.

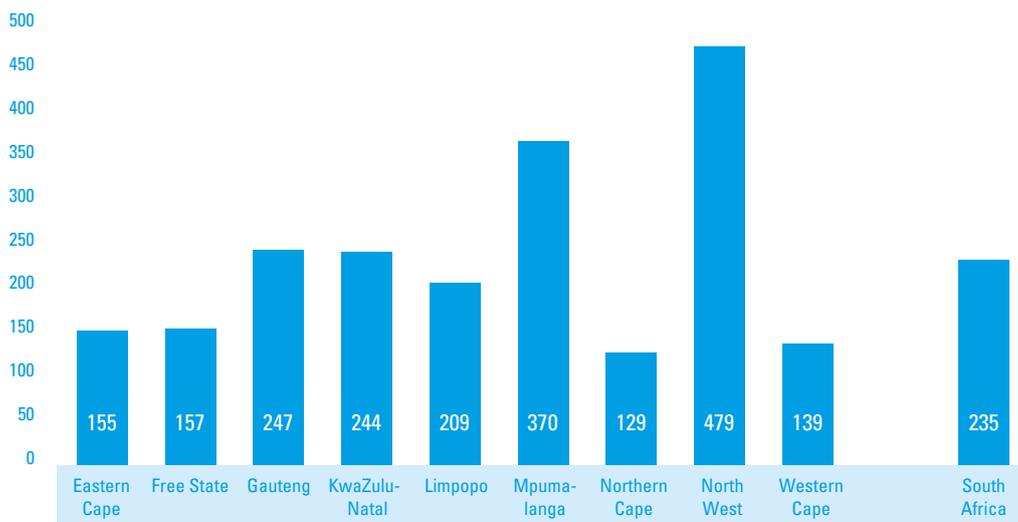
### DO TEACHERS AND LEARNERS HAVE THE NECESSARY SUPPORT MATERIALS?

In addition to teachers, learner and teacher support materials (LTSM) are essential for effective teaching and learning. In 2011, even for the priority subject of mathematics, there were only 81 textbooks for every 100 Grade 5 learners. In Free State, there were only 65 textbooks for every 100 Grade 6 learners.<sup>4</sup>

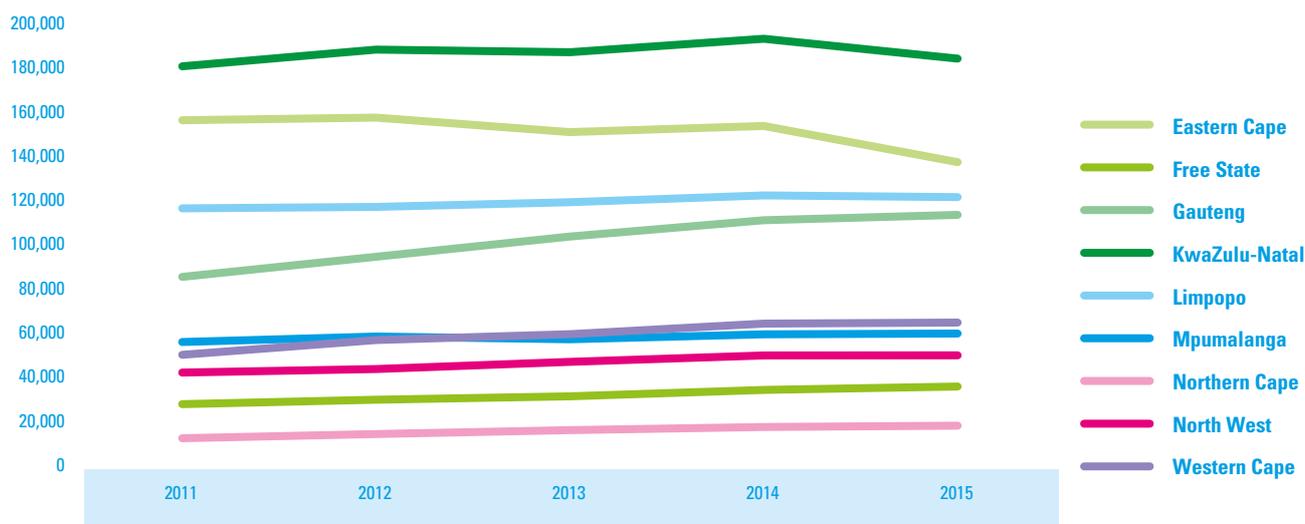
Calculating the amounts allocated for LTSM is complicated. In some cases, the provincial department takes responsibility for all LTSM spending for public

4 Department of Basic Education. (2013) *Macro Indicators Report*: 57.

**Figure 4. Expenditure on LTSM per public school learner by province, 2015/16**



**Figure 5. Grade R enrolments, 2011–2015**



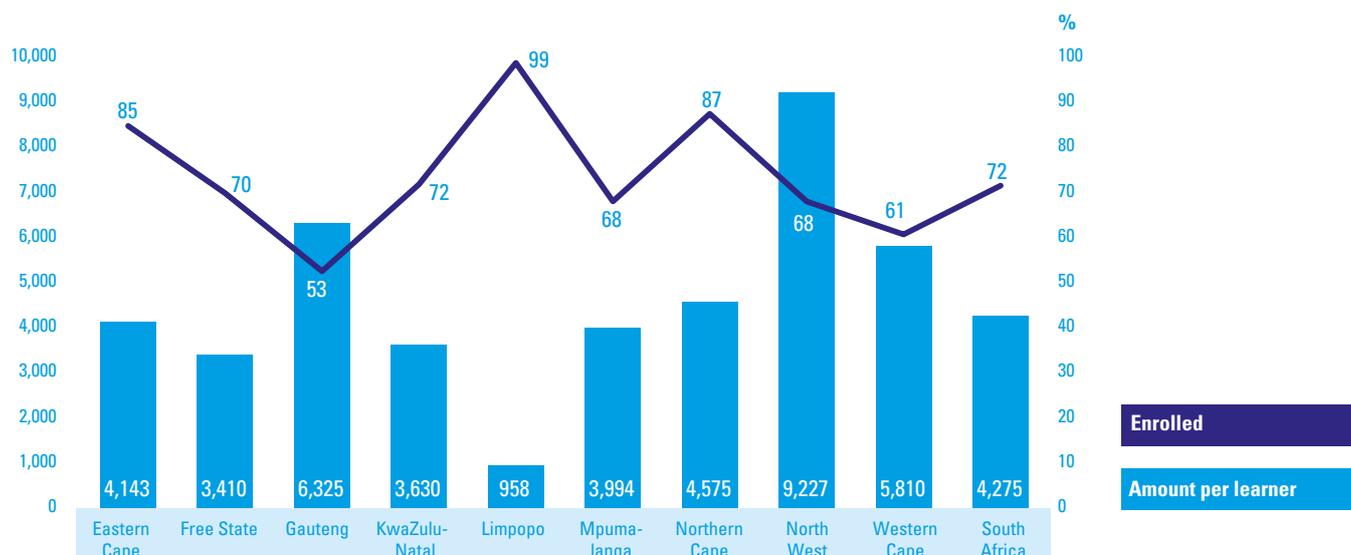
schools. In other provinces, the amount for LTSM is included in the transfers to public schools that manage their own funds. For these schools, the LTSM spending is hidden because it is not recorded separately from the rest of the transfer to the school. The analysis here is based on the estimates that the DBE has compiled on LTSM spending in each province.

In 2016/17, the amount allocated by the nine provinces combined for LTSM is estimated at R3,165.9 million. This is less than the R3,223.2 million allocated by the nine provinces in 2013/14, even before adjusting for inflation.

Figure 4 shows the amount spent on LTSM per public ordinary school in 2015/16 in each of the nine provinces. Nationally, the mean amount is R235. This would not be enough for even two textbooks per learner. Limpopo has been the focus of civil society challenges, including court cases, in respect of non-delivery of textbooks for children. These challenges have been successful in terms of court judgements, although they have not achieved the desired outcome of every child having the textbooks they need.

Figure 4 shows five other provinces allocating even less per learner than Limpopo. This suggests that LTSM problems are not restricted to Limpopo.

**Figure 6. Annual Grade R per learner allocation and percentage of 6-year-olds enrolled in public and independent schools, 2015/16**



### DO GRADE R ALLOCATIONS REFLECT GOVERNMENT'S PRIORITISATION OF EARLY CHILDHOOD DEVELOPMENT?

South Africa's National Development Plan accords high priority to Grade R, and government started focusing on this grade even before the Plan was launched. In 2008, government issued national norms and standards for Grade R funding, as well as guidelines for costing the basic minimum package for Grade R. The documents stated that provincial departments should cover the full per learner costs of the basic package. The package was to include the salary of an educator (an early childhood development practitioner) teaching up to 30 children, as well as learner support materials, minor building repairs, electricity and water, and administrative support. The amount per learner was set at 70% of the per learner amount for Grade 1. Provincial departments were allowed to reduce the amount to 50% in the short term to allow faster rollout. Rollout was to start with the poorest quintiles.

Figure 5 shows the numbers of learners recorded in Grade R in each province over the period 2011 to 2015.<sup>5</sup> It includes learners in independent schools who account for 5% of all Grade R enrolments in the country. The percentage is 14% in Gauteng and 5% in Western Cape, but 3% or less in all other provinces.

The difference in absolute numbers seen in Figure 5 is expected, given the variation in population size across provinces. The differences between provinces in trends over the period are less expected. The figure shows a steady increase in enrolments for most provinces,

and a particularly strong relative increase for Gauteng. However, Eastern Cape shows a strong decrease, as does KwaZulu-Natal for the most recent period. At least part of this decrease may be due to stricter enforcement of the age requirement for Grade R, excluding younger children who might previously have been enrolled. Overall, the wealthier provinces appear to be doing better than the poorer ones.

In 2008, the government hoped to have achieved universal Grade R enrolment by 2010. This was not achieved. A draft policy framework on universal access to Grade R issued in 2014 aimed to increase access to 100% by 2019. The framework notes that universal access does not mean that Grade R is compulsory. However, it must be available for those who want the service.

Research shows no measurable impact on subsequent school performance of Grade R in the poorer schools, while there is some impact for children from wealthier schools.<sup>6</sup> Yet, unlike at ordinary school level, fees are charged for most Grade R learners regardless of quintile and despite prioritisation of the importance of early childhood development in South Africa's policy.

Figure 6 shows substantial variation across provinces in funding of Grade R. At the extremes, North West allocated R9,227 per Grade R learner for the year as against only R958 in Limpopo. North West's amount was more than double the national average of R4,275 per learner. Part of the difference across provinces may reflect some provinces not categorising funds correctly

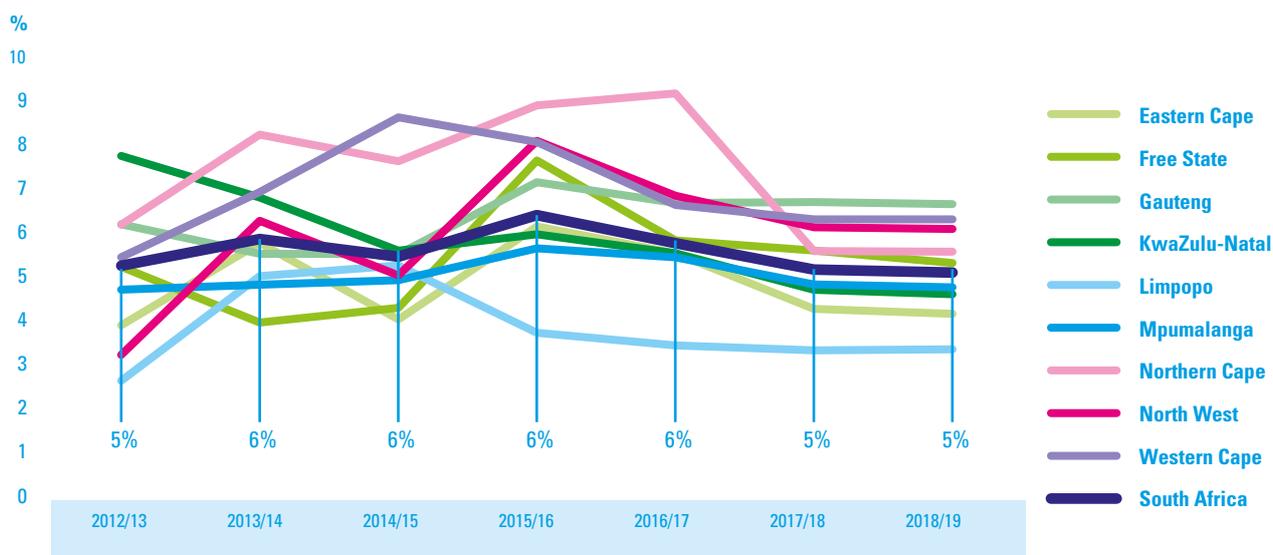
5 Department of Basic Education. *School Realities*.

6 Van der Berg S, Girdwood E, Shepherd D, van Wyk C, Kruger J, Viljoen J, Ezeobi O & Ntaka P. (2013) *The Impact of the Introduction of Grade R on Learning Outcomes: Policy summary, executive summary and evaluation report*. Department of Economics, Stellenbosch University.

**Figure 7. Infrastructure deficits in public ordinary schools, 2009 and 2015**



**Figure 8. Percentage of provincial budgets allocated to infrastructure development, 2012/13–2018/19**



**Table 3. DBE grants for school infrastructure, 2012/13–2018/19 (R million)**

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Education infrastructure	5,802	6,643	7,327	9,354	9,614	12,780	13,512
School infrastructure backlogs	1,277	1,956	2,541	2,047	2,375		

across subprogrammes. In particular, some Grade R funding may be categorised under the primary ordinary school subprogramme. However, the two provinces with the highest per learner allocations – North West and Gauteng – are also the provinces with the lowest share of their 6-year-olds enrolled. Conversely, Limpopo has the lowest allocation, but the number enrolled is equivalent to 99% of 6-year-olds in the province.<sup>7</sup> (In reality, some of the children attending Grade R in Limpopo are almost certainly of other ages. In addition, Limpopo’s enrolment numbers may not be reliable.)

For the country as a whole, the Grade R amount per child is only about two-fifths of the primary school amount per child.

### WHAT ARE THE PHYSICAL CONDITIONS FOR TEACHING AND LEARNING?

Figure 7 shows the infrastructure backlogs in public ordinary schools in each of the nine provinces in 2009 and 2015. The information source is the DBE’s National Education Infrastructure Management System, which gives a total of 24,460 school sites for 2009 and a lower number of 23,589 sites for 2015. All provinces, except

Gauteng and Mpumalanga, record a decrease in the number of school sites over the period. This reflects, in part, the closure or merging of schools serving small numbers of children and with multi-grade classes that are unlikely to deliver quality education.

Figure 7 shows the percentage of schools with no or unreliable water supply increasing from 18% to 22% over the period. The percentage with no or unreliable electricity falls from 20% to 16%, and the percentage with no sanitation or pit or bucket latrines falls from 50% to 29%. Overall, the graph suggests some progress. However, in Eastern Cape there is a marked worsening of the situation in respect of both water and electricity over the period. Even on the last measure, by the end of the period more than half of the schools in this province still have inadequate sanitation. This situation will discourage attendance, especially of adolescent girls who are menstruating.

Two conditional grants from the DBE fund most of school infrastructure. The education infrastructure grant is channelled through the DBE to the provincial departments. Table 3 shows the amount of the grant increasing from R5,802 million in 2012/13 to a projected R13,512 million in 2018/19. The actual amount in 2018/19 might, however, be lower if the past pattern of actual expenditure being lower than planned continues.

<sup>7</sup> A single year age group is used as a proxy given that children are meant to stay in Grade R for only one year.



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The school infrastructure backlogs grant, commonly known as the Accelerated School Infrastructure Development Initiative (ASIDI), was introduced in 2012/13. After 2017/18, it will be part of the education infrastructure grant. This merging of the grants from 2017/18 largely explains the sharp increase in the allocation for the education infrastructure grant in 2017/18. The ASIDI grant also funds school infrastructure in the provinces. However, for most provinces the DBE does not transfer the funds to the provinces but instead makes direct payments to providers. This approach was adopted in the hope that it would enable more efficient and speedy use of the available funds. However, national government also struggled to meet the targets.

Figure 8 shows that, for all provinces combined, the percentage of the provincial education budget allocated to infrastructure is between 5% and 6% over the period 2012/13–2018/19. For all provinces, these allocations are mainly funded through the education infrastructure grant as the ASIDI grant is not channelled through the provincial budget. In Western Cape, the sharp increase in 2015/16 is explained by the ASIDI grant being transferred to the province's budget. Eastern Cape's percentage is consistently lower than the average for all provinces combined, although Figure 7 shows that it has the most severe infrastructure backlogs of all provinces. In all provinces, some of the funds will be spent on offices and other infrastructure for non-teaching officials, rather than on schools.

In November 2013, after a court challenge by Equal Education, the Minister of Basic Education issued legally binding norms and standards for school infrastructure. Both the Department of Basic Education and government more generally have established a range of processes and requirements in respect of planning, funding and management of infrastructure development. The intention was to ensure that infrastructure is completed efficiently and without corruption.

In practice, the plethora of instruments and different processes may have the perverse results of increasing the proportion of infrastructure budgets that go to consultants and other intermediaries and delaying the completion of infrastructure. Construction of a school which costs R21 million or more should take about 15 months, while smaller schools should be built in 8–10 months.<sup>8</sup> However, the detailed listings of school infrastructure projects in the provincial budget votes shows all projects involving construction of new schools taking more than two years. Providing basic information to local communities about what has been allocated, and for what infrastructure, may be a more effective and cheaper way of monitoring that infrastructure funds are used effectively.

<sup>8</sup> Independent Development Trust cited in Budlender D. (2015) *School infrastructure in the Eastern Cape: Actors, processes and information sources*. International Budget Partnership: Cape Town.