

# Education

## Introduction

Education's contribution to socioeconomic development cannot be overemphasised. In a young democracy like South Africa's, education plays a particularly critical role in transformation, reinforcing initiatives aimed at creating equity and equal opportunities. It contributes to empowerment and social cohesion. For South Africa's historically disadvantaged communities, greater access to quality education is important for alleviating poverty and inequality and the creation of possibilities to achieve a better life.

The past 12 years have seen increased investment in education. South Africa now spends 5,4 per cent of its GDP on education. In terms of most input measures the country's education system compares favourably with other middle-income countries. Per learner spending in the public schooling system has been increasing at a real annual rate of 4,1 per cent between 2003/04 and 2006/07. The spending mix has been shifting from recurrent personnel expenditure towards non-personnel expenditure. Within non-personnel spending, critical components like learner support materials and capital or school construction have been prioritised. Participation rates have grown considerably, and among female children of school going age were approximately 98 per cent in 2006, up from 93 per cent in 2003. With the introduction of the no-fee schools policy in 2007, participation rates will continue to improve. This will go further to realising the goal of providing basic education to all South Africans.

On the back of strong real growth in spending, certain outputs are improving. The number of matric passes has steadily increased over the past three years as participation rates at this level also show sustained growth. However, the statistics shown later in the chapter reflect that the changes in education outputs do not always match the growth in amounts spent on education. Learners obtaining university endorsement dropped marginally from 17 per cent in 2005 to 16,3 per cent in 2006. At the same time, the total numbers of learners passing the senior certificate in mathematics and science on the higher grade both dropped in 2006.

*Spending on education compares favourably with other middle income countries*

*There is not always a correlation between spending and outputs*

*Policies are in place for improving outputs and outcomes*

Recognising the role of education in developing skills for a growing developing economy and its place in facilitating other transformation objectives, government has instituted policies to improve education outputs and outcomes. Some of these require additional resources, and are provided for in current baseline budgets. These include human resource development and remuneration, for which an additional R6 billion is allocated in the current MTEF period, while others require innovative ways of managing available resources. This chapter explores some of the choices made and their implications. It provides:

- a short overview of the current education landscape
- a review of provincial budgets and expenditure trends, including spending by economic classification and programmes
- an overview of equity in the education system
- an analysis of selected education outputs.

### The current education landscape

In January 2005 there were 13,9 million learners and students enrolled in 34 162 education institutions served by 437 330 educators and lecturers in the different education streams in South Africa. Approximately 87,7 per cent of learners were in 26 592 public ordinary schools served by 382 133 educators.

**Table 2.1 Education in South Africa: A global picture, 2005**

National	Learners	%	Educators	Institutions
Public schools	11 902 316	85,4%	362 670	25 570
Independent schools	315 449	2,3%	19 463	1 022
<b>Total (Public and Independent)</b>	<b>12 217 765</b>	<b>87,7%</b>	<b>382 133</b>	<b>26 592</b>
Other educational programmes				
ABET	269 140	1,9%	17 181	2 278
ELSEN	87 865	0,6%	7 294	404
Public FET	377 584	2,7%	6 407	50
ECD	246 911	1,8%	9 000	4 815
Public HE	737 472	5,3%	15 315	23
<b>Total (Other)</b>	<b>1 718 972</b>	<b>12,3%</b>	<b>55 197</b>	<b>7 570</b>
<b>Grand Total</b>	<b>13 936 737</b>	<b>100,0%</b>	<b>437 330</b>	<b>34 162</b>

Source: Education Statistics in South Africa at a Glance in 2005, National Department of Education

*South Africa spent R95 billion on education and skills development in 2006/07*

In total, South Africa spent R95 billion on education and skills development in 2006/07. At 69,8 per cent, primary and secondary education make up the largest share of total education spending. This excludes funds raised through fees charged by different education institutions. The next three years will see the budgets for higher education (HE), further education and training (FET), adult basic education and training (ABET) and early childhood development (ECD) growing fairly rapidly. This is consistent with government's policy goals of expanding and consolidating these sectors to create a comprehensive education system that caters for the learning needs of all citizens.

**Table 2.2 Education components and shares, 2003/04 – 2009/10**

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
	Outcome			Preliminary outcome	Medium-term estimates		
<b>R million</b>							
<b>Education</b>	<b>70 764</b>	<b>76 269</b>	<b>84 432</b>	<b>94 979</b>	<b>104 672</b>	<b>117 177</b>	<b>129 170</b>
<i>of which</i>							
Higher education	8 953	9 911	10 647	11 938	13 331	14 921	16 684
Primary and secondary school education	50 627	54 474	60 387	66 305	73 518	81 502	89 452
Further education and training (FET)	1 282	1 472	1 717	2 196	2 659	2 981	3 006
Adult basic education and training (ABET)	537	536	716	718	908	993	1 067
Early childhood development (ECD)	377	446	448	546	983	1 201	1 253
<b>Percentage share of total education</b>							
Higher education	12,7%	13,0%	12,6%	12,6%	12,7%	12,7%	12,9%
Primary and secondary school education	71,5%	71,4%	71,5%	69,8%	70,2%	69,6%	69,3%
Further education and training (FET)	1,8%	1,9%	2,0%	2,3%	2,5%	2,5%	2,3%
Adult basic education and training (ABET)	0,8%	0,7%	0,8%	0,8%	0,9%	0,8%	0,8%
Early childhood and development (ECD)	0,5%	0,6%	0,5%	0,6%	0,9%	1,0%	1,0%
<b>GDP (R billion)</b>	<b>1 289,0</b>	<b>1 430,7</b>	<b>1 580,1</b>	<b>1 755,3</b>	<b>1 938,9</b>	<b>2 141,7</b>	<b>2 379,3</b>
Education total as % of GDP	5,5%	5,3%	5,3%	5,4%	5,4%	5,5%	5,4%

Source: National Treasury database

## Public schools

There were nearly 12 million learners in 25 194 public schools served by 367 188 educators in 2006. The learner:school ratio in the predominantly rural provinces like Eastern Cape and Free State tends to be lower than the ratio in the more urban provinces like Gauteng and Western Cape due to the sparse distribution of the population in these rural provinces.

Table 2.3 shows that the national learner:educator ratio (including school governing body funded posts) in public schools was 33:1. Excluding the school governing body funded posts, the learner:educator ratio increases by 7,1 per cent to 35:1. Gauteng and Western Cape have the highest level of school governing body funded posts. If these are excluded for these provinces, their respective learner: educator ratios increase to 39:1 and 37:1.

*National learner:educator ratio is 33:1*

**Table 2.3 Public ordinary school statistics by province, 2006**

	Number			Ratio	
	Learners	Educators	Schools	Learner : Educator	Learner : School
Eastern Cape	2 136 189	64 168	5 929	33	360
Free State	670 083	22 721	1 752	29	382
Gauteng	1 617 124	47 990	1 880	34	860
KwaZulu-Natal	2 662 202	81 171	5 651	33	471
Limpopo	1 902 279	56 962	4 243	33	448
Mpumalanga	922 823	26 746	1 749	35	528
Northern Cape	208 135	6 543	421	32	494
North West	894 249	30 388	2 115	29	423
Western Cape	949 092	30 499	1 454	31	653
<b>Total</b>	<b>11 962 176</b>	<b>367 188</b>	<b>25 194</b>	<b>33</b>	<b>475</b>
<b>Percentage of national total</b>					
Eastern Cape	17,9%	17,5%	23,5%		
Free State	5,6%	6,2%	7,0%		
Gauteng	13,5%	13,1%	7,5%		
KwaZulu-Natal	22,3%	22,1%	22,4%		
Limpopo	15,9%	15,5%	16,8%		
Mpumalanga	7,7%	7,3%	6,9%		
Northern Cape	1,7%	1,8%	1,7%		
North West	7,5%	8,3%	8,4%		
Western Cape	7,9%	8,3%	5,8%		
<b>Total</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>		

Source: *Schools Realities in 2006, National Department of Education*

### Independent schools

School education is also offered by 1 098 independent schools, which enrolled 340 060 learners with 19 407 educators in 2006. Independent schools fund the bulk of their operations from school fees with limited financial support from government. Nearly half are in Gauteng, which is to be expected as the province has a relatively well-off population. Table 2.4 shows that the learner:educator ratios in these schools range from a low of 13:1 in Western Cape to a high of 39:1 in Eastern Cape, while Gauteng is close to the national average (16:1).

Eastern Cape is the only province where the learner: educator ratio in independent schools (39:1) is higher than in the public ordinary schools (33:1 in 2006).

**Table 2.4 Independent school statistics by province, 2006**

	Number			Ratio	
	Learners	Educators	Schools	Learner : Educator	Learner : School
Eastern Cape	29 805	758	106	39	281
Free State	16 263	765	69	21	236
Gauteng	152 986	9 630	366	16	418
KwaZulu-Natal	47 206	2 789	176	17	268
Limpopo	28 928	1 333	97	22	298
Mpumalanga	21 285	975	99	22	215
Northern Cape	2 846	137	15	21	190
North West	11 007	677	43	16	256
Western Cape	29 734	2 343	127	13	234
<b>Total</b>	<b>340 060</b>	<b>19 407</b>	<b>1 098</b>	<b>18</b>	<b>310</b>
<b>Percentage of national total</b>					
Eastern Cape	8,8%	3,9%	9,7%		
Free State	4,8%	3,9%	6,3%		
Gauteng	45,0%	49,6%	33,3%		
KwaZulu-Natal	13,9%	14,4%	16,0%		
Limpopo	8,5%	6,9%	8,8%		
Mpumalanga	6,3%	5,0%	9,0%		
Northern Cape	0,8%	0,7%	1,4%		
North West	3,2%	3,5%	3,9%		
Western Cape	8,7%	12,1%	11,6%		
<b>Total</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>		

Source: *Schools Realities in 2006, National Department of Education*

### Further education and training colleges

The demand for skilled labour has increased considerably, mainly due to sustained economic growth and the need to compete in the global economy. Government's objective of accelerating and sustaining economic growth at 6 per cent or higher has necessitated stepped up investment in the further education and training (FET) colleges. The recapitalisation of FET institutions started in 2005/06 with an injection of R50 million to develop project plans. Further amounts of R470 million, R595 million and R795 million have been allocated for the actual refurbishment and re-equipping of the facilities over the MTEF period.

*Increased investment  
in FET colleges*

As part of this initiative, 11 new curriculum programmes jointly with business and labour, have been introduced to ensure that the sector is responsive to the general needs of industry and the overarching goals of the Accelerated and Shared Growth Initiative for South Africa (Asgi-SA). These include programmes for engineering, business, tourism and hospitality, IT and agriculture. The programme is further supported by a bursary scheme. Table 2.5 shows learner uptake for the different technical training areas per province in 2007.

**Table 2.5 Learners enrolled in new curriculum programmes at FET colleges, 2007**

	Actual college enrolment					Total
	Engineering	Business	Tourism hospitality	Information technology	Agriculture	
Eastern Cape	1 322	1 032	229	191	27	2 801
Free State	612	599	146	118	61	1 536
Gauteng	3 315	2 280	542	537	–	6 674
KwaZulu-Natal	1 723	819	280	373	174	3 369
Limpopo	1 923	826	251	225	95	3 320
Mpumalanga	1 186	514	31	124	46	1 901
Northern Cape	596	590	75	105	–	1 366
North West	267	273	39	129	–	708
Western Cape	1 569	1 034	379	219	21	3 222
<b>Total</b>	<b>12 513</b>	<b>7 967</b>	<b>1 972</b>	<b>2 021</b>	<b>424</b>	<b>24 897</b>
<b>Percentage of national total</b>						
Eastern Cape	10,6%	13,0%	11,6%	9,5%	6,4%	11,3%
Free State	4,9%	7,5%	7,4%	5,8%	14,4%	6,2%
Gauteng	26,5%	28,6%	27,5%	26,6%	0,0%	26,8%
KwaZulu-Natal	13,8%	10,3%	14,2%	18,5%	41,0%	13,5%
Limpopo	15,4%	10,4%	12,7%	11,1%	22,4%	13,3%
Mpumalanga	9,5%	6,5%	1,6%	6,1%	10,8%	7,6%
Northern Cape	4,8%	7,4%	3,8%	5,2%	0,0%	5,5%
North West	2,1%	3,4%	2,0%	6,4%	0,0%	2,8%
Western Cape	12,5%	13,0%	19,2%	10,8%	5,0%	12,9%
<b>Total</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>

Source: National Department of Education

*FET engineering programmes have highest enrolments*

About 50 per cent of the FET enrolments are in the engineering field, an area in which South Africa is currently experiencing an acute skills shortage. However, it is worrying that fewer students are enrolling in the fields of agriculture and tourism in provinces like Eastern Cape and Mpumalanga, where these sectors have the greatest growth potential.

The full impact of the recapitalisation of the FET college sector will be assessed only at the end of 2008 when the first batch of students graduate with a national curriculum statement (NCS) vocational qualification.

**Gross enrolment ratio**

The gross enrolment ratio (GER) is the number of learners, regardless of age, enrolled in a specific school phase as a percentage of the total appropriate school-age population. A ratio of 100 will indicate that the system is in balance, a ratio below 100 indicates that there are missing learners, while a ratio above 100 indicates that there are under- and over-age learners in the system. Generally, ratios less than 90 and above 105 are unacceptable as they indicate major inefficiencies in the system.

South Africa's gross enrolment ratios for primary and secondary education phases were 103 per cent and 89 per cent respectively in 2005. The figures reflect two kinds of improvement. First, most children of school going age do attend school. Second, the education system is becoming more efficient in dealing with out-of-age enrolment. In the primary phase, only Eastern Cape (120 per cent), KwaZulu-Natal (104 per cent), Mpumalanga (104 per cent) and Limpopo (102 per cent) had GERs in excess of 100 per cent, pointing to the possibility of out-of-age enrolment. The other provinces ranged between 91 per cent in Free State and 99 per cent in Gauteng. This is an improvement from eight years ago, when most provinces had GERs significantly above 100 per cent. Eastern Cape continues to have high repeater rates and thus inefficiency in its primary phase.

*Gross enrolment ratios show improved efficiency*

There is also considerable improvement in the number of learners who go on to the secondary phase, with the national GER at 89 per cent. Apart from Eastern Cape, where the GER was very low (72 per cent), the GER in the secondary phase in 2005 ranged from 81 per cent in Northern Cape to 101 per cent in Limpopo.

## Budgets and expenditure trends

Provincial education spending grew by 9,4 per cent annually, from R60,3 billion in 2003/04 to R79 billion in 2006/07. A number of interventions have been instituted to improve access and quality. These include:

*Education expenditure grow in line with policy imperatives*

- quality and upliftment programmes aimed at building additional classrooms, laboratories and libraries, and providing equipment in historically disadvantaged schools
- expansion of Grade R, with a target of achieving universal enrolment by 2010
- human resource development programmes, which aim to prepare educators for implementing the new curriculum statement
- the introduction of no-fee schools to improve access and to ensure an inclusive education system
- improving existing special schools to provide strengthened and integrated support services consisting of special schools/resource centres, newly developed full-service schools and district-based support teams, so that quality education becomes accessible to all learners
- providing learner and teacher support materials for implementing the new national curriculum statement.

In 2006/07 R79 billion in 2006/07 or 42,5 per cent of total provincial spending was on education, making it the largest component. The projected average annual growth of 10 per cent from 2007/08 will see provincial education spending reaching R107,3 billion by 2009/10.

Reinforcing the previous improvements in the service conditions of educators that were funded from the R4,2 billion allocated in the

2005 MTEF, the 2007 Budget includes R6 billion earmarked for implementing an occupation-specific dispensation (OSD) for educators within a national framework to be agreed within the sector. This means that good performance, qualifications and length of service are recognised and rewarded appropriately. Table 2.6 shows education spending per province.

**Table 2.6 Provincial education expenditure<sup>1</sup>, 2003/04 – 2009/10**

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
<b>R million</b>		<b>Outcome</b>		<b>Preliminary outcome</b>	<b>Medium-term estimates</b>		
Eastern Cape	10 308	10 654	11 523	12 873	14 726	16 616	17 681
Free State	4 087	4 400	4 916	5 346	5 692	6 331	7 013
Gauteng	9 539	9 835	10 406	11 623	14 543	15 967	17 131
KwaZulu-Natal	12 022	13 033	15 030	16 234	18 577	20 385	22 533
Limpopo	8 264	9 610	10 362	11 367	11 948	13 638	15 022
Mpumalanga	4 529	4 871	5 780	6 273	7 956	8 601	9 373
Northern Cape	1 305	1 397	1 563	1 643	2 267	2 535	2 771
North West	4 896	5 179	5 951	6 686	5 324	5 936	6 462
Western Cape	5 305	5 691	6 449	6 920	7 685	8 497	9 341
<b>Total</b>	<b>60 255</b>	<b>64 670</b>	<b>71 981</b>	<b>78 963</b>	<b>88 719</b>	<b>98 505</b>	<b>107 327</b>
<b>Percentage growth (average annual)</b>			<b>2003/04 – 2006/07</b>				<b>2007/08 – 2009/10</b>
Eastern Cape			7,7%				9,6%
Free State			9,4%				11,0%
Gauteng			6,8%				8,5%
KwaZulu-Natal			10,5%				10,1%
Limpopo			11,2%				12,1%
Mpumalanga			11,5%				8,5%
Northern Cape			8,0%				10,6%
North West			10,9%				10,2%
Western Cape			9,3%				10,2%
<b>Total</b>			<b>9,4%</b>				<b>10,0%</b>

1. Includes National School Nutrition Programme.

Source: National Treasury provincial database

**Falling shares of education spending needs careful evaluation**

Although overall education spending shows robust growth, its share of total provincial spending declines over the period under review from 45,7 per cent to 41,8. Generally, the overall downward trends look moderate, but two provinces reflect declines which warrant further analysis. These are North West and KwaZulu-Natal, whose education shares drop respectively by 12,5 per cent and 6 per cent over the seven year period.

While the overall share in spending is an inconclusive indicator of the adequacy or otherwise of the funding level of a sector in a province, when used in conjunction with other indicators it can provide useful pointers. The sharp decline in North West's share of education spending will result in a decline in per capita expenditure in that province in 2007/08 in nominal terms. Consequently, the department will afford fewer inputs than it did in the previous year. In KwaZulu-Natal, the education budget is one of the fastest growing budgets, but because the province has always had a lower per capita than the



national average, the declining share implies that it will take longer for it to reach the national average.

**Table 2.7 Education expenditure as a percentage of total provincial expenditure, 2003/04 – 2009/10**

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
	Outcome			Preliminary outcome	Medium-term estimates		
Eastern Cape	47,5%	49,3%	48,7%	47,8%	47,5%	47,6%	47,7%
Free State	45,8%	45,3%	46,0%	43,5%	42,8%	42,1%	41,9%
Gauteng	40,2%	39,7%	38,4%	33,4%	36,1%	36,5%	36,5%
KwaZulu-Natal	47,2%	46,5%	45,1%	43,9%	42,7%	41,6%	41,2%
Limpopo	50,0%	51,3%	49,5%	47,5%	47,2%	47,6%	47,3%
Mpumalanga	50,2%	48,6%	49,8%	49,4%	49,1%	48,3%	47,9%
Northern Cape	41,6%	42,1%	39,5%	36,0%	40,0%	39,9%	39,4%
North West	48,1%	46,6%	45,3%	44,5%	36,9%	36,3%	35,6%
Western Cape	40,3%	38,9%	38,5%	36,7%	37,1%	36,5%	37,3%
<b>Total</b>	<b>45,7%</b>	<b>45,6%</b>	<b>44,7%</b>	<b>42,5%</b>	<b>42,2%</b>	<b>41,9%</b>	<b>41,8%</b>

*Source: National Treasury provincial database*

Marginal shifts in spending shares are to be welcomed as a reflection of budgets being reprioritised. In some cases they can be justified on the grounds that they allow departments time to deepen existing programmes or prepare to implement new ones. Significant shifts do call for careful analysis as they might inadvertently impact negatively on inter-provincial equity and equalisation of opportunities within the sector.

### Spending by economic classification

Table 2.8 shows that compensation of employees constitutes 79,3 per cent of total education spending. In line with the need to address the infrastructure backlog in the sector, the share of capital spending is set to double from R2,6 billion in 2003/04 to R5,2 billion in 2009/10.

**Table 2.8 Provincial education expenditure by economic classification, 2003/04 – 2009/10**

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
	Outcome			Preliminary outcome	Medium-term estimates		
R million							
Current payments	55 185	58 947	65 381	70 485	79 189	87 542	95 309
<i>of which:</i>							
Compensation of employees	49 677	53 413	58 175	62 597	69 183	75 929	82 260
Goods and services	5 506	5 490	7 187	7 857	10 002	11 608	13 044
Transfers and subsidies	2 498	3 222	3 792	4 754	5 684	6 508	6 832
Payments for capital assets	2 572	2 500	2 808	3 724	3 845	4 455	5 186
<b>Total</b>	<b>60 255</b>	<b>64 670</b>	<b>71 981</b>	<b>78 963</b>	<b>88 719</b>	<b>98 505</b>	<b>107 327</b>
<b>Percentage of provincial education expenditure</b>							
Current payments	91,6%	91,2%	90,8%	89,3%	89,3%	88,9%	88,8%
<i>of which:</i>							
Compensation of employees	82,4%	82,6%	80,8%	79,3%	78,0%	77,1%	76,6%
Goods and services	9,1%	8,5%	10,0%	10,0%	11,3%	11,8%	12,2%
Transfers and subsidies	4,1%	5,0%	5,3%	6,0%	6,4%	6,6%	6,4%
Payments for capital assets	4,3%	3,9%	3,9%	4,7%	4,3%	4,5%	4,8%
<b>Total</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>
<b>Percentage growth (average annual)</b>							
	2003/04 – 2006/07		2006/07 – 2007/08		2007/08 – 2009/10		
Current payments	8,5%		4,0%		9,7%		
<i>of which:</i>							
Compensation of employees	8,0%		3,4%		9,0%		
Goods and services	12,6%		8,4%		14,2%		
Transfers and subsidies	23,9%		6,1%		9,6%		
Payments for capital assets	13,1%		1,1%		16,1%		
<b>Total</b>	<b>9,4%</b>		<b>4,0%</b>		<b>10,0%</b>		

Source: National Treasury provincial database

### Compensation of employees

Because the delivery of education is personnel intensive, a significant proportion (79,3 per cent) of the sector's expenditure is on personnel. Spending on compensation of employees grew 8 per cent annually from R49,7 billion in 2003/04 to R62,6 billion in 2006/07, with the implementation of the 2004 wage agreement and pay progression for educators being the main cost drivers.

In the period ahead, targeted personnel interventions will see spending on compensation of employees growing 9 per cent annually, from R69,2 billion in 2007/08 to R82,3 billion in 2009/10. Specific personnel interventions in the period ahead aim to attract and retain educators and to improve school and district management:

- The number of administrative and educator staff in schools is to be increased to relieve educators of administrative responsibilities to allow them more contact time. It will also allow principals to devote more time to managing their schools.
- District support to schools is to be strengthened to improve the monitoring of school performance.

- An occupation specific dispensation (OSD) for educators is to be introduced to allow classroom teachers to progress up the salary scales without having to stop teaching to earn higher salaries. This is to reward educators who stay in the system for a long time and whose teaching is of a high quality.
- Plans are under way to introduce teacher assistants, initially for the foundation phase only, as well as a possible year of community service for newly qualified teachers.

#### Norms and standards for district offices

In a recent review of capacity assessments across government by the Department of Public Service and Administration, which focused on district capacity among others, it was found that there are major inconsistencies between education district offices. For example, in the three provinces examined (KwaZulu-Natal, Western Cape and Northern Cape), the number of support personnel at district level varied from 1 for every 68 educators in Northern Cape to one for every 99 educators in Western Cape. It was also found that roles and responsibilities of district staff varied greatly across provinces and that there was a lack of conceptual clarity on the possibilities and limitations of decentralisation. A key finding though was that a lack of skilled personnel at this level had a major impact on the quality of service delivery. There is thus a pressing need for a set of norms and standards to be developed on the roles and functions of districts, as well as staffing levels and skills required at this level.

**Table 2.9 Provincial education compensation of employees, 2003/04 – 2009/10**

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
	Outcome			Preliminary outcome	Medium-term estimates		
R million							
Eastern Cape	8 756	9 324	9 916	10 707	11 836	12 982	13 639
Free State	3 392	3 598	3 899	4 148	4 412	4 922	5 441
Gauteng	7 267	7 699	8 271	8 958	11 006	11 912	12 612
KwaZulu-Natal	10 045	10 863	11 879	12 951	14 768	16 259	18 046
Limpopo	7 090	7 858	8 759	9 258	9 685	10 644	11 589
Mpumalanga	3 560	3 875	4 325	4 752	5 848	6 335	6 680
Northern Cape	1 012	1 155	1 234	1 314	1 689	1 914	2 091
North West	4 237	4 474	4 930	5 256	4 036	4 452	4 996
Western Cape	4 316	4 568	4 962	5 253	5 904	6 510	7 167
<b>Total</b>	<b>49 677</b>	<b>53 413</b>	<b>58 175</b>	<b>62 597</b>	<b>69 183</b>	<b>75 929</b>	<b>82 260</b>
<b>Percentage of provincial education spending</b>							
Eastern Cape	84,9%	87,5%	86,1%	83,2%	80,4%	78,1%	77,1%
Free State	83,0%	81,8%	79,3%	77,6%	77,5%	77,7%	77,6%
Gauteng	76,2%	78,3%	79,5%	77,1%	75,7%	74,6%	73,6%
KwaZulu-Natal	83,6%	83,3%	79,0%	79,8%	79,5%	79,8%	80,1%
Limpopo	85,8%	81,8%	84,5%	81,4%	81,1%	78,0%	77,1%
Mpumalanga	78,6%	79,6%	74,8%	75,8%	73,5%	73,7%	71,3%
Northern Cape	77,6%	82,7%	78,9%	80,0%	74,5%	75,5%	75,4%
North West	86,5%	86,4%	82,8%	78,6%	75,8%	75,0%	77,3%
Western Cape	81,4%	80,3%	76,9%	75,9%	76,8%	76,6%	76,7%
<b>Total</b>	<b>82,4%</b>	<b>82,6%</b>	<b>80,8%</b>	<b>79,3%</b>	<b>78,0%</b>	<b>77,1%</b>	<b>76,6%</b>

Source: National Treasury provincial database

Table 2.10 shows the trend of learner:educator ratios since 2004. Including school governing body funded posts, the learner:educator ratio was 33:1 in 2006. This was slightly lower than the ratio of 35:1 in 2004. Ratios were relatively higher in Gauteng and Mpumalanga, but the trend throughout is a decreasing ratio. Class size has a significant impact on classroom management, and teaching and learning. Maintaining a relatively smaller class size is important for the delivery of quality education.

**Table 2.10 Learner:educator ratios in public ordinary schools, 2004 – 2006**

	Public schools including SGB			Public schools excluding SGB		
	2004	2005	2006	2004	2005	2006
Eastern Cape	34	33	33	33	35	35
Free State	30	29	30	31	31	31
Gauteng	34	32	34	37	37	39
KwaZulu-Natal	36	34	33	37	37	35
Limpopo	36	34	33	38	35	34
Mpumalanga	36	34	35	37	35	36
Northern Cape	34	32	32	30	34	31
North West	30	31	29	38	32	34
Western Cape	38	32	31	38	37	37
<b>Total</b>	<b>35</b>	<b>33</b>	<b>33</b>	<b>35</b>	<b>35</b>	<b>35</b>

Source: *Schools Realities in 2006, National Department of Education*

### Goods and services

#### *Sharp growth in budgets for learner and educator support materials*

Provincial education departments spend a substantial amount of their budgets on goods and services (R7,9 billion in 2006/07), which include learner support materials. Spending on goods and services grew at 12,6 per cent per year from R5,5 billion in 2003/04 to R7,9 billion in 2006/07, and is budgeted to grow 14,2 per cent annually to R13 billion by 2009/10. Its share of provincial education budgets rises from 9 to 12 per cent over the seven year period.

The growth in spending is fuelled by the drive to implement the national curriculum statement, which requires a significant increase in learner and teacher support materials. While the growth in absolute amounts allocated to goods and services is a positive development, for it to translate into increased supplies of materials at the school level supply chain management processes of education departments need to be strengthened.

### Transfers and subsidies

Education departments administer transfers and subsidies to independent and section 21 schools (defined later). Transfers and subsidies grew by 23,9 per cent per year from R2,5 billion in 2003/04 to R4,8 billion in 2006/07 and are budgeted to grow by 9,6 per cent per year to R6,8 billion by 2009/10.

#### *Spending on no-fee schools is budgeted to be R3 billion per year*

The sizable growth in the budgets from 2006/07 onwards is to fund the implementation of the no-fee schools policy. Spending on no-fee

schools is budgeted to be R3 billion annually. This allocation benefits schools by targeting non-personnel non-capital expenditure.

### No-fee schools

In 2007, government adopted the policy of no-fee schools. The aim of this policy is to give effect to the constitutional imperative of the "... right to a basic education ...". It is a policy and budgetary response to the need to make education truly inclusive by removing fees as a barrier. To implement the no-fee schools policy, schools are ranked into five categories (each quintile representing 20 per cent) and the schools in the lowest 40 per cent are deemed poor and allow learners to enrol without paying fees. In return, government funds the schools' expenses that used to be funded from fees. The table below shows that 55,2 per cent of public schools covering 41,8 per cent of learners, are classified as no-fee schools.

An adequacy benchmark of R554 per learner is the minimum allocation that has to be made to no-fee schools by provincial departments while they are encouraged to allocate the target amount of R738 per learner, where possible.

Western Cape and Gauteng are allocating quintile 1 schools the target allocation of R738 per learner (Gauteng allocates R738 to quintile 2 schools as well), while Mpumalanga exceeds the target allocation for quintile 1, with an allocation of R829 per learner. The table shows the number of schools and learners benefiting from the no-fee school policy per province.

	Number of learners	% of learners exempted from school fees	Number of no fee schools	% of schools not charging fees	Per learner allocation Q1	Per learner allocation Q2	Total spent (Rand thousand)
Eastern Cape	1 224 711	57,3%	3 825	64,5%	554	554	678 490
Free State	298 184	44,5%	1 304	74,4%	721	596	202 761
Gauteng	377 274	23,3%	432	23,0%	738	738	278 460
KwaZulu-Natal	1 173 503	44,1%	3 341	59,1%	629	560	703 604
Limpopo	1 015 524	53,4%	2 557	60,3%	579	579	587 988
Mpumalanga	404 431	43,8%	983	56,2%	829	648	72 063
Northern Cape	102 244	49,1%	335	79,6%	557	555	56 877
North West	267 042	29,9%	728	34,4%	658	658	349 194
Western Cape	132 560	14,0%	407	28,0%	738	677	93 361
<b>Total/Average</b>	<b>4 995 473</b>	<b>41,8%</b>	<b>13 912</b>	<b>55,2%</b>	<b>667</b>	<b>618</b>	<b>3 022 798</b>

Source: National Department of Education

Section 21 schools are designated on the basis of a nationally defined legal framework. Section 21 status allows a school to manage its own funds, with the exception of personnel and capital. For a school to be granted section 21 status, the provincial department must be satisfied that the school has the capacity to manage its own funds and make decisions relating to its own requirements.

*Section 21 schools manage their own recurrent costs*

The growth in transfers and subsidies is partly an indicator that more and more schools are being given section 21 status. The increase also suggests that there is further growth in actual expenditure on non-personnel non-capital items, which include goods and services expenditure. While the attainment of section 21 status has positive benefits, there are also challenges. Sometimes schools fail to meet the conditions necessary for funds to flow to the school. Therefore care should be taken by schools in applying for section 21 status and by departments in ensuring that they do not give the schools section 21 status when they are not ready for it.

### Payments for capital assets

#### Backlogs in school infrastructure persists

Over the last 12 years, government has undertaken surveys of the infrastructure needs of schools. These were conducted in 1996, 2001, and 2006, and all concluded that there is a need to invest more resources in school infrastructure. This includes building new schools, adding classrooms to existing schools, building laboratories and libraries, and providing amenities such as water, sanitation and electricity.

Against this backdrop, capital expenditure in education has been growing at a rapid rate of 13,1 per cent annually, from R2,6 billion in 2003/04 to R3,7 billion in 2006/07 and is budgeted to grow at 16,1 per cent annually to R5,2 billion by 2009/10. To support provinces in accelerating the rollout of school infrastructure, among other things, the infrastructure grant for provinces was introduced in 2000/01 with a funding level of R300 million. It has since grown to R2,3 billion in 2003/04 and will peak at R8 billion by 2009/10.

Since 2003/04, 407 schools or 18 351 classrooms have been added to the education sector property portfolio. Table 2.11 shows infrastructure delivery per province. This level of delivery should have a positive impact on the infrastructure backlog.

**Table 2.11 Number of schools and classrooms built, 2003/04 – 2006/07**

	2003/04		2004/05		2005/06		2006/07	
	New schools completed	Number of classrooms	New schools completed	Number of classrooms	New schools completed	Number of classrooms	New schools completed	Number of classrooms
Eastern Cape	141	1 390	–	599	29	63	16	47
Free State	9	653	2	95	7	17	–	15
Gauteng	18	558	26	779	5	61	13	50
KwaZulu-Natal	–	890	–	287	–	1 772	3	1 106
Limpopo	1	1 824	–	768	14	1 637	–	1 143
Mpumalanga	–	685	–	393	4	384	–	269
Northern Cape	–	–	21	337	24	654	29	55
North West	1	46	–	10	–	27	3	60
Western Cape	6	217	11	697	18	607	6	156
<b>Total</b>	<b>176</b>	<b>6 263</b>	<b>60</b>	<b>3 965</b>	<b>101</b>	<b>5 222</b>	<b>70</b>	<b>2 901</b>

Source: National Department of Education

### Provincial budgets and expenditure by programme

#### Public ordinary school education takes up the largest share of provincial education budgets in 2006/07

Table 2.12 shows that at 84 per cent, public ordinary school education takes up the largest share of provincial education budgets in 2006/07. Its declining share over the medium term is mainly a result of much faster growth in spending on other education programmes such as special schools, further education and training, adult basic education and training (ABET) and grade R.

**Table 2.12 Provincial education expenditure by programme, 2003/04 – 2009/10**

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
	Outcome			Preliminary outcome	Medium-term estimates		
<b>R million</b>							
Administration	4 426	4 498	5 065	5 251	6 145	6 756	7 333
Public ordinary school education	50 627	54 474	60 387	66 305	73 518	81 502	89 452
<i>of which:</i>							
<i>Primary schools</i>	27 853	29 703	32 606	34 370	38 068	42 395	45 700
<i>Secondary schools</i>	20 922	22 651	25 242	28 133	31 032	34 251	38 279
<i>Other subprogrammes</i>	1 852	2 120	2 540	3 802	4 417	4 857	5 473
Independent school subsidies	266	286	334	403	458	523	559
Public special school education	1 566	1 803	1 932	2 129	2 462	2 718	2 740
Further education and training	1 171	1 321	1 454	1 967	2 389	2 760	2 808
Adult basic education and training	537	536	710	718	908	993	1 067
Early childhood development	377	446	440	546	983	1 201	1 253
Auxiliary and associated services	1 285	1 304	1 659	1 645	1 856	2 052	2 114
<b>Total</b>	<b>60 255</b>	<b>64 670</b>	<b>71 981</b>	<b>78 963</b>	<b>88 719</b>	<b>98 505</b>	<b>107 327</b>
<b>Percentage growth (average annual)</b>	<b>2003/04 – 2006/07</b>		<b>2006/07 – 2007/08</b>		<b>2007/08 – 2009/10</b>		
Administration	5,9%		17,0%		9,2%		
Public ordinary school education	9,4%		10,9%		10,3%		
Independent school subsidies	14,8%		13,8%		10,4%		
Public special school education	10,8%		15,6%		5,5%		
Further education and training	18,9%		21,4%		8,4%		
Adult basic education and training	10,2%		26,5%		8,4%		
Early childhood development	13,1%		80,1%		12,9%		
Auxiliary and associated services	8,6%		12,8%		6,7%		
<b>Total</b>	<b>9,4%</b>		<b>12,4%</b>		<b>10,0%</b>		

Source: National Treasury provincial database

### *Public ordinary schools*

Spending on public ordinary schools grew 9,4 per cent annually from R50,6 billion in 2003/04 to R66,3 billion and is budgeted to grow 10,3 per cent annually to R89,5 billion by 2009/10. The sharp growth in spending is mainly to strengthen current programmes in the schooling system that are aimed at improving the quality of learning and teaching, to support the introduction of the national curriculum statement and to finance the no-fee schools policy.

*Strengthening public ordinary schools remain a top priority*

### *Independent schools*

Independent schools are schools that are privately run with minimal financial support from government. These schools follow the same school curriculum as public ordinary schools. The Department of Education sets minimum standards related to resources, teacher qualifications and performance for independent schools, and then accredits and subsidises those schools that fulfil these minimum standards.

*Spending on independent schools takes up about 0,5 per cent of total provincial spending*

The independent school sector plays a key role in the delivery of education in that it frees up state resources for use on poorer schools. The quality of these institutions may range from the highest levels, comparable to some of the best resourced schools in the world, to others where resources are far more basic. Tuition fees are also as diverse, ranging from R2 000 to R50 000 per year.

While the spending share for independent schools in total provincial spending remains stable at around 0,5 per cent, actual transfers made to these schools are set to nearly double, from R266 million in 2003/04 to R559 million by 2009/10.

### *Public special schools*

These schools provide education to learners with special needs. By 2005, there were close to 88 000 learners in over 400 schools taught by 7 294 educators. Table 2.13 shows the number of public special schools, their enrolment and educators per province in 2005.

**Table 2.13 Learners, educators and schools in public special schools, 2005**

	Learners	Educators	Schools
Eastern Cape	8 521	842	42
Free State	5 020	430	20
Gauteng	33 707	2 379	108
KwaZulu-Natal	10 578	902	62
Limpopo	6 659	518	25
Mpumalanga	3 218	164	18
Northern Cape	1 278	145	9
North West	3 957	374	40
Western Cape	14 927	1 540	80
<b>Total</b>	<b>87 865</b>	<b>7 294</b>	<b>404</b>

*Source: National Department of Education*

Public special school spending grew 10,8 per cent annually from R1,6 billion in 2003/04 to R2,1 billion in 2006/07 and is budgeted to grow 5,5 per cent annually to R2,7 billion by 2009/10.

Gauteng and Western Cape indicate the highest spending on these schools, while Northern Cape has a very small budget by comparison. This is to be expected as Gauteng and Western Cape have the highest number of learners in special schools. But the other seven provinces have much catching up to do as the low number of special school places available in these provinces does not reflect the demand for special schools.



**Table 2.14 Per capita expenditure for special schools, 2003/04 – 2005/06**

<b>Rand</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>
Eastern Cape	17 475	22 093	24 691
Free State	26 757	22 524	29 418
Gauteng	13 520	16 019	17 881
KwaZulu-Natal	22 039	23 924	25 940
Limpopo	16 897	23 202	16 946
Mpumalanga	24 078	31 524	27 713
Northern Cape	26 305	30 346	37 279
North West	17 178	21 766	23 679
Western Cape	10 544	24 694	24 549
<b>Average</b>	<b>19 086</b>	<b>20 870</b>	<b>22 136</b>

*Source: Education Statistics in South Africa at a Glance in 2003 - 2005, National Department of Education.*

Inequality of funding between provinces for learners with special needs also needs to be addressed. Per learner expenditure ranges from R17 000 in Limpopo to R37 000 in Northern Cape in 2005/06. Funding norms and standards for learners with special educational needs are being finalised, which aims to address this disparity.

#### *Further education and training*

Total spending by provincial education departments on further education and training (FET) colleges grow rapidly in the period under review. In addition, FET colleges receive funds from the private sector, tuition fees and the sector and education training authorities (SETAs). Provincial spending on FET colleges grew 20 per cent annually from R1,2 billion in 2003/04 to R2 billion in 2006/07 and is budgeted to grow 8,4 per cent annually to R2,8 billion by 2009/10. The sharp growth in transfers is due to the introduction of the FET college recapitalisation grant.

*FET college recapitalisation grant takes up most spending*

#### *Adult basic education and training*

There are two key components to adult basic education and training (ABET). The first relates to the basic adult literacy programme that teaches adults basic reading and numeracy skills. The second component to ABET is that it is a way for those who have not completed schooling to upgrade their skills to improve their prospects of getting employment or promotion at work. ABET benefits both the country and individuals. Individuals gain skills that significantly improve their quality of life, while the national gains are an increased skills pool and more meaningful participation in the political, economic and social spheres by a more literate populace.

*ABET takes up about 1 per cent of provincial education budgets*

Spending on ABET grew 10,2 per cent annually from R537 million in 2003/04 to R718 million in 2006/07 and is budgeted to grow 8,4 per cent annually to R1,1 billion by 2009/10. Funding norms and standards are currently being developed by the education sector, which should provide greater direction to this sector.

### *Early childhood development, including Grade R*

Grade R is the reception year for children aged between five and six before they enter Grade 1. Funding for Grade R is the responsibility of departments of education. Up to now, the education sector has played a limited role in the provision of educational programmes to children under the age of four as this has largely been the responsibility of the social development sector. The departments of education are mainly responsible for the design of the curriculum for the training of early childhood development (ECD) practitioners. This effectiveness of this arrangement is going to be reviewed in the period ahead.

*Education on track to meet target of universal Grade R enrolment by 2010*

Government has set a target of universal enrolment in Grade R by 2010. The average annual growth of 13,1 per cent from 2003/04 to 2006/07 and 12,9 per cent from 2007/08 to 2009/10 starts to address the required budgetary growth in this programme to meet the 2010 target. Table 2.15 shows ECD budgets and expenditure trends by province.

**Table 2.15 ECD budgets and expenditure trends by province, 2003/04 – 2009/10**

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
		Outcome		Preliminary outcome	Medium-term estimates		
R thousand							
Eastern Cape	27 305	36 937	38 823	46 313	105 753	150 343	181 550
Free State	16 290	29 509	32 054	46 533	58 038	63 047	68 856
Gauteng	88 178	51 807	41 507	35 706	152 739	197 471	207 546
KwaZulu-Natal	22 588	79 697	61 760	97 723	167 697	178 851	192 098
Limpopo	12 809	23 535	22 031	43 223	83 935	108 593	70 627
Mpumalanga	35 075	33 072	41 867	45 252	67 297	83 319	94 086
Northern Cape	11 371	13 198	13 909	14 169	35 772	37 655	39 538
North West	107 259	118 231	113 689	126 784	159 127	167 071	173 922
Western Cape	56 310	60 135	74 477	90 195	153 039	214 782	225 204
<b>Total</b>	<b>377 185</b>	<b>446 121</b>	<b>440 117</b>	<b>545 898</b>	<b>983 397</b>	<b>1 201 132</b>	<b>1 253 427</b>

Source: National Treasury provincial database

### **The national school nutrition programme**

*Learners fed through the national school nutrition programme show improved performance*

The national school nutrition programme (NSNP) is an anti-poverty measure aimed at the poorest learners. There seem to be substantial improvements in the performance of learners who are fed through the NSNP and who would otherwise suffer from under nutrition.

In 2006, the programme provided meals to just over 6 million learners in 156 school days. This is up from the just below 5 million learners fed in 2005, illustrating the extended reach of the programme.

Aspects of the programme require careful assessment and review going forward. While the programme is directed at primary school learners, in some provinces not all primary school grades at identified schools are targeted. This means that some learners at a school who are eligible for the programme do not receive meals. Northern Cape and Western Cape are piloting the extension of the NSNP to high schools.

### Per learner spending by province: 2003/04 – 2009/10

One of government's objectives is to ensure equitable distribution of resources in education, as this is the basis for equalising opportunities. Spending per learner is but one of the measures of equity. As the figures on spending per learner in table 2.16 shows, the gap in funding per learner across provinces has been narrowing over time. The introduction of specific pro-poor policies like the no-fee schools policy introduced in 2007 is but one initiative that aims for equity in funding in the education system.

**Table 2.16 Per learner allocations per province, 2003/04 – 2009/10**

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
	Outcome			Preliminary outcome	Medium-term estimates		
Eastern Cape	4 870	4 955	5 222	6 058	7 007	7 906	8 412
Free State	5 871	6 372	7 349	7 771	8 294	9 224	10 217
Gauteng	5 740	5 792	6 184	7 039	7 861	8 630	9 260
KwaZulu-Natal	4 320	4 795	5 526	6 003	6 698	7 349	8 124
Limpopo	4 549	5 075	5 435	5 902	6 777	7 736	8 521
Mpumalanga	4 951	5 211	6 323	6 688	7 215	7 800	8 500
Northern Cape	6 458	6 685	7 440	7 838	8 661	9 684	10 589
North West	5 495	5 733	7 034	7 490	6 790	7 571	8 241
Western Cape	5 544	5 814	6 580	7 270	7 851	8 681	9 543
<b>National average</b>	<b>5 311</b>	<b>5 603</b>	<b>6 344</b>	<b>6 895</b>	<b>7 461</b>	<b>8 287</b>	<b>9 045</b>

Provinces are succeeding in channelling funds for non-personnel non-capital items to poorer schools to achieve equity in spending. However, to sustain this trend, provinces where per learner expenditure tapers off in the outer years of the MTEF period, will need to inject more resources into non-personnel non-capital to narrow the gap more quickly. In spite of evidence of improved inter-provincial equity, not enough is known about equity within a province. The question to ask is whether the gap is narrowing between schools in affluent areas and those serving poor communities.

## Education outputs and outcomes

### Grade 12 performance

*Grade 12 pass rate on a downward trend since 2003*

A key measure of the performance of the education sector is the Grade 12 pass rate. Like all measures based on examination results, it is a limited instrument as it generally does not consider other criteria that would impact on results, like teacher expertise and qualifications, retention rates in other grades and resources at schools. However, in the absence of any other comprehensive measure of performance, the Grade 12 results are frequently used.

The number of learners passing Grade 12 has been rising from 249 831 in 1999 to 351 503 in 2006. Learners passing Grade 12 mathematics and physical science have also been increasing. However, the pass rate has been declining steadily between 2003 and 2006.

*Retention and throughput have improved*

The increase in the number of learners registered for the Grade 12 examination indicates that there is improved retention and throughput in the system. Fewer learners are dropping out of the system and fewer learners are being held back in Grade 11, which was the practice in some schools to boost their Grade 12 pass rates. In addition, according to uMalusi, the body that assures quality for the Grade 12 examination, the quality of Grade 12 question papers is better now than in the past. This is partly because more Grade 12 question papers are being set nationally and standardised. In 2006, national papers were written for 11 subjects, including mathematics and physical science.

**Table 2.17 Number of matric passes and pass rate, 2004 – 2006**

	2004		2005		2006	
	Number of learners who passed	Percentage pass rate	Number of learners who passed	Percentage pass rate	Number of learners who passed	Percentage pass rate
Eastern Cape	33 915	53,5%	39 597	56,7%	41 268	59,3%
Free State	19 459	78,7%	20 355	77,8%	21 582	72,2%
Gauteng	54 808	76,8%	57 073	74,9%	57 355	78,3%
KwaZulu-Natal	81 830	74,0%	84 842	70,5%	82 460	65,7%
Limpopo	54 897	70,6%	60 087	64,7%	58 850	55,7%
Mpumalanga	22 913	61,8%	22 737	58,6%	25 479	65,3%
Northern Cape	24 221	83,4%	23 748	78,9%	25 440	67,0%
North West	5 609	64,9%	6 172	63,0%	5 753	76,8%
Western Cape	33 065	85,0%	32 573	84,4%	33 316	83,7%
<b>Total/average</b>	<b>330 717</b>	<b>70,7%</b>	<b>347 184</b>	<b>68,3%</b>	<b>351 503</b>	<b>66,6%</b>

Source: National Department of Education

In 2006, 351 503 Grade 12 learners passed the examination. Of these, 16,3 per cent received university exemption compared to 17,0 per cent in 2005. There were thus 701 fewer learners who qualified for

university in 2006 than in 2005, but 713 more than in 2004. Western Cape continues to have the highest pass rate, consistently above 80 per cent, as well as the highest percentage of endorsements at 26,6 per cent in 2006. Gauteng's pass rate is up to 78,3 per cent in 2006 and its exemption percentage also increases to 23,2 per cent.

Eastern Cape and Limpopo had pass rates of below 60 per cent. Eastern Cape's 59,3 per cent pass rate represented a continued upward trend, from 53,5 per cent in 2004. However, Limpopo's 55,7 per cent pass rate represented a drop from 70,6 per cent in 2004. A similar trend is apparent for Limpopo's endorsement percentage, which drops down to 13,3 per cent in 2006 compared to 20,9 per cent in 2004. The only other province showing a similar downward trend in pass rates is Northern Cape, which drops from 83,4 per cent in 2004 to 67 per cent in 2006.

**Table 2.18 Percentage of candidates who obtained university endorsement per province, 2002 – 2006**

	2002	2003	2004	2005	2006
Eastern Cape	8,1%	9,5%	8,8%	8,8%	10,1%
Free State	18,8%	22,8%	22,2%	21,9%	19,7%
Gauteng	21,7%	23,3%	22,1%	21,1%	23,2%
KwaZulu-Natal	18,1%	20,5%	18,9%	17,4%	15,2%
Limpopo	17,5%	18,9%	20,9%	17,7%	13,3%
Mpumalanga	10,8%	12,4%	12,5%	12,7%	14,0%
Northern Cape	18,3%	19,6%	18,7%	15,3%	15,5%
North West	14,5%	15,3%	12,4%	12,1%	14,6%
Western Cape	26,5%	26,6%	27,1%	26,9%	26,6%
<b>National average</b>	<b>16,9%</b>	<b>18,6%</b>	<b>18,2%</b>	<b>17,0%</b>	<b>16,3%</b>

Source: Report on the Senior Certificate Examination, (EMIS, National Department of Education)

The key areas of South Africa's overall growth strategy, Asgi-SA, require skilled personnel in the areas of engineering, science and technology. The two subjects required for admission into these fields at tertiary level are mathematics and science. Most tertiary institutions insist on a higher grade pass in these subjects.

**Table 2.19 Number of learners passing senior certificate in maths and science, 1995 – 2006**

Numbers	1995	1997	1999	2001	2003	2004	2005	2006
Total matric passed	283 742	264 795	249 831	277 206	322 492	330 717	347 184	351 503
Maths HG	29 475	19 575	19 327	19 504	23 412	23 143	26 383	25 217
Maths SG	54 947	65 580	79 631	72 301	99 426	109 664	112 279	110 452
Science HG	34 895	26 658	23 344	24 280	26 067	26 975	29 965	29 781
Science SG	28 020	34 584	54 884	45 315	61 756	73 943	73 667	81 151

Source: National Department of Education

While the overall number of passes continued to increase, the mathematics pass rates decline at both standard grade and higher grade level. Higher grade passes declined from 26 383 in 2005 to 25 217 in 2006 and standard grade from 112 279 down to 110 452 in

2006. However, learners with standard grade mathematics are much less equipped for further study in the key areas highlighted above, even if they do manage to pass Grade 12 with endorsement. In order to grow the number of engineering, science and technology graduates, the number of higher grade mathematics passes therefore has to increase.

**Table 2.20 Mathematics results per province, 2004 – 2006**

	2004			2005			2006		
	Learners who wrote mathematics exams	% who passed mathematics	Learners passing HG	Learners who wrote mathematics exams	% who passed mathematics	Learners passing HG	Learners who wrote mathematics exams	% who passed mathematics	Learners passing HG
Eastern Cape	39 958	53,6%	1 535	44 387	55,1%	1 765	45 146	53,9%	1 957
Free State	12 206	72,8%	1 355	12 895	72,9%	1 440	15 393	67,1%	1 499
Gauteng	44 821	65,9%	6 604	49 555	66,1%	7 377	48 257	63,4%	6 894
KwaZulu-Natal	74 932	52,6%	5 356	81 405	50,7%	5 365	84 926	46,3%	4 726
Limpopo	39 228	45,1%	2 046	46 944	42,0%	2 802	53 908	37,1%	2 653
Mpumalanga	19 334	51,0%	1 283	20 818	50,6%	1 456	21 391	51,1%	1 392
Northern Cape	2 767	80,6%	382	3 363	70,8%	413	3 345	71,0%	416
North West	20 822	50,9%	1 314	21 319	51,8%	1 444	22 070	50,3%	1 543
Western Cape	22 026	77,8%	4 268	22 466	77,5%	4 321	23 206	72,6%	4 137
<b>Total</b>	<b>276 094</b>	<b>56,8%</b>	<b>24 143</b>	<b>303 152</b>	<b>55,7%</b>	<b>26 383</b>	<b>317 642</b>	<b>52,2%</b>	<b>25 217</b>

Source: Report on the Senior Certificate Examination, (EMIS, National Department of Education)

In science, the situation is slightly different. Higher grade pass numbers are slightly down on 2005 levels, but there is a significant increase in the number of physical science standard grade passes, from 73 667 in 2005 to 81 151 in 2006. The increase can mostly be attributed to Eastern Cape, Free State, Limpopo and Mpumalanga, where the numbers passing standard grade science increased by over 1 000 in each province. While this is certainly an encouraging sign, as with mathematics, there is a need for more higher grade passes, particularly if South Africa is to achieve the growth and development targets that have been set.

**Table 2.21 Physical science results per province, 2004 – 2006**

	2004			2005			2006		
	Learners who wrote physical science exams	% who passed physical science	Learners passing HG	Learners who wrote physical science exams	% who passed physical science	Learners passing HG	Learners who wrote physical science exams	% who passed physical science	Learners passing HG
Eastern Cape	23 941	74,7%	1 487	26 684	70,6%	1 641	27 961	76,1%	1 856
Free State	7 937	82,2%	1 681	8 687	80,7%	1 800	11 045	79,6%	1 957
Gauteng	28 660	78,7%	6 889	32 242	78,2%	7 941	3 145	80,4%	7 852
KwaZulu-Natal	39 051	72,8%	6 221	44 021	68,6%	6 341	47 244	75,3%	5 867
Limpopo	21 733	62,4%	3 337	27 335	57,4%	4 246	32 502	52,4%	4 010
Mpumalanga	13 159	66,9%	1 436	14 575	65,2%	1 846	15 462	71,0%	1 911
Northern Cape	1 616	88,1%	386	2 048	84,2%	379	2 081	85,3%	389
North West	12 993	73,2%	1 601	13 639	74,5%	1 803	14 714	74,0%	1 886
Western Cape	12 124	89,7%	3 937	12 597	87,2%	3 968	12 764	88,1%	4 053
<b>Total</b>	<b>161 214</b>	<b>74,2%</b>	<b>26 975</b>	<b>181 828</b>	<b>71,1%</b>	<b>29 965</b>	<b>166 918</b>	<b>73,6%</b>	<b>29 781</b>

Source: Report on the Senior Certificate Examination, (EMIS, National Department of Education)

The fact that pass rates for mathematics higher grade continue to be low or are even declining presents a challenge for the country's education system, especially because funding has been rising.

Initiatives such as the Dinaledi Schools project, where the objective is to increase the number of mathematics and science passes in Grade 12 in disadvantaged schools, have the potential to improve performance in mathematics. These schools showed an increase in the number of higher grade mathematics passes, from 3 815 in 2005 to 3 909 in 2006. In higher grade science, the numbers increased from 4 622 in 2005 to 4 747 in 2006. It is heartening that these learners, who should go on to make a noticeable impact on addressing the skills needs in key areas, are from disadvantaged areas across South Africa.

*Special initiative to improve mathematics and physical science*

## Conclusion

South Africa's spending on education has grown strongly over the last four years and this trend is set to continue in the future. As a result, the country spends 5,4 per cent of its GDP on education. At this level, education spending compares favourably with similar countries. By any measure, access and inter-provincial equity are improving.

This is clearly in recognition of the benefits that an educated population brings to the country, especially in terms of economic and social development. There are also significant benefits for individuals who gain valuable skills through education. Thus, the important progress made in improving access to education at all levels, especially for the poor, is laudable. However, much remains to be done in terms of improving the quality of education delivered in many of South Africa's schools.

Notwithstanding the progress made a number of challenges and policy questions remain:

- Outputs and outcomes are not responding fast enough to increases in spending: matric results remain around 66 per cent.
- Enrolments and the number of passes in mathematics and science on the higher grade remain low.
- Many schools are still without proper physical structures and basic amenities such as water, sanitation and electricity.
- Supply chain management process are not always effective in ensuring that learner support materials are procured and delivered to all schools ahead of the start of the school year.

While government acknowledges these challenges and has initiated several programmes to address them (some of which were discussed in this chapter), the pace of change has not been fast enough for many of the country's learners.