

Education

Introduction

Transformation of education is an area in which the post-apartheid government has achieved considerable success.

Key transformation objectives have been accomplished...

Notable achievements include:

- Improved access, as reflected in the sharp growth in enrolment figures. These peaked to historical highs in excess of 12 million in 1996 and are directly linked to the policy of compulsory education adopted in 1996
- Accelerated provisioning of school infrastructure, which was reinforced through the school-building programme
- Improved learner: educator ratios, from in some instances 40:1 to 32:1 in 2002
- Enhanced efficiency by curtailing out-of-age enrolments
- A more equitable distribution of resources within the sector
- Strengthening of parent and community involvement through school governing bodies
- The successful transition from 17 departments to a unified system of school education under the auspices of the nine provinces.

In spite of these successes some challenges still remain. These include the need to further advance equity in the allocation of public expenditure on education, to enhance the quality of teaching and learning, to strengthen science and mathematics teaching, and to reinforce active community participation in school education through participation in school governing bodies.

... but challenges remain

This chapter analyses provincial expenditure and budget trends in education for the period 1999/00 to 2005/06. At 36,7 per cent of total provincial spending, education expenditure makes up the largest proportion of provincial expenditure. This chapter notes the continued recovery in provincial spending on education in the three years to 2002/03, which is reinforced by the 2003 MTEF budgets. It highlights the need to focus on non-financial service delivery information so that Government, the public and education managers can have a better sense of the impact of rising expenditure on educational outputs and outcomes.

Constitutionally, education is a concurrent function for all levels excepting tertiary education. National Government is responsible for formulating policy and setting norms and standards relating to all levels of education. It also funds higher education institutions through subsidies to universities and technikons and by giving financial support to students through the National Student Financial Aid Scheme. Provinces are responsible for all aspects of school education, as well as important education programmes such as adult education (ABET), early childhood development (ECD) and further education and training at public and youth colleges.

Provincial education expenditure trends

Provincial education budgets will grow at 8,3 per cent over the MTEF

The figures in tables 4.1 and 4.2 show that provinces are projecting to spend R53,1 billion on education in 2002/03. Although the share of education spending in total provincial expenditure shows a steady downward trend from 39,8 per cent in 1999/00 to 36,7 per cent in 2002/03, provincial education expenditure has been growing at 10,1 per cent a year in the three years to 2002/03.

Table 4.1 Provincial education expenditure

	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Estimated actual	2003/04 Medium-term estimates	2004/05 Medium-term estimates	2005/06 Medium-term estimates
R million							
Personnel	36 221	39 308	41 531	46 046	49 322	52 718	55 813
Capital	459	672	1 382	1 851	3 167	3 489	3 672
Other recurrent	3 148	3 243	3 976	5 205	6 407	7 240	7 979
Total	39 828	43 223	46 889	53 102	58 897	63 447	67 465
Percentage change (average annual)	1999/00 – 2002/03			2002/03 – 2005/06			
Personnel	8,3%			6,6%			
Capital	59,2%			25,7%			
Other recurrent	18,2%			15,3%			
Total	10,1%			8,3%			

Source: National Treasury database.

Education spending is set to continue to grow strongly

The 2003 provincial budgets reinforce the upward trend in education spending. Education expenditure is projected to grow at an average 8,3 per cent (or 2,7 per cent in real terms) over the MTEF. In 2003/04, provinces are budgeting to spend R5,8 billion more on education than their expected outcome for 2002/03. In aggregate terms provincial education spending rises to R58,9 billion in 2003/04 to R63,4 billion in 2004/05 and reaches R67,5 billion in 2005/06.

Highest growth is now in non-personnel components

Unlike in the period prior to 1998, when the bulk of additional resources to education spending went into personnel and left very little for non-personnel, especially for capital expenditure, emphasis is now on the non-personnel components of expenditure. Consistent with prioritising other complementary inputs such as learner support materials, and building on the moderate recovery in the three years to 2002/03, non-personnel expenditure in education grows by R2,5 billion or 35,7 per cent in 2003/04. Non-personnel expenditure will continue to rise over the MTEF at an average annual rate of 18,2 per cent.

Table 4.2 Education expenditure per province

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
R million	Actual	Actual	Actual	Estimated actual	Medium-term estimates		
Eastern Cape	6 616	7 191	7 863	9 278	9 912	10 901	11 741
Free State	2 785	2 990	3 174	3 636	4 029	4 450	4 791
Gauteng	6 310	6 815	7 268	8 193	8 849	9 345	9 793
KwaZulu-Natal	7 299	8 173	9 261	10 373	11 868	12 677	13 451
Limpopo	5 854	6 370	6 673	7 385	8 512	9 054	9 498
Mpumalanga	2 809	2 997	3 331	3 951	4 523	4 920	5 374
Northern Cape	906	965	1 013	1 151	1 306	1 408	1 556
North West	3 408	3 699	3 972	4 332	4 768	5 241	5 585
Western Cape	3 840	4 023	4 334	4 803	5 131	5 452	5 676
Total	39 828	43 223	46 889	53 102	58 897	63 447	67 465
Percentage change (average annual)	1999/00 – 2002/03			2002/03 – 2005/06			
Eastern Cape	11,9%			8,2%			
Free State	9,3%			9,6%			
Gauteng	9,1%			6,1%			
KwaZulu-Natal	12,4%			9,0%			
Limpopo	8,1%			8,8%			
Mpumalanga	12,0%			10,8%			
Northern Cape	8,3%			10,6%			
North West	8,3%			8,8%			
Western Cape	7,7%			5,7%			
Total	10,1%			8,3%			

Source: National Treasury database.

Table 4.3 shows the share of education expenditure by province. It is above the average in Limpopo (40,0 per cent), Mpumalanga (40,4 per cent), Eastern Cape (38,6 per cent) and North West (38,2 per cent). While this may reflect provincial budget choices and preferences, it does also have a structural and historical basis. Provinces which amalgamated multiple administrations, tend to have bigger staff numbers, with duplication in a number of functions and positions.

Table 4.3 Education as percentage of provincial expenditure

Percentage of total	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
	Actual	Actual	Actual	Estimated actual	Medium-term estimates		
Eastern Cape	40,6%	39,6%	40,1%	38,6%	35,5%	36,4%	35,5%
Free State	41,6%	40,2%	38,6%	36,2%	36,4%	36,3%	35,9%
Gauteng	37,5%	37,6%	36,0%	33,9%	32,7%	31,5%	29,7%
KwaZulu-Natal	37,6%	37,5%	37,0%	35,7%	36,1%	34,8%	33,8%
Limpopo	45,7%	44,0%	42,6%	40,0%	39,8%	38,6%	36,9%
Mpumalanga	42,9%	42,7%	39,4%	40,4%	39,8%	39,3%	39,3%
Northern Cape	35,9%	36,2%	34,4%	33,6%	33,2%	32,5%	33,1%
North West	41,3%	40,1%	40,1%	38,2%	36,1%	35,7%	34,8%
Western Cape	35,7%	34,9%	34,6%	32,9%	31,3%	30,9%	29,9%
Total	39,8%	39,1%	38,3%	36,7%	35,6%	35,1%	34,0%

Source: National Treasury database.

Education expenditure per learner

The gap in per learner expenditure among provinces is still wide...

Table 4.4 shows that growth in education expenditure over the last three years has resulted in a substantial increase in per learner expenditure, from R3 234 in 1999/00 to R4 437 in 2002/03. However, at R1 393, the gap among provinces in average per learner expenditure is still wide. Despite having the biggest education budget of R10,4 billion, and notwithstanding the highest growth in total spending of 12,4 per cent a year between 1999/00 and 2002/03, KwaZulu-Natal still has the lowest per learner expenditure. Sustained growth in education budgets in provinces with low per learner expenditure, should narrow the gap over the MTEF.

Table 4.4 Expenditure per learner

	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Estimated actual
Rand				
Eastern Cape	2 846	3 362	3 866	4 466
Free State	3 570	3 910	4 433	5 155
Gauteng	4 021	4 384	4 655	5 077
KwaZulu-Natal	2 633	3 069	3 432	3 762
Limpopo	3 211	3 452	3 674	4 015
Mpumalanga	3 019	3 287	3 685	4 321
Northern Cape	4 438	4 858	5 139	5 805
North West	3 602	4 065	4 447	4 727
Western Cape	3 987	4 391	4 721	5 081
Average	3 234	3 631	3 995	4 437

Sources: Learner numbers, EMIS, national Department of Education and Expenditure data, National Treasury database.

... but must be viewed in relation to other factors

While per learner expenditure is an important measure for comparing the nine provinces, it is advisable to use it with other indicators that reflect unique circumstance prevailing in individual provinces. For instance, some provinces have greater administration or head office expenditure. Some spend more on transportation and hostel accommodation, while others have higher average salaries because they have larger proportions of better-qualified educators. Also, the average cost of providing education varies across provinces due to the availability or otherwise of infrastructure and other factors.

Composition of provincial education expenditure

Expenditure by programme and uniform budgets

Public ordinary schools get 83 per cent of provincial education expenditure

Table 4.5 sets out provincial education spending by programme and shows that public ordinary school education makes up the biggest percentage of provincial education expenditure. The programme funds primary and secondary schools that provide compulsory education to grades 1 to 9, and non-compulsory education for grades 10 to 12.

With the introduction of the 'inclusive school policy', many learners with special needs will now be incorporated into public ordinary schools. Only learners with disabilities that require specialised care will be placed in special learning centres.

Estimated provincial expenditure on public ordinary schools amounts to R44,3 billion or 83,4 per cent of total education expenditure in 2002/03. Expenditure on this programme is budgeted to grow by 10,1 per cent to R48,8 billion in 2003/04, rising to R52,7 billion in 2004/05 and R56,1 billion in 2005/06. The growth in expenditure on public ordinary schools is in line with the overall growth in education expenditure of 10,9 per cent.

Table 4.5 Provincial education expenditure per programme

R million	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
	Actual	Actual	Actual	Estimated actual	Medium-term estimates		
Administration	2 644	2 472	3 479	3 780	4 328	4 574	4 832
Public ordinary school education	33 653	36 966	39 213	44 306	48 804	52 702	56 083
<i>of which: Primary schools</i>	20 322	22 200	23 709	24 526	27 121	28 920	30 807
<i>of which: Secondary schools</i>	12 493	13 695	14 703	18 970	20 802	22 825	24 293
<i>Other</i>	838	1 071	801	811	881	957	982
Independent school subsidies	176	206	187	196	235	245	253
Public special school education	1 116	1 134	1 356	1 446	1 595	1 665	1 764
Further education and training	754	827	869	1 082	1 201	1 276	1 360
Adult basic education and training	362	410	401	512	551	595	637
Early childhood development	199	197	248	449	510	538	591
Auxiliary and associated services	657	653	844	1 199	1 519	1 701	1 784
Other programmes	266	359	293	132	154	151	161
Total expenditure	39 828	43 223	46 889	53 102	58 897	63 447	67 465
Economic classification							
Current expenditure	39 369	42 551	45 507	51 251	55 730	59 958	63 792
<i>of which: Personnel</i>	36 221	39 308	41 531	46 046	49 322	52 718	55 813
Capital expenditure	459	672	1 382	1 851	3 167	3 489	3 672

See Appendix A2.3 for expenditure and budgets of each province.

For the 2003 provincial budgets, all provinces implemented a uniform budget format and programme structure for education. Historical expenditure has been reclassified to be consistent with the new programme structure and to allow for comparisons. For the first time, Government is now in a position to present expenditure on primary and secondary education separately.

Uniform budget structures implemented in 2003/04

Within the Public Ordinary School Education Programme, the share of secondary education is set to grow from 37,1 per cent in 1999/00 to 43,3 per cent in 2005/06. Conversely, the share of expenditure on primary education drops from 60,4 per cent to about 55,0 per cent over the same period. However, expenditure on primary school education grows by 7,9 per cent from R24,5 billion in 2002/03 to R30,8 billion in 2005/06. Expenditure on secondary school education amounted to R19,0 billion in 2002/03 and, growing at an average annual rate of 8,6 per cent, rises to R24,3 billion in 2005/06.

Primary school education receives 55 per cent of school education expenditure

The introduction of the Early Childhood Development (ECD) Programme is an important reform initiative aimed at providing a more efficient schooling system. The national Department of Education envisages that the introduction of a reception grade will allow for greater school preparedness of learners and, ultimately, a lower repeater rate and a more efficient education system.

Personnel expenditure trends

Average teacher salary package is between R78 000 and R97 000

Delivery of education is one of the most personnel-intensive public services. Out of an estimated expenditure outcome of R53,1 billion in 2002/03, about R46 billion, representing 86,7 per cent, is on personnel. While the average salary package of an educator ranges between R78 000 and R97 000, 'take-home' salary (excluding pension and medical aid) averages between R60 000 and R80 000 per annum..

Declining share of personnel expenditure creates space for critical non-personnel inputs

Provincial departments of Education are succeeding in curtailing growth in personnel spending in their budgets. Following an agreement between educators' unions and Government in 1999 over rationalisation and redeployment, provinces embarked on a strategy to contain personnel spending. The aim was to reduce the share of personnel spending in total education expenditure to at least 85 per cent. This was in order to create space in provincial budgets for non-personnel inputs that are critical to the effective delivery of education.

Over the last three years, growth in educator salaries has been slightly below inflation. Simultaneously, education budgets have been growing at 1,5 per cent in real terms. Combined with moderate decreases in educator numbers mainly due to attrition, this has resulted in a reduction in the share of personnel in education spending from 90,9 per cent in 1999/00 to 86,7 per cent in 2002/03. As the 2003 MTEF budgets indicate, the downward trend in the share of personnel is set to continue, with the share dropping further to 82,7 per cent by 2005/06.

Right-sizing is yielding dividends

The rate of the fall in the share of personnel, however, varies from province to province. Table 4.6 shows that all provinces have contained personnel expenditure, albeit with varying success. In four provinces, Limpopo (89,7 per cent), North West (89,6 per cent), KwaZulu-Natal (88,9 per cent) and Eastern Cape (88,6 per cent), the share of personnel is above the national average of 86,7 per cent. This is in spite of the fact that these provinces have lower average educator salaries.

Although Western Cape and Gauteng have a larger complement of highly qualified educators and therefore on average pay more per educator, their share of personnel expenditure is among the lowest. This is partly due to the bold step these provinces took to rightsizing their personnel structure.

Table 4.6 Provincial education personnel expenditure

R million	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
	Actual	Actual	Actual	Estimated actual	Medium-term estimates		
Eastern Cape	6 371	6 772	7 166	8 224	8 537	9 360	9 784
Free State	2 472	2 694	2 800	3 150	3 388	3 617	3 874
Gauteng	5 448	5 786	6 049	6 702	6 817	7 223	7 654
KwaZulu-Natal	6 721	7 613	8 251	9 223	9 995	10 593	11 207
Limpopo	5 401	5 871	6 124	6 625	7 407	7 821	8 292
Mpumalanga	2 587	2 788	2 960	3 285	3 688	4 005	4 402
Northern Cape	773	812	857	932	1 041	1 124	1 218
North West	3 129	3 405	3 609	3 883	4 125	4 357	4 590
Western Cape	3 318	3 567	3 716	4 023	4 323	4 617	4 792
Total	36 221	39 308	41 531	46 046	49 322	52 718	55 813
Percentage of education budget							
Eastern Cape	96,3%	94,2%	91,1%	88,6%	86,1%	85,9%	83,3%
Free State	88,7%	90,1%	88,2%	86,6%	84,1%	81,3%	80,9%
Gauteng	86,3%	84,9%	83,2%	81,8%	77,0%	77,3%	78,2%
KwaZulu-Natal	92,1%	93,2%	89,1%	88,9%	84,2%	83,6%	83,3%
Limpopo	92,3%	92,2%	91,8%	89,7%	87,0%	86,4%	87,3%
Mpumalanga	92,1%	93,0%	88,9%	83,1%	81,5%	81,4%	81,9%
Northern Cape	85,3%	84,1%	84,6%	81,0%	79,8%	79,9%	78,3%
North West	91,8%	92,1%	90,9%	89,6%	86,5%	83,1%	82,2%
Western Cape	86,4%	88,7%	85,7%	83,8%	84,3%	84,7%	84,4%
Total	90,9%	90,9%	88,6%	86,7%	83,7%	83,1%	82,7%

Source: National Treasury database.

Non-personnel expenditure

The physical facilities that are conducive to a stable learning environment have been identified as one of the strategic priorities of education. In the years when personnel spending was in excess of 90 per cent of education expenditure, little was left for school infrastructure, construction and maintenance, textbooks and other critical inputs.

One of the spin-offs of the success in containing personnel costs is the strong recovery in non-personnel expenditure. In the three years to 2002/03, the upturn in non-personnel expenditure has been largely fuelled by exponential growth in capital expenditure. This comprises mainly of building schools and extra classrooms in overcrowded schools and replacing dilapidated buildings.

After rising somewhat steadily in 2000/01 and 2001/02, education capital expenditure more than doubles in the three years to 2002/03, rising from R672 million in 2000/01 to an estimated outcome of R1,9 billion in 2002/03. This raises the share of capital expenditure in education to 3,5 per cent from 1,2 per cent in 1999/00. Although information on physical progress with classroom building is not readily available, spending of this magnitude is expected to make a significant impact on reducing backlogs.

Non-personnel expenditure recovers strongly over the MTEF

Strong growth in capital expenditure should reduce classroom backlogs

Table 4.7 Provincial education capital expenditure

	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Estimated actual	2003/04 Medium-term estimates	2004/05 Medium-term estimates	2005/06 Medium-term estimates
R million							
Eastern Cape	8	62	187	314	437	412	438
Free State	13	31	104	97	120	199	214
Gauteng	216	170	191	374	777	826	831
KwaZulu-Natal	23	198	539	432	1 016	1 155	1 246
Limpopo	30	54	103	186	302	334	353
Mpumalanga	63	42	92	153	206	236	243
Northern Cape	26	0	1	16	26	27	38
North West	28	54	53	153	145	165	174
Western Cape	53	59	111	125	138	134	135
Total	459	672	1 382	1 851	3 167	3 489	3 672
Percentage of education budget							
Eastern Cape	0,1%	0,9%	2,4%	3,4%	4,4%	3,8%	3,7%
Free State	0,5%	1,0%	3,3%	2,7%	3,0%	4,5%	4,5%
Gauteng	3,4%	2,5%	2,6%	4,6%	8,8%	8,8%	8,5%
KwaZulu-Natal	0,3%	2,4%	5,8%	4,2%	8,6%	9,1%	9,3%
Limpopo	0,5%	0,8%	1,6%	2,5%	3,5%	3,7%	3,7%
Mpumalanga	2,2%	1,4%	2,8%	3,9%	4,6%	4,8%	4,5%
Northern Cape	2,8%	0,0%	0,1%	1,4%	2,0%	2,0%	2,5%
North West	0,8%	1,5%	1,3%	3,5%	3,0%	3,2%	3,1%
Western Cape	1,4%	1,5%	2,6%	2,6%	2,7%	2,5%	2,4%
Total	1,2%	1,6%	2,9%	3,5%	5,4%	5,5%	5,4%

Source: National Treasury database.

Non-personnel non-capital components will account for more growth in expenditure in future

Capital expenditure continues to grow over the MTEF, rising to R3,2 billion in 2003/04 and reaching R3,7 billion in 2005/06. However, over the next three years the main factors behind growth in non-personnel spending in education include other non-personnel non-capital components, such as increased funding for learner support materials.

Non-personnel non-capital expenditure

In addition to having educators, proper school buildings and other facilities, effective teaching and learning also requires various complementary inputs, such as textbooks, stationery, and other teaching aids.

The slowdown in growth of personnel expenditure and strong growth in provincial budgets has created space for increases in other non-personnel expenditure. It is important to disaggregate non-personnel non-capital expenditure further to separate the component that is spent on public ordinary schools.

Non-personnel non-capital spending for provincial education is R5,2 billion for 2002/03

Table 4.8 shows that total provincial non-personnel non-capital expenditure in 2001/02 was R3,9 billion. It increased by 30,9 per cent to R5,2 billion in 2002/03. This includes non-personnel non-capital expenditure at head office and other parts of education administration.

Table 4.8 Non-personnel non-capital (npnc) expenditure–total provincial education

R million	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
	Actual	Actual	Actual	Estimated actual	Medium-term estimates		
Eastern Cape	238	357	511	740	938	1 129	1 519
Free State	301	265	269	389	520	633	704
Gauteng	646	858	1 029	1 117	1 255	1 296	1 308
KwaZulu-Natal	554	362	471	718	857	929	998
Limpopo	422	445	446	574	802	900	853
Mpumalanga	159	166	279	513	629	678	729
Northern Cape	108	153	155	203	238	256	299
North West	250	240	310	296	498	718	820
Western Cape	469	397	507	655	670	701	749
Total	3 148	3 243	3 976	5 205	6 407	7 240	7 979
Percentage of education budget							
Eastern Cape	3,6%	5,0%	6,5%	8,0%	9,5%	10,4%	12,9%
Free State	10,8%	8,8%	8,5%	10,7%	12,9%	14,2%	14,7%
Gauteng	10,2%	12,6%	14,2%	13,6%	14,2%	13,9%	13,4%
KwaZulu-Natal	7,6%	4,4%	5,1%	6,9%	7,2%	7,3%	7,4%
Limpopo	7,2%	7,0%	6,7%	7,8%	9,4%	9,9%	9,0%
Mpumalanga	5,7%	5,5%	8,4%	13,0%	13,9%	13,8%	13,6%
Northern Cape	11,9%	15,9%	15,3%	17,6%	18,3%	18,2%	19,2%
North West	7,3%	6,5%	7,8%	6,8%	10,4%	13,7%	14,7%
Western Cape	12,2%	9,9%	11,7%	13,6%	13,1%	12,9%	13,2%
Total	7,9%	7,5%	8,5%	9,8%	10,9%	11,4%	11,8%

Source: National Treasury database.

Table 4.9 shows non-personnel non-capital expenditure on public ordinary schools excluding head office and other components of the administration. Non-personnel non-capital expenditure on public ordinary schools rose slightly from R210 per learner in 1999/00 to R259 per learner in 2002/03. While this is an improvement, it is still relatively low. It appears that this is one of the components of expenditure that has been squeezed out by the rising share of personnel spending and increases in capital spending in the past.

The provinces with low non-personnel non-capital expenditure per learner for the Public Ordinary Schools Education Programme, also have low senior certificate pass rates. In 2002/03, these provinces spent on average R155 per learner, as opposed to the average expenditure of R468 per learner in Northern Cape, Gauteng and Western Cape. There appears to be a relationship between inadequate non-personnel non-capital resourcing and senior certificate results, indicating the need to reinforce this component of education expenditure.

Non-personnel non-capital spending on ordinary schools recovers

Table 4.9 Non personnel non capital (npnc) expenditure – public schools only

	1999/00		2000/01		2001/02		2002/03	
	Actual	Per learner ¹ (Rand)	Actual	Per learner ¹ (Rand)	Actual	Per learner ¹ (Rand)	Estimated actual	Per learner ¹ (Rand)
R million								
Eastern Cape	212	92	261	123	355	175	394	190
Free State	250	325	152	204	145	206	213	308
Gauteng	509	350	387	270	347	240	685	463
KwaZulu-Natal	477	175	145	55	152	57	308	113
Limpopo	349	193	213	116	259	144	357	197
Mpumalanga	140	153	77	86	137	153	321	355
Northern Cape	93	461	113	574	108	555	108	554
North West	216	230	164	182	201	227	226	250
Western Cape	288	312	242	273	315	354	418	457
Total	2 534	210	1 755	151	2 018	176	3 031	259

1. Learner enrolment - only public schools.

Sources: Learner enrolment EMIS, national Department of Education; Expenditure data, National Treasury database.

Transfers and grants

Conditional grants make up a relatively small proportion of provincial education expenditure

Conditional grants in education amount to R409 million in 2002/03 and are used to fund financial management and quality enhancement, HIV/Aids education and early childhood development (ECD). The ECD grant is phased out after 2003/04 and in future the programme will be funded through the equitable share.

Largest conditional grant supports improvement in education management

The largest conditional grant to provinces is to support quality enhancement in education management and improved financial management in provincial education departments. This grant supports the strengthening of district management, various projects aimed at restoring the culture of learning and teaching in schools, and improving financial management capacity in provincial departments of Education.

Integrated Nutrition Programme to be managed by education departments

At present, the Integrated Nutrition Programme (INP) is implemented by the Department of Health. This grant is used for providing food to learners from poor households. Initially, there was under-expenditure on this programme, and funding for it did not grow. Now that there is evidence of improvement in the capacity to spend, funding for the programme is projected to grow substantially to R1 041 million in 2005/06. Plans are also afoot to shift the Integrated Nutrition Programme, currently administered by the Department of Health, to the Department of Education. It is envisaged that such a move would foster better co-ordination. The national Department of Education has started work on improving the impact and effectiveness of the Integrated Nutrition Programme for poor learners in the education system.

Higher Education

Higher Education follows on the Further Education and Training Band in education and spans levels 5 to 8 of the National Qualifications Framework. Studies in higher education lead to diplomas, degrees, professional qualifications and higher degrees, grouped together at the national level into 22 fields of specialisation, ranging from agriculture and renewable resources to social sciences and social studies. In 2000 there were 36 higher education institutions, consisting of 21 universities and 15 technikons, with a total of 591 161 students, 14 789 permanent educators and 24 002 temporary educators. The number of university students was 388 369, and 202 792 at technikons. At universities the largest field of specialisation was business, commerce and management (21,2 per cent of enrolments), followed by education (19,1 per cent). At technikons, business, commerce and management is by far the largest area of specialisation, with 30 per cent of students enrolled in this area. At universities about 22 per cent of students were enrolled in the natural sciences (as against the human sciences) and about 36 per cent at technikons.

Restructuring

The National Plan for Higher Education was released in March 2001 after which a National Working Group advised the Minister on the restructuring of the institutional landscape of higher education. The restructuring process involves the consolidation of higher education provisioning on a regional basis through the establishment of new institutional and organisational forms, including comprehensive institutions incorporating both university- and technikon-type qualifications, and reducing the number of higher education institutions through mergers. The restructuring will allow for increased access, including access to career-focused programmes. There will also be improved articulation between career-focused and academic programmes.

The restructuring will reduce the number of institutions from 36 to 21. National Institutes for Higher Education will be established in both Mpumalanga and Northern Cape, where there are no existing higher education institutions. The overall reduction of the number of institutions should improve equity, sustainability and productivity within the higher education system. The first merger took place on 1 April 2002 when the Natal Technikon and ML Sultan Technikon merged to establish the Durban Institute of Technology. This merger was followed by the incorporation of the Qwa-Qwa campus of the University of the North into the University of the Free State on 1 January 2003.

The Department will continue implementing the National Plan for Higher Education over the medium term, which will lead to more institutional mergers and programme rationalisation to minimise overlaps and duplication. R800 million was allocated over the MTEF to support this process, mainly for the re-capitalisation of undercapitalised institutions, personnel retrenchment costs, harmonising systems, facilitating the process and for physical infrastructure.

Funding

In 2003/04, the 21 universities will receive about R6 billion in transfers from the national Department of Education and the 14 technikons will receive R2,3 billion. Total transfers to these institutions will increase to R8,9 billion, up from R8,0 billion in 2002/03. This includes funds for institutional restructuring and funds for the National Student Financial Aid Scheme. Allocations to institutions are determined through a funding formula incorporating student numbers and types – such as contact versus distance learning, level of study and field of study – as well as the main components of costs. The finalisation and phased-in implementation of a new funding framework for higher education institutions is receiving priority attention. A new policy for the measurement and reward of research outputs at higher education institutions will also be implemented in the medium term. In addition to subsidy and earmarked funding from Government, higher education institutions also charge fees and receive revenue from other sources such as donors.

National Student Financial Aid Scheme

Government also funds needy students directly through loans and bursaries through the National Student Financial Aid Scheme. The Scheme is responsible for administering and allocating loans and bursaries to eligible students; developing criteria and conditions for granting loans and bursaries to eligible students in consultation with the Minister of Education, raising funds, recovering loans, maintaining and analysing a database and undertaking research for the better utilisation of financial resources, and advising the Minister on matters relating to student financial aid.

The student head count receiving awards from the National Student Financial Aid Scheme has increased from nearly 69 300 in 1996/97 to 88 800 in 2001/02, or to about 15 per cent of the higher education student population. The average expenditure per student in 2001/02 was R7 150. The Fund will receive R545 million from the national Department of Education in 2003/04, in addition to which it also manages contributions from higher education institutions and international donors. An increasing proportion of funding is coming from students repaying loans, and R209 million from this source of funding will be made available in 2003/04.

Key inputs into education delivery

Personnel

Educators make up 40 per cent of all civil servants

Education is labour intensive and the management of education personnel is central to the delivery of quality education. Education personnel constitute 40 per cent of all civil servants, and 59 per cent of civil servants in the provinces. Chapter 10 on Personnel provides additional detailed discussion on personnel.

Table 4.10 Education personnel

	2001			2002		
	Number of educators	Number of admin personnel	Ratio of educator to admin	Number of educators	Number of admin personnel	Ratio of educator to admin
Eastern Cape	66 555	8 778	7,6	66 770	8 502	7,9
Free State	24 096	5 331	4,5	24 039	5 586	4,3
Gauteng	45 981	14 974	3,1	47 225	14 831	3,2
KwaZulu-Natal	73 360	9 145	8,0	75 991	9 533	8,0
Limpopo	57 182	5 312	10,8	56 795	5 156	11,0
Mpumalanga	25 943	3 977	6,5	26 342	3 810	6,9
Northern Cape	6 688	2 383	2,8	6 612	2 314	2,9
North West	32 322	4 563	7,1	32 265	4 389	7,4
Western Cape	28 424	8 650	3,3	28 417	8 337	3,4
Total	360 549	63 113	5,7	364 457	62 458	5,8

Source: Persal, National Treasury.

Post provisioning model determines number of educator posts per school

In 1999, Government and educator unions signed an agreement on educator rationalisation and redeployment. Under the agreement, provincial education budgets are used for determining the overall number of posts available. Educator posts are then distributed to schools on a *pro rata* basis. A post provisioning model which calculates weighted learner enrolments by taking into account the maximum ideal class size applicable to a learning area or phase, the timetable load for educators, learner numbers, number of grades, whether there is more than one language as the medium of instruction, and learner disabilities was adopted.

Post provisioning model to be revised in 2003 and to emphasise educator needs of poor areas

In 2003, a revised post-provisioning model is being implemented. In addition to the factors included in the previous model, the revised model will take into account the requirements of Curriculum 2005 as well as the current arrangement of distributing educator posts in favour of poor areas. Provinces have set aside up to 5 per cent of their posts to allow extra educators to be placed at the poorest schools. The pool of posts intended for addressing inequities is allocated to schools on the basis of the resource targeting list. This is a requirement of the National Norms and Standards for school funding and will allow for a post distribution with a pro-poor bias. It is also envisaged that this model will address some of the concerns on intra-provincial inequalities in educator distribution.

364 457 educators in public school system

Based in part on distribution by the post provisioning model and, in part, on historical patterns, Table 4.10 outlines the provincial distribution of educators and education personnel for 2001 and 2002.

Although there was a decline in educators from 1996 to 1999, in 2001 educator numbers increased slightly, and the educator complement for 2002 stood at 364 457.

Non-educator personnel includes staff not employed in terms of the Employment of Educators Act (76 of 1998). Over the past three years this component of personnel has remained stable at around 63 000. In 2002, the national ratio for administration personnel to educator was 1: 5,8. In Limpopo, KwaZulu-Natal, Eastern Cape and North West the educator to administration personnel ratio is very low. This suggests that in these provinces, educators may be performing administrative responsibilities.

Non-educator personnel at stable levels

Educator qualifications

After 1994, South Africa's education system was characterised by a high number of educators without suitable qualifications. This has been particularly evident in provinces where large components of former homeland administrations were incorporated. Since 1994, considerable efforts have gone into upgrading educator skills and formal qualifications.

New system inherited a high number of under-qualified educators

There has been notable progress in upgrading educator qualifications. Intensive educator training initiatives have contributed to a drop in the number of educators without suitable qualifications. For example, in KwaZulu-Natal, the number of educators without matric has been reduced from 1 757 in 1997 to none in 2002. However, nationally, there are still 68 000 educators who do not have the minimum qualification, which is matric plus three years of post-matric training.

Number of educators lacking in suitable qualifications has decreased

Based on data in the Personnel Salary Payment System (Persal) on educator qualifications, averaged for 2002, it is clear that a large component of educators have tertiary qualifications, as shown in Table 4.11. The national average of educators with a tertiary qualification is 84 per cent. In Gauteng and Western Cape, most educators have tertiary qualifications or four years (or more) post matric training.

Most educators now have tertiary qualifications

In April 2002, a total of 13 305 educators enrolled for the National Diploma in Education to upgrade their qualifications. The course is studied for two years on a part-time basis. In addition to initiatives to improve the formal qualifications of educators, there has been a considerable focus on education skills training. Educators unions and Government have agreed that each educator devotes 80 hours to ongoing professional development a year outside of learner contact time. This is in addition to the ongoing training of educators in Curriculum 2005 and the principles of Outcome Based Education (OBE).

Education skills training receiving attention

Table 4.11 Educator qualifications 2002

	Matric	Underqualified Educators ¹	Matric + 3 years	Matric + 4 years	Total educators
Eastern Cape	386	12 860	31 565	22 343	66 770
Free State	758	4 717	9 535	9 786	24 039
Gauteng	123	3 334	14 625	29 267	47 225
KwaZulu-Natal	4 577	13 433	27 887	34 671	75 991
Limpopo	182	7 919	24 568	24 307	56 795
Mpumalanga	692	3 844	10 275	12 223	26 342
Northern Cape	70	854	2 405	3 354	6 612
North West	1 420	10 218	10 361	11 686	32 265
Western Cape	116	2 598	8 643	17 177	28 417
Total	8 323	59 777	139 864	164 812	364 457
Percentage of educators					Total REVQ 13 and above
Eastern Cape	0,6%	19,3%	47,3%	33,5%	80,7%
Free State	3,2%	19,6%	39,7%	40,7%	80,4%
Gauteng	0,3%	7,1%	31,0%	62,0%	92,9%
KwaZulu-Natal	6,0%	17,7%	36,7%	45,6%	82,3%
Limpopo	0,3%	13,9%	43,3%	42,8%	86,1%
Mpumalanga	2,6%	14,6%	39,0%	46,4%	85,4%
Northern Cape	1,1%	12,9%	36,4%	50,7%	87,1%
North West	4,4%	31,7%	32,1%	36,2%	68,3%
Western Cape	0,4%	9,1%	30,4%	60,4%	90,9%
Total	2,3%	16,4%	38,4%	45,2%	83,6%

1. Includes educators with highest qualifications: Matric, Matric + 1 year, Matric + 2 years.

Source: Persal, National Treasury.

Educator and whole-school evaluation in place

There is a growing awareness that, along with the formal upgrading of skills, educator performance needs to be formally assessed and evaluated. An educator developmental appraisal system has been implemented in all provinces, which ascertains the developmental needs of individual educators. Based on pre-agreed evaluation criteria encompassing a set of nine priorities, a system of whole-school evaluation has also been implemented. This evaluation is carried out internally by the school personnel and externally by appointed supervisors. Although not yet formalised, it is proposed that an evaluation system for enhanced remuneration be based on a combination of these two approaches.

Attrition rate high in Gauteng and Western Cape

According to a study conducted by the national Department of Education in 2001, the rate of attrition of permanent publicly employed educators was, on average, 15 000 educators a year. Provinces with higher levels of economic activity and job opportunities such as Gauteng and Western Cape are experiencing higher attrition rates. The education system produces an estimated 5 000 educators per year. However, in the medium term it is unlikely that the sector would acquire a deficit, as there is a stock of surplus and unemployed educators. To address possible longer-term concerns, the national Department of Education will be undertaking an educator supply and demand study.

Infrastructure

In 2000, an extensive School Register of Needs (SRN) was completed. The Register established a comprehensive record of the location and extent of all public ordinary school infrastructure. With the exception of Mpumalanga, which submitted separate data from the 2000 survey, all provinces registered an improvement in provisioning of classrooms, electricity connections and toilets between 1996 and 2000. At present, the national Department of Public Works is still responsible for paying municipal rates on government properties that are used by provincial education departments. In 2001/02 this amounted to R182 million.

Improvement in school infrastructure

Resource targeting

The 2000 school year saw the introduction of the National Norms and Standards for School Funding. The aim of this policy is to focus non-personnel expenditure on those schools with the greatest need. The resources targeted for distribution will, to some extent, address the infrastructure backlog and create an effective learning environment.

Non-personnel spending focuses on schools with greatest need

All provincial schools were assessed in terms of their physical conditions and the poverty levels of the community in which they are located. Schools were ranked from the poorest to the least poor, and then divided into five quintiles, based on the profile of learners, community location and infrastructure backlog. In each province, a ranked list of schools was developed and resources are now being targeted to those schools on the basis of the table below.

Mechanism for resource targeting

Resource targeting based on conditions of school and poverty of communities

School quintiles from the poorest to the least poor	Expenditure allocation	Cumulative percentage of schools	Cumulative percentage of non-personnel non-capital expenditure	Per learner expenditure indexed to average of 100
Poorest 20%	35% of the resources	20%	35%	175
Next 20%	25% of the resources	40%	60%	125
Next 20%	20% of the resources	60%	80%	100
Next 20%	15% of the resources	80%	95%	75
Least poor 20%	5% of the resources	100%	100%	25

Both current and capital expenditure are incorporated in the National Norms and Standards for School Funding. Categories such as water and electricity, teaching equipment and supplies, and learner support material are distributed according to the resource targeting list, while new classrooms and hostel costs are targeted mainly towards need and poverty redress.

Capital and current resources targeted for redistribution

The development of the resource targeting system is an important step in attaining equity. However, it has become apparent that, given the extensive prevalence of poverty, the distinction between the poorest two quintiles and the next quintiles does not deal adequately with the challenge of inequity. Also, the resource targeting system is developed per province and only helps with intra-provincial equity. In

Pervasive poverty remains a challenge for the education system

some instances, the least poor of one province are much better funded than the poorest in another province.

Non-personnel funds transferred directly to section 21 schools

For schools that have full section 21 status, funds are transferred directly to the school governing body and expenditure is audited. However, for the majority of schools, funds are administered at a district or regional office level, and it is the effective management of the resources at this level that is critical.

Learner support material

Average expenditure on learner support material in 2002/03 was R126 per learner

A critically important component of the norms and standards funding categories is learner support material (LSM), which includes text books, stationery and, in some provinces, teaching aids. Table 4.12 reflects expenditure on learner support materials. For 2002/03, expenditure per learner improved but continued to be very low in some provinces - KwaZulu-Natal (R71 per learner) and North West (R70 per learner).

The 2003/04 budgets show marked growth in planned LSM expenditure of all provinces to a budget of R2,2 billion. Based on current trends in learner numbers, this should raise estimated per learner expenditure on LSM to about R190. Growth in per learner expenditure is particularly high in KwaZulu-Natal where LSM expenditure is budgeted to grow to R518 million. Appendix A.2.1 provides more detail on LSM expenditure and budgets.

Table 4.12 Learner support material expenditure

	2000/01	2000	2001/02	2001	2002/03	2002	2003/04	2003
R million	Actual	Per learner (Rand) ¹	Actual	Per learner (Rand) ¹	Estimated actual	Per learner (Rand) ¹	Budget	Per learner (Rand) ²
Eastern Cape	92,2	43	210,9	104	285,0	138	341,1	165
Free State	106,5	143	91,4	130	78,0	113	100,5	145
Gauteng	168,9	118	213,9	148	226,0	153	273,2	185
KwaZulu-Natal	192,4	73	181,8	68	192,3	71	518,3	191
Limpopo	131,5	72	209,6	117	285,0	157	425,0	234
Mpumalanga	48,9	54	92,1	103	212,0	235	241,6	267
Northern Cape	19,7	100	30,1	155	29,0	148	29,8	152
North West	54,6	61	57,0	65	63,1	70	152,0	168
Western Cape	55,3	62	77,0	87	108,5	118	131,0	143
Total	870,1		1 163,8		1 478,9		2 212,6	
Average		75		101		126		189

1. Learner enrolment - only public schools.

2. Per learner estimates for 2003/04 based on learner enrolment for 2002.

Source: Provincial Treasuries and provincial Departments of Education.

School governance and management

Greater decentralisation fosters better school management

Functional schools are the main building blocks of an effective education system. Devolving some of the critical management functions, including certain financial management and procurement functions, to schools as cost centres, is therefore vitally important.

Schools should be empowered to take decisions on the day-to-day running of their affairs, including aspects of the procurement function, within the parameters set in relevant national frameworks and taking account of their capacities. In recognition of this, Government encourages greater community involvement in running schools. Functional school management structures have been identified as a crucial element in enhancing school outputs and outcomes. The granting of section 21 status to schools also gives expression to this policy initiative.

The involvement of local communities in the governance of schools is a part of the 1994 reform initiatives. The South African Schools Act (84 of 1996)(SASA) requires that a school governing body (SGB) consisting of parents from the local community, be elected for each school. Fostering community involvement in local school governance is important for fostering greater accountability.

More community involvement in local school governance is needed

The roles of school governing bodies would include functions such as support to the educators and principal, the encouragement of voluntary community services at schools and general fundraising. In addition, schools that have been granted section 21 status in terms of the Act would have to take on additional financial management responsibility, though criteria determining the size of the state allocation to the school remain unchanged.

School governing bodies elected at each school

A focus of a number of schools has been on hiring additional educators whose salaries are paid for by funds raised at school level. As can be expected, given the predominance of previous model C schools in Gauteng and Western Cape, these provinces have a large number of teachers appointed by school governing bodies.

School governing bodies hire additional educators

Table 4.13 Number of educators appointed by school governing bodies

	1997	2001
Eastern Cape	– ¹	2 069
Free State	279	766
Gauteng	1 731	4 575
KwaZulu-Natal	1 653	4 312
Limpopo	429	676
Mpumalanga	437	846
Northern Cape	– ¹	265
North West	364	477
Western Cape	1 050	2 987
Total	5 943	16 973

1. Data not available.

Source: Annual Schools Survey, EMIS, national Department of Education.

Determining school fees is an important responsibility of school governing bodies. Initial studies indicate that school fees for schools in the upper quintile of the funding norms range between R300 and R2 700 per learner, per year. For the other four quintiles, average fees are less than R200 per year. The South African Schools Act allows learners from households that cannot afford school fees to request exemption. Yet, evidence points to the non exemption and exclusion of learners who cannot afford fees because of the inability of their

School fees determined by school governing bodies

parents to afford school fees, or pay for uniforms, essential transport or additional stationery and books.

Education outputs

Results

High participation rates, but concern over dropout rate in secondary education

Ensuring access for all children to basic education has been a major success of the education reform process. Following the introduction of compulsory education, school enrolment rose to 12,3 million children registered as learners by 1996. This was an estimated increase of 2,6 million over the 1990 enrolment figures and an increase of 2,2 million over 1994 figures. Table 4.14 shows learner enrolment figures for 1996 to 2002.

Table 4.14 Learner enrolment (public ordinary schools and independent schools)

	1996	1997	1998	1999	2000	2001	2002
Eastern Cape	2 325 000	2 441 177	2 292 475	2 324 684	2 138 861	2 033 832	2 077 446
Free State	780 000	798 305	806 649	780 170	764 755	716 021	705 368
Gauteng	1 569 000	1 514 239	1 556 755	1 569 423	1 554 495	1 561 359	1 613 779
KwaZulu-Natal	2 772 000	2 919 096	2 813 786	2 772 225	2 663 360	2 698 453	2 757 278
Limpopo	1 823 000	1 838 272	1 848 054	1 823 017	1 845 265	1 816 189	1 839 079
Mpumalanga	931 000	885 856	935 878	930 624	911 779	903 997	914 353
Northern Cape	204 000	196 012	201 308	204 238	198 650	197 101	198 288
North West	946 000	938 780	955 306	946 160	909 906	893 144	916 463
Western Cape	963 000	908 610	954 732	963 358	916 384	918 030	945 239
Total	12 313 000	12 440 347	12 364 943	12 313 899	11 903 455	11 738 126	11 967 293

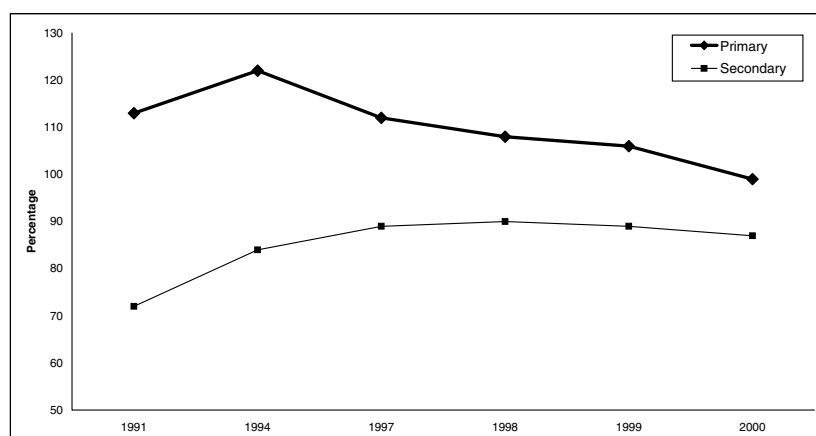
Sources: Learner numbers 1997-2002, EMIS, national Department of Education; Learner numbers 1996, IGFR 2001.

Participation rates remain high. But high dropout rates are cause for concern. Figure 4.1 illustrates participation rates for primary and secondary enrolment since 1991. The high gross enrolment rates of more than 120 per cent in the mid-1990s have been reduced. This efficiency gain allows for a greater incidence of appropriately aged learners.

On average, for every 100 children that are in Grade 1, there are 52 in Grade 12. Although the growth in primary school learner numbers will impact on this data, this could still be suggestive of a high dropout rate in South African schools – especially evident in poorer rural communities.

Although improving, the throughput rate is still low

Only 30 per cent of candidates of the 18-year-old cohort passed the senior certificate examination (Grade 12) in 2001, the last year for which data are available. The average throughput rate is 17 per cent in the Eastern Cape and 27 per cent in Mpumalanga and Free State. Provinces with the highest throughput rates are Western Cape (40 per cent) and Limpopo (35 per cent). Progression rates – the proportion of learners proceeding to the next level each year – are also improving.

Figure 4.1 Gross enrolment rates for primary and secondary schools from 1991 to 2000

Gross enrolment rates compare the enrolment in the education system to the appropriately-aged cohort in the population

Table 4.14 shows, the impact of the redistribution of educators through redeployment and post provisioning strategies within provinces. Compared to 1996 – with a learner: educator ratio of 40:1 in some instances - the 2001 and 2002 learner: educator ratios have improved. Although data are for different years, there is convergence between the learner: educator and learner: classroom ratios, indicating that the problem of educators without classrooms is progressively being addressed.

Learner educator ratio of 32:1

Table 4.15 Learner¹ : Classroom and Learner¹ : Educator² ratios

	2000	2002
	L : C	L : E
Eastern Cape	43	31
Free State	33	29
Gauteng	33	31
KwaZulu-Natal	40	36
Limpopo	40	32
Mpumalanga	48	34
Northern Cape	26	30
North West	34	28
Western Cape	31	32
Average	38	32

1. Learner enrolment - only public schools.

2. Educator numbers - only state funded.

Source: School Register of Needs, 2000 Survey.

The final year (Grade 12) pass rate should not be the only measure of success in a school system, although it is very important. At present, it is the only nationally set examination, and, once due consideration has been given to specific regional socio-economic conditions, it can serve as an inter-provincial comparative indicator. As a national average, there has been a steady improvement in the pass rate from 49 per cent in 1996 to nearly 69 per cent in 2002. Pass rates improved in all the provinces. The most dramatic increase in the pass rate has been in Limpopo, with a pass rate of 69,5 per cent in 2002 compared

Senior certificate results greatly improved

to a pass rate of 35,1 per cent in 1998. The Northern Cape and Western Cape have exceptionally good pass rates, at 89,9 per cent and 86,5 per cent, respectively.

Table 4.16 Number of senior certificate passes: 2001 and 2002

	2001		2002	
	Learners	% of learners that wrote senior certificate	Learners	% of learners that wrote senior certificate
Eastern Cape	28 825	45,6%	33 286	51,8%
Free State	15 703	59,0%	17 777	70,7%
Gauteng	47 368	73,6%	50 941	78,1%
KwaZulu-Natal	58 620	62,8%	68 973	70,7%
Limpopo	48 971	59,5%	49 644	69,5%
Mpumalanga	18 136	46,9%	22 222	55,8%
Northern Cape	5 571	84,2%	5 309	89,9%
North West	22 963	62,5%	24 637	67,8%
Western Cape	31 049	82,7%	32 985	86,5%
Total	277 206	61,7%	305 774	68,9%

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

Gauteng and Western Cape have the highest number of university-entrance passes

It is also important to look at the 'quality' of the pass rate and the number of matric endorsements, which means university entrance level passes. The highest number of endorsements occurs in Gauteng and Western Cape, which have highly qualified educators. It is interesting to note that KwaZulu-Natal – a largely rural province with adverse socio-economic conditions in the rural areas, and which did incorporate a self governing territory - has consistently produced a high number of endorsements. Thus is in spite of a high learner: educator ratio and a low per capita expenditure.

Table 4.17 Number of matric endorsements: 2001 and 2002

	2001		2002	
	Learners	Endorsement as a % of senior certificate passes	Learners	Endorsement as a % of senior certificate passes
Eastern Cape	4 133	6,5%	5 189	8,1%
Free State	3 853	14,5%	4 733	18,8%
Gauteng	13 697	21,3%	14 172	21,7%
KwaZulu-Natal	15 697	16,8%	17 636	18,1%
Limpopo	10 994	13,4%	12 517	17,5%
Mpumalanga	3 701	9,6%	4 317	10,8%
Northern Cape	975	14,7%	1 081	18,3%
North West	5 279	14,4%	5 285	14,5%
Western Cape	9 378	25,0%	10 118	26,5%
Total	67 707	15,1%	75 048	16,9%

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

The shortage of an appropriately skilled workforce has been recognised as one of the major obstacles to economic growth in South Africa. In 2000, the Human Sciences Research Council (HSRC) conducted a survey of 273 organisations to assess their skill shortages: 76 per cent indicated that they do not have adequate skilled human resources and 54 per cent of organisations that need engineers experienced problems in recruiting these professionals. Learners need to be prepared for a workplace that demands sophisticated and technologically orientated skills, and a solid base in mathematics and science is an essential requirement for this.

Shortage of technically skilled workforce obstacle to economic growth

Tables 4.17 and 4.18 present the senior certificate mathematics and physical science results. Only a small percentage of senior certificate students write mathematics (33 per cent); of these students only 56,1 per cent passed, and within this, an even smaller number passed on the higher grade level. The same pattern prevails for physical science.

Table 4.18 Mathematic - Grade 12 learners and pass rates for 2002

Province	Learners passing HG	Learners passing HG as % of those that wrote	Learners passing SG	Learners passing SG as % of those that wrote	Learners passing LG	Learners passing LG as % of those that wrote	Learners who wrote exam	% who wrote and passed
Eastern Cape	1 334	3,4%	14 713	37,7%	4 783	12,3%	38 992	53,4%
Free State	1 191	8,8%	6 356	46,8%	1 338	9,9%	13 579	65,4%
Gauteng	6 092	14,5%	18 988	45,1%	3 360	8,0%	42 144	67,5%
KwaZulu-Natal	4 513	6,8%	23 296	34,8%	6 714	10,0%	66 859	51,6%
Limpopo	1 440	4,1%	11 307	32,1%	2 792	7,9%	35 223	44,1%
Mpumalanga	929	4,6%	6 457	32,3%	1 761	8,8%	20 005	45,7%
Northern Cape	344	14,3%	1 511	62,9%	187	7,8%	2 403	85,0%
North West	1 006	5,0%	7 348	36,5%	1 906	9,5%	20 149	50,9%
Western Cape	3 679	17,0%	11 313	52,3%	1 788	8,3%	21 635	77,6%
Total	20 528	7,9%	101 289	38,8%	24 629	9,4%	260 989	56,1%

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

Table 4.19 Physical Science - Grade 12 learners and pass rates for 2002

Province	Learners passing HG	Learners passing HG as % of those that wrote	Learners passing SG	Learners passing SG as % of those that wrote	Learners passing LG	Learners passing LG as % of those that wrote	Learners who wrote exam	% who wrote and passed
Eastern Cape	1 331	5,6%	10 531	44,5%	5 229	22,1%	23 655	72,3%
Free State	1 584	17,9%	4 154	47,0%	1 218	13,8%	8 847	78,6%
Gauteng	6 658	24,4%	13 072	47,9%	3 172	11,6%	27 302	83,9%
KwaZulu-Natal	6 157	17,5%	16 620	47,2%	4 753	13,5%	35 202	78,2%
Limpopo	2 474	12,5%	8 570	43,1%	1 866	9,4%	19 863	65,0%
Mpumalanga	1 269	9,5%	5 260	39,4%	2 163	16,2%	13 364	65,0%
Northern Cape	311	20,8%	940	62,8%	162	10,8%	1 496	94,5%
North West	1 434	11,7%	5 507	45,1%	2 118	17,3%	12 223	74,1%
Western Cape	3 670	30,8%	6 109	51,3%	1 197	10,1%	11 903	92,2%
Total	24 888	16,2%	70 763	46,0%	21 878	14,2%	153 855	76,4%

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

Conclusion

This chapter shows that substantial progress has been made in transforming education. Notable achievements are evident in a range of indicators such as meaningful enrolment, improved learner: educator ratios, improved infrastructure and a rising matric pass rate. Spending on school education has grown by 10,1 per cent over the last three years, and will continue to grow by 8,3 per cent over the MTEF.

However, there still remain some key challenges for the sector to resolve. The provincial education departments will have to dedicate effort towards improving their financial management, as the 2001/02 audit reports reveal that only Free State and Mpumalanga received unqualified audit reports. The remaining seven provinces and the national Department all received qualified audit reports.

The sector also needs to enhance its capacity to spend its capital budgets, and to ensure that sufficient funds are spent for non-personnel non-capital expenditure.

While attempting to assess service delivery trends, the *Review* also points to the unavailability of credible non-financial information. The 2003/04 strategic plans represent the first attempt to formalise and standardise measurable objectives and performance targets for education.

In addition to senior certificate results, provincial education departments will be measured against indicators such as absenteeism levels, repetition and dropout rates and numeracy in grades 3 and 6. Together with the annual report, the strategic plans will form the basis of reporting on performance. In addition, a process to complement the quarterly financial reports with performance measures on non-financial outputs, will be initiated.