Mainstreaming Higher Education in National and Regional Development in Southern Africa

Regional Country Profiles

The Study Team are responsible for the choice and presentation of the data and facts contained in this document and for the opinions expressed therein, these are not necessarily those of SARUA nor the AAU and do not make any commitment for either association.

The country study presented here was prepared as a part of the study "Mainstreaming Higher Education in National and Regional Development in Southern Africa" (SARUA, 2009). It forms the background data to that study and is published here as an appendix to that report. The Country Studies data has not been subjected to the same level of editorial scrutiny as the Report itself. However, we publish these country studies as supplemental information to that presented in the Report, and hope that they will be of value to other researchers in the region.

SOUTH AFRICA

10.1 Country Context

TABLE: 1. World Development Indicators

World Development Indicators	Yr 2006
Population, total (millions)	47.4
Population growth (annual %)	1.1
Surface area (sq km) (thousands)	1219.1
Life expectancy at birth, total (years)	50.7
Mortality rate, infant (per 1 000 live births)	56
GNI (current US$) (billions)	249.9
GNI per capita, Atlas method (current US$)	5390
Prevalence of HIV, total (% of population ages 15-49)	18.8

Source: *World Bank South Africa: Quick Facts*[1]

South Africa's 1994 transition from apartheid to constitutional democracy has been one of the most astonishing political achievements of our time. It is a powerful demonstration that a peaceful, negotiated path from conflict and injustice to cooperation and reconciliation is possible. South Africa is a country with extreme differences in incomes and wealth. Thirteen percent of the population lives in 'first world' conditions, while nearly 50 percent live in developing country conditions. In this latter group, only one-quarter of households has access to electricity and running water; only half obtain a primary school education; and over a third of the children suffer from chronic malnutrition. Poverty levels have not reduced significantly and the burden of HIV/AIDS and unemployment remains high. Despite the enormity of the backlogs, government initiatives to meet these challenges have had encouraging results. The pro-poor reorientation of spending has contributed to improved social development indicators in a range of areas, particularly relating to access to services and education, and progress has also been made towards meeting some of the other Millennium

[1]http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/SOUTHAFRICAEXTN/0,,menuPK:368102~pagePK:141132~piPK:141109~theSitePK:368057,00.html accessed 19 August 2008

Development Goals (MDGs). However, poverty, hunger, child mortality and HIV/AIDS-prevalence MDGs are unlikely to be met, if current trends persist.

10.2 Planning Context

Vision 2014

South Africa's vision statement has the following objectives:

- Reduce poverty and unemployment by half
- Provide the skills required by the economy
- Ensure that all South Africans are able to fully to exercise their constitutional rights and enjoy the full dignity of freedom
- Compassionate government service to the people
- Achieve a better national health profile and massively reduce preventable causes of death, including violent crime and road accidents
- Significantly reduce the number of serious and priority crimes and cases awaiting trial
- Position South Africa strategically as an effective force in global relations.

South Africa's main planning document for each electoral period is the Medium Term Strategic Framework (MTSF). The MTSF for 2004 – 2009 has as its core objectives: increasing employment and reducing poverty.

Medium Term Strategic Framework (MTSF) 2004 – 2009

The major strategic priorities identified in the MTSF include:

- Increasing the gross fixed capital formation (GFCF) rate from 16 percent to 25 percent over the next decade
- Encouraging economic activity among communities which are marginalised from the First Economy
- Ensuring the acquisition of skills and facilitating sustainable livelihoods.
- Reducing dependence on social grants at the same time as growing the economy and expanding access to economic opportunities

- Improving state capacity for growth and development
- Combating crime to facilitate economic growth

10.3 Education Context

The vision and mission of the National Department of Education

As stated on its website the Department's vision is as follows:

'Our vision is of a South Africa in which all our people have access to lifelong education and training opportunities, which will in turn contribute towards improving the quality of life and building a peaceful, prosperous and democratic society.'

Mission

- To provide leadership in the construction of a South African education and training system for the 21st century.
- Making the provincial system work by making co-operative government work.
- Breaking the back of illiteracy among adults and youths in five years.
- Developing schools as centres of community life.
- Ending conditions of physical degradation in South African schools.
- Developing the professional quality of our teaching force.
- Ensuring the success of active learning through outcomes-based education.
- Creating a vibrant further education and training system to equip youth and adults to meet the social and economic needs of the 21st century.
- Building a rational, seamless higher education system that grasps the intellectual and professional challenges facing South Africans in the 21st century.
- Dealing urgently and purposefully with the HIV/AIDS emergency in and through the education and training system.
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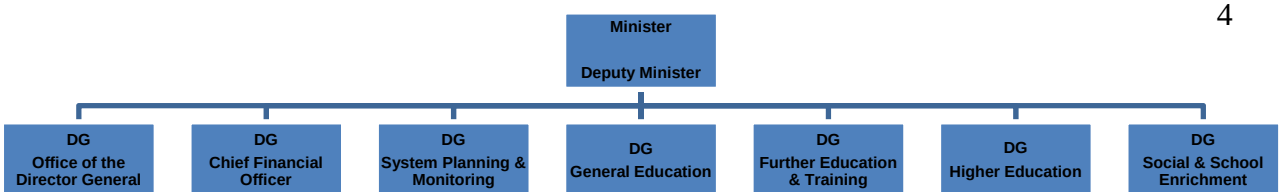
    - **DIAGRAM: 1. Organogram for the National Department of Education**



The Constitution has vested substantial power in the provincial legislatures and governments to run educational affairs. This is subject to the national policy framework and excludes universities and universities of technology. The National Department of Education is responsible for formulating policy, setting norms and standards, and monitoring and evaluating all levels of education. It also holds responsibility for further education and training, social enrichment and higher education. In fulfilling this purpose the National Education Department also funds HE institutions through subsidies and by providing financial support to students through the National Student Financial Aid Scheme (NSFAS).

TABLE: 2. Education System in South Africa

Level of Education	Grades	Number of Years	Age Range	National Examination/Certificate
General Education and Training (GET)	Grade R (Reception) – Grade 9	10	7-15 yrs	Equivalent of Adult Basic Education and Training (ABET) qualification
Further Education and Training (FET)	Grades 10-12 / N1-N6 (FET colleges)	3/6		(NQF Levels 2-4)
Higher Education (HE)				Degrees, (including PhDs and MA level) Diplomas and Certificates (NQF Levels 5-8)

All of these formal education levels are integrated within the National Qualifications Framework (NQF) provided by the South African Qualifications Authority (SAQA) Act, 1995 (Act 58 of 1995). Learners attend school for 13 years, although the first year of education (Grade R) and the last three are not compulsory. Grade R can also be completed at nursery school.

TABLE: 3. Situational Analysis of Education, South Africa (2006)

Province	School Sector	Learners			Educators			Schools			LER	LSR
		Number	As % of Provincial Total	As % of National Total	Number	As % of Provincial Total	As % of National Total	Number	As % of Provincial Total	As % of National Total		
Eastern Cape	Independent	29 805	1.4	8.8	758	1.2	3.9	106	1.8	9.7	39.3	281
	Public	2 136 189	98.6	17.9	64 168	98.8	17.5	5 929	98.2	23.5	33.3	360
	Total	2 165 994		17.6	64 926		16.8	6 035		23.0	33.4	359
Free State	Independent	16 263	2.4	4.8	765	3.3	3.9	69	3.8	6.3	21.3	236
	Public	670 083	97.6	5.6	22 721	96.7	6.2	1 752	96.2	7.0	29.5	382
	Total	686 346		5.6	23 486		6.1	1 821		6.9	29.2	377
Gauteng	Independent	152 986	8.6	45.0	9 630	16.7	49.6	366	16.3	33.3	15.9	418
	Public	1 617 124	91.4	13.5	47 990	83.3	13.1	1 880	83.7	7.5	33.7	860
	Total	1 770 110		14.4	57 620		14.9	2 246		8.5	30.7	788
KwaZulu-Natal	Independent	47 206	1.7	13.9	2 789	3.3	14.4	176	3.0	16.0	16.9	268
	Public	2 662 202	98.3	22.3	81 171	96.7	22.1	5 651	97.0	22.4	32.8	471
	Total	2 709 408		22.0	83 960		21.7	5 827		22.2	32.3	465
Limpopo	Independent	28 928	1.5	8.5	1 333	2.3	6.9	97	2.2	8.8	21.7	298
	Public	1 902 279	98.5	15.9	56 962	97.7	15.5	4 243	97.8	16.8	33.4	448
	Total	1 931 207		15.7	58 295		15.1	4 340		16.5	33.1	445
Mpumalanga	Independent	21 285	2.3	6.3	975	3.5	5.0	99	5.4	9.0	21.8	215
	Public	922 823	97.7	7.7	26 746	96.5	7.3	1 749	94.6	6.9	34.5	528
	Total	944 108		7.7	27 721		7.2	1 848		7.0	34.1	511
North West	Independent	11 007	1.2	3.2	677	2.2	3.5	43	2.0	3.9	16.3	256
	Public	894 249	98.8	7.5	30 388	97.8	8.3	2 115	98.0	8.4	29.4	423
	Total	905 256		7.4	31 065		8.0	2 158		8.2	29.1	419
Northern Cape	Independent	2 846	1.3	0.8	137	2.1	0.7	15	3.4	1.4	20.8	190
	Public	208 135	98.7	1.7	6 543	97.9	1.8	421	96.6	1.7	31.8	494
	Total	210 981		1.7	6 680		1.7	436		1.7	31.6	484
Western Cape	Independent	29 734	3.0	8.7	2 343	7.1	12.1	127	8.0	11.6	12.7	234
	Public	949 092	97.0	7.9	30 499	92.9	8.3	1 454	92.0	5.8	31.1	653
	Total	978 826		8.0	32 842		8.5	1 581		6.0	29.8	619
National	**Independent**	**340 060**	**2.8**		**19 407**	**5.0**		**1 098**	**4.2**		**17.5**	**310**
	Public	**11 962 176**	**97.2**		**367 188**	**95.0**		**25 194**	**95.8**		**32.6**	**475**
	Total	**12 302 236**			**386 595**			**26 292**			**31.8**	**468**

LER – Learner to Educator rate *LSR – Learner to School rate*

Source: *Department of Education, School Realities, 2006*

The past 12 years have seen increased investment in education. South Africa now spends 5.4 percent 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 percent 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. Among female learners of school going age participation is estimated at 98 percent in 2006, up from 93 percent in 2003. With the introduction of the no-fee schools policy in 2007, participation rates are expected to continue improving. This will go further to realising the goal of providing basic education to all South Africans. (IGFR, 2007)

TABLE: 4. Gross Enrolment Ratio (GER) and Gender Parity Index (GPI) in the ordinary school sector, by province and gender (2006)

Province	Gender	School Phases (Gr. 1-12)						School Bands (Gr. R-12)					
		GER (%)			GPI			GER (%)			GPI		
		Primary Phase (Gr. 1-7)	Secondary Phase (Gr. 8-12)	Total (Gr. 1-12)	Primary Phase (Gr. 1-7)	Secondary Phase (Gr. 8-12)	Total (Gr. 1-12)	GET Band (Gr. R-9)	FET Band (Gr. 10-12)	Total (Gr. R-12)	GET Band (Gr. R-9)	FET Band (Gr. 10-12)	Total (Gr. R-12)
Eastern Cape	Female	115	82	101				105	76	98			
	Male	118	68	97				105	59	94			
	Total	116	75	99	0.97	1.21	1.04	105	68	96	1.00	1.29	1.04
Free State	Female	90	89	90				86	84	86			
	Male	93	84	89				88	76	85			
	Total	92	87	90	0.97	1.06	1.01	87	80	85	0.98	1.11	1.01
Gauteng	Female	99	103	100				93	97	94			
	Male	100	99	100				94	89	93			
	Total	99	101	100	0.99	1.04	1.00	94	93	94	0.99	1.09	1.01
KwaZulu-Natal	Female	99	94	97				93	92	93			
	Male	104	89	98				97	84	94			
	Total	101	91	97	0.95	1.06	0.99	95	88	93	0.96	1.10	0.99
Limpopo	Female	95	107	100				95	110	98			
	Male	102	98	101				99	95	98			
	Total	99	102	100	0.93	1.09	0.99	97	103	98	0.96	1.16	1.00
Mpumalanga	Female	106	106	106				100	106	101			
	Male	113	99	107				105	94	102			
	Total	109	103	107	0.94	1.07	0.99	102	100	102	0.95	1.13	0.99
North West	Female	95	91	93				88	86	87			
	Male	99	87	94				91	79	88			
	Total	97	89	94	0.96	1.05	0.99	89	83	88	0.97	1.09	0.99
Northern Cape	Female	95	86	91				88	80	86			
	Male	98	83	92				91	74	87			
	Total	96	85	92	0.97	1.04	0.99	90	77	87	0.97	1.08	0.99
Western Cape	Female	95	91	93				91	83	89			
	Male	96	80	89				90	68	85			
	Total	95	88	91	0.99	1.14	1.04	90	75	87	1.01	1.22	1.05
National	Female	100	95	98				95	92	94			
	Male	104	87	97				97	80	93			
	Total	102	91	98	0.96	1.09	1.01	96	86	94	0.98	1.15	1.01

Source: Department of Education, Education Statistics 2006

South Africa's gross enrolment ratios for primary and secondary education phases were 103 percent and 89 percent respectively in 2005. The figures reflect two kinds of improvement. Firstly, most children of school-going age attend school and, secondly, the education system is becoming more efficient in dealing with out-of-age enrolment. (IGFR, 2007)

TABLE: 5. Percentage of candidates with 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%	12,1%	12,5%	12,7%	11,0%
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%
National average	**16,9%**	**18,6%**	**18,2%**	**17,0%**	**16,3%**

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

- **A key measure of the performance of the education sector is the Grade 12 pass rate.**
- **The number of learners passing Grade 12 rose from 249 831 in 1999 to 351 503 in 2006. Learners passing Grade 12 mathematics and physical science have also been increasing. 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 or are being held back in Grade 11, which had been the practice in some schools to boost their Grade 12 pass rates.**

In 2006, 351 503 Grade 12 learners passed the examination. Of these, 16.3 percent received university exemption compared to 17 percent in 2005. There were thus 701 fewer learners who qualified for university in 2006 than in 2005, but 713 more than in 2004.

Various pieces of policy and legislation create the framework for transformation in education and training in South Africa. The most important are outlined below:

- **The National Education Policy Act (NEPA) (1996)**

This describes the policies, as well as the legislative and monitoring responsibilities of the Minister of Education and formalises the relations between national and provincial authorities.

- **The South African Schools Act (SASA) (1996)**

This promotes access, quality and democratic governance in the schooling system.

- **The Further Education and Training Colleges Act, 2006 (Act No 16 of 2006)**

Providing for the regulation of further education and training.

- **The Higher Education Act (1997)**

Defining a unified and nationally planned system of higher education.

- **The Adult Basic Education and Training Act (ABET) (2000)**

This provides for the establishment of public and private adult learning centres, funding for ABET, the governance of public centres, as well as quality assurance mechanisms for this sector.

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10.3.1 Focus on Higher Education

10.3.1.1 Policy environment

Vision 2014

Provide the skills required by the economy

Medium Term Strategic Framework (2004 – 2009)

Within the broader outline provided earlier in this section, the following points are more specific in the context of higher education.

- Central main intervention is to grow the economy
- Direct facilitation of job-creation, skills development and work experience
- Rearrange the allocation of the student assistance scheme for tertiary education in such a way that it prioritises skills urgently required by the economy, starting off

  with a four-year quota system to be reviewed for accent to change when the need arises

Government's Programme of Action 2008

- Double output of universities in priority sectors by aligning NSFAS and subsidy

funding with scarce skills. DoE has allocated R439 million to improving the facilities at disadvantaged institutions, for the support of key skills areas, including Faculties of Engineering and Technology

- Increase the resource allocation for Research and Development and Innovation to reach 1 percent of GDP, and double the pool of young researchers. R195 million has been set aside for the strengthening of the scientific capacity of higher education institutions. National spending on R&D stands at 0.9 percent of GDP

National Plan for Higher Education (2001)

The plan established indicative targets for the size and shape of the HE system, including overall growth and participation rates, institutional and programme mixes, and equity and efficiency goals. It included the following objectives:

- The participation rate in HE to be increased from 15 percent to 20 percent in the long term, i.e. 10 to 15 years
- A shift in the balance of enrolments over the following five to 10 years between the Humanities; Business and Commerce; and Science, Engineering and Technology, from the current ratio of 49:26:25 to 40:30:30
- Institutions to establish student-equity targets, with the emphasis on programmes in which black and female students were underrepresented; and develop strategies to ensure equity of outcomes
- Institutions to develop employment-equity plans with clear targets for rectifying race and gender inequities
- Institutional diversity to be achieved through the approval of a distinct mission and academic programme profile for each institution
- The academic programme mix at each institution to be determined on the basis of its existing programme profile, and on its demonstrated capacity to add new programmes
- Redress for historically black institutions to be linked to agreed missions and programme profiles, including developmental strategies to build capacity
- Research to be funded through a separate formula based on research output, including, at a minimum, masters and doctoral graduates and research publications
- Earmarked funds to be allocated to build research capacity, including scholarships to promote postgraduate enrolments
- The institutional landscape to be restructured through collaboration at regional level, in programme development, delivery and rationalisation, particularly of small and costly programmes.

10.3.1.2 Profile of Higher Education

South Africa's HE landscape consists of the following 23 institutions:

- University of the Witwatersrand
- University of Cape Town
- Rhodes University
- Stellenbosch University
- University of the Western Cape
- University of Zululand
- University of Venda
- University of the Free State
- North West University
- University of Pretoria
- University of KwaZulu-Natal
- University of South Africa (Unisa)
- Tshwane University of Technology
- Durban Institute of Technology
- Central University of Technology, Free State
- Mangosuthu Technikon
- University of Johannesburg
- University of Limpopo
- Nelson Mandela Metropolitan University
- Walter Sisulu University for Science and Technology
- University of Fort Hare
- Cape Peninsula University of Technology
- Vaal University of Technology

An additional 80 private higher education institutions have been registered in terms of section 54(1)(c) of the Higher Education Act.

TABLE: 6. Higher Education Enrolment (by Field of Study) 2006

2ND-ORDER CESM CATEGORY	OCCAS-IONAL	UG DIP/CERT	UG BACH. DEG	PG /DIP/POST DIP DIP/CERT	PG BACH. DEG	HONOURS /NH DIP	MASTERS/ MASTERS DIP	DOCTO-RATE	TOTAL
Ag. and Renewable Resources	165.33	5,978.25	4,326.25	33.50	0.00	300.42	1,218.67	424.00	**12,446.42**
Arch. and Env. Design	48.50	6,013.92	4,488.25	59.50	15.00	422.08	1,020.50	80.00	**12,147.75**
Arts, Visual and Performing	248.92	2,922.08	4,544.08	53.00	0.00	217.17	619.67	117.00	**8,721.92**
Business, Commerce & Mgmt. Sc.	4,972.92	83,881.75	110,206.25	3,092.42	6.17	11,405.92	8,839.92	631.00	**223,036.33**
Communication	402.83	5,087.42	8,406.17	71.75	0.00	450.08	348.50	81.50	**14,848.25**
Computer Sc. and Data Proc.	1,532.08	15,208.67	14,018.17	129.17	1.42	1,250.50	996.00	198.67	**33,334.67**
Education	567.92	44,766.33	24,635.25	4,879.75	1,286.00	17,044.17	4,248.42	1,048.00	**98,475.83**
Engineering and Eng. Tech.	1,332.42	34,548.25	17,847.08	282.67	0.00	825.50	2,630.25	725.50	**58,191.67**
Health Care and Health Sciences	405.50	5,926.00	27,057.75	1,813.42	836.00	683.17	7,136.42	1,002.50	**44,860.75**
Home Economics	27.33	2,916.25	1,688.25	19.50	0.00	26.50	191.00	44.33	**4,913.17**
Industrial Arts, Trades and Tech.	7.00	1,185.83	502.58	0.00	0.00	69.67	29.33	4.00	**1,798.42**
Language, Linguistics, and Lit.	1,607.42	3,259.92	11,762.50	41.17	0.25	950.50	1,314.83	494.50	**19,431.08**
Law	1,436.83	4,597.33	34,563.00	1,535.00	189.25	33.50	2,786.67	391.00	**45,532.58**
Libraries and Museums	56.75	682.58	1,842.67	37.00	0.00	159.50	139.50	59.00	**2,977.00**
Life Sciences and Physical Sc.	1,363.75	5,608.75	16,278.67	21.83	0.00	1,447.92	2,660.42	1,650.00	**29,031.33**
Mathematical Sciences	779.33	2,023.58	10,299.67	83.08	4.00	805.58	618.50	246.00	**14,859.75**
Military Sciences	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	**0.50**
Philosophy, Religion and Theology	186.17	176.25	3,638.92	71.92	1.33	533.75	1,118.67	790.00	**6,517.00**
Phys. Ed., Health Ed. and Leisure	26.83	1,431.75	2,200.92	25.50	4.00	230.83	126.83	43.00	**4,089.67**
Psychology	4,270.50	210.17	18,014.33	46.92	0.00	3,096.50	1,523.00	489.50	**27,650.92**
Public Admin. and Social Services	364.25	17,351.92	15,905.42	50.50	0.00	858.00	2,205.58	422.00	**37,157.67**
Social Sciences and Social	2,529.42	3,151.00	28,341.83	142.92	12.58	2,850.75	3,091.33	877.50	**40,997.33**

Studies									
Unknown	301.00	10.00	4.00	1.00	0.00	0.00	35.00	9.00	**360.00**
TOTAL (FRACTIONAL COUNTS)	**22,633.00**	**246,938.00**	**360,572.00**	**12,492.00**	**2,356.00**	**43,662.00**	**42,899.00**	**9,828.00**	**741,380.00**

Source: *Ministry of Education, HEMIS database*

TABLE: 7. Higher Education Graduates (by Field of Study) 2006

2ND-ORDER CESM CATEGORY	UG DIP/CERT	UG BACH. DEG	PG /DIP/POST DIP DIP/CERT	PG BACH. DEG	HONOURS /NH DIP	MASTERS/MASTERS DIP RESEARCH	MASTERS/MASTERS DIP NON_RESEARCH	DOCTOR-ATE	TOTAL
Ag. and Renewable Resources	839.92	959.92	21.50	0.00	181.25	163.14	49.61	54.00	**2,269.33**
Arch. and Env. Design	1,111.83	1,059.58	11.00	9.00	246.50	100.42	131.25	3.00	**2,672.58**
Arts, Visual and Performing	585.08	1,090.25	29.00	0.00	153.00	79.86	42.14	9.00	**1,988.33**
Business, Commerce & Mgmt. Sc.	10,627.92	12,718.00	1,401.33	2.00	3,495.25	355.61	1,446.89	61.00	**30,108.00**
Communication	610.33	1,112.42	35.00	0.00	246.17	29.51	30.99	16.00	**2,080.42**
Computer Sc. and Data Proc.	1,678.67	2,044.25	56.58	0.00	533.58	126.99	44.26	12.00	**4,496.33**
Education	16,491.75	4,284.42	2,278.17	563.50	4,295.75	303.33	209.68	127.00	**28,553.58**
Engineering and Eng. Tech.	3,635.58	2,985.08	101.67	0.00	298.25	412.36	176.31	105.00	**7,714.25**
Health Care and Health Sciences	1,530.83	5,588.75	866.92	240.00	454.83	429.19	442.47	110.00	**9,663.00**
Home Economics	624.25	378.33	15.50	0.00	13.17	21.39	8.61	3.00	**1,064.25**
Industrial Arts, Trades and Tech.	270.17	182.33	0.00	0.00	64.25	3.67	6.83	1.00	**528.25**
Language, Linguistics, and Lit.	493.58	1,593.17	24.08	0.25	463.58	143.68	84.65	60.00	**2,863.00**
Law	414.50	3,610.67	609.00	66.83	10.25	199.65	477.52	25.00	**5,413.42**
Libraries and Museums	44.17	220.25	23.00	0.00	56.50	10.83	11.18	12.00	**377.92**
Life Sciences and Physical Sc.	778.17	2,371.92	16.42	0.00	1,100.08	502.95	108.63	206.00	**5,084.17**
Mathematical Sciences	290.67	1,134.50	31.00	3.00	433.67	83.26	58.49	28.00	**2,062.58**
Philosophy, Religion and Theology	37.58	616.00	43.75	0.83	280.25	147.95	129.30	70.00	**1,325.67**
Phys. Ed., Health Ed. and Leisure	228.92	435.17	2.50	3.00	195.50	21.74	0.76	8.00	**895.58**

Psychology	11.33	2,605.58	37.75	0.00	1,237.50	234.08	174.92	74.00	**4,375.17**
Public Admin. and Social Services	1,758.50	1,960.17	43.50	0.00	350.50	151.16	159.26	38.00	**4,461.08**
Social Sciences and Social Studies	361.25	4,290.25	124.33	1.58	1,202.17	334.33	232.17	77.00	**6,623.08**
Unknown	16.00	26.00	11.00	0.00	0.00	2.00	0.00	1.00	**56.00**
TOTAL (FRACTIONAL COUNTS)	**42,441.00**	**51,267.00**	**5,783.00**	**890.00**	**15,312.00**	**3,857.08**	**4,025.92**	**1,100.00**	**124,676.00**

Source: *Ministry of Education, HEMIS database*

10.3.1.3 Governance

Higher Education Act (1997)

- Provides for a unified and national system of HE.
- Establishment, governance and funding of public HE institutions
- Registration of private HE institutions

This Act, together with the Education White Paper on HE (1997) and the National Plan for HE, forms the basis for the transformation of the HE sector.

The South African **Council on Higher Education (CHE)** is an independent statutory body responsible for advising the Minister of Education on all matters related to higher education policy issues, and for quality assurance in higher education and training.

The role of HE in the South African education system is threefold:

- Human Resource Development (HRD): mobilising human talent and potential through lifelong learning to contribute to the social, economic, cultural and intellectual life of a rapidly changing society.
- High-level skills training: providing person-power to strengthen the country's enterprises, services and infra-structure. This requires the development of professionals with globally equivalent skills, but who are socially responsible and conscious of their role in contributing to the national development effort and social transformation.

- Producing, acquiring and applying new knowledge: national growth and competitiveness depend on continuous technological improvement and innovation, driven by a well-organised and vibrant research and development system that integrates the research and training capacity of HE with the needs of industry and of social reconstruction. (SA Yearbook 2007/08)

10.3.1.4 Research

The top five South African universities in terms of their contribution to research are:

(Percent of article output 1990 – 2004):

University of Pretoria: 15.34 percent

University of Cape Town: 14.27 percent

University of the Witwatersrand: 14.09 percent

Stellenbosch University: 13.28 percent

University of KwaZulu-Natal: 10.71 percent

Main fields of research:

- Medical Science
- Southern African studies
- Marine Science
- Veterinarian Science
- Philosophy
- Wildlife
- Psychology
- Astronomy and Astrophysics
- Education

South Africa has the largest research sector in the region accounting for 64 percent of the entire budget spent on research on the continent. Due partly to international isolation under apartheid and the need to find mechanisms to survive in an era of international sanctions, the previous South African government, with assistance from those countries who were not averse to its political ideals, assisted in building a vibrant research sector in areas such as nuclear physics; fossil fuel processing; communication and information technology.

10.4 Financing Context

The analysis in this section is based on the National Budget. It excludes the cost of delivery of primary and secondary education as the provision of these levels of the education system has been decentralised to a provincial level.

10.4.1 Trends in allocation

TABLE: 8. National Budget Allocations

Rands 000	2005/06	2006/07	2007/08	2008/09
Allocation	**Actual**	**Actual**	**Estimate**	**Estimate**
Total Expenditure	**416,683,997**	**470,192,470**	**542,116,575**	**611,095,906**
Total Education	12,436,807	14,249,805	16,377,652	18,857,546
% of budget	2.98%	3.03%	3.02%	3.09%
% of GDP	0.78%	0.79%	0.80%	0.82%
Total Health	9,937,084	11,338,047	12,744,932	15,100,845
% of budget	2.38%	2.41%	2.35%	2.47%
% of GDP	0.63%	0.63%	0.62%	0.66%
Social Development	55,067,840	61,676,087	67,024,893	76,007,974
% of budget	13.22%	13.12%	12.36%	12.44%
% of GDP	3.47%	3.41%	3.28%	3.32%
Total Defence	23,510,541	23,817,584	26,148,701	28,233,155
% of budget	5.64%	5.07%	4.82%	4.62%
% of GDP	1.48%	1.32%	1.28%	1.23%
GDP	1,584,743,000	1,807,316,000	2,045,533,000	2,286,906,000

Note 1: The Education budget does not include provincial spending on primary and secondary education
Note 2: The Social Development budget includes social assistance grants that were previously funded at a provincial level

Source: *National Treasury Budget Review 2008*

The table above shows that expenditure on Education increased from R12.4-billion in 2005/06 to R18.8-billion in 2008/09 at an average annual rate of 14.9 percent. Over the same period, Health

expenditure increased at an average annual rate of 15 percent; Social Development at 11.3 percent and Defence at 6.3 percent. Furthermore, between 2005/06 and 2008/09 Education spending as a percentage of GDP increased slightly from 0.78 percent to 0.82 percent, while Defence spending as a percentage of GDP decreased slightly from 1.48 percent to 1.23 percent. This may be an indication of the South African attempt to reprioritise expenditure in favour of education and the social sector away from defence spending.

TABLE: 9. National Education Budget Allocations

Rands 000	**2005/06**	**2006/07**	**2007/08**	**2008/09**
Allocation	**Actual**	**Actual**	**Estimate**	**Estimate**
Total Expenditure	**12,436,807**	**14,249,805**	**16,377,652**	**18,857,546**
1. Administration	132,474	147,160	151,322	202,683
% Total	1.07%	1.03%	0.92%	1.07%
2. Systems Planning and Monitoring	34,202	36,430	90,338	98,116
% Total	0.28%	0.26%	0.55%	0.52%
3. General Education	224,479	228,257	297,874	348,166
% Total	1.80%	1.60%	1.82%	1.85%
4. Further Education and Training	238,461	710891	1,189,964	1,023,353
% Total	1.92%	4.99%	7.27%	5.43%
5. Social and school enrichment	1,144,523	1,141,481	1,286,816	1,980,464
% Total	9.20%	8.01%	7.86%	10.50%
6. Higher Education	10,646,832	11,956,879	13,326,930	15,178,189
% Total	85.61%	83.91%	81.37%	80.49%
7. Auxiliary and Associated Services	15,836	28,707	34,408	26,575
% Total	0.13%	0.20%	0.21%	0.14%

Source: *Estimates of National Expenditure 2008*

Spending in the National Education budget is dominated by the higher education programme which receives, on average, 82.8 percent of total expenditure. This programme consists mainly of transfers to higher education institutions and the National Student Financial Aid Scheme. The percentage share, although high, does decrease over the period from 85.61 percent of the total budget in 2005/06 to 80.49 percent in 2008/09.

10.4.2 Activity Support

TABLE: 10. Breakdown of Higher Education Budget

Rands 000	**2005/06**	**2006/07**	**2007/08**	**2008/09**
Allocation	**Actual**	**Actual**	**Estimate**	**Estimate**
Higher Education Total	10,646,832	11,956,879	13,326,930	15,178,189
Compensation of employees	9,816	12,676	12,362	14,784
% total	0.09%	0.11%	0.09%	0.10%
Goods and services	3,953	4,045	9,450	8,784
% total	0.04%	0.03%	0.07%	0.06%
Transfers and subsidies	10,632,860	11,939,978	13,304,745	15,154,291
% total	99.87%	99.86%	99.83%	99.84%
Payments for capital assets	203	180	373	330
% total	0.00%	0.00%	0.00%	0.00%

Source: *Estimates of National Expenditure 2008*

Almost the entire higher education budget is allocated to transfers and subsidies. The main beneficiaries are departmental agencies, universities and technikons. The breakdown is illustrated below.

TABLE: 11. Transfers and Subsidies

Rands 000	**2005/06**	**2006/07**	**2007/08**	**2008/09**
Allocation	**Actual**	**Actual**	**Estimate**	**Estimate**

Council on Higher Education	26,648	27,902	29,297	31,208
National Student Financial Aid Scheme	864,092	926,378	1,332,697	1,566,465
Higher Education Institutions	9,899,491	10,828,620	11,944,151	13,556,618

Source: *Estimates of National Expenditure 2008*

Over the four-year period transfers to the National Student Financial Aid Scheme have increased at an average annual rate of 21.9 percent while transfers to higher education institutions have increased at an average annual rate of 11.0 percent and to the Council of Higher Education by 5.4 percent.

10.5 Issues and Observations

The higher education sector in South Africa is larger and better resourced than that of all other countries in the region. Like all of South Africa's social institutions, higher education faces the challenge of being originally designed for a small urban elite and being under pressure to cater for a growing demand from the poor and rural population. This is illustrated by the inefficiencies and lack of effectiveness in the higher education system. A major study has found that 40 percent of South African students drop out of university in their first year. Financial difficulties among the country's large pool of poor black students are, unsurprisingly, largely to blame – 'first generation' students from low-income, less-educated families are the most likely to drop out.

The Student Pathways study by the Human Sciences Research Council found that on average only 15 percent of students finish their degrees in the allotted time. High student dropout and failure rates are a major problem in a country with limited state resources, a desperate shortage of high level skills and a pressing need to raise income levels among the poor.

While South Africa has a highly successful National Student Financial Aid Scheme, which supports about 120 000 of 735 000 university students, loans and bursaries may not cover the full costs of study, leaving poor students struggling to meet living and other expenses.

Lack of finance emerged as the major impediment for students, said Moeketsi Letseka, the senior researcher who conducted the study. Letseka said this was to be expected considering that on average their monthly family income was between R400 (US$60) and R1,600 (US$240).

'Around 70 percent indicated that they had no siblings with university experience, which suggests that they are first-generation university students in their families,' he said.

Financial difficulties had compelled most of the students who dropped out to take up a part-time or

full-time job: 'While this was necessary in order to augment their meagre financial resources, there is no doubt that juggling study and work proved to be another reason for not focusing on studies,' Letseka points out.

Why students leave: investigating the problem of high university dropout rates researchers sought to understand factors influencing the pathways of students through universities into the labour market. The researchers traced a 2000 – 2002 cohort of students who dropped out or graduated from seven very different institutions around the country.

They drew on data from the Education Department, institutional reports, qualitative interviews with academics and managers, and a postal survey of 34 000 respondents. Of these, 20 000 had abandoned their studies and 14 000 had graduated.

The return rate was 16 percent, or some 5 400 former students. The full report was to have been published in November 2008.

The study found that among students who dropped out from the seven universities, on average 70 percent came from low-income families. This proportion rose to 82 percent at the historically disadvantaged University of Fort Hare. Low-family income generally equated with lack of formal education.

Black Africans comprised the largest proportion of students with low socioeconomic status. While 73 percent of black students were from low-income families, only 12 percent of white students were and, conversely, only 9 percent of black, but 47 percent of white, students were from families with high incomes.

Other reasons for high dropout rates, reported in local newspapers, were poor career choices, domestic problems, pregnancy and too much partying.

Universities are struggling to solve the dropout problem given its largely financial basis, and have called on government to raise student loans and bursaries to relieve the financial pressures on needy students. In the past decade many institutions have also introduced academic support systems for students from sub-standard schools.

The distance University of South Africa (Unisa) recently announced it plans to spend nearly R50-million (US$7.5-million) to establish a comprehensive network of tutors and academic support personnel across the country, in an effort to decrease dropout and failure rates. (www.universityworldnews.com 2 September 2008)