

South African Higher Education in the First Decade of Democracy



10 years

November 2004



CHE

***South African Higher Education
in the first decade of democracy***

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South African Higher Education in the first decade of democracy

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FOREWORD

The Council on Higher Education (CHE) is an independent statutory body established by the *Higher Education Act* of 1997. Its mandate is to advise the Minister of Education on all matters of higher education (HE), so as to bring equity and quality into the system and help it respond to economic and social development needs, provide effective and efficient management; and contribute to the public good. The CHE is responsible, through its Higher Education Quality Committee (HEQC), for quality assurance. It must regularly report on the state of South African higher education and contribute to its general development.

The tenth anniversary of South Africa's democracy is a timely opportunity to reflect on a decade of policy-making and policy implementation aimed at transforming South African higher education. *South African Higher Education in the First Decade of Democracy* describes and analyses contemporary conditions within South African higher education and the changes that have occurred during the past decade, with particular reference to what we inherited in 1994. More specifically, the report:

- Describes and analyses the state and conditions of South African higher education in 1994, given the available information, data and statistics.
- Provides as comprehensive a description and analysis of the contemporary state of South African higher education as is possible, given the available information, data and statistics.
- Describes and analyses the changes that have occurred during the past decade.
- Crystallises the key trends within South African higher education, identifying continuities and developments and changes occurring in South African higher education.
- Identifies the major challenges that confront South African higher education at system and institutional levels.

South African Higher Education in the First Decade of Democracy begins by making the 'case' for higher education, as a vital social domain and activity in general, and specifically in relation to the reconstruction and transformation agenda in South Africa. Using as a framework the inheritance of 1994, developments in the past ten years, the situation today, and critical issues and key challenges in the coming years, it then looks at:

- Legal and Policy Context
- Institutional Landscape
- Equity
- Teaching and Learning
- Research
- Community Engagement
- Quality Assurance
- Responsiveness
- Governance
- Financing
- Internationalisation.

Finally, Chapter 13, *South African Higher Education: Past, Present and Future*, crystallises the significant elements of the system, its continuities and changes, and the challenges and critical issues that confront the system and the institutions.

Over 80 figures and tables convey a wealth of statistical and other information about the changes and contemporary conditions in South African higher education.

South African Higher Education in the First Decade of Democracy seeks to:

- Stimulate debate and discussion among policy-makers, stakeholders and scholars around the information this report has assembled and the analysis it has produced.
- Serve as a valuable resource for higher education researchers, administrators and policy-makers.
- Give further effect to the CHE's commitment to publishing and disseminating knowledge and information on higher education, including ever more comprehensive accounts of the state of higher education in South Africa.

In providing an overview of conditions in higher education during the past ten years, *South African Higher Education in the First Decade of Democracy* also serves in part as a point of departure for a colloquium in November 2004 of higher education leaders, senior government officials, policy-makers, advisers and analysts, local and overseas intellectuals and scholars, and a range of key higher education stakeholders.

The Colloquium, *Ten Years of Democracy and Higher Education Change*, held by the CHE in association with the South African Universities Vice-Chancellors Association and the Committee of Technikon Principals, seeks to promote open, honest and critical engagement on the higher education transformation process and its current outcomes, in the context of the political and economic changes undergone by South Africa since 1994 and the value and policy underpinnings of higher education transformation and its implementation dynamics.

High quality higher education is crucial for social equity, economic and social development and a vibrant democracy and civil society. If higher education does not produce knowledgeable, competent and skilled graduates, generating research and knowledge, and undertaking responsive community service, then equity, development and democracy will all be constrained. The challenges of reconstruction, social transformation and development are tremendous. Higher education must not fail to establish the new priorities and satisfy the new needs of a democratic South Africa.

Mr Saki Macozoma
CHE Chairperson



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The CHE wishes to acknowledge and express its appreciation for the contribution of all those who:

- Undertook research, analysis and writing; in particular, Ms Ashley Symes (Consultant), who effectively and efficiently delivered a complete draft report to the CHE in the time frame agreed; the Centre for the Study of Higher Education (CSHE) at the University of the Western Cape, which provided data and undertook analysis of sections of the report; and Mr Jozef Lazarus of the Joint Education Trust Education Services who drafted the chapter on community engagement.
- Served as critical readers, commenting critically on drafts of individual chapters of this report.
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- Provided the required data for this report, especially the Higher Education Branch, Department of Education.
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ACRONYMS

AAU	Association of African Universities
ACU	Association of Commonwealth Universities
ANC	African National Congress
APPETD	Alliance of Private Providers of Education, Training and Development
ASAHDI	Association of Vice-Chancellors of Historically Disadvantaged Tertiary Institutions in South Africa
AU	African Union
AUT	University and Technikons Advisory Council
BC(MS)	Business and Commerce (and Management Sciences) (fields of study)
BEd	Bachelor of Education
CATE	College of Advanced Technical Education (precursor of technikon)
CBO	Community-Based Organisation
CHE	Council on Higher Education
CHEC	Cape Higher Education Consortium
CHESP	Community–Higher Education–Service Partnerships (JET initiative)
CREST	Centre for Research on Science and Technology (Stellenbosch University)
CHET	Centre for Higher Education Transformation
CSHE	Centre for the Study of Higher Education (University of the Western Cape)
CSIR	Council for Scientific and Industrial Research
CTP	Committee of Technikon Principals
CUP	Committee of University Principals (precursor of SAUVCA)
DACST	Department of Arts, Culture, Science and Technology (national)
DoE	Department of Education (national)
DoL	Department of Labour (national)
DTI	Department of Trade and Industry (national)
E	Education (field of study)
ECHEA	Eastern Cape Higher Education Association
esATI	Eastern Seaboard Association of Tertiary Institutions
ETQA	Education and Training Quality Assurer
FET	Further Education and Training
FOTIM	Forum of Tertiary Institutions in the Northern Metropolis
FTE	Full-Time Equivalent (student enrolment)
GAAP	Generally Accepted Accounting Practice
GDP	Gross Domestic Product
GEAR	Macro-economic Strategy for Growth, Employment and Redistribution
HAI	Historically Advantaged Institution
HAT	Historically Advantaged Technikon
HAU	Historically Advantaged University
HBT	Historically Black Technikon (term in use prior to the term HDT)

HBU	Historically Black University (term in use prior to the term HDU)
HDI	Historically Disadvantaged Institution
HDT	Historically Disadvantaged Technikon
HDU	Historically Disadvantaged University
HEB	Higher Education Branch (of DoE)
HEI	(Public) Higher Education Institution (or generic term)
HEMIS	Higher Education Management Information System (of DoE)
HEQC	Higher Education Quality Committee (of CHE)
HRD	Human Resource Development
HSRC	Human Sciences Research Council
HSS	Humanities and Social Sciences (fields of study)
HWT	Historically White Technikon (term in use prior to the term HAT)
HWU	Historically White University (term in use prior to the term HAU)
IEASA	International Education Association of South Africa
IJC	Interim Joint Committee (for programme accreditation)
INQAAHE	International Network of Quality Assurance Agencies in Higher Education
IORARC	Indian Ocean Rim Association for Regional Cooperation
JET	Joint Education Trust
MBA	Master of Business Administration
MoE	Ministry of Education
MoL	Ministry of Labour
MOU	Memorandum of Understanding
MTEF	Medium-Term Expenditure Framework (of South African government)
NACI	National Advisory Council on Innovation
NAP	New Academic Policy
NCHE	National Commission on Higher Education
NECC	National Education Crisis Committee
NEPAD	New Partnership for Africa's Development
NEPI	National Education Policy Investigation
NGO	Non-Governmental Organisation
NHEIAS	National Higher Education Information and Applications Service
NQF	National Qualifications Framework
NRF	National Research Foundation
NSB	National Standards Body
NSFAS	National Student Financial Aid Scheme

NSI	National System of Innovation
NYC	National Youth Commission
ODL	Open/Distance Learning
OFS	Orange Free State
PQM	Programme and Qualifications Mix
QA	Quality Assurance
QMS	Quality Management System/s
QPU	Quality Promotion Unit (of SAUVCA)
R&D	Research and Development
RDP	Reconstruction and Development Programme
RPL	Recognition of Prior Learning
SACOL	South African College for Open Learning
SACTE	South African College for Teacher Education
SADC	Southern African Development Community
SANC	South African Nursing Council
SAPSE	South African Post-Secondary Education (management information)
SAQA	South African Qualifications Authority
SASVO	Southern African Student Volunteers (University of Pretoria)
SAUVCA	South African Universities Vice-Chancellors Association
SERTEC	Certification Council for Technikon Education
SET	Science, Engineering and Technology (fields of study)
SETA	Sector Education and Training Authority
SETA-ETQA	SETA accredited by SAQA as an ETQA
S&T	Science and Technology
SHAWCO	Students Health and Welfare Centres Organisation (University of Cape Town)
STI	Science and Technology Initiative
TEFSA	Tertiary Education Fund of South Africa (precursor of NSFAS)
THRIP	Technology and Human Resources for Industry Programme
UDUSA	Union of Democratic University Staff Unions
VC	Vice-Chancellor
WTO	World Trade Organisation

INTRODUCTION

South African Higher Education in the First Decade of Democracy

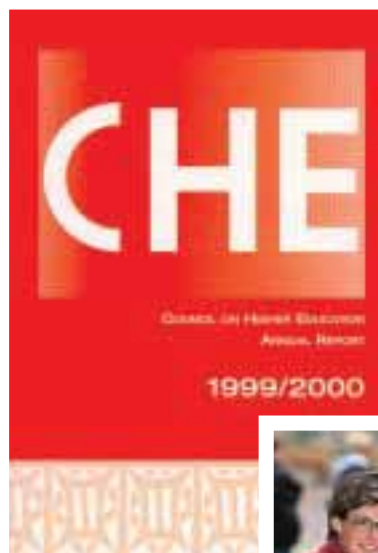


South African Higher Education in the First Decade of Democracy describes and analyses the contemporary state of South African higher education, with reference to what was inherited in 1994 and the changes that have occurred over the past ten years.



Through this report, the Council on Higher Education (CHE) hopes to:

- Stimulate debate and discussion among policy-makers, stakeholders and scholars around the information and analysis produced.
- Produce a valuable resource for researchers, administrators and policy-makers concerned with higher education.
- Give further effect to the CHE's commitment to the publication and dissemination of knowledge and information on higher education.



In particular, the report aims to describe the state and conditions of South African higher education in 1994, and in 2004, given the available information, data and statistics; to trace the changes that have occurred in the past ten years; to crystallise the key trends within South African higher education, indicating continuities, developments and changes; and to identify the major challenges that now confront South African higher education at system and institutional levels.

With these purposes in mind, the report begins by setting out the 'case' for higher education, in particular the relationship of higher education to the reconstruction and transformation agenda in South Africa. It goes on to highlight selected higher education issues, chapter by chapter, within the following rubric:

- What was the inheritance in 1994?
- What have been the developments in the last ten years?
- What is the situation today?
- What are the critical issues and key challenges?

It concludes with an integrated evaluation of South African higher education's past, present and future.

Framing the report is the double transformation challenge for South African higher education. The first element of this dual challenge emanates from the historical context of South Africa – and in particular the apartheid legacy; it has to do with achieving social equity, economic growth and development, and building and consolidating democracy. The second element is related to contemporary global developments, namely: addressing the challenges of globalisation and the competitive global economy, and enabling South Africa to participate in, and engage with, this global order in a proactive way.

SOUTH AFRICAN HIGHER EDUCATION IN THE FIRST DECADE OF DEMOCRACY

From the standpoint of South Africa's apartheid legacy, higher education transformation poses challenges in terms of three critical policy goals which have particular implications for the governance, management and financing of higher education:

- Equity and democratisation.
- Effectiveness (including the relevance, quality and appropriate quantities of programmes and outputs).
- Efficiency.

Simultaneously, the higher education system must meet the manifold challenges presented by the radical changes which are occurring globally in terms of the new role of knowledge in late modern cultural and economic development – especially with regard to the production, dissemination, application (networking), structure, management and quality of knowledge.

Thus the transformation challenges that are spelled out in the *White Paper*¹ on higher education and the *National Plan for Higher Education*², as well as the broader challenges that global imperatives present, provide the framework for the description and analysis in the report.

The report builds on previous CHE *Reports*³ on the state of South African higher education (1998–1999 and 2000–2001) and draws on a wide range of policy documents, published reports, articles and books, and expert views and opinions. It uses the latest available data and statistics wherever possible: i.e. 2002 enrolments figures and 2001 figures where it has not been possible to obtain accurate figures of more recent date. In this way it aims to deliver an accurate, objective, and considered report and reflection on the health of the South African higher education system.



SOUTH AFRICAN HIGHER EDUCATION IN THE FIRST DECADE OF DEMOCRACY

Chapter Notes and References

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Universities

- 1** The University of the North and the Medical University of Southern Africa (University of Limpopo from January 2005)
- 2** The University of KwaZulu-Natal
- 3** The University of Zululand
- 5** The University of Fort Hare
- 6** Rhodes University
- 7** The University of Transkei (Walter Sisulu University of Technology and Science from January 2005)
- 8** University of Port Elizabeth (The Nelson Mandela Metropolitan University from January 2005)
- 9** The University of Cape Town
- 10** Stellenbosch University
- 11** The University of the Western Cape
- 13** North-West University
- 14** The University of the Free State
- 16** Rand Afrikaans University and Vista (Soweto and East Rand) (University of Johannesburg from January 2005)
- 17** The University of Pretoria
- 18** The University of South Africa
- 19** The University of Venda for Science and Technology
- 20** The University of the Witwatersrand

Technikons

- 4** Durban Institute of Technology (Mangosuthu Technikon to join DIT)
- 7** The Border and Eastern Cape Technikons (Walter Sisulu University of Technology and Science from January 2005)
- 8** Port Elizabeth Technikon (The Nelson Mandela Metropolitan University from January 2005)
- 12** Cape Technikon and Peninsula Technikon will merge (Cape Peninsula University of Technology from January 2005)
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CHAPTER 1

THE CASE FOR HIGHER EDUCATION¹



1.1 The Social and Public Value of Higher Education

Amidst the multiple competing demands of social transformation, reconstruction and development in post-apartheid South Africa, why should public resources and energy be directed towards higher education?

The answer to this question lies in the fact that higher education and its constituent institutions have immense social and public value: they contribute to the good of society, and therefore should be accorded a share of public resources.



In many parts of the world, the case for higher education's social and public value is founded on recognising that countries which have managed to sustain high levels of economic growth with significant improvements in the living standards of the masses of their populations are those which have given priority to excellent education and training, and to higher education and training in particular as an agent of socio-economic change and development. In successful national education and training systems in democratic countries, education equips learners

with skills to absorb new knowledge and the desire to learn and continually expand knowledge. At the apex of these systems, higher education is charged with developing a citizenry capable of participating effectively in democratic processes, and thus enhancing the project of democracy; with producing intellectuals who can engage with the most intractable problems of society and so develop more generally the ability of citizens to participate politically, economically and socially; and with producing high-level skilled graduates and new bases of knowledge to drive economic and social development, and to enhance the overall levels of intellectual and cultural development.

This case for higher education has not been uncontentious. For years the World Bank fostered the belief that higher education offered lower individual and social returns than primary education, with negative consequences for levels of public investment in higher education in many countries – especially developing ones. The pendulum swung back on this view during the 1990s, however, and the value of higher education is again unequivocally endorsed, albeit with an increased emphasis on its role in enhancing national economic competitiveness within a global knowledge-driven economy.² (This may entail a risk that there will be undue focus on labour-market and economic responsiveness, at the expense of recognising the wider social and cultural contributions of higher education.)

In South Africa since 1994, a democratically-elected government has set out to achieve 'a better life for all' by focusing on economic development, by seeking to reconstruct the entire social system, and by aiming to reintegrate successfully into the international community while taking a lead role on the African continent. In this context of comprehensive transformation, the demands on higher education have been extensive. Chapter 2 of this report explores the policy and legal context of South African higher education. Here it is apposite to cite the general purposes that higher education is expected to fulfil, as set out in its key framework policy, the *White Paper* of 1997:

Higher education has several related purposes. In the context of present-day South Africa, they must contribute to and support the process of societal transformation outlined in the Reconstruction and Development Programme (RDP), with its compelling vision of people-driven development leading to the building of a better quality of life for all. These purposes are:

- To meet the learning needs and aspirations of individuals through the development of their intellectual abilities and aptitudes throughout their lives. Higher education equips individuals to make the best use of their talents and of the opportunities offered by society for self-fulfilment. It is thus a key allocator of life chances [and] an important vehicle for achieving equity in the distribution of opportunity and achievement among South African citizens.
- To address the development needs of society and provide the labour market, in a knowledge-driven and knowledge-dependent society, with the ever-changing high-level competencies and expertise necessary

"...countries which have managed to sustain high levels of economic growth with significant improvements in the living standards of the masses of their populations are those which have given priority to excellent education and training..."

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for the growth and prosperity of a modern economy. Higher education teaches and trains people to fulfil specialised social functions, enter the learned professions, or pursue vocations in administration, trade, industry, science and technology and the arts.

- To contribute to the socialisation of enlightened, responsible and constructively critical citizens. Higher education encourages the development of a reflective capacity and a willingness to review and renew prevailing ideas, policies and practices based on a commitment to the common good
- To contribute to the creation, sharing and evaluation of knowledge. Higher education engages in the pursuit of academic scholarship and intellectual inquiry in all fields of human understanding, through research, learning and teaching.³



Within the context of these general purposes, the *White Paper* and other key policy documents such as the *National Plan* of 2001 call urgently upon higher education to address the challenges of social equity, development, effectiveness and efficiency. Higher education is asked to provide equitable opportunities for learning and (self-) development; to be responsive to societal needs, producing relevant knowledge and socially committed graduates; to contribute positively to the development of the country (and by extension, its region and continent); and to be publicly accountable for the manner in which it applies resources in the

fulfilment of these roles. Such demands imply that the case for higher education in South Africa is a compelling one in principle, and that there is a concomitant strong rationale for public investment in higher education.

While such a case and rationale are implicit in these policies and their goals, they were not explicit realities at the time the policies were written. By the mid-1990s, public confidence in the ability of higher education to deliver accountably while at the same time satisfying the requirements of the new order was low. The lack of trust in – specifically – public higher education was the result of a number of factors. First, there was a perception that higher education institutions (HEIs) remained essentially fixed in their apartheid past. Second, there was concern about the quality of output and institutions. Third, numerous inefficiencies plagued the system, with many HEIs evincing governance and financial problems, inadequate financial systems, the unwarranted duplication of programmes and the lack of optimal use of infrastructure and human resources. Fourth, these problems of trust and accountability occurred in a new context, as private providers rapidly entered the arena and seemed set to erode the historical monopoly enjoyed by public HEIs.

Given that the deep distrust engineered by apartheid education continued to abide in the system after 1994, the rallying cry to higher education to contribute to transformation has been at the same time a cry to higher education to transform itself, in order to fulfil its potential for serving the needs of a democratic South African society.

The case for higher education in practice – and the extent to which it has been possible to address the loss of public confidence in it – will be analysed more fully in the chapters that follow. This chapter sets out the in-principle case for higher education in a democratic South Africa.



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1.2 *The Case for South African Higher Education*

Despite the inherited problems and challenges it faces, higher education – and public higher education in particular – has immense potential to **contribute to consolidating democracy and social justice, producing critical intellectuals, developing knowledge, and expanding and improving the economy. Further, these contributions can be complementary and systemic.** Higher education that serves the purposes of democracy helps to lay the basis for greater participation in economic and social life more generally. Higher education that supports higher levels of employment contributes to political and social stability. Higher education that effectively combines these functions builds the capability and capacity of citizens to exercise and enforce their democratic rights and to participate effectively and critically in decision-making. Thus the overall well-being of nations gains enormously from higher education's contribution to the social, cultural, political and economic development of its citizens. Higher education is capable at once of delivering public goods (opportunities for self-fulfilment, critical citizenry, free intellectual inquiry), and of responding to contextualised societal and economic needs (high-level skills and knowledge production for the modern economy).

1.2.1 *Higher Education, Democracy and Social Justice*

Through its traditions of academic freedom and collegial interaction, higher education can **foster open and critical intellectual debate and contribute to a vibrant and engaged civil society**, which in turn increases the possibility of civil society participation in decision-making. By creating opportunities for social advancement on the basis of acquired knowledge, skills and competencies, higher education also **enhances equity and social justice.**

The role of higher education in the defence and advancement of democracy is closely related to the manner in which it **promotes good citizenship.** As noted, this is an in-principle function accorded to higher education in the *White Paper*⁴. In practice, the proper execution of this role requires South African higher education to deliver academic programmes that encourage intellectual critique, and to ensure the relevance of these programmes wherever possible to South African social and development challenges.

In exercising its core functions of teaching (developing critical thinking), research and community engagement, higher education can also **support social policy development and the monitoring and evaluation of policy implementation.** In other words, it is able to contribute to society by engaging with the actual problems and challenges of social reconstruction and development, as well as by functioning as a social critic. This ability is essential to enhancing society's capacity to consolidate democracy and promote prosperity in the long term. South African President Thabo Mbeki has on a number of occasions referred to the role of higher education in society, and especially in emerging democracies such as our own, placing emphasis on the need for more vigorous debate and discussion, especially amongst the country's black intelligentsia. Critical discussion of, and engagement with, social policies are paving stones to reinvigorate the African continent. The African Renaissance is inconceivable without knowledge and a critical mass of intellectuals (scholars, thinkers, scientists, economists, writers, artists...) being produced or enriched by HEIs.

The concept of a 'learning society' is predicated on democratic principles and processes which enable the engagement of broad social layers in learning, and which promote tolerance for differing viewpoints.

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The premise is that democratic learning environments can tap the collective experience and wisdom of communities and so build society's capacity to sustain and renew itself. The value and legitimacy of higher education in South Africa must also be judged by the extent to which it **provides access and opportunities for all South Africans**. In particular, higher education must provide evidence of opening the way to black South Africans (especially Africans); to women and other socially disadvantaged groups; and to non-traditional learners, including students from working-class and rural backgrounds and adults who possess work-related knowledge. The extent to which higher education promotes or frustrates equity and access will have a direct bearing on social and class stratification, and the nature of the labour market. If it can successfully create equitable opportunities, the higher education system is a potentially powerful agent for enhancing the life opportunities of increasing numbers of people over time. High-quality, equitable higher education **promotes social mobility and the well-being of larger social constituencies**, and thereby increases the stability of society as a whole.



Higher education **affords private individual and public social benefits**. The former relate to enhanced employment possibilities, better salaries and benefits, improved working conditions, improved health and quality of life, and greater capacity to participate in a society endeavouring to build a democratic and just social order. These private gains also generate public (social) gains such as higher employment rates, higher savings, increased contributions to national revenue and incomes, greater workforce flexibility, a decreased reliance on government financial support, and more active citizenship.

1.2.2 Higher Education, Economic Growth and Development

It has already been noted that higher education has the potential to contribute in a complementary way to the economic and humanising goals of society. Both these goals are of critical importance to the survival and sustainability of nations, and to their ability to participate effectively in a competitive global arena and meet the needs of citizens.

Studies on the relationship between knowledge production and economic and social development have demonstrated the critical importance of the creation of new knowledge. As an illustration of this, the growth of knowledge, enhanced by wider diffusion of information and communication technologies (ICTs) since the 1980s, has been the catalyst for high levels of social and economic development in regions such as the Pacific Rim over the last two decades.

The contemporary 'knowledge society' that is the product of increased capital in the global economy and of rapid technological advances, demands integrated knowledge solutions to deal with complex socio-economic problems – in developing countries as much as if not more so than elsewhere. HEIs have a critical role to play in **developing solutions to 'real world' problems through research that supports innovation, as well as through sustaining disciplinary knowledge foundations** which underpin interdisciplinary and multidisciplinary knowledge production. In South Africa, a large proportion of



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intellectuals, and of knowledge production, dissemination and application, is based in HEIs, and can be leveraged to address societal and economic development needs – both directly, and in partnership with government, industry and communities.

A central feature of South Africa's economic policy since 1994 has been a focus on meeting the challenge of international competitiveness. It has been eminently clear to policy-makers that an inability to compete globally will increasingly marginalise the South African economy, have profound effects on its rate of growth, and negative consequences for the social well-being and stability of South African society. For instance, the potential threats and opportunities of the 'network society', as conceptualised by Manuel Castells⁵, may imply from a South African perspective that the acquisition of knowledge and ready access to new knowledge and technology create new global power relations to our disadvantage: those countries that can rapidly access knowledge and ICTs and adapt to their demands ('the network') will dominate those countries that cannot. The knowledge capacities of higher education, properly supported by an enabling policy environment and constructive inter-sectoral partnerships, **can enable South Africa to stay on the competitive side of the digital divide.**

Rapid knowledge production and technological development as the underpinnings of international competitiveness demand educational capacity for lifelong learning: i.e. continual opportunities to expand, upgrade and refresh skills acquired on the basis of prior learning. Skills acquired flexibly in this model can enable graduates to operate in diverse social settings and to develop complex notions of identity and citizenship. Giving effect to lifelong learning demands concentrated effort from higher education: **the development of flexible and continuing adult education programmes, and support and resources for such work.**



As in the rest of the world, the South African labour market has undergone major restructuring in recent years. Increasingly, capital- and knowledge-intensive production and services have created a demand for skilled professionals in the scientific, technological, technical, and business fields. Thus from an economic perspective, **the private and public returns on many higher education programmes have an important complementary contribution to make alongside the contributions of other levels of the education**

system. The manufacturing, processing and service sectors, which aim to have a significant impact upon the country's economic future as they produce internationally-traded goods, depend upon the knowledge produced by, and applied in, HEIs.

Since 1994, South Africa has pursued a 'high skills, high growth' economic development path. Increased supply of high-level skills and personpower is critical in such a scenario. Higher education therefore represents a **much-needed capacity to alleviate the skills constraint on economic expansion.** Such expansion and improvement is intended to promote the possibility of jobs for many less skilled and unskilled workers, and thus to result in a net improvement of economic welfare and equity.



South Africa's process of democratic transformation has placed new demands on state bureaucracy, with a particular need to develop an honest, effective, efficient and innovative public service. Higher education is equipped to play a major role in **generating the high- and medium-level capacities and skills required in the public sector**, including conceptual, policy development, planning and implementation skills, and managerial, administrative and financial competencies and skills.

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Finally, higher education has a crucial role to play in **improving the quality and skills levels of schooling, health care, welfare and other public services at national, provincial and local levels.** This requires the active promotion of continuing education amongst those working in health, social services, education, and other public sector fields, as well as the provision of flexible opportunities for lifelong learning that will enable the upgrading of professional knowledge and technical skills. As an anchor to such learning, thoughtful applied and strategic research is required in order to engage effectively with key social, political and economic policy issues and to deal with the concrete problems of social reconstruction and development. Such research, along with the consolidation and enhancement of the knowledge and skills of public sector personnel, is necessary for innovation, improved social delivery and development in South Africa today.

1.3 Conclusion

In the context of South Africa's socio-economic transformation agenda, the development of socially responsive HEIs and of socially committed individuals with the critical intellectual capabilities to produce, disseminate and apply knowledge and technology, is both a short-term priority and a long-term policy imperative. Without investment in human resource development (HRD) and expanding opportunities for both young and adult learners, sustainable growth will be difficult, and competitive participation in the global economy well-nigh impossible, to achieve. Equally, effective and efficient implementation of policies and strategies, and delivery of opportunities and services, will be compromised, and the achievement of a genuinely democratic and caring society will be frustrated.

It is true that the costs of higher education are high when compared with lower levels of education. Yet even in circumstances such as South Africa's, where the schooling system is in urgent need of funds to enhance quality, it needs to be recognised that the claim of higher education on public resources is justified precisely because it serves purposes complementary to other parts of the system. The critical value of higher education to society lies in its unique ability to provide graduates with intellectual capacities and skills that can both enrich society, and enhance economic growth. This is dependent on higher education's ability to provide equitable opportunities for the development of high levels of intellectual rigour, of analytical capacity, of self-motivation, and of independence of thought; basic research skills; and a capacity and mental aptitude for innovation. These attributes, as delivered by a well-functioning higher education system (which cannot be achieved at lower levels of schooling), are crucial since they contribute substantively to the quality of public and professional leadership at all levels and in all sectors of society, which is essential to the fostering of social justice and economic development.

The case for higher education is argued in the context of South Africa's challenges of social equity, economic and social development, and the building and consolidation of democracy. Through its fundamental roles of high-level teaching and learning, research and knowledge production, and community engagement, higher education can play a critical role in addressing these challenges. Public support, allocation of public resources, and public oversight, are required if higher education is to deliver constructively on its social and public purposes. The chapters that follow in part evaluate the extent to which South African higher education has been able to do this in practice over the last ten years.



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Chapter Notes and References

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- ³ White Paper, 1997: Section 1.3.
- ⁴ Ibid
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CHAPTER 2

THE LEGAL AND POLICY CONTEXT

Critically, the legal and policy context of higher education structures higher education provision, and also influences and shapes the behaviour of actors. With this in mind, this chapter approaches the legal and policy context of South African higher education with the following purposes:

- To provide an overview of higher education policy and legislation before 1994 and as it has developed over the last ten years, with a primary focus on overarching frameworks.
- To provide a backdrop for later chapters of this report, in which further details of policy and legislation are located and examined in their particular setting (cross-references are provided wherever necessary).
- To highlight subsidiary aspects of policy and legislation that are of particular importance and are not covered in other chapters of this report.
- To evaluate the policy trajectory since 1994 and to identify challenges that may lie ahead for developing the legal and policy context.

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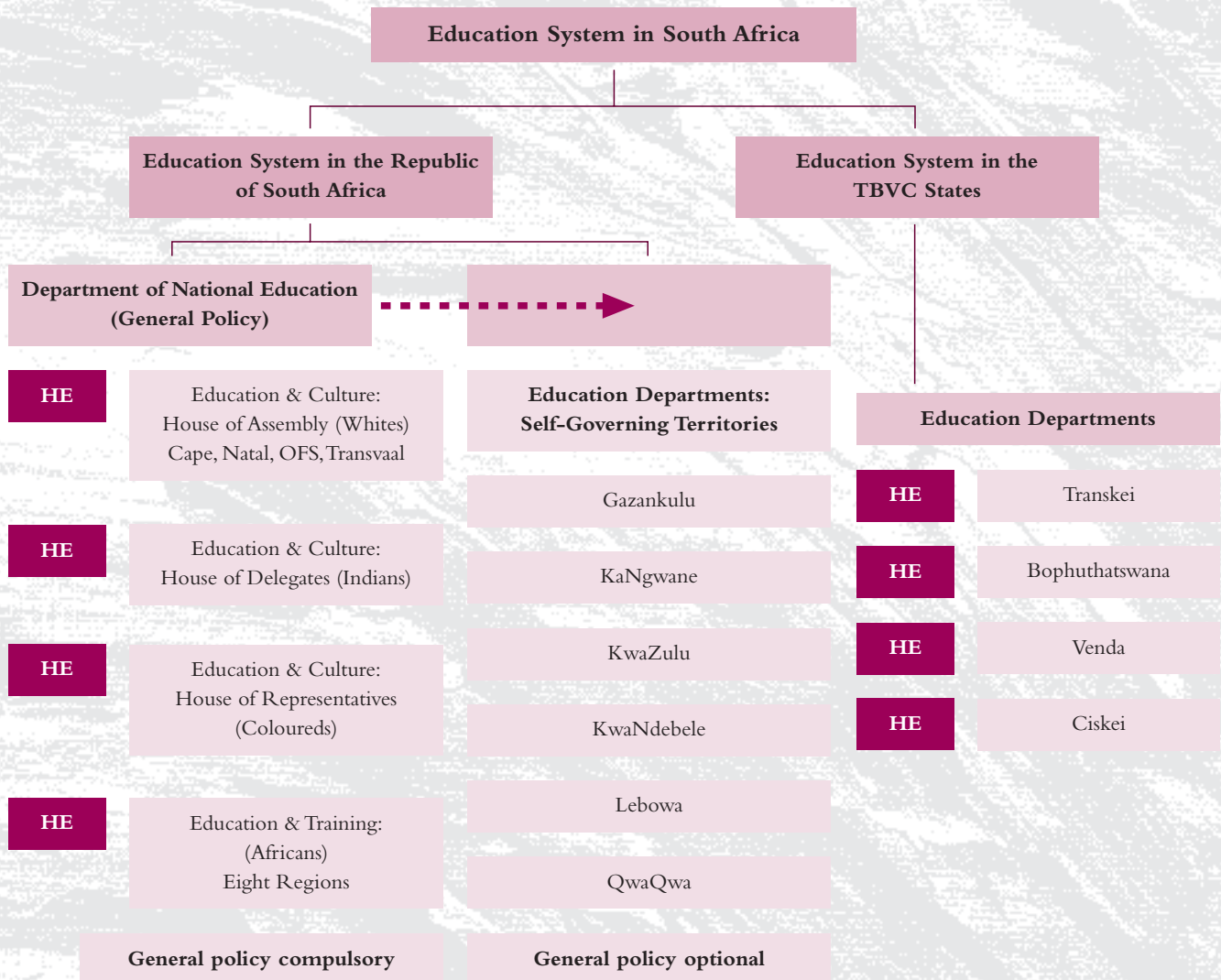
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2.1 The Inheritance in 1994

Characteristic of the apartheid state's legislative and policy framework for higher education were rigid sets of distinctions and divisions. The first cluster of divisions was that between 'race' and ethnic groups; accordingly, the system was splintered and complex. The situation in 1993 is shown graphically in Figure 1¹.

Figure 1: The Public Education and Higher Education System in South Africa, 1993



Source: Adapted from Department of National Education, 1993

By 1968, the administration of education for Africans was decentralised into regions, self-governing territories and – from 1976 – four 'bantustans' (Transkei, Bophuthatswana, Venda and Ciskei: the 'TBVC states'). The various governments were responsible for African education at all levels. This included higher education, as the Extension of University Education Act of 1959 had provided for the establishment of African higher education institutions (HEIs) as part of the introduction of 'Bantu self-government'; 11 institutions had been created by 1988. Within the Republic of South Africa, the Minister of Education and Training administered all African education, including HEIs designated for Africans.

Administrative responsibility for Coloured and for Indian education shifted variously in the period between 1910 and 1983 between provincial and designated central departments. These arrangements also affected

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designated Coloured and Indian HEIs formally established in the 1960s. In terms of the 1983 Constitution (see below), all Coloured education became the responsibility of the Minister of Education and Culture, Administration: House of Representatives. All Indian education fell under the Minister of Education and Culture, Administration: House of Delegates.

In the case of White education, prior to September 1984 provincial departments provided all education except that defined by law as higher education (technical colleges, technikons and universities), which was the responsibility of the Department of National Education. In terms of the 1983 Constitution (see below), provincial education departments became sub-departments of the Department of Education and Culture, Administration: House of Assembly and higher education became the responsibility of this Minister.

As the above indicates, the 1983 Constitution divided the national parliament into three chambers with separate representation of White voters (House of Assembly), Coloured voters (House of Representatives) and Indian voters (House of Delegates). There was no provision for representation of Africans. This Constitution drew a distinction between general and 'own' affairs, with the latter meant to be matters specific to the culture and values of different population groups. Education became an 'own affair' for all groups – except Africans, in whose case education was a 'general affair' vested in a central department (Department of Education and Training). The Department of National Education assisted the Minister of National Education in determining national education policy.

Arrangements for higher education, as described, had special implications for access: all public HEIs were designated for a particular 'race', and students from other 'race' groups could not be admitted without special permits obtained by the HEI from its administering government department. In addition, the different legal status and 'racial' basis of different HEIs led to complex differentiation in governance and funding arrangements (considered in Section 10.1 and Section 11.1 respectively).

A second set of divisions was that made between institutional types: universities, technikons and colleges. While such differentiation was not peculiar to the apartheid state – indeed it was in line with international higher education practice – it did entail some nuances in the South African case. According to the Van Wyk de Vries Commission of Inquiry into universities in 1973, universities advanced learning; inculcated certain qualities of character in the student; prepared students to practice a profession; and instilled standards of good citizenship. However, the relationship of universities to (apartheid) society was highly particularised in legal and policy terms. Legally speaking, each university was a 'corporation' founded by an act of Parliament – meaning that its functions were prescribed and could be terminated by the state. At the same time, in policy terms, a university was 'an independent sphere of societal relationships' (separate from the spheres of the state, religion and other spheres), meaning that *for as long as it existed*, the state could not interfere directly in its affairs. Neither could the university interfere in the affairs of the state by, for example, rejecting the state's designation of it for a particular 'race' group².

The technikons emerged from the former colleges of advanced technical education (CATEs) which were established by Act of Parliament in 1967. Having investigated the training of engineering technicians, the Goode Committee (1978) recommended that 'technikons', as CATEs would now be called, should have the



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1998-2002



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special function of training technicians and technologists; a function that would be parallel to, but separate from, that of the universities, and distinct from that of colleges, which focused on practical training in non-technology fields. Thus, in policy terms, science and the development of knowledge were the domain of universities, while technology and its application were the domain of technikons. Accordingly, each institutional type had to have its own parallel qualification structure, as was put into effect through various policies in the 1980s and early 1990s.³ Before 1993, technikons did not award degrees, and did not enjoy their own ‘independent sphere’, but were subject to central control of their curricula, examinations and certification.

In sum, legal and policy provisions for higher education under the apartheid government were ostensibly meant to create a system of ‘separate but equal’ elements that catered for particular needs in parallel. The effect of this legal and policy framework was to engender a higher education system that was highly fragmented and uncoordinated; that was fundamentally inequitable; that was ‘effective’ only in terms of rigid categorisations imposed by the state; and whose duplications rendered it profoundly inefficient.

2.2 Key Developments since 1994

2.2.1 Legal and Policy Frameworks

In the post-1990 period, three initiatives began to develop bases for post-apartheid higher education policy. These were the National Education Policy Investigation (NEPI), a civil society initiative with origins in the ‘people’s education’ movement; the Union of Democratic University Staff Unions (UDUSA) policy forum; and the Centre for Education Policy Development, linked to the African National Congress (ANC). The ANC developed a new national education policy

framework, and pledged an ANC-led government to appointing a national commission to formulate recommendations for

transforming higher education. All of these initiatives emphasised five principles for higher education: non-racialism, non-sexism, democracy, redress and a unitary system. Some also highlighted the balance that higher education policy would need to achieve between equity and redress on the one hand, and between quality and development on the other – although the policy framework did not explicitly address policy trade-offs that might be needed, and did not broach concrete strategies for redress within the higher education system.⁴

In creating an effective higher education system the post-apartheid government faced a twofold challenge. First, the system had to be transformed to redress inequalities of access, participation, and success within higher education; and to reduce radically deeply-embedded inequalities between HEIs, which included their resources, staff complements and student bodies. Second, the higher education system had to produce effectively and efficiently, with limited resources, the range of graduate, research and service outputs required to drive national development in a global knowledge-driven economy. To do this it was necessary to expand South Africa’s competitive participation in the global context, address the basic needs of its population, and enrich the intellectual and cultural life of its people. Adopting a sequential approach to these goals was viewed as an unaffordable luxury. In consequence, the three ‘Es’ – equity, effectiveness and efficiency – came to be consistently understood as interlinked keynotes for higher education policy after 1994.

“The White Paper set out policy in support of an intention to transform higher education through the development of a programme-based higher education system, planned, funded and governed as a single coordinated system.”



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2.2.1.1 National Commission on Higher Education

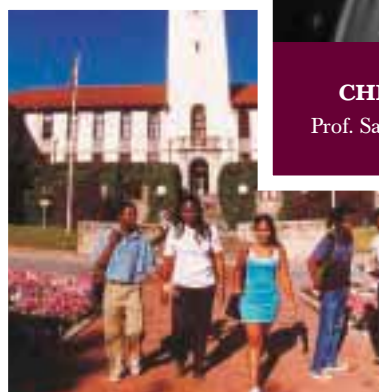
The formal process of higher education policy formulation began when the promised National Commission on Higher Education (NCHE) was established by presidential proclamation at the end of 1994. Its report, *A Framework for Transformation*, submitted in September 1996, rested on three envisaged ‘pillars’ for a transformed higher education system.⁵

First, in order to satisfy the needs of equity, redress and development, a policy of **increased participation** was required. This should be achieved, in the NCHE’s view, through change from an elite higher education system to a mass higher education system: i.e. a process of ‘massification’. Acknowledging that increased participation would bring with it new administrative arrangements and significant expenditure, a single coordinated higher education system was proposed as the only way in which the inequities, ineffectiveness and inefficiency of the existing system could be eradicated. In addition – in part to combat potentially adverse effects of rising enrolment on academic standards, but more importantly to tackle differences in quality across institutions and to steer overall quality improvements in the system – the NCHE advocated a policy of quality assurance (QA) and quality promotion through various forms of capacity-building within a National Qualifications Framework (NQF).

Second, the NCHE believed that a policy of **greater responsiveness** was needed to ensure that higher education engaged with the challenges of its social context. This would require changes in the content, focus and delivery modes of academic programmes and research, adapted to the knowledge needs of the market and civil society. It also called for governance structures that would facilitate wide participation and stakeholder consultation.

The NCHE’s third policy pillar of **increased cooperation and partnerships** led to the recommendation of a model of ‘cooperative governance’, whose elements included the state in a supervisory role (as opposed to a role of control, or interference); intermediary bodies between state and HEIs; HEIs characterised by internal constituency partnerships; and a set of linkages between HEIs and civil society.

In producing its recommendations, the NCHE had followed an extensive process of consensus-building, and received general acclaim for its work. However, a further consultative process around the NCHE’s recommendations was needed before they might be turned into policy, and this was led by the Ministry and the new Department of Education (DoE). In terms of the 1996 Constitution, education at all levels *except the tertiary level* became a functional area of concurrent national and provincial competence.⁶ Thus the DoE had administrative responsibility at national level for higher education and had established a Higher Education Branch (HEB, 1995) to provide much-needed capacity in this regard. Following a Green Paper (December 1996) and a Draft White Paper (April 1997), the DoE managed to forge a broad consensus in the new higher education policy published as *Education White Paper 3: A Programme for the Transformation of Higher Education* (July 1997).⁷



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2.2.1.2 *The White Paper*

The *White Paper* set out policy in support of an intention to transform higher education through the development of a **programme-based** higher education system, **planned, funded** and **governed** as a **single coordinated system**. As a necessary means to overcome the deficiencies of the legacy higher education system, the *White Paper* affirmed the **principles** that must underpin change initiatives: equity and redress; democratisation; effectiveness and efficiency; development; quality; academic freedom; institutional autonomy and public accountability. The *White Paper* accepted the three NCHE 'pillars' as consistent with these principles. However it did not accept the specific proposals of the NCHE to increase participation through massification, instead arguing for **planned expansion** of higher education, with efficiencies achieved in the context of fiscal constraints and using designated policy instruments.

A programme-based definition of higher education conceptualised it as taking place in a multiplicity of institutions and sites of learning, using a variety of methods. As such, the system would be able to attract an increasingly diverse body of learners and facilitate a range of key goals. These included: to provide a spectrum of educational opportunities without unfair discrimination; to promote equity of access and success, and advance redress; to diversify the system in terms of mission and programme mixes to meet national and regional needs; to secure and advance high-level research capacity; and to build new institutional and organisational forms and new institutional identities and cultures.

The *White Paper* detailed the role of planning, funding and governance in a single, coordinated higher education system encompassing universities, technikons, colleges of education, nursing and agriculture, and private higher education providers. A national higher education plan including benchmarks for transformation, and a system of three-year rolling institutional plans, would facilitate responsiveness by the system, and ensure planned expansion linked to sustainability (as against the NCHE view of massification). A goal-oriented, performance-related funding system would align resource allocation to policy goals and objectives. A system of cooperative governance would see the state playing a steering and coordinating role, while autonomous HEIs retained authority over their resources but acquired obligations to be publicly accountable for their use. Governance structures at both system and institutional levels would be democratised. At system level, the *White Paper* did not follow NCHE recommendations for a higher education forum of stakeholders with policy advisory functions, and a higher education council as a statutory intermediary with planning and allocative functions. Instead it opted for a single body – the Council on Higher Education (CHE) – with policy advisory and QA functions, and with administrative responsibility resting with the HEB.

2.2.1.3 *The National Plan*

After the *White Paper* of 1997, there was a gap of some four years before the publication of the next key policy framework, namely: the *National Plan for Higher Education* in 2001. The *National Plan* itself referred to this 'implementation vacuum' as having arisen from an incremental approach to the execution of policy instruments. This had in turn 'given rise to a number of significant developments, including unintended and unanticipated consequences, which, if left unchecked, threaten the development of a single, national, coordinated, but diverse higher education system'⁸. Thus the *National Plan* provided a clear signal that all was not going as hoped, at least from government's perspective.



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The ‘significant developments’ referred to had been driven by a set of interrelated factors. First, there was an absence of regulatory instruments, as noted by the *Plan*. Second, some HEIs seized market opportunities: historically advantaged institutions (HAIs) undertook a range of entrepreneurial initiatives to position themselves advantageously (e.g. distance education programmes utilising ‘telematic’ delivery; partnerships with private providers to tap into expanding markets; and increasing market shares of contract research and consultancies).

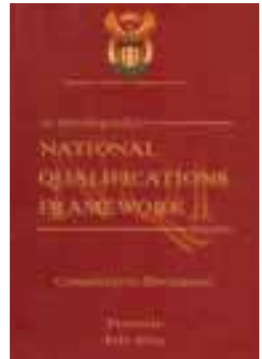
Third, rapid shifts in student enrolments occurred, with African and women student numbers in HAIs rising significantly, while enrolments at most historically black universities (HBUs) declined sharply.⁹ This decline was in part due to financial constraints facing students in these institutions: historically disadvantaged institutions (HDIs) had increased enrolments without initial concern for fee recovery, on the assumption that a broad programme of redress funding would eventuate. When it did not, and given their unequal capacity and opportunity to

develop entrepreneurial activities, several of these institutions faced serious threats to their sustainability, further aggravated by governance crises. Other

factors allowed students greater choice of institution: these included the opening up of higher education access after the early 1990s; student and parental

perceptions of declining quality at HBUs; increased competition from private providers; and expansion of the National Student Financial Aid Scheme (NSFAS). The net result of unplanned change was a set of HEIs whose differentiation, while overtly linked to developments in the market, was also directly linked to differences engendered by apartheid. This served to exacerbate institutional inequalities with respect to resource opportunities and educational outcomes, and to create disparities in institutional governance capacities.

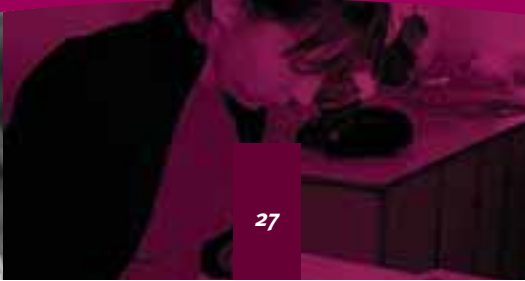
As a consequence of these developments, in 1999 the Minister of Education sought the advice of the CHE on the optimal size and shape of the higher education system, setting in motion a range of policy developments (fully described in Section 3.2) that ultimately led to proposals for institutional mergers and incorporations to be implemented in 2004 and 2005. The *National Plan* itself was in part a response to the CHE report on size and shape, and provided the framework and mechanisms for restructuring the higher education system to achieve the vision and goals of the *White Paper*. In essence, it rejected the CHE’s proposed differentiation through distinct institutional types, instead proposing differentiation through mission and programme mix. Its goals and strategic objectives are captured in Figure 2, and its key points are set out alongside.



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HEQC ED:
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Figure 2: Goals and Strategic Objectives of the National Plan, 2001, as linked to the White Paper

	Goals	Strategic Objectives
1.	Provide a full spectrum of advanced educational opportunities for an expanding range of the population without and form of discrimination (cf, White Paper 1.27)	Produce graduates with skills and competencies to meet the human resource development needs of South Africa
2.	Promote equity of access and fair chances for success and advance redress for past inequalities (cf, White Paper 1.14)	Reflect demographic realities in South Africa in student and staff composition and ensure that 'race' and gender profiles of graduates reflect the profile of student enrolments
3.	Diversify the system in terms of missions and programmes mix to meet national and regional needs (cf, White Paper 1.27)	Ensure diversity through mission and programme differentiation
4.	Secure and advance high-level research capacity to ensure intellectual enquiry and application of research for technological improvement and social development (cf, White Paper 1.27)	Sustain current research strengths and promote research required to meet national development needs and build competitive capabilities
5.	Build new institutional and organisational forms and new institutional identities and cultures as part of a co-ordinated national HE system (cf, White Paper 2.42-2.45)	Foster collaboration at regional level and restructure the institutional landscape

Source: MoE 2001

- Indicative targets for the **size and shape** of the higher education system were established by the *National Plan*. These included: a medium-term increase in the participation rate from 15% to 20%; graduation rate benchmarks to ensure greater access and success; shifting the ratio of enrolments between the humanities; business and engineering; and science, engineering and technology (SET) from 49:26:25 to 40:30:30; and student and staff equity targets. The establishment of a National Higher Education Information and Applications Service (NHEIAS) was proposed to facilitate more equitable 'race' and gender access to higher education, and to provide government with information to assess the efficacy of its human resource development (HRD) strategy. (Further policy developments regarding the NHEIAS are discussed in Section 2.2.2.3.)
- The *National Plan* promised steps would be taken to ensure **diversity of institutional mission and programme differentiation**. This would include determining the institutional programme and qualifications mixes on the basis of current profiles and ensuring the relevance of institutional function in terms of national priorities and the capacity for proposed new programmes. The 'binary divide' between universities and technikons would be maintained for a further five years. A moratorium that had been imposed on the development of distance education programmes in 'contact-mode' HEIs would be lifted, but approval would still be required for funded and non-funded distance education programmes. (Further details with respect to the *National Plan's* view on programme and qualifications mixes, distance education and public-private partnerships are provided in Section 3.2.2.) The *National Plan* also addressed the issue of institutional redress within the framework of institutional diversity, emphasising that the purpose of

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redress must be to 'ensure the capacity of institutions to discharge their institutional mission within an agreed national framework'¹⁰. (Further details with respect to the *National Plan's* view on institutional redress and subsequent policy developments are provided in Section 2.2.2.2.)

- The *National Plan* stated that **restructuring of the institutional landscape** would occur through reduction in the number of HEIs, but not in the number of delivery sites. A National Working Group would be convened to recommend mergers and regional collaboration opportunities (over and above mergers recommended by the *Plan* itself, such as the creation of a single public distance education provider). National Institutes for higher education would be established in Mpumalanga and the Northern Cape, which had no HEIs located within their borders.
- Research capacity would be built through a **new approach to research funding** which would require accountability for research outputs, as well as strategies to improve the quality and quantity of postgraduate studies.

While the *National Plan* was generally well received, it also raised some concerns amongst analysts and within the higher education sector.¹¹ These concerns were of two main kinds. First, there were questions about the extent to which an emphasis on system and educational efficiency (through a focus on throughput and equity of outcomes) was in tension with expanding participation rates according to principles of equity of access, and redress. In other words, there was a concern that an integrated policy approach to the three 'Es' was slipping in favour of an efficiency focus. Second, the *National Plan* appeared to some to be a sign of intensified state steering of the system (e.g. through insistence on the use of Ministerial regulatory powers in the face of failures of institutional voluntarism¹²), already suggested by amendments to the *Higher Education Act*. (See below, Section 2.2.1.4.) Additional questions prompted by the *National Plan* included whether the impact of HIV/AIDS had been factored into targets for participation; the extent to which strategies for building research capacity would address underlying organisational and qualitative requirements; and whether the DoE would cope with a relentless implementation schedule. Answers to some of these concerns will only be provided by time. In the short term, the schedule for the implementation of the *National Plan* certainly proved overly ambitious in some aspects; more significantly, implementation revealed policy interdependencies which created necessary delays. (This is discussed further in the last section of this chapter.)

2.2.1.4 The Higher Education Act

The *Higher Education Act* of 1997¹³ gave legal form to the values, principles and core concepts of policy, making provision for:

- System-level governance. Notable was the establishment in law of the Council on Higher Education (CHE) as an independent, expert body which would give strategic advice to the Minister of Education on matters of higher education policy, in order to support the effective transformation and development of the system. The CHE would also perform quality promotion and QA functions through its permanent subcommittee, the Higher Education Quality Committee (HEQC).



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- The establishment, declaration, merger and closure of public HEIs. The Act gave the Minister of Education powers to establish, declare, merge and close public HEIs, subject to consultation with the CHE and notice through the *Government Gazette*.
- Institutional governance. The Act set out statutory provisions for the roles, responsibilities and composition of institutional councils, senates and – as an innovation of South African higher education governance – institutional forums which would advise the council on all issues affecting the HEI, and specifically on issues of institutional culture and transformation. The Act enabled the Minister to appoint – with the advice of the CHE – an independent assessor to investigate and report on any public HEI encountering governance difficulties, including financial or other maladministration.
- Funding. The Act stipulated that the Minister of Education must determine funding policy for public HEIs – including redress measures – after consulting the CHE and with the concurrence of the Minister of Finance. It also stipulated that HEIs must furnish an annual report on governance, together with audited statements of income and expenditure, and a balance sheet and cash flow statement.
- Language. The Act stated that the Minister must determine a language policy for higher education, to guide institutional language policies.
- Private HEIs. The Act set out arrangements for the registration of private HEIs.
- The Act abolished the University and Technikons Advisory Council (AUT, now replaced by the CHE), and made provision for procedures to abolish at any future date the statutory status of the Committee of University Principals (CUP), Committee of Technikon Principals (CTP) and the Matriculation Board.

Since its promulgation in 1997, the *Higher Education Act* has been frequently amended (every year since 1999).¹⁴ Principal amendments have been:

- Empowerment of the Minister to appoint an ‘administrator’ for a public HEI in which financial or other maladministration has occurred (1999). In effect, the administrator fulfils the functions of the council of the HEI until such time as a new council is appointed. An amendment of 2002 further provided for an administrator to take over the functions of a council which is deemed to have resigned.
- Designation of the Director-General as the registrar of private HEIs (1999). This amendment began the strengthening of the regulatory framework for private higher education, supported by further amendments in 2000 and 2001.
- Provision that a public HEI requires the approval of its council and, under certain circumstances, the concurrence of the Minister, to enter into a loan or overdraft agreement or to develop infrastructure (2000).
- Deeming the HEQC the Education and Training Quality Assurer (ETQA) primarily responsible for higher education (2001).
- Empowerment of the Minister to determine the ‘seat’ (physical location) of an institution (2001).
- Provisions for mergers and incorporations. These included providing for the establishment of interim councils for new, declared or merged public HEIs (2001); and providing for labour and student matters arising out of declarations and mergers (2002) and incorporations (2003).
- Provision for changes in the size of councils and institutional forums (2002).
- Establishment of the Boards of National Institutes of Higher Education in Mpumalanga and the Northern Cape (2003).



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These amendments to the *Act* have clearly been related to particular developments in higher education, namely: governance and financial crises at institutional level in the late 1990s; concerns about compromises in the quality of educational provision by an expanding private sector; and the intention after 2001 to restructure higher education through mergers and incorporations. From a higher education sector perspective, a degree of uneasiness arose around some of these amendments, especially those having to do with the appointment of an administrator; Ministerial determination of the institutional seat (previously determined in universities' Private Acts); and general limits set on institutional overdrafts and capital expenditure (as opposed to limits imposed under specific conditions). These were seen by some HEIs to curb aspects of institutional autonomy and thus to change in practice the model of cooperative governance advocated by policy. This theme is fully explored in Chapter 10 (Sections 10.2 and 10.4).

2.2.2 Other Policy Developments

In addition to the overarching legal and policy frameworks already described, a number of important subsidiary policy developments have taken place or are in progress. As these are not discussed in other chapters of this report, they are addressed here for completeness.

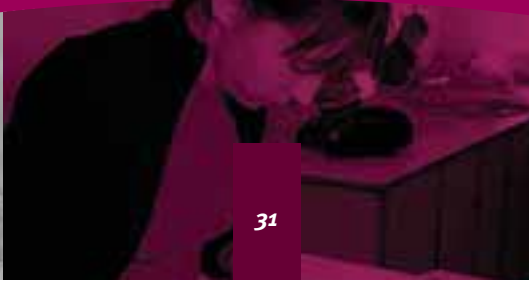
2.2.2.1 Language Policy

Amidst ongoing concerns about equity of access and success in higher education, the question of language has always loomed large; Cabinet's approval in November 2002 of a Language Policy Framework for Higher Education¹⁵ was therefore an important milestone.

In South Africa, language was used in the past as an instrument of control, oppression and exploitation – and significantly so in education. The 1996 Constitution delineates the right of individuals to receive education in the language of their choice.¹⁶ In this context, the Minister of Education was obliged by the *Higher Education Act* to develop a framework language policy for higher education, to guide HEIs who must in turn determine the institutional language policy.¹⁷ The critical challenge in doing so was 'to ensure the simultaneous development of a multilingual environment in which all our languages are developed as academic/scientific languages, while at the same time ensuring that the existing languages of instruction do not serve as a barrier to access and success'.¹⁸

The process followed for arriving at the language policy included a request by the Minister to the CHE for advice (submitted July 2001); as well as a request to Professor Jakes Gerwel to convene an informal committee to advise specifically with regard to Afrikaans (report submitted January 2002). In addition, the Ministry considered views expressed by a number of different constituencies, including those of the Vice-Chancellors of historically Afrikaans-medium institutions.

In setting out a **framework for languages of instruction**, the language policy acknowledged the current position of English (in the majority of HEIs) and Afrikaans (in historically Afrikaans-medium HEIs) as dominant. Notably, historically Afrikaans-medium HEIs had in recent years adopted a flexible language policy,



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offering parallel/dual instruction in English and Afrikaans. Even at the University of Stellenbosch where, by policy, Afrikaans was the only language of tuition at undergraduate level, a shift towards the use of English in conjunction with Afrikaans had occurred. Given practical considerations, the policy deemed it necessary to

work with the reality of English and Afrikaans languages of instruction until other South African languages have been developed to a level where they may be used in all higher education functions. In the interim, the policy committed the Ministry to the establishment of a task team to develop a medium- to long-term strategy to promote multilingualism

The policy recognised Afrikaans as a language of scholarship and science, and thus as a national resource whose capacity should not be eroded. The sustainability of Afrikaans as a medium of academic expression and communication could be ensured through a range of strategies, including the use of Afrikaans as a primary but not a sole medium of instruction – provided this did not impede access.



In relation to the **future of South African languages as areas of academic study and research**, HEIs were encouraged by the policy to pay particular attention to curriculum development in the study of South African languages and literature, while the Ministry would encourage such development through planning and funding incentives. A similar approach was proposed for **developing the study of foreign languages**, especially those important for the promotion of South Africa's cultural, trade and diplomatic relations.

HEIs were encouraged to promote **multilingualism in institutional policies and practices**, and to develop strategies for promoting student and staff proficiency in designated languages of tuition. Measures could include, for example, requiring proficiency in an African language as a prerequisite for a range of academic fields of study.

2.2.2.2 Redress Policy

Redress of past inequalities in higher education was a central issue in policy debates from the early 1990s, and was identified as a policy goal in the *White Paper* and *National Plan*. Over time, policy documents have come to distinguish between **institutional redress**: aimed at addressing the multiple apartheid-generated disadvantages embedded in institutional infrastructure and resources; and **social redress**: aimed at enhancing the position of individual students from disadvantaged backgrounds. Despite the symbolic prominence of the issue, and in the absence of a formal redress policy, concrete action to operationalise institutional redress has at times appeared to lag (although it is true that available redress funds also had to be used to bail out HDIs in financial distress, as in 1999/2000).¹⁹ Attention was however firmly directed to social redress through the NSFAS. (See Section 11.2.3.)

With respect to institutional redress, the *National Plan* specifically asked the question: 'redress for what?' It was firm in its view that funding and governance crises that had erupted in HDIs in the late 1990s could neither be countenanced nor ascribed solely to the legacy of apartheid. Instead, the allocation of redress funding would have to be linked to well-defined missions (see Section 2.2.1.3), and development strategies based on business plans with needs linked to performance improvement and efficiency measures.²⁰

In late 2000, the Minister requested advice from the CHE regarding the development of a redress policy and strategy. Under the auspices of its Funding and Financing Standing Committee, the CHE sought:

- To review the development of the concept of institutional redress in higher education within a wider framework of transformation policy in contemporary South Africa.

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- As part of this, to investigate its contemporary meaning and relevance and to arrive at an operational definition appropriate to the current context.
- To state specifically what the purpose and objects of institutional redress should be.
- To advance specific recommendations on the formulation, planning and implementation of institutional redress strategies.
- To investigate specifically the feasibility of different methods of funding or financing institutional redress strategies, taking into account recent policy developments.
- To suggest mechanisms for the allocation of redress funds, and for the optimal time frame of a redress policy and appropriate monitoring and reporting mechanisms.

The CHE submitted its advice in November 2003.

The development of two key policy instruments – the restructuring of the institutional landscape (described in Section 3.2 and 3.3) and the new funding framework (described in Section 11.3) – incorporate significant redress measures. However, the extent to which redress will be fully accomplished by these mechanisms remains to be seen. This will be the subject of careful monitoring, as part of the CHE's wider role in monitoring and evaluating the achievement of policy goals and objectives. To the extent that redress goals are not fully met through these policy measures, additional mechanisms could easily be implemented. These could include possible additional adjustments to the proposed funding framework and the allocation of earmarked funding for capacity-building and for specially identified institutional projects directed to redressing historically-rooted disadvantage.



2.2.2.3 National Higher Education Information and Applications Service

The Minister appointed a Working Group to develop an implementation plan for the NHEIAS proposed by the *National Plan*. (See Section 2.2.1.3.) Having evaluated existing central applications systems operating in KwaZulu-Natal, as well as in other countries (Ireland and the United Kingdom), the Working Group submitted its report in December 2002.²¹ Its recommendations included: that all first-entry students – local and foreign, contact and distance – wishing to study at undergraduate level at any public HEI should apply only through the NHEIAS; that the NHEIAS should produce a handbook listing all programmes available to first-entry students, and should also supply career information; that applications should combine academic placement, student financial aid and student housing; that applicants should be permitted ranked choices not exceeding ten in number; and that HEIs should maintain their right to set the criteria for admissions, but should delegate to the central service the administrative application of the criteria to the pool of applicants.

In response to a subsequent discussion document released by the Ministry, the higher education sector and its constituent HEIs voiced a number of concerns.²² First, while supporting a central port of entry that disseminates information, facilitates a single application procedure for applicants, and allows the best offer of a place to be made, HEIs felt this should not preclude applicants from applying directly to their institution of choice. Second, proposals on career guidance and counselling were felt to be insufficient, with more effort and resources needed in other phases of education (general and further education). Third, the sector felt agreement was needed on the nature of the service, the timing of its implementation and the required



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resources. With respect to the nature of the service, the sector believed a central applications *and* admissions service was premature. Selecting and placing students is made complex in South Africa by inadequate guidance at the majority of schools, ongoing mismatch between the outcomes of schooling and higher education entry requirements, and large numbers of under-prepared students. HEIs play a nuanced role in responding to these factors and could not simply delegate this task to a central service. Accordingly, HEIs opposed the idea of a central allocation process, and proposed a modified applications-only model. With respect to timing, the sector felt that institutional capacity for managing change related to the NHEIAS would be severely restricted, given institutional restructuring and other policy change initiatives. Merging institutions should be given time to stabilise their academic programmes and establish new identities before participating in a central service. Finally, the sector was concerned that a proposal for mandatory participation in the NHEIAS, would ‘severely compromise institutional autonomy’ (albeit that proposals were for HEIs to set their own admissions criteria).

A second sectoral submission in March 2004²³ has argued for the establishment of a comprehensive higher education enrolment system that phases in a central information and applications service. This would link the service to the systemic functions of admissions regulation, in particular the management of minimum admissions thresholds (i.e. the current and future services of the Matriculation Board). Furthermore, it would be linked to the development of an access system that provides flexible preparatory opportunities for entry to higher education studies (through UNISA and institution-specific delivery of flexible access courses); and to ongoing strategic research activities that can impact on and shape the interface between further education and higher education. This approach has been offered by the sector in the belief that an information and applications service *on its own* cannot address the challenges of increased and broadened access at the point of entry to higher education study. It has also been proposed that enrolment management could be made one of the priority functions of a new single higher education association. (See below, Section 2.3.) The sector’s proposed model is still under consideration by the Minister of Education.

2.3 The Situation in 2004

Following the *National Plan* in 2001, key policy development has focused on areas related primarily to the principal steering levers of planning and funding (as repeatedly identified by the *White Paper* and *National Plan*), and the third key lever of quality which was conceptually present from the NCHE onwards, but gained special prominence with the establishment of the CHE and the formal launch of the HEQC (2001).

Currently, the following areas are at the centre of policy development and implementation:

- Higher education restructuring. Policy development has focused on programme rationalisation, programme and infrastructural cooperation, and the development of new institutional and organisational forms through mergers and incorporations. Details of the policy process and outcomes are fully discussed in Chapter 3 (Institutional Landscape). Key outcomes have been the determination of institutional programme and qualifications mixes in August 2002, subject to continuing review, and Cabinet decisions in December 2002 for reconfiguring the institutional landscape, taking effect in 2004 and 2005.
- New higher education funding framework. Policy development has focused on the development of funding policy that is ‘goal-oriented’ (i.e. linked to national policy goals), ‘performance-related’ (i.e. linked to accountability for research and teaching outputs through the subsidy formula), and that enables institutional and social redress (through forms of earmarked funding). The policy process and resultant framework are fully discussed in Chapter 11 (Financing). The new funding framework was gazetted in December 2003, and is being implemented from 2004 using a ‘migration strategy’.



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- National frameworks and criteria for quality promotion and QA. In particular, the HEQC has developed frameworks and criteria for the accreditation of higher education programmes and for the audit of institutional QA and quality management systems (QMS). Draft accreditation and audit frameworks and criteria were published in mid-2002; the audit framework and criteria were finalised in June 2004 ahead of implementation of institutional audits. Details are fully discussed in Chapter 8 (Quality Assurance).
- Academic policy. The creation of a single coordinated higher education system, within the context of the NQF, requires the development of a single academic planning framework and qualifications structure for higher education. Policy development in this respect has had to take account of the role of the South African Qualifications Authority (SAQA) and a review of NQF implementation. Details of these processes are more fully discussed in Chapter 5 (Teaching and Learning). It is hoped to implement an integrated higher education qualifications structure from January 2006 (proposals currently exist as a discussion document).
- Finally, as a result of increasing concern about the quality of leadership and management of public HEIs, the Minister requested the CHE (June 2001) to investigate and make recommendations on how to improve the efficiency, effectiveness and accountability of higher education governance. The outcomes of this process have not resulted in any sweeping changes to the model of higher education governance set out in the *White Paper*, but have raised a number of issues with regard to how the model has been applied at both system and institutional levels. These are described in Chapter 10 (Governance).



A new element in the higher education policy environment in 2004 is that the institutional restructuring process (fully described in Chapter 3) has rendered redundant the divisions between existing higher education sectoral bodies (South African Universities Vice-Chancellors Association (SAUVCA), the CTP, and the Association of Vice-Chancellors of Historically Disadvantaged Tertiary Institutions in South Africa (ASAHDI)). Consequently, an important initiative since 2002 has been the exploration of a new unified higher education association which will 'speak with one voice' for the sector.

Clearly a constructive relationship between government and the organised sector is critical for successful policy development and implementation, and the new association will have a key role to play in establishing a relationship with government that works for the good of higher education in an evolving policy context. Given that this chapter has highlighted the sectors concern that policy directions may constrain institutional autonomy, it may be fair to say that a key factor in establishing this relationship will be determining a mutually constructive approach. Too strong a centralist regulatory thrust from government will inevitably alienate the organised sector; similarly, a stance from the sector which is characterised by obligatory criticism of government will be needlessly antagonistic. Moreover, key challenges for the new association will be finding mechanisms for effective self-regulation of aspects of higher education, and proactive engagement with the state.

2.4 Critical Issues and Key Challenges Ahead

2.4.1 Interpreting the Course of Higher Education Policy in South Africa²⁴

To recap: the 1997 *White Paper* set out the framework for transformation towards a single, coordinated higher education system that would be both equitable and differentiated. Transformation would be guided by the



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goals of expanded participation, cooperative governance and responsiveness to societal needs, and a set of principles including equity, effectiveness and efficiency. Policy goals were translated into a legislative framework for higher education through the *Higher Education Act*, while the *National Plan* elaborated a set of strategic objectives, benchmarks, and an operational time frame for progress towards transformation. Subsequent policy development has focused on particular aspects highlighted by the *White Paper* and *National Plan* (e.g. restructuring policy, funding policy, redress policy, academic policy and QA policy). The sequence and degree of developments have been influenced by multiple competing priorities which are also interconnected.

A decade on from 1994, it is important to consider the extent to which the *broad intentions* of policy have been achieved. (More detailed consideration of policy achievements and future challenges lies within the scope of individual chapters of this report.) This analysis briefly considers three interrelated themes: the extent to which the policy process has unfolded in a predictable way; the extent to which policy has achieved its intended outcomes; and the extent to which policy has shown it can be relied upon to determine the nature of transformation.

The policy process is conventionally understood to be linear and sequential: policies are formulated in response to problems and adopted; they are implemented, and they are evaluated – at which point they are either maintained, or terminated, with a new policy succeeding them. The South African higher education policy process after 1994 has shown the enormous complexity of large-scale transformative policy change. As one example, new policies – such as the new funding framework – are being introduced at the same time as the new institutional landscape is being constructed through mergers and incorporations. The success of these policies will surely be interrelated. Yet the one policy (funding) has been formulated and implemented even while another (reconfiguration) is being implemented – and at least two years in advance of an academic policy – although its success remains to be evaluated. It may be argued, however, that this has been necessary, given that years have elapsed since new funding arrangements were first promised. A key conclusion would appear to be that conventional assumptions of a linear policy process must be discarded. The point to be made is that South African higher education displays complex, multi-layered,



iterative and intersecting policy development and implementation, and is sure to continue to do so. Furthermore, of great importance are sensitive processes of monitoring and evaluation with respect to policy implementation, which will serve to provide early warning of unanticipated policy consequences, to identify policy gaps, and so to condition interrelated policy elements. In 2004, the CHE is poised to take up this role (as designated for it in the *White Paper*), by giving effect to the framework first outlined in its document *Towards a Framework for Monitoring and Evaluation of South African Higher Education*.²⁵

Understandably, given the stark inequalities, ineffectiveness and inefficiencies of the higher education system inherited from apartheid, it was widely assumed that a comprehensive policy framework for systemic transformation – as specified in the *White Paper* – would drive change in the required directions, with outcomes directly related to stated policy goals. However, following the *White Paper*, a largely unanticipated pattern of change and developments emerged in the South African higher education sector (e.g. market-responsive initiatives by HEIs out of kilter with policy goals; difficulties in implementing cooperative governance; financing inequities that pushed HAIs and HDIs further apart). By 2004, a policy of mandatory institutional restructuring has been adopted and is being implemented as one

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key response to these unforeseen developments, as well as to the persistent apartheid legacy underlying them, and to the state's view that HEIs had failed to adopt voluntary approaches to address these. Yet past experience would appear to recommend continued vigilance against the unexpected. In particular, perhaps, policy needs to conceptualise the notion of a higher education 'system' in a more nuanced fashion and pursue outcomes through an appropriate mix of centrally-driven measures, as well as 'softer' steerage mechanisms, incentives and opportunities for participative self-regulation by the sector. This would seem to suggest that a re-examination of core governance concepts articulated by the *White Paper* (e.g. the steering role of the state, institutional autonomy, and the public accountability of autonomous HEIs) is necessary. This theme is taken up in the overview of governance in *Section 10.4*.

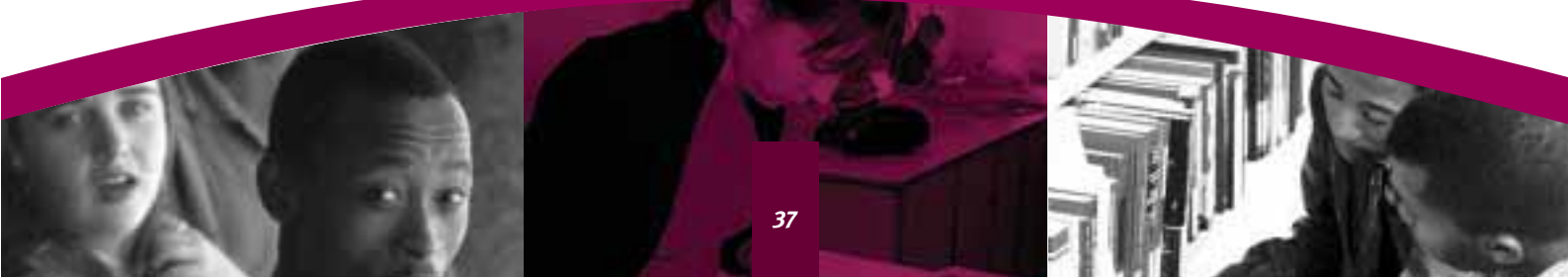
The pattern of developments after 1994 makes it clear that change is not exclusively driven by the state and national policy. It has in the recent past also been propelled from within the higher education sector (as HEIs and stakeholders acted in line with sectional interests and varying interpretations of policy), and by economy



and society (as market forces and shifting social demand for higher education came to bear). Thus, depending on the circumstances, any of these agencies – state, higher education sector or economy and society – may exert a more dominant influence. Accordingly, the course of policy implementation may quite easily – and to a greater or lesser extent, run counter to planned intentions²⁶.

This gap between policy intention and outcome can be understood as the inevitable result of the complex policy and change process already described. However, as a counter-argument it has been suggested that policy goals are unlikely to be achieved simply by developing more assertive, centrally-driven, comprehensive and coordinated policies and plans. Indeed, such an approach would run the risk of succumbing to rationalist assumptions about the efficacy of policy as the principal (and even sole) driver of change. Acknowledging the intricacy and uncertainty of change and policy outcomes neither renders national policy redundant and ineffectual nor diminishes the state's responsibility for driving equitable and effective change towards stated policy goals. It does, however, have important implications for understanding the 'system', systemic change, policy and the policy process and how these are approached in practice. Once again – and this time in combination – close monitoring of policy implementation and a review of system-level governance dynamics would appear to be required to support such understanding.

Given the complexities and constraints inherent in the South African higher education policy process (and probably in any policy process), it is not possible currently to predict with certainty the implications, future effects and long-term impact of policy development as it has unfolded to this point. In the flux which characterises the current South African higher education system, the effects of policies are likely to be co-produced by the state, the higher education sector, individual HEIs, and other social actors – in cooperation, in conflict and in competition.



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Chapter Notes and References

- ¹ Information in Figure 1 and the following paragraphs refers to: Department of National Education (1993, 3rd edn). *Education Realities in South Africa 1993*. Report: NATED 02-300 (93/12). Pretoria: Department of National Education: Chapter 1; Cooper, D and Subotzky, G (2001). *The Skewed Revolution: Trends in South African Higher Education, 1988–1998*. Bellville: Education Policy Unit, University of the Western Cape: Chapter 1.
- ² Bunting, I (1994). *A Legacy of Inequality: Higher Education in South Africa*. Cape Town: University of Cape Town Press: Chapter 3.
- ³ Ibid: Department of National Education 1993: Chapter 4. Policies setting out the separate qualifications structures included: *A Philosophy for Technikon Education*, NATED-02-118 (1988); *A Qualification Structure for Universities in South Africa*, NATED-02-116 (1989); and *Requirements for National Instructional Programmes at Technikons*, NATED-02-150 (1993). The last named of these began to dismantle the tight state control that typified technikons on inception, as it dispensed with their national syllabuses; in addition, the Technikons Act (Act 125 of 1993) laid the in-principle basis for the awarding of degrees to technikon students.
- ⁴ Cloete, N, Fehnel, R, Maassen, P, Moja, T, Perold, H and Gibbon, T (eds) (2002). *Transformation in Higher Education: Global Pressures and Local Realities in South Africa*. Cape Town: Juta: 94–96; Fisher, G (1998). 'Policy, Governance and the Reconstruction of Higher Education in South Africa'. *Higher Education Policy* 11: 121–140; 121; Moja, T and Hayward, FM (2000). 'Higher Education Policy Development in Contemporary South Africa'. *Higher Education Policy* 13: 335–359; 335–339.
- ⁵ National Commission on Higher Education (1996). *Report: A Framework for Transformation*. Pretoria: Human Sciences Research Council Publications: Chapter 1.
- ⁶ Republic of South Africa (1996). *Constitution of the Republic of South Africa, Act No. 108 of 1996*. Government Gazette No. 17678, Notice No. 2083, 18 December 1996. Pretoria: Government Printers: Schedule 4.
- ⁷ White Paper 1997.
- ⁸ MoE 2001: 10.
- ⁹ Cooper and Subotzky 2001.
- ¹⁰ MoE 2001: 11.
- ¹¹ As examples of sources in which such concerns are expressed see: Porteus, K et al (2001). 'The National Plan for Higher Education'. *Quarterly Review of Education and Training in South Africa* 8(2): 21–28; Hall, M and Symes, A (2003). 'Cooperative Governance or Conditional Autonomy? Principles for Governance of South African Higher Education'. Pretoria: Council on Higher Education (CHE). (Kagisano CHE Higher Education Discussion Series Issue No 2, Summer 2003.)
- ¹² MoE 2001: Section 6.4.
- ¹³ Republic of South Africa (1997). *Higher Education Act No. 101 of 1997*. Government Gazette No. 18515, Notice 1655, 19 December 1997. Pretoria: Government Printers.
- ¹⁴ Amendments are: Republic of South Africa (1999). *Higher Education Amendment Act No 55 of 1999*. Government Gazette No 20651, Notice 1399, 19 November 2000. Pretoria, Government Printers; Republic of South Africa (2000). *Higher Education Amendment Act No 54 of 2000*. Government Gazette No 21784, Notice 1196, 22 November 2000. Pretoria, Government Printers; Republic of South Africa (2001). *Higher Education Amendment Act No 23 of 2001*. Government Gazette No 22808, Notice 1104, 02 November 2001. Pretoria, Government Printers; Republic of South Africa (2002). *Higher Education Amendment Act No 63 of 2002*. Government Gazette No 24187, Notice 1598, 19 December 2002. Pretoria, Government Printers; Republic of South Africa (2003). *Higher Education Amendment Act No 38 of 2003*. Government Gazette No 25840, 15 December 2003. Pretoria, Government Printers.
- ¹⁵ Ministry of Education. (November 2002). *Language Policy for Higher Education*. Pretoria: Ministry of Education (MoE).
- ¹⁶ Constitution 1996: Chapter 2, Section 29(1)a.
- ¹⁷ The policy specified 31 March 2003 as the date for submission of each HEI's language policy.
- ¹⁸ MoE November 2002: Section 6.
- ¹⁹ MoE 2001: 11.
- ²⁰ MoE 2001: 10–12.
- ²¹ Ministry of Education (June 2002). *The Establishment of a National Higher Education Information and Applications Service for South Africa*. Report of the Working Group to the Minister of Education. Pretoria: Ministry of Education (MoE).
- ²² South African Universities Vice-Chancellors Association and Committee of Technikon Principals (2003). *HE Sector Response to the Report of the Working Group on the Establishment of a National Higher Education Information and Applications Service (NHEIAS). A Joint SAUVCA–CTP Submission*. Pretoria: South African Universities Vice-Chancellors Association and Committee of Technikon Principals (SAUVCA–CTP).
- ²³ South African Universities Vice-Chancellors Association/Committee of Technical Principals (March 2004). *Discussion Document Prepared for Meeting between SAUVCA–CTP Executive Committees and the Minister: 19 March 2004*.
- ²⁴ This section includes (condensed) arguments advanced elsewhere by Dr N Cloete and the Centre for Higher Education Transformation (CHET), including Cloete, Fehnel et al 2002: Ch 13, and inputs to earlier drafts of the present report made by Dr Cloete.
- ²⁵ Council on Higher Education (April 2004). *Towards a Framework for the Monitoring and Evaluation of South African Higher Education*. Pretoria: Council for Higher Education (CHE).
- ²⁶ This point is elaborated in a comprehensive analysis by Cloete, Fehnel et al 2002: Chapter 13. The analysis draws on Burton Clark's (1983) well-known conceptual model of the 'triangle of coordination' in HE, in which state authority, 'academic oligarchy' and the market are identified as different modes of HE coordination. See: Clark, B (1983). 'Governing the Higher Education System'. In Shattock, M (1983). *The Structure and Governance of Higher Education*. Guildford: Society for Research into Higher Education: 19–45

CHAPTER 3

INSTITUTIONAL LANDSCAPE

3.1 *The Inheritance in 1994*

By 1994, the South African higher education system consisted of 36 public higher education institutions (HEIs). These were structured along ‘racial’ and ethnic lines, were characterised by a rigid binary divide between universities (21) and technikons (15), and were administered by the relevant national authority (eight different government departments in all, in the Republic of South Africa or one of the apartheid ‘bantustans’).



These institutions were: four English-medium universities originally reserved for white students; six Afrikaans-medium universities originally reserved for white students; seven technikons reserved for white students; six universities and five technikons located in 'bantustans' and self-governing territories and reserved for African students; two urban universities and two technikons reserved for Coloured and Indian students; two urban universities reserved for black students; and two distance education providers (one university and one technikon).¹ This institutional landscape is set out in Figure 3; Section 2.1 explains the division of authority; Section 10.1 provides further details as to the governance framework of the public HEIs.

Figure 3: The Institutional Landscape of South African Public Higher Education, 1994 ²

Authority	Universities	Technikons	Total
House of Assembly (for Whites)	11 <i>English:</i> University of Cape Town, University of Natal, Rhodes University, University of the Witwatersrand <i>Afrikaans:</i> University of the [Orange] Free State, University of Port Elizabeth, University of Pretoria, Potchefstroom University, Rand Afrikaans University, University of Stellenbosch <i>Distance:</i> University of South Africa	8 Cape Technikon, Technikon [of the Orange] Free State, Natal Technikon, Port Elizabeth Technikon, Pretoria Technikon, Vaal Triangle Technikon, Technikon Witwatersrand <i>Distance:</i> Technikon of South Africa	19
House of Representatives (for Coloureds)	1 University of the Western Cape	1 Peninsula Technikon	2
House of Delegates (for Indians)	1 University of Durban-Westville	1 ML Sultan Technikon	2
Department of Education and Training (for Africans)	4 University of the North, University of Zululand, Medical University of South Africa, Vista University	2 Mangosuthu Technikon, Technikon Northern Transvaal	6
Republic of Transkei	1 University of Transkei	1 Eastern Cape Technikon (Transkei Technikon)	2
Republic of Bophuthatswana	1 University of North-West (University of Bophuthatswana)	1 Technikon North-West (Setlogelo Technikon)	2
Republic of Venda	1 University of Venda	0	1
Republic of Ciskei	1 University of Fort Hare	1 Border Technikon (Ciskei Technikon)	2
TOTAL	21	15	36

INSTITUTIONAL LANDSCAPE

In addition to the landscape of public HEIs already described, there were many colleges (e.g. teacher education, nursing, agriculture, police and military), administered along ‘racial’ and ethnic lines by the provincial administrations and by various ‘separate development’ political structures.

A very small private higher education sector was also present. In analysing the evolution of private provision in South Africa, one commentator noted that the neglect of private post-secondary education institutions by the government could, ironically, be viewed as the primary cause of the steady growth of the sector during the period 1948–1990. ‘In addition, the stringent apartheid laws and practices in the education system led to the departure from the public education sector of many black pupils, especially Africans; some of them found their way to private post-secondary institutions.’³ After 1990, there was a rapid and marked growth in private providers of higher education. While this was consistent with international trends, it also appeared to be fanned by a continued lack of policy to regulate the establishment and operation of the sector.⁴



SAUVCA Chairperson
Prof. Njabulo Ndebele



SAUVCA CEO
Ms Piyushi Kotecha

3.2 Key Developments since 1994

From the NCHE onwards, key goals for transforming the institutional landscape included:

- The creation of an integrated and coordinated higher education system, from a highly fragmented base.
- Erosion of rigid boundaries between institutional types (university, technikon, college, contact and distance).
- Erosion of boundaries in the legacies left by different institutional histories (historically advantaged, historically disadvantaged, ‘racially’ distinct origins).
- The creation of a more diverse and differentiated higher education landscape.
- Changes in programme and qualification offerings in the curriculum, and in the forms of HE provision.
- Increased higher education enrolments.

All of this needed to be achieved while taking into account variable institutional capacities for remodelling and reorientation (in line with variable leadership, governance, management, histories and conditions). In addition, a strategic confluence of policy initiatives had to be achieved, to draw together planning (steering the size and shape of the higher education system), funding (mobilising resources to support institutions while they were undergoing change) and quality (developing criteria and minimum standards for provision).

By the end of the 1990s, the policy and legislative basis for the creation of a single, coordinated higher education system had been established. Thus, for example, in addition to setting out the governance framework for public HEIs (universities and technikons), the *Higher Education Act* allowed for the incorporation of colleges into the higher education sector and the *White Paper* indicated that they would be incorporated in phases, beginning with the colleges of education. The *Higher Education Act* also stipulated the legal conditions for the registration of private HEIs and imposed various obligations upon them. (More is said of the college and private sectors below.)



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Also by the end of the 1990s, the Department of Education (DoE) had required all institutions to develop three-year institutional rolling plans. It was clear from these that public HEIs were attempting, within their variable constraints, to respond to changed political, economic and social conditions. Some historically advantaged institutions (HAIs) had developed strong strategic planning and management expertise and had deployed their resources to respond to the non-traditional students' demand for higher education. Sources of funds had been diversified and income generated through non-traditional fee-paying students, research contracts and partnerships. Other HEIs had remained essentially residential and placed strong emphasis on excellence, postgraduate teaching and research. They had engaged in faculty and curriculum restructuring

to increase efficiency and to respond more effectively to the range of competencies, skills and abilities required by the knowledge economy. Yet other HEIs were characterised by stability, a strong leadership core, a slowly expanding student body and a relatively stable academic and service workforce. Some of these were beginning to experiment with new programmes, new forms of delivery, new notions of cooperation and new forms of management. Finally, certain historically disadvantaged institutions (HDIs) had been unable to reorient themselves as quickly and to the same extent as others. They had experienced sporadic and differing degrees of instability because of governance conflicts, and some had had severe declines in student enrolments.



CTP Chairperson
Prof. AT Mokadi

In combination, the range of developments signalled a highly mixed picture, but not necessarily one that was leading to a strategically differentiated set of HEIs. (See also the analysis of

developments between the *White Paper* and the *National Plan* in Section 2.2.1.3) An obvious challenge was to ensure that the policy goal of a national, integrated and coordinated system was not compromised. In addition, enrolment patterns prompted many questions about the sustainability of the prevailing landscape of higher education: while it was clear that a broader spectrum of students was enrolling, they were, however, not enrolling in the anticipated increased numbers. Instead, student enrolment in higher education declined by 7% overall in 1999, compared to 1998. A major shift appeared to be occurring in enrolment patterns, with the main beneficiaries being contact technikons and the historically white Afrikaans-medium universities; and shifts were also occurring at the level of programmes (further details are provided in Section 4.2.2).

In sum, by the end of the 1990s it was clear that an investigation into the size and shape of higher education was urgent. This would have to take into full consideration the apartheid legacy, as well as institutional responses and developments post-1994, including dysfunctionalities in the system. It would be necessary to arrive at proposals that could inform effective steering of the system, as well as a systemic plan clarifying the forms of institutional differentiation necessary for achieving national policy goals.



CTP CEO
Dr. Dennis van Rensburg

3.2.1 Public Higher Education Restructuring

The Minister of Education requested the Council on Higher Education (CHE) to provide recommendations on the optimal size and shape of the system, in order to solicit public comment. This set in train a period of intense deliberations, debate and uncertainty regarding the future shape of the public higher education system in South Africa and the individual institutions within it.

The **CHE's report**⁵ *Towards a New Higher Education Landscape: Meeting the Equity, Quality and Social Development Imperatives of South Africa in the 21st Century* was released in June 2000. Some of its central

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findings included: that fragmentation of the system threatened to increase; that little meaningful coordination or cooperation had been achieved, while competitiveness between institutions appeared to have intensified; and that the sustainability of the higher education system, including the effective and efficient use of resources, required a reduction in the number of HEIs through ‘combinations’. It argued that the ‘current landscape and institutional configuration of higher education is... inadequate to meet socio-economic needs and is no longer sustainable. South Africa does not have the human and financial resources to maintain the present institutional configuration’.⁶ The key recommendation of the report was a differentiated higher education system based on different institutional mandates and types. ‘Bedrock institutions’ would focus on quality undergraduate programmes, with limited postgraduate programmes to a taught master’s level, and research related to curriculum, learning and teaching. A second set of HEIs would focus on quality undergraduate programmes, comprehensive postgraduate taught and research programmes up to the doctoral level, and extensive research. A third set of HEIs would provide quality undergraduate programmes, extensive postgraduate taught and research programmes up to the master’s level, selective postgraduate taught and research programmes up to the doctoral level, and select areas of research. In addition there should be a dedicated distance education institution, as well as private HEIs. These specific proposals were contentious, implying as they did allocation of distinct institutional mandates.



SAQA Executive Officer
Mr Samuel Isaacs

In responding to the report, the *National Plan* confirmed – on the basis of a preliminary analysis of current enrolment trends and the institutional three-year rolling plans – that ‘the number of public higher education institutions in South Africa could and should be reduced’.⁷ It did not take up the specific differentiation proposals of the CHE report, but proposed two main restructuring strategies, linked to the CHE report’s view that institutional restructuring could take a number of forms. The first was programme and infrastructural cooperation, including the regional-level rationalisation of the provision of costly programmes and specialised postgraduate programmes; the establishment of new ‘higher education institutes’ in Mpumalanga and the Northern Cape; and collaboration in infrastructure development. The second strategy was the development of new institutional and organisational forms by means of a process of mergers. Accordingly, the National Working Group (NWG) was appointed in March 2001 to investigate and advise the Minister ‘on appropriate arrangements for consolidating the provision of higher education on a regional basis through establishing new institutional and organisational forms, including the feasibility of reducing the number of higher education institutions’.^{8,9}

The **report of the NWG** was delivered to the Minister in January 2002 and publicly released in February. It proposed a reduction from 36 to 21 institutions, providing a set of reasons for these based on a regional analysis of higher education provision in terms of quality, sustainability and equity. Reception of the NWG report included some strong concerns and criticisms. These included, for example, that the NWG had focused too narrowly on mergers; that the consultative process was inadequate; that the data upon which the recommendations were based were inaccurate; and that the benchmarks and performance indicators utilised were inappropriate.



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After a period of consultation and lobbying, and in some cases acrimonious encounters between Minister and institutions – some of whom threatened legal action, **the Ministry's response to the NWG** recommendations was taken to Cabinet at the end of May 2002 and subsequently set out in a Government Gazette¹⁰ for public comment in June 2002. In terms of the *Higher Education Act*, a three-month period for public representations on the gazetted proposals was mandatory. In its response, the Ministry endorsed the NWG's approach and method, rejecting those concerns and criticisms mentioned. It accepted all the NWG's recommendations with four exceptions¹¹ in which it provided some rationale for alternatives, identifying areas of strength and weakness of individual HEIs within a region. It accepted that colleges of nursing and agriculture should be incorporated into the higher education system, subject to discussion with the relevant Ministries. It elaborated the thinking behind the new 'comprehensive' institutional type (a combination of university- and technikon-type programmes which would enhance access and articulation, and expand opportunities for research and responsiveness). Various aspects of mergers were addressed: unitary versus federal (with the former favoured as an appropriate means for overcoming fragmentation and for streamlining scarce governance, management and administrative capacities), and voluntary versus mandatory (with the former rejected as being almost certain not to mobilise sufficient headway). It also set out detailed areas of mandatory regional programme collaboration and rationalisation, with the requirement that inter-institutional consultations occur and that reports be submitted to the Minister on prescribed dates with concrete plans in this regard. Concerning equity, the Ministry stipulated that all institutions not affected

by mergers should submit plans for the period 2004–2006 by December 2002. These should give attention to strategies and time frames to address inequities in black, women and disabled student enrolments; indications – where applicable – as to how Afrikaans as a language of instruction would not constitute a barrier to access; and employment equity plans.

Having considered the 71 submissions received during the three-month period for public comment, and having sought CHE advice and Cabinet approval, the Minister made his **final restructuring decisions** public on 9 December 2002.¹² The Minister announced the establishment of a Merger Unit within the Higher Education Branch (HEB) of the DoE. Guidelines for institutions regarding the operationalisation of the merger process were issued in April 2003.¹³ The mergers would occur in two phases: the first with effect from January 2004 and the second with effect from January 2005. Significantly, in the light of continuing concern about the overt and hidden costs of mergers, the Minister indicated

government's commitment to providing the financial resources necessary to facilitate the mergers and to ensure the stability and sustainability of institutions, including funds to re-capitalise institutions which did not have an adequate asset base to cover their liabilities. In the 2003 Medium Term Expenditure Framework (MTEF) Budget Review, the Minister of Finance announced that R3 billion would be allocated for the restructuring process in the next few years.

3.2.2 The Programme and Qualifications Mix Exercise

A key objective of the *National Plan* was to ensure institutional diversity through mission and programme differentiation. In line with this, during 2002, the DoE undertook the Programme and Qualifications Mix (PQM) exercise which aimed to determine the appropriate mix for each public HEI, on the basis of its current programme profile; the relevance of the profile to the institution's location and context, and regional and national priorities; and its demonstrated capacity to add new programmes to the profile.



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The PQM exercise was not conceived as a one-off process. Instead, institutional profiles are to be subject to ongoing future adjustments, streamlining and rationalisation in order to:

- Maintain and stabilise institutional PQM profiles in areas of strength or potential strength, enabling a focus on quality, effectiveness and efficiency (e.g. improved throughput and graduation rates).
- Contain unrealistic institutional aspirations, taking into account capacity and context.
- Create a baseline to determine a rational allocation of programmes linked to structural reconfiguration and national and regional human resource development (HRD) needs.
- Address situations in which institutions ‘drift’ from their stated mission or intended academic programme focus.
- Prevent unnecessary programme duplication and overlap between institutions.

After extensive consultation and on advice from the CHE with respect to criteria used, the PQM profile for each institution was finalised in August 2002, with the stipulation that, from 2003, only approved programmes would qualify for funding.

In assessing institutional profiles, guidelines included:

- Fit between an HEI’s mission and its proposed PQM as well as national or regional needs.
- Institutional capacity, in particular in terms of qualified staff.
- Overall graduation rates and graduation rates in the proposed programme area.
- Past enrolment and graduation rates if the new qualification was building on the lower-level qualification.
- The PQM mix of neighbouring HEIs and indications of regional collaboration
- That proposed programmes in new educational categories and proposed new postgraduate programmes be subject to more rigorous scrutiny and review. In general only the first-level qualification of a new programme area was approved. Overall institutional graduation rates as well as graduation rates of contributing lower-level qualifications were scrutinised to ascertain whether there was strength in the area before a higher level qualification was approved.
- New postgraduate diplomas to be approved only in terms of the current national academic policy, i.e. as qualifications with the status below that of honours degrees.
- New undergraduate certificates and diplomas not to be approved in universities, except in certain circumstances, e.g. where there was no technikon in the area.
- Approval to offer postgraduate programmes to be withdrawn where there were no enrolments recorded at the HEI in 2000 or where the programmes were not appropriate to the institutional mission.



Several limitations of the exercise were acknowledged by the Ministry: the absence of an implemented quality assurance (QA) system; uneven and apparently inaccurate data submitted by HEIs; and the need for more nuanced understanding of graduate outputs by field of study in relation to labour market requirements. These issues notwithstanding, the Ministry declared its confidence that the exercise was a useful first step in determining institutional niches to contribute effectively towards the HRD and knowledge needs of the nation.



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HEIs submitted regional reports on programme and qualifications mixes in June 2003. At this stage, there were no proposals for rationalisation of programmes. Instead, it was argued in all cases that existing programmes should be kept, albeit with greater collaboration and in some cases streamlining to enable articulation.

Three other aspects of the PQM exercise can be noted as signals of the state's strong central steerage of the system (an issue which receives further attention in the analysis of governance – see Section 10.2):

- Distance education: a proliferation of distance education programmes as offered by contact institutions was a cause for concern in the National Plan. The Plan feared unanticipated consequences with respect to the quality, funding and sustainability of such programmes. Through the PQM exercise, a range of determinations were made. First, no enrolments of new students in existing distance education programmes in teacher education would be funded from 2004, unless the programmes had been approved as part of the national teacher education plan. Second, no new distance education programmes offered in partnership with private providers would be funded; and no enrolments of new students in existing distance education programmes offered in partnership with private providers would be funded from 2004, unless specifically approved. Third, funding caps would be placed on distance education programmes offered in categories other than teacher and teacher education. Finally, no new distance education programmes would be permitted prior to the Minister's receiving advice from the CHE on the role of distance education in the light of current and future trends, in particular changes in information and communications technology (ICT).¹⁴
- Satellite campuses: the National Plan raised concerns about the proliferation of satellite campuses, and stated that the Ministry would not fund student places at such campuses from 2002 unless they had been approved as part of an institutional plan. Pending a final decision, given the absence of reliable information, the PQM exercise determined that from 2003 no new programmes would be funded in satellite campuses established outside the 'seat' of an HEI, i.e. the greater municipal area in which the HEI was established.¹⁵
- Regional collaboration: the National Plan required HEIs to submit all proposed new programmes from 2001 for regional clearance, prior to submission to the Ministry for funding and to the CHE for accreditation. The Ministry identified a broad range of potential areas for programme collaboration and rationalisation within each region. The PQM determined that the continued funding of the identified programmes from the 2004/2005 financial year would be subject to the affected regional HEIs' jointly reviewing and submitting programmes for collaboration and rationalisation.



3.2.3 Incorporation of Colleges into Higher Education

In terms of the South African Constitution, all tertiary education is a 'national competence'. For colleges, the legal implication of the *Higher Education Act* ¹⁶ was that colleges could either be established as autonomous institutions or as sub-divisions incorporated into an existing HEI.

From the mid-1990s, a range of processes was undertaken to determine how colleges would be incorporated into higher education. Those for the colleges of education are described below. For the colleges of nursing and agriculture, task teams were established and made their reports in 2000; these reports were not released and final decisions are still pending.



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3.2.3.1 Colleges of Education

A task team was appointed in August 1997, to investigate how to locate all teacher education within the higher education system. In reporting to the DoE (which presented proposals to the Council of Education Ministers in mid-1998), the task team put forward a range of possibilities, including that some colleges of education could become autonomous HEIs if they could achieve a minimum enrolment of 2 000 full-time equivalent (FTE) students, while others would become part of existing HEIs. An initial rationalisation of the colleges was undertaken by the regions, based on the outcomes of a national teacher education audit completed in 1995 (the number of colleges was reduced from 120 in 1994 to 50 in early 2000). Guided by a Transition Committee, colleges reduced their numbers further during 2000, as the regions rationalised to 25 'contact' colleges with 10 000 students who were earmarked for incorporation into higher education. The other 5 000 college students were enrolled in two distance colleges: the South African College for Teacher Education (SACTE) and the South African College for Open Learning (SACOL).

In 2000, universities and technikons enrolled 85 432 students in teacher education (both pre- and in-service training). Of these, 18 187 students were studying in contact programmes; and 67 245 in distance programmes, of which 19 137 were registered at UNISA, Technikon SA and Vista University. There were also 32 696 students registered at the colleges of education.

During 2001, all the colleges of education were incorporated into universities and technikons. The process was complex and contested. Key issues were whether HEIs would be willing to offer college programmes that did not 'fit' (especially primary education programmes); the supposed existence of a college culture and training model, which would be lost; and issues relating to staffing and labour relations. The *National Plan* has committed the DoE to finalising a National Teacher Education Plan with a national agenda for teacher education, development and training.

3.2.3.2 Colleges of Nursing

More than 20 nursing colleges continue to exist under the jurisdiction of the provinces. According to figures supplied by the South African Nursing Council (SANC), 18 111 students were enrolled in these colleges in 2001 (see Appendix 2, Table 35).

3.2.3.3 Colleges of Agriculture

Twelve agricultural colleges continue to exist under the jurisdiction of the provinces. Those of their programmes at levels 5 and 6 of the National Qualifications Framework (NQF) are registered with the South African Qualifications Authority (SAQA) and, by special arrangement, fall within the ambit of the Higher Education Quality Committee (HEQC) for QA purposes. The colleges also offer, or plan to offer, non-formal training programmes, typically short courses for the further education and training (FET) sector.

Enrolments in agricultural colleges showed a sharp decline of 26% between 1999 and 2003, perhaps owing to a corresponding increase in enrolments in universities and technikons. In 2003, 1 508 students were enrolled in the colleges of agriculture. Declines in enrolments had been accompanied by an overall deterioration in 'race' and gender equity (See Appendix 2, Table 36). By contrast, enrolments in Agriculture



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in universities and technikons were higher in absolute terms, and increased steadily from 7 309 in 1998 to 10 341 in 2002. Proportions of black and women students also improved (See Appendix 2, Table 37).

3.2.4 Private Higher Education

After the mid-1990s, there was a proliferation of local and foreign private providers of higher education, as well as a complex array of partnership arrangements between public and private institutions. Reasons advanced to explain this included: substantial student interest in the types of programmes offered by private providers (particularly short courses, flexible modular programmes, and distance education); and perceptions

of declining quality in public education and instability at public HEIs.¹⁷ In 1995, the NCHE estimated that approximately 150 000 students were enrolled in private HEIs.¹⁸ By November 2000, one study¹⁹ estimated that there were approximately 323 private and transnational institutions operating in the private higher education sector, and a number of public HEIs engaged in collaborative arrangements. It was, however, suggested that the size of private higher education might not be as large as generally assumed: the perception of a large number of enrolments possibly stemmed from a double count of students in public-private partnerships. More recent studies have shown that the private sector is certainly much smaller than anticipated in the past, especially as the anticipated growth of transnational institutions and enrolments never materialised. Private higher education 'proper' has been estimated in 2004 to be at a headcount of between 30 000 and 35 000, comprising around 93 institutions and 382 programmes.²⁰



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Between 1998 and May 2002, SAQA provisionally accredited 348 programmes of 89 private providers, on condition that they apply to the HEQC for re-accreditation to offer the same programmes in 2003. At the time of the HEQC's re-accreditation of private providers in 2002, 58 multi-purpose providers (out of a possible 68) made submission for re-accreditation, while no single-purpose provider (out of a possible 21) did so; a total of 218 programmes were submitted. More than 60% of these providers were in urban locations, more than 30% in central business districts of main cities, and only one provider was in a township. More than half of the providers were in Gauteng, about a quarter in KwaZulu-Natal and some 13% in the Western Cape. About 25% of programmes offered were in business administration; other programmes on offer included religion (15%), information technology (14%), marketing and public relations (12%), communications and media (9%), and education and training (7%).²¹

Ultimately, the HEQC accredited 14 of the providers, with conditional accreditation granted to a further 30. From the exercise, it drew a range of worrying conclusions, including:

- There was an uncertain correlation between labour market requirements and private programme provision, as evidenced for example by the high percentage qualifications in religion and the lack of offerings in science, engineering and technology (SET).
- Teaching and learning were uneven owing to lack of sufficient staff with adequate qualifications, poor arrangements for experiential learning, and poor academic infrastructure and support.
- There was a general absence of internal QA arrangements and little knowledge of national policies and regulations.
- The degrees offered tended to fit more appropriately into the FET band of the NQF than the higher education band; this undermined the relationship between transformation and quality, because the increased access offered to students was for qualifications that could not deliver what they promised.²²

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Improvements in private higher education provision are being sought by two principal routes. The first is the regulatory route, whereby private providers of higher education must submit their programmes for accreditation via the HEQC as a condition of registration with the DoE.²³ The second is the external QA route, whereby private providers are subject to the same processes of audit and accreditation by the HEQC as are public HEIs, and have access to the same developmental and transformative dimensions of these processes (a case in point was recently provided by the HEQC's Master of Business Administration (MBA) re-accreditation exercise, concluded in May 2004, which evaluated public and private providers using identical criteria and procedures – see Section 8.3.2.1). A third route is afforded by self-regulation – for example using the mechanism of the Alliance of Private Providers of Education, Training and Development (APPETD) – as the private sector ‘moves of its own accord to become a complementary part of the system as a whole and play its rightful role in the development of human resources in this country and the region’.²⁴



3.3 The Situation in 2004

3.3.1 The New Institutional Landscape of Public Higher Education

The new public higher education landscape in South Africa is to consist of 22 public institutions:²⁵ 11 universities, five ‘universities of technology’ and six ‘comprehensive institutions’. In addition, two National Institutes for Higher Education are in the process of being established in Mpumalanga and the Northern Cape. The details are set out in Figure 4.



The new landscape incorporates a new institutional nomenclature, notably the terms ‘university of technology’ and ‘comprehensive institution’. Universities of technology are institutions formerly known as technikons, and so redesignated in October 2003.²⁶ Comprehensive

institutions combine both university-type and technikon-type programmes, and in some instances result from a university-technikon merger. The Minister requested advice from the CHE on the issue of nomenclature in September 2002. This was duly submitted in late 2003, although the report has not as yet been made public. Amongst others, recommendations were made as to names for public HEIs in South Africa; criteria, in broad principle, for the use of designated protected names for HEIs; and processes and procedures for applying for recognition.



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Figure 4: The New Institutional Landscape of South African Public Higher Education

Institutional Type		Institutions
Universities	8 separate and incorporated universities	1. University of Cape Town (UCT) 2. University of Fort Hare (UFH) + Rhodes University East London Campus 3. University of the Free State (UFS) + Vista University (Bloemfontein) + University of the North (Qwa-Qwa) 4. University of Pretoria (UP) + Vista University (Mamelodi) 5. Rhodes University 6. University of Stellenbosch (US) 7. University of the Western Cape (UWC) + University of Stellenbosch Dental School 8. University of the Witwatersrand (Wits)
	3 merged universities	1. University of Durban-Westville (UDW) + University of Natal = The University of KwaZulu-Natal 2. The University of the North (UNIN) + Medical University of South Africa (MEDUNSA) = University of Limpopo 3. Potchefstroom University of Christian HE (PUCHE) + University of North-West (UNW) + Vista University (staff and students of Sebokeng) = North-West University
Universities of Technology	2 separate and incorporated (technikons) universities of technology	1. Technikon Free State (TFS) + Vista University (Welkom) = Central University of Technology 2. Vaal Triangle Technikon + Vista University (infrastructure and facilities of Sebokeng) = Vaal University of Technology
	3 merged (technikons) universities of technology	1. Cape Technikon + Peninsula Technikon (Pentech) = Cape Peninsula University of Technology 2. Durban Institute of Technology (DIT) + Mangosuthu Technikon + infrastructure and facilities of the Umlazi campus of the University of Zululand 3. Technikon Pretoria (TP) + Technikon Northern Gauteng (TNG) + Technikon North-West = Tshwane University of Technology
Comprehensives	2 separate comprehensives	1. University of Venda = University of Venda for Science and Technology 2. University of Zululand
	4 merged comprehensives	1. Rand Afrikaans University (RAU) + Technikon Witwatersrand + Vista University (East Rand and Soweto) = University of Johannesburg 2. University of Port Elizabeth (UPE) + Port Elizabeth Technikon (PET) + Vista University (Port Elizabeth) = Nelson Mandela Metropolitan University 3. University of South Africa (UNISA) + Technikon South Africa (TSA) + Vista University Distance Education Centre (VUDEC) 4. University of Transkei (Unitra) + Border Technikon + Eastern Cape Technikon = Walter Sisulu University of Technology and Science
National Institutes		1. Mpumalanga Institute for Higher Education 2. Northern Cape Institute for Higher Education

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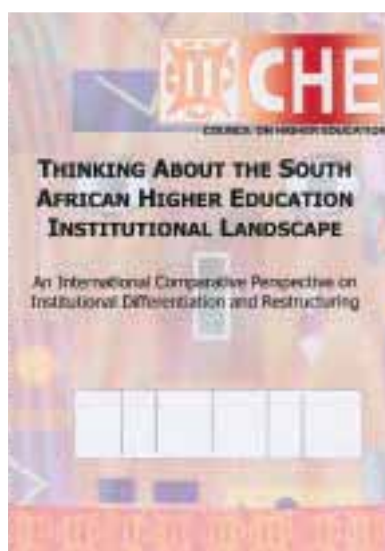
There has been some debate about the extent to which this new institutional configuration renders void the old categories of HAIs and HDIs. It has been pointed out, for example, that of the 12 separate institutions, eight are HAIs who now enjoy freedom from the resource-intensive burden of merger processes. In addition while part of the purpose of merging HAIs and HDIs is to achieve greater equity and redress in the system, success will depend on the effective formulation and implementation of redress policy and a new funding framework which incorporates redress measures. Going forward, however, it is crucial that attention not dwell on the implications of any 'residual' historical institutional groupings, but instead focus constructively on the challenge of overcoming former institutional identities (in the case of merging HEIs), and transforming and creating new identities in all HEIs. Some of the challenges associated with this are addressed in the final section of this chapter.



In a very preliminary way, the profile of the envisaged future institutional landscape can be drawn and the various impacts of restructuring assessed.

3.3.2 Institutional Size in the New Institutional Landscape

With respect to institutional size, the mergers will create some very large institutions. In terms of 2001 headcount enrolments (used here for indicative purposes only), seven institutions will have enrolments of above 30 000, a further four will have above 20 000, six above 10 000 and five below 10 000. The new dedicated distance education comprehensive institution will have a huge headcount enrolment of 210 275. The two Pretoria institutions are next largest: the merged university of technology with 52 373 students and the University of Pretoria with 44 643 students. Apart from the latter, the largest nine institutions are all the result of mergers (*Table 1*).



By comparison, the 2001 situation with respect to institutional size was as follows: the two dedicated distance education institutions were by far the largest: UNISA with over 133 000 and Technikon SA with over 68 000 enrolments. The University of Pretoria (without Vista Mamelodi) had over 41 000, and Pretoria Technikon over 38 000. A further seven institutions had between 20 000 and 30 000 enrolments, eight between 10 000 and 20 000, and 17 fewer than 10 000.



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Table 1: The New Institutional Landscape Ranked by Size of Institution (2001 headcount enrolments)

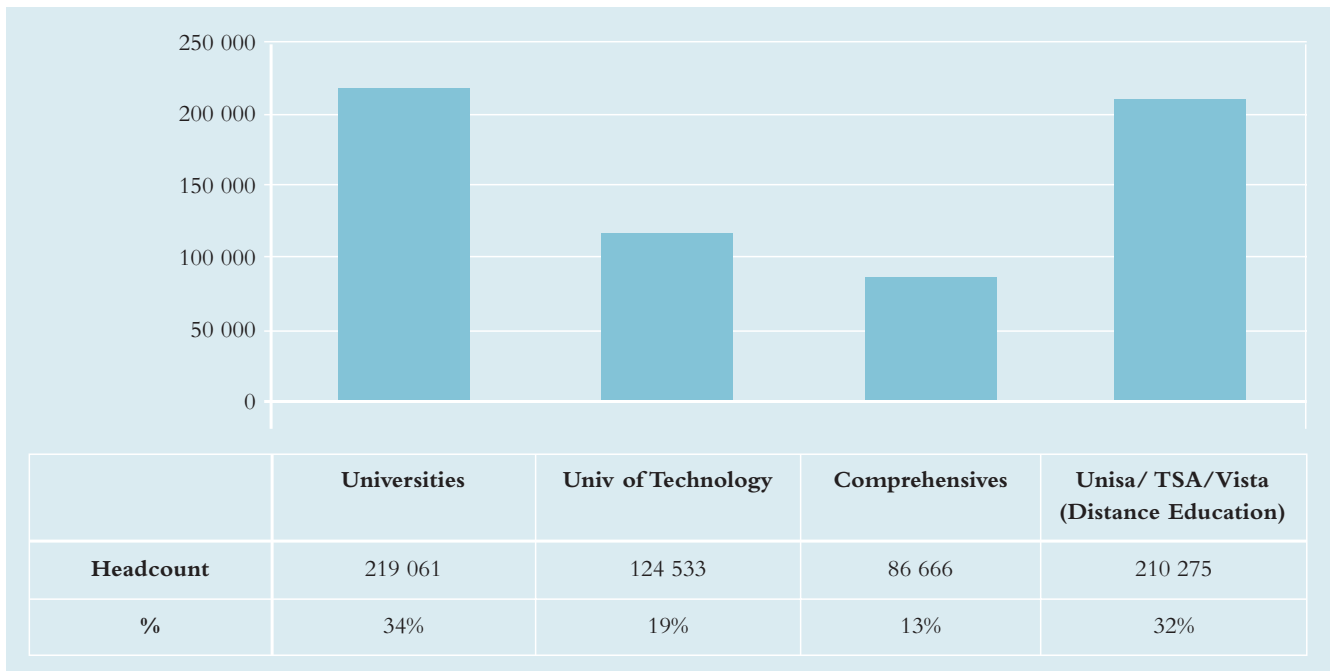
	Institution	Nature	Type	Enrolment
1.	UNISA (UNISA/TSA/VUDEC)	Merged	Comprehensive	210 275
2.	Tshwane University of Technology (Tech Pretoria/TNG/Tech North-West)	Merged	University of Technology	52 373
3.	University of Pretoria (UP/Vista (Mamelodi))	Independent	University	44 643
4.	University of Johannesburg (RAU/Tech Wits/Vista (East Rand & Soweto))	Merged	Comprehensive	36 226
5.	Nelson Mandela Metropolitan University (UPE/PET/Vista (Port Elizabeth))	Merged	Comprehensive	35 317
6.	University of KwaZulu-Natal (UDW/University of Natal)	Merged	University	34 207
7.	North-West University (PUCHE/UNW/Vista (Sebokeng))	Merged	University	30 293
8.	Durban Institute of Technology (DIT/Mangosuthu Tech)	Merged	University of Technology	26 042
9.	Cape Peninsula University of Technology (Cape Tech/Pentech)	Merged	University of Technology	21 180
10.	University of Stellenbosch	Independent	University	20 557
11.	University of the Witwatersrand	Independent	University	20 339
12.	University of Cape Town	Independent	University	18 602
13.	University of the Free State (UFS/Vista (Bfn))	Independent	University	17 741
14.	Vaal University of Technology (Vaal Triangle Tech/Vista (Sebokeng))	Independent	University of Technology	16 110
15.	Walter Sisulu University of Technology and Science (Unitra/Border Tech/ Eastern Cape Tech)	Merged	Comprehensive	15 123
16.	University of the Western Cape	Independent	University	10 499
17.	University of Limpopo (UNIN/MEDUNSA)	Merged	University	10 233
18.	Central University of Technology (TFS/Vista (Welkom))	Independent	University of Technology	8 828
19.	University of Fort Hare	Independent	University	6 982
20.	University of Zululand	Independent	Comprehensive	6 320
21.	University of Venda for Science and Technology	Independent	Comprehensive	6 101
22.	Rhodes University	Independent	University	4 965
TOTAL				652 956

Source: HEMIS, 2001 DoE and HEIs

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Figure 5 shows the distribution of 2001 headcount enrolment by the new institutional types. (A comparison can be made with Figure 7 in Chapter 4).

Figure 5: Distribution of 2001 Headcount Enrolments by New Institutional Types



Source: HEMIS, 2001 DoE and HEIs

South African higher education enrolments have historically been characterised by an ‘inverted pyramid’, with a preponderance of students at universities and far fewer at technikons. At first glance, the new configuration seems to leave almost twice as many enrolments in universities as in universities of technology (technikons). However, this is misleading, as it must be borne in mind that the new landscape concentrates almost half of total enrolments in the new comprehensive institutions, in which enrolments will be spread between university- and technikon-type programmes (45%, made up of 32% in the new distance education institution and 13% in the other comprehensive institutions).

Distance education represents a very sizeable proportion of enrolments in the new institutional landscape. Research conducted by the CHE in response to a request by the Minister for policy advice (to be released shortly), has found that:

- 43% of all headcount students in 2001 were enrolled in declared distance education programmes. According to the research, distance education in dedicated distance education institutions as well as in traditionally face-to-face HEIs had significantly expanded headcount participation in public higher education.
- In 2001, UNISA and Vista-Vudec together formed 73% of declared distance education university FTE enrolments.
- In the technikon sector, Technikon SA comprised 88% of declared distance education FTE enrolments.

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3.3.3 Equity in the New Institutional Landscape

Details with respect to equity in the new institutional landscape are covered in Section 4.3.

3.3.4 Research and the new institutional landscape

A comparison of higher education research in terms of the 'old' and new institutional landscapes is provided in Section 6.3.

3.4 Critical Issues and Key Challenges Ahead

South African higher education restructuring is proceeding in two spheres: reconfiguration through mergers and incorporations, and programme-level restructuring. With respect to the latter, it has already been noted that the PQM exercise may entail future adjustments, streamlining and rationalisation. As far as public higher education is concerned, the true effectiveness of these processes, including the degree of successful programme rationalisation achieved through regional cooperation, has yet to be determined. Private providers have not been subject to an equivalent PQM – although this is not beyond the bounds of future possibilities.

As the structural reconfiguration of the South African higher education landscape unfolds, it is important to remember the specific nature of the exercise in South Africa. Mergers and incorporations have been prescribed by the state as part of an explicit agenda of transformation, equity and efficiency in the sector. Restructuring has as its goal the dismantling of the apartheid landscape

of higher education and the configuration of a new landscape which will allow higher education to achieve the goals set for it in national policy. As a critically related point, it must be reiterated that the South African state has taken the route of mandatory restructuring in the face of failure by HEIs to explore such solutions voluntarily (and no alternatives to mandatory merger have been ventured). Through mandatory restructuring, the state is recasting institutions in terms of a transformed 'fitness of purpose' – i.e. institutional fitness in terms of national policy goals, priorities and targets. Once institutions have grasped this challenge by formulating visions and missions for merged entities that align them with transformation goals, it is then their task to achieve 'fitness for purpose' – i.e. conditions that will allow them to implement these visions and missions.



Against this backdrop, it remains to be seen whether or not reconfiguration will successfully (and evenly) enhance the national higher education policy goals set out in the *White Paper* and the *National Plan*. The Ministry has been at pains to reiterate that mergers and incorporations are not ends in themselves but must be seen in conjunction with the other policy goals and objectives of the National Plan and as part of the wider transformation project.

Evaluating the progress of restructuring must be a focus of attention for higher education policy analysis going forward, as well as for the CHE as it puts its statutory monitoring and evaluation role into effect. The merger process presents challenges for systemic monitoring and evaluation:

- First, the issue of how successfully different institutional cultures are merged will need to be monitored.
- Second, the cost effectiveness of the entire operation will have to be assessed.
- Third, outcomes in terms of equity, redress, effectiveness and efficiency will have to be evaluated.

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- Fourth, higher education provision will need to be redefined as associated with university, university of technology/technikon and comprehensive institutional types; and taking into account the range of specific and generic knowledge, skills and competencies required by graduates to meet the demands of the labour market, and of citizenship in a developing country in a globalised world. Clearly, the issue of how comprehensive institutions are to combine university and technikon elements of their programmes requires elaboration.²⁷
- Fifth, the quality and responsiveness of teaching and learning, research and community engagement as these develop in merged entities will need to be monitored.
- Finally, lessons about institutional change management and unanticipated problems and challenges of merger must be highlighted.

The same challenges, from an institutional perspective, rest at the heart of the governance, management and implementation of individual mergers and incorporations.

A research study of an early merger (the merger of ML Sultan Technikon and Natal Technikon as the Durban Institute of Technology with effect from April 2002) and early incorporations (of colleges of education into universities, after 2000; and of the MEDUNSA faculty of veterinary sciences into that of the University of Pretoria, after 1998) signposted the following issues as necessary factors in successful mergers and incorporations:

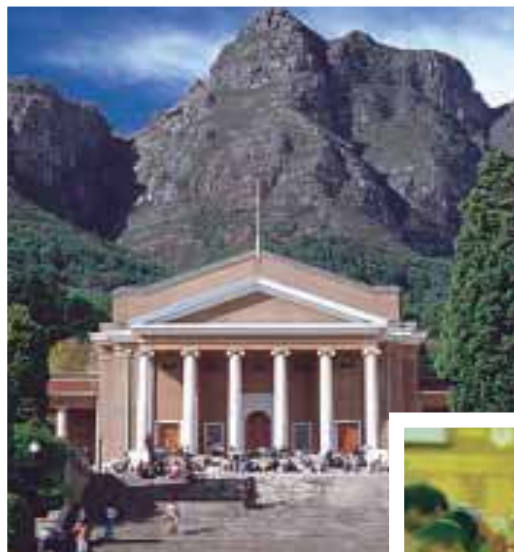
- A strong and reliable institutional leadership whose authority is respected.
- A strong and strategic leadership that deploys its energy and resources for optimal positioning of staff, students and curriculum in the merged (or incorporated) entity.
- A strong and verifiable financial position on the part of merging (or incorporating) entities.
- A strong and reliable student enrolment.
- A strong and loyal staff complement.
- A well-planned and well-timed merger implementation.
- A government that intervenes proactively, decisively and appropriately to ensure that the merger process stays on track, especially in times where the proposed merger (or incorporation) ‘threatens to disintegrate’²⁸.

This study (observing past cases) and a second one²⁹ (projecting an analytical framework for merger outcomes), have warned of unintended consequences of institutional restructuring. These would signal significant deviation from the transformative goals of policy, and from its aim of overcoming apartheid legacies (which are frequently at the root of contested institutions) through a model of ‘equal partnership’ in merger processes. These possible consequences include:



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- ‘Protected enclosure’ or ‘disguised compliance’ (the continued separate existence of a former institution inside a merged entity). Most at risk could be HEIs with incompatible institutional cultures; multi-campus institutions (where arrangements that are unitary by name could be federal by nature); and comprehensives.
- ‘Institutional obliteration’ (the disappearance of one partner inside a merged entity), ‘subsumed integration’ (effective takeover of one institution by another in a purportedly merged entity), or ‘unilateral predominance’ (the legacy culture of one partner persists, leaving no room for creation of a new institutional identity). Most at risk could be under-capacitated merger partners, and incorporating HEIs.
- ‘Mission fragmentation’ (the merged entity struggles to embrace new academic products). Most at risk could be comprehensives.
- Misguided public/private partnerships (i.e. partnerships initiated by the merged entity in a quest for a new institutional identity, that undermine the public good).³⁰



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Chapter Notes and References

- ¹ Cooper and Subotzky 2001: Chapter 1; Cloete, Fehnel *et al.* 2002: Chapter 2.
- ² Compiled with reference to Cooper and Subotzky 2001: 4-10; and Cloete, Fehnel *et al.* 2002: 64-85.
- ³ Mabizela, M (2002). 'The Evolution of Private Provision of Higher Education in South Africa'. *Perspectives in Education* 20(4): 41-51: 46.
- ⁴ Mabizela 2002: 48.
- ⁵ CHE 2000.
- ⁶ CHE 2000: 51.
- ⁷ MoE 2001: 86-87.
- ⁸ National Working Group (2001). *The Restructuring of the Higher Education System in South Africa: Report of the National Working Group to the Minister of Education*. Government Gazette No. 23549, 21 June 2002. Pretoria: Government Printers (Appendix 3 of the Notice): 56.
- ⁹ Other working groups established in May 2001 and relevant to the reconfiguration of the institutional landscape were: the Working Group on the Establishment of a Single Dedicated Distance Education Institution; the Working Group on the Incorporation of the Qwa-Qwa Branch of the University of the North into the University of the Free State; and two Working Groups for the Establishment of a National Institute for Higher Education in Mpumalanga, and the Northern Cape, respectively.
- ¹⁰ Ministry of Education (2002). 'Transformation and Restructuring: A New Institutional Landscape for Higher Education'. Government Gazette No. 23549, 21 June 2002. Pretoria: Government Printers.
- ¹¹ Exceptions: a) the proposed mergers between Peninsula Technikon and the University of the Western Cape (UWC); b) the proposed merger between the University of Fort Hare (UFH), Rhodes and the Health Sciences faculty of the University of Transkei; c) the proposal to leave Rand Afrikaans University (RAU) and Technikon Witwatersrand as separate institutions; and d) the proposals relating to the incorporation of the East Rand and Soweto campuses of Vista University. Instead, the Ministry proposed merging the Cape and Peninsula Technikons, and RAU and Technikon Witwatersrand; it retained UWC, UFH and Rhodes as separate institutions and proposed incorporating the East London campus of Rhodes and the Health Sciences faculty of the University of Transkei into UFH.
- ¹² Ministry of Education (9 December 2002). Statement by the Minister of Education, Professor Kader Asmal, on the Transformation and Reconstruction of the Higher Education System, Pretoria, 9 December 2002. The only two departures from those proposals gazetted in June 2002 were: the retention of the University of Venda as a separate comprehensive institution, and the merging of the University of Transkei (with its Medical School), Border and Eastern Cape Technikons into a comprehensive institution.
- ¹³ Ministry of Education (April 2003). *Higher Education Restructuring and Transformation: Guidelines for Mergers and Incorporations*. Pretoria: Ministry of Education (MoE).
- ¹⁴ The CHE convened a task team for this purpose in late 2002 and will submit its report in 2004. South African Institute for Distance Education (2004). *Enhancing the Contribution of Distance Higher Education in South Africa*, Pretoria: Council on Higher Education (CHE). In addition the South African Universities Vice-Chancellors Association (SAUVCA) and Committee of Technikon Principals (CTP) convened a reference group on this issue in January 2003. Its report offered recommendations to the Minister and was handed to the CHE. South African Universities Vice-Chancellors Association. (July 2003). *Learning Delivery Models in Higher Education in South Africa: A Formal Review of Distance Education and Open Learning in South Africa*. Pretoria: South African Universities Vice-Chancellors Association (SAUVCA).
- ¹⁵ A key problem with respect to information about satellite campuses was that HEIs had not been obliged to report on them separately. The HEMIS reporting system would have to be amended to enable the collection of separate data.

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- ¹⁶ Higher Education Act 1997: Section 21.2.
- ¹⁷ CHE Annual Report 2000/2001: Section 2, 1.3.
- ¹⁸ Council on Higher Education (2003a). The State of Private Higher Education in South Africa. Higher Education Monitor No 1. Pretoria: Council on Higher Education (CHE): 7.
- ¹⁹ Mabizela, M, Subotzky, G and Thaver, B (November 2000). The Emergence of Private Higher Education in South Africa: Key Issues and Challenges: Discussion document prepared for the CHE Annual Consultative Conference. Bellville: Education Policy Unit, University of the Western Cape.
- ²⁰ Information provided by the HEQC.
- ²¹ CHE 2003a: Chapter 2. Information provided by the HEQC in 2004 – although incomplete – suggests that the proportion of private providers in Gauteng may have increased, with concomitant decreases in other regions. The proportion of programmes in business and commerce appears to have increased, with decreases in other fields of study (e.g. religion, and education and training).
- ²² Ibid: Chapter 5.
- ²³ Department of Education (2003). Higher Education Act 1997: Regulations for the Registration of Private Higher Education Institutions. Pretoria: Department of Education (DoE): Section 12. (This publication is an exact copy of Regulation No. R1564 of Government Gazette No. 24143 of 13 December 2002.)
- ²⁴ Subotzky, G (2002). 'The Nature of the Private Higher Education Sector in South Africa: Further Quantitative Glimpses'. *Perspectives in Education* 20(4): 1-14: 12.
- ²⁵ A first set of mergers and incorporations is effective January 2004, and a second set January 2005.
- ²⁶ Some technikons were redesignated as universities of technology in October 2003; others would merge with universities to form comprehensive universities. The CTP has developed a document which conceptualises the position, role and functions of universities of technology in the South African context. See: Committee of Technikon Principals (August 2004). *Position, Role and Function of Universities of Technology in South Africa*. Pretoria: Committee of Technikon Principals (CTP).
- ²⁷ The process has begun with a concept document produced by the DoE: Department of Education (January 2004). *Creating Comprehensive Universities in South Africa: A Concept Document*. Pretoria: Department of Education (DoE).
- ²⁸ Jansen, J (ed.) (2002). *Mergers in Higher Education: Lessons Learned in Transitional Contexts*. Pretoria: UNISA Press: Chapter 7.
- ²⁹ Hall, M, Symes, A and Luescher, TM (2004). *The Governance of Mergers in South African Higher Education*. Pretoria: Council on Higher Education (CHE).
- ³⁰ Jansen 2002: 163-5; Hall et al. (2004): 56-60.

CHAPTER 4

EQUITY

The achievement of equity is a principal and prominent goal for higher education in a democratic South Africa.



“Existing inequalities ... must be identified and a programme of transformation that includes measures of empowerment and redress implemented.”

The term ‘equity’ is used to refer to the following issues:

1. Higher education enrolments and success rates that reflect the social composition of the broader society – in all higher education institutions (HEIs), in all fields of study and at all qualification levels.
2. Higher education graduate outputs that reflect equitable distribution of opportunity and outcomes within higher education and its constituent HEIs.
3. Higher education staffing that reflects the social composition of the broader society – in all HEIs and at all levels in the academy and in management and administration.
4. Higher education research outputs that reflect equitable participation, opportunity and outcomes in higher education research.
5. Resources made available to individuals from historically disadvantaged social groups, to provide them with fair opportunities to participate in higher education.
6. Adequate funding to provide historically disadvantaged institutions (HDIs) with fair opportunities to participate in the higher education sector.
7. Increased capacity development with respect to quality, to provide HDIs with fair opportunities.

As the *White Paper* explains, the achievement of equity has both backward- and forward-looking elements. Existing inequalities ‘which are the product of policies, structures and practices based on racial, gender, disability and other forms of discrimination or disadvantage’ must be identified and a programme of transformation that includes measures of empowerment and redress implemented.¹

The theme of equity is considered throughout this report. In particular, the seven dimensions of equity highlighted above are addressed as follows: point 7 (quality assurance) in Chapter 8; points 5 and 6 (financing) in Chapter 11; and point 4 (research) in Chapter 6. Points 1 to 3 (student enrolment, opportunities and outcomes, and staffing) are the subject of this chapter. In particular, this chapter focuses on available data and statistics to give a picture of developments in the public higher education system.

The overall distribution of enrolments by ‘race’ and gender provides a broad and therefore a limited indicator of equity. As has been repeatedly emphasised in key policy documents, equity is about more than just formal access to higher education: it is also about substantive access to a variety of academic fields and disciplines, to postgraduate study, and to opportunities and outcomes in general, in all fields and disciplines, and at all levels of study. Evaluating this broader and more substantive notion of equity requires investigation of ‘race’ and gender distributions across the various fields of study, qualifications levels, and rates of success, throughput and graduation. It especially requires analysis of those fields and qualification levels where women and black students have been traditionally under-represented, sometimes markedly. This chapter analyses these issues in relation to developments up to the present, and in relation to the new institutional landscape. In considering these aspects of equity, it also addresses related aspects of efficiency, and responsiveness to the labour market.

4.1 The Inheritance in 1994

4.1.1 Student Equity to 1994

In line with the nature of the apartheid project, the apartheid system of higher education was profoundly inequitable. Public HEIs were designated for the exclusive use of specified ‘race’ groups (African, Coloured, Indian and white), and there were legal constraints upon their enrolling students from another group (see

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[illegible]

	HBU's	HWU's (Afrikaans)	HWU's (English)	UNISA	HBT's	HWT's	TSA
1990	75 600	69 800	50 400	104 300	17 400	47 100	30 100
1994	103 300	78 300	51 700	129 200	28 000	66 500	68 000

Source: Cloete, Fehnel et al 2002: Chapter 5

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Overall participation rates in the public higher education system (i.e. total number of enrolled students divided by total population in the 20–24 age band, as per international norms) remained unsatisfactory. The gross participation rate was approximately 17% – higher than that of many developing countries, but lower than that of fast-developing and developed countries. Participation rates were highly skewed by ‘race’: approximately 9% for Africans, 13% for Coloureds, 40% for Indians and 70% for whites.³

In early 1994 (using 1993 headcount enrolments):

- 47% of students were white, 40% African, 7% Indian and 6% Coloured.
- Of African students, 49% were enrolled in historically black HEIs, 13% in historically white HEIs, and 38% in distance education HEIs.
- 43% of students were female and 57% male.

In 1994, 69% of enrolments were in universities and 31% in technikons; 50% were in humanities, 25% in science, engineering and technology (SET), and 25% in business and management.⁴

Very little data is available with respect to private higher education enrolments, both before 1994 and afterwards. It has been conjectured that, in the early 1990s, as the private sector began to expand rapidly, it attracted some black students because of the access difficulties for these students inherent in the public system. (See Section 3.1) Further details about the size of the private sector and its enrolments are provided in Section 3.2.4, although regrettably these do not yield data regarding equity.

The analysis in Section 4.2 traces trends in student enrolments, opportunities and outcomes in the public sector from 1993 onwards.

4.1.2 Staff Equity to 1994

Prior to 1994, employment practices in public higher education – and, no doubt, private higher education also, although there is little hard data – reflected the broader patterns of the apartheid division of labour. Accordingly, academic staff and senior administrative staff were overwhelmingly male and white (including in HEIs reserved for blacks); lower-level and service positions were filled predominantly by blacks and women.

By 1994, of a total of some 45 000 staff across the public higher education sector:

- 80% of professional staff were white, 12% African, 4% Coloured and 4% Indian.
- 34% of professional staff were women, and their status was generally lower than that of male professional staff.
- 52% of non-professional staff were African, 29% white, 13% Coloured and 6% Indian.
- 47% of non-professional staff were women.
- Of full-time black academic staff in 1993, 36% were employed in HBUs, 33% in HBTs, 15% in English-medium HWUs, 8% in HWTs, 5% in distance education providers, and 3% in Afrikaans-medium HWUs.
- Of permanent academic staff in 1993, women were best represented in the distance education HEIs at 44%, and they were represented at between 20% and 27% in other categories of HEI. These totals were further skewed by the fact that 90% of professors, 78% of associate professors, and 67% of senior lecturers were men.⁵

The analysis in Section 4.2 traces trends in staff equity from 1995 onwards.



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4.2 Key Developments since 1994

4.2.1 Overview of Policy with Respect to Student and Staff Equity

Policy developments since 1994 have been significant first and foremost because they have given a clear shape and form to what is required of HEIs in terms of achieving equity. This shape and form has been provided not only by explicit benchmarks in some cases, but also by a set of powerful conceptual links between, for example, equity and development, and equity and human rights. In the case of student enrolment, opportunities and outcomes, equity imperatives have been squarely cast within a determinant planning and funding framework, and increasingly within a quality framework. Staff equity has become a focus of institutional planning as a result not only of higher education policy requirements, but also on account of labour laws which apply to it directly.

4.2.1.1 Policy and Student Equity

It was confidently expected that higher education enrolments would expand after 1994, firstly given increasing enrolment patterns after 1990, as already described, and also in anticipation of higher numbers of matriculation exemptions. The NCHE expressed this confidence in its recommendations for a policy of massification, and its predictions of a public higher education system whose participation rate would be 30% by 2005, and which would enrol 690 000 students by 1999 and 740 000 by 2001. HEIs' own predictions were lower but followed the same trend.⁶ (Section 3.2 has highlighted the fact that this anticipated direction did not materialise as predicted in the late 1990s; Section 4.2.2 gives further consideration to the significance of falling enrolments from 1997 to 1999.)

The *White Paper* did not accept massification as a basis for policy development, rather committing itself to planned expansion of the system. Such expansion would rely primarily on 'a planning model that will provide estimates of the cost of expanding the higher education system based on different scenarios ... a variety of growth estimates and ... demographic and labour market indicators'.⁷ buttressed by a planning dialogue with HEIs and refined funding instruments. The *White Paper* aimed to connect the policy goals of equity and development by ensuring equity in the student body; by expanding career-oriented programmes; by expanding postgraduate enrolments at the master's and doctoral levels; and by increasing distance and open learning enrolments⁸. The significance of the private sector in expanding enrolments was also recognised (as was the accompanying need to ensure a proper regulatory environment for private providers).⁹ Finally, the *White Paper* insisted on the need to improve the throughput and output rates of higher education, if the equity, development and responsiveness goals of policy were to mesh and to be achieved.

Three of the strategic objectives of the *National Plan* directly referenced student equity. First, the goal of producing graduates with skills and competencies to meet South Africa's human resource needs required increasing the participation rate (from 15% to 20% by 2010–2015), as well as the number of enrolments. It required increasing graduate outputs in line with specific benchmarks (e.g. 25% for three-year undergraduate programmes, and 33% for master's programmes); changing enrolments by field of study (from a humanities:business/commerce:SET ratio of 49%:26%:25% to 40%:30%:30%); recruiting non-traditional students (e.g. workers, mature learners and the disabled); and increasing student recruitment from



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the Southern African Development Community (SADC). Second, the strategic goal of achieving equitable student and graduate profiles required a range of planning and funding levers to increase overall access and success. Third, the goal of sustaining and developing research capacity required a range of planning and funding levers to increase postgraduate enrolments and success at master's and doctoral levels.

4.2.1.2 Policy and Staff Equity

The *White Paper* recognised that distribution of access and opportunity for staff along lines of 'race', gender, class and geography, was even more inequitable than for students.¹⁰ It set as a goal the development of capacity-building measures to facilitate a more representative staff component 'which is sensitive to local, national and regional needs, and is committed to standards and ideals of creative and rigorous academic work'.¹¹ It further stated that HEIs would be required to submit human resource development (HRD) plans, including equity goals, as part of their three-year rolling plans.¹² HRD plans would need to include staff recruitment and promotion policies and practices, staff development arrangements, remuneration and conditions of service, reward systems, and the transformation of institutional cultures to support diversity.

In the *National Plan*, the strategic goal of achieving equitable staff profiles was cited. This would require specific strategies by HEIs to be identified in their three-year plans, as well as initiatives by the Ministry (e.g. postgraduate scholarships for target groups, and removal of obstacles to recruiting academic staff from elsewhere in Africa).

Significant after 1994 was the development of a framework of labour legislation aiming to endorse constitutional rights and obligations in the sphere of employment (the *Labour Relations Act of 1955*, the *Basic Conditions of Employment Act of 1997*, the *Skills Development Act of 1998*, and the *Employment Equity Act of 1998*). With specific reference to HEIs, this framework of laws brought all staff, including academic staff, within one domain of employee relations, because all employment contracts were governed by the *Labour Relations Act*; because skills development plans were now required for all employees; and because the *Employment Equity Act* laid down clear and detailed requirements for initiating, driving and managing staff equity in HEIs. Specifically, this Act has required all HEIs to undertake an organisational analysis to determine under-represented staff categories and barriers to equity; and to detail an equity plan, setting out equity targets, measures, strategies and monitoring procedures.¹³



4.2.2 Developments in Student Access

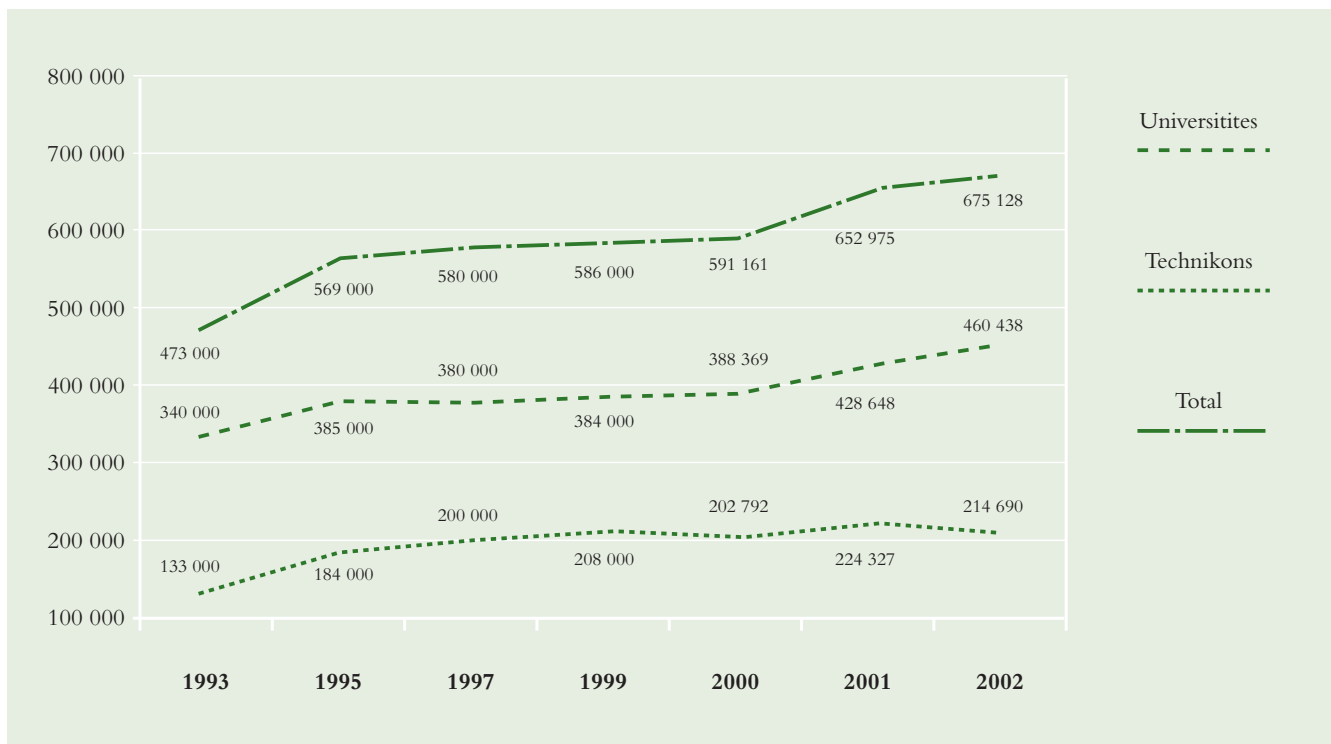
As already noted, the *National Plan* set a goal of increasing the higher education participation rate from 15% to 20% in the medium term and – as an associated issue – of increasing the overall size of the student body.

Figure 7 and Table 2 illustrate the much-debated fluctuation in overall higher education enrolments in recent years. After a steady increase from 473 000 in 1993 to 580 000 in 1997, enrolments peaked at 605 000 in 1998 (not shown) and then declined to 586 000 in 1999. This drop was widely assumed to represent a threat to the sustainability of some HEIs – especially historically disadvantaged universities (HDUs). These trends were interpreted by some analysts at the time as being long-term in nature, and as having serious potential for confounding policy goals for expanded student enrolments. Overall, these interpretations turned

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out to be ill-founded, however, as enrolments afterwards rose to 591 161 in 2000, then quite sharply to 652 975 in 2001, and even higher to 675 128 in 2002. Following the same pattern, full-time equivalent (FTE) enrolments dipped between 1997 and 1999 and then rose to 398 000 in 2000, to 436 000 in 2001 and to 553 000 in 2002. It should nevertheless be noted that HDU enrolments have not followed the same trend. Table 3 shows that undergraduate enrolments in HDUs fell significantly between 1995 (98 640) and 2002 (76 529). Although these 2002 enrolments mark a recovery from 2001 (67 327, not shown), and although postgraduate HDU enrolments have grown (from 11 641 in 1994, to 14 049 in 2002), overall growth in enrolments has not been achieved by these institutions since the losses of the 1990s.

Figure 7: Headcount University and Technikon Student Enrolments, 1993-2002



Source: CHE, 1998/9; HEMIS, 2000, 2001, 2002

Table 2: Full-time Equivalent Student Enrolments, 1993-2002

Institution	1993	1995	1997	1999	2000	2000	2001
Universities	193 000	252 000	261 000	245 000	254 000	281 000	387 000
Technikons	96 000	126 000	153 000	141 000	144 000	155 000	166 000
Total	289 000	378 000	414 000	386 000	398 000	436 000	553 000

Source: CHE, 1998/9; HEMIS, 2000, 2001, 2002

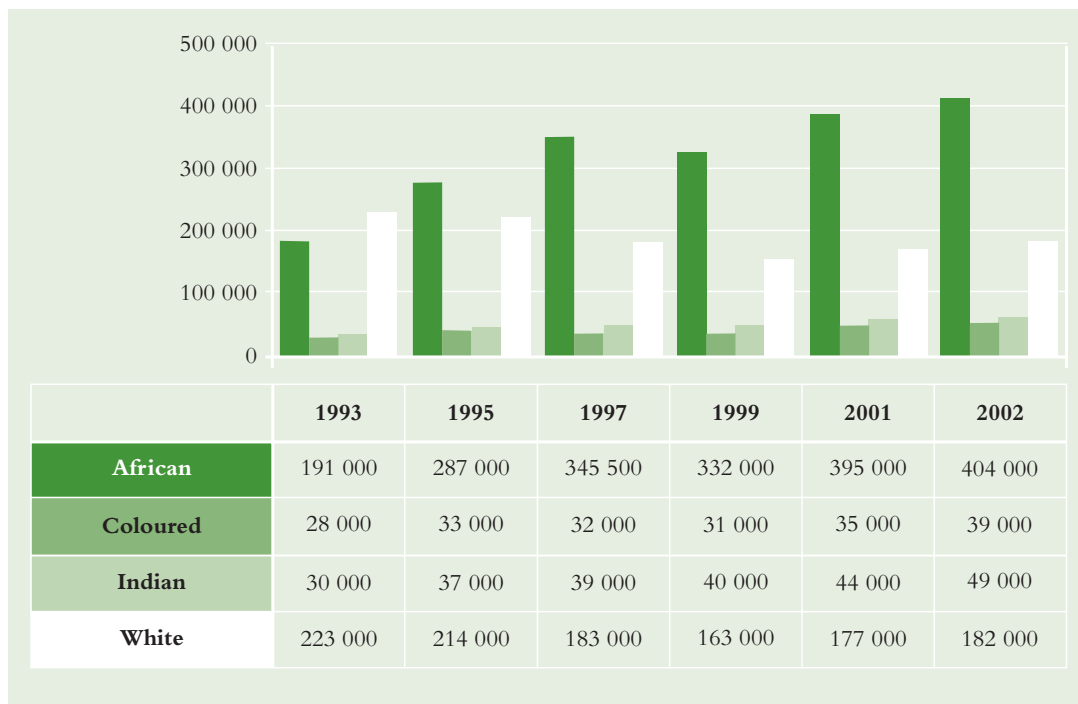
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The patterns described above have highlighted the danger of drawing premature conclusions from enrolments for particular years. Furthermore, while increasing overall enrolment has been welcomed as consistent with the policy goal of increasing participation rates, it is important to examine this growth more closely. Of particular interest and significance are questions as to whether increased enrolments have contributed to the additional and complementary policy goals of 'race' and gender equity, and *National Plan* targets for achieving shifts in enrolments by field of study and qualification level, in line with the requirements of the labour market. The following paragraphs provide this analysis for the last ten-year period. (Tables 38 to 49 in Appendix 2 supplement the analysis by providing headcount enrolments, for 1995 and 2002, for individual universities and technikons – by 'race', by gender, and in terms of undergraduate and postgraduate enrolments.)

Radical transformation in the 'racial' composition of the student body from the mid-1990s is graphically evident from Figure 8 and Figure 9. The number and proportion of African students rose steadily and dramatically from 191 000 (40%) in 1993 to 404 000 (60%) in 2002. Correspondingly, the number and proportion of white students declined from 223 000 (47%) in 1993 to 163 000 (29%) in 1999. Subsequently, while white student numbers increased in 2002 to 182 000, their proportion nevertheless dropped to 27%, as a result of continued increases in the number of African students. Coloured student enrolments fluctuated over this period, dropping between 1995 and 1999, then rising again to 39 000 in 2002. Indian student enrolments increased steadily throughout the period. The proportion of Coloured and Indian students has, however, remained static.

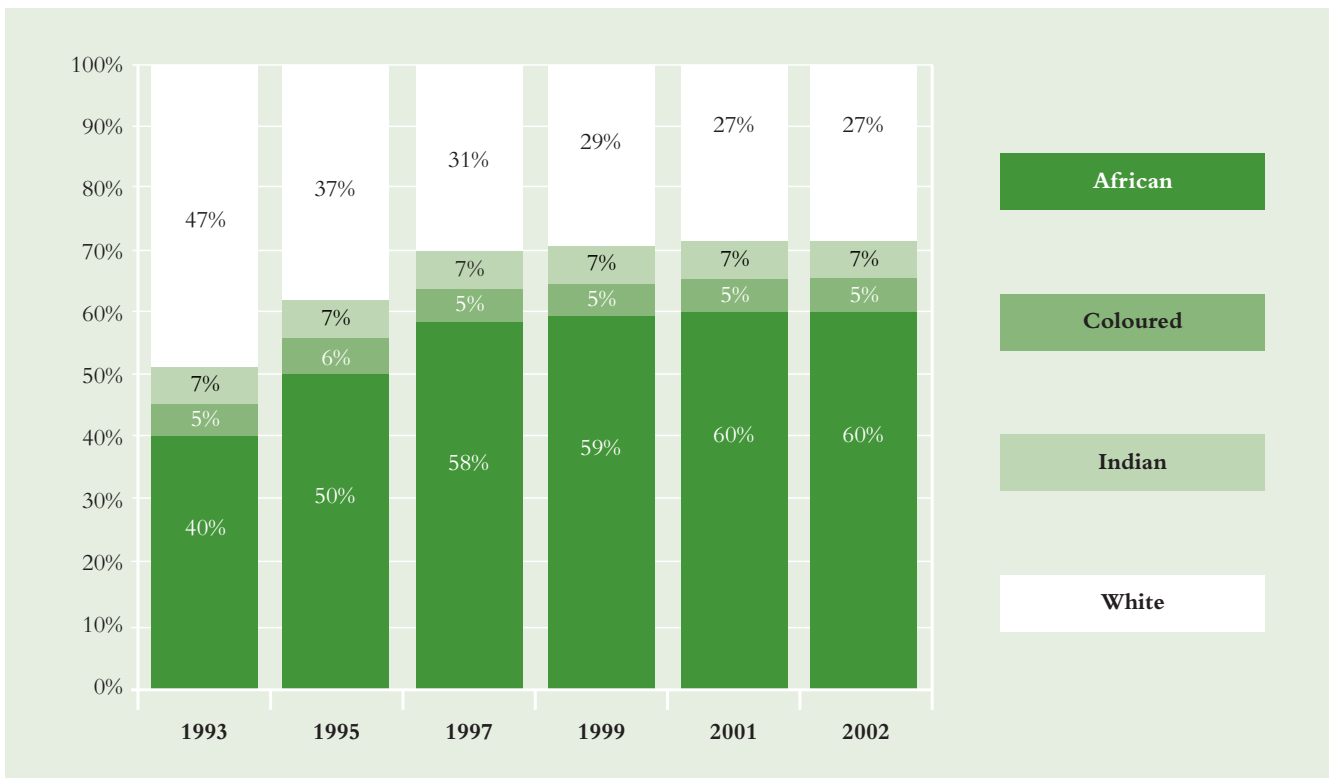


Figure 8: Headcount Enrolments by 'Race' 1993–2002



Source: SAPSE, CHE (1999/2000); HEMIS, 2001, 2002. Note: Figures rounded to nearest thousand.

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Figure 9: Proportion of Higher Education Headcount Enrolments by 'Race', 1993–2002

Source: SAPSE; CHE (1999/00); HEMIS, 2001, 2002

The gender profile of the higher education student population also showed dramatic changes between 1993 and 2001, as indicated by Figure 10. The number of women students rose steadily until women formed the majority in 1999, and reached 54% of total higher education enrolments in 2002.

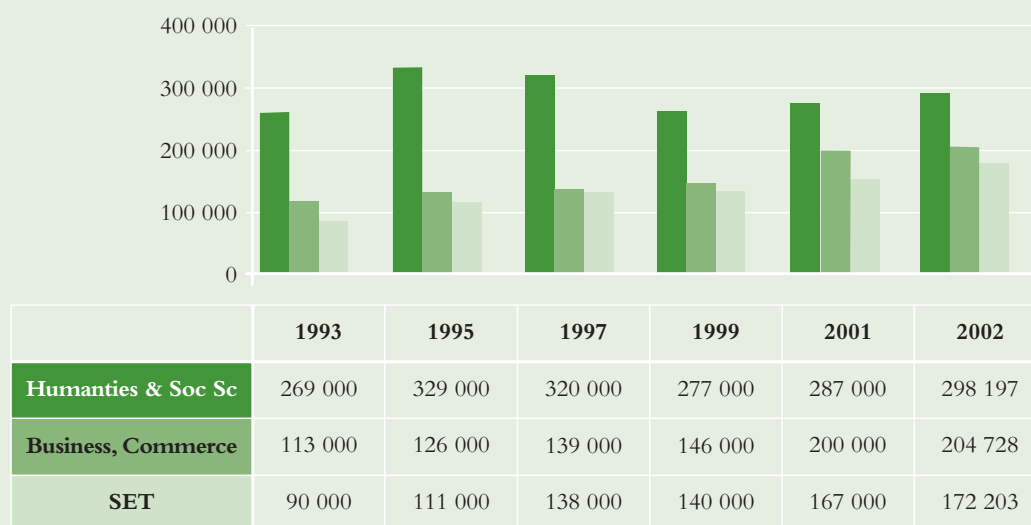


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Figure 10: Headcount Enrolments by Gender, 1993-2002

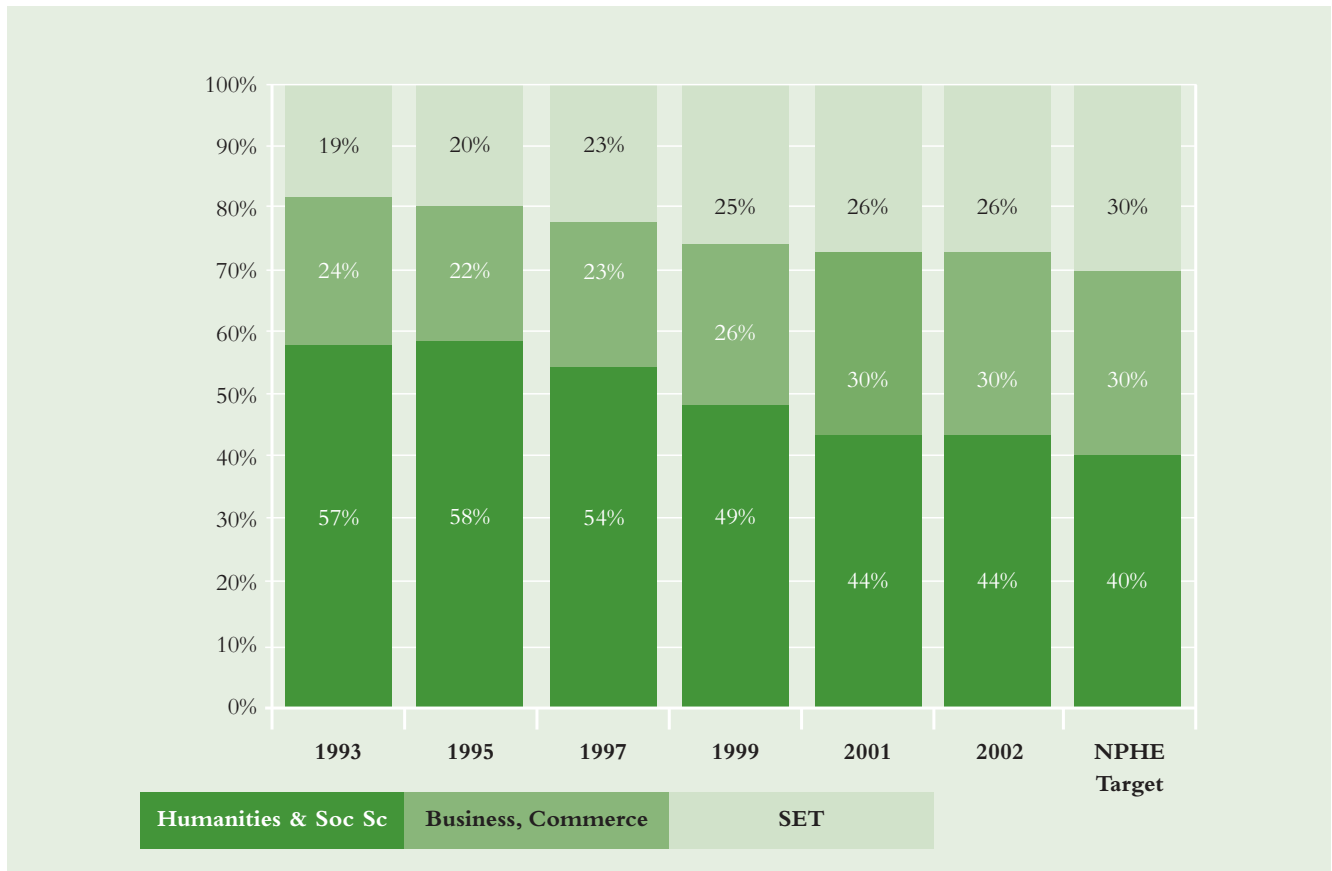
Source: SAPSE; CHE (1999/00); HEMIS, 2001, 2002. Note: There are minor variations between the totals in this figure and those in Figure 8

Enrolments by field of study also showed important shifts between 1993 and 2000, as is apparent from Figure 11 and Figure 12.

Figure 11: Headcount Enrolments by Field of Study, 1993-2002

Source: SAPSE; CHE (1999/00); HEMIS, 2001, 2002. Note: SET = Science, Engineering & Technology

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Figure 12: Ratio Headcount Enrolments by Field of Study, 1993–2002, compared to *National Plan* Targets

Source: SAPSE; CHE (1999/00); HEMIS, 2001, 2002

Enrolments in the Humanities and Social Sciences (HSS) rose from 269 000 to a peak of 320 000 in 1997, then declined to 277 000 in 1999, followed by a small rise in 2001 and 2002 to 298 197. Enrolments in Science, Engineering & Technology (SET) and in Business and Commerce (BC) rose steadily through this period, almost doubling in each case. As a result, the ratio of HSS:BC:SET enrolments shifted markedly from 57:24:19 in 1993 to 44:30:26 in 2002, as can be seen in Figure 12. This means that the overall ratio has been progressively approaching the target set in the *National Plan* of 40:30:30, with increases needed in SET.

Another important and noticeable trend, indicated in Table 3, relates to changes in the distribution of university headcount enrolments by qualification level.



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Table 3: Distribution of University Headcount Enrolments by Qualification Level and Institutional Type, 1995 and 2002

Qualification/Institutional Type	HAU		HDU		UNISA		TOTAL	
	No.	%	No.	%	No.	%	No.	%
1995								
Professional UG 1 st Bachelor	36 307	26%	26 519	24%	13 500	11%	76 326	21%
General UG 1 st Bachelor	49 606	35%	52 311	47%	82 571	70%	184 487	50%
UG Diploma/Certificate	11 949	9%	19 635	18%	3 090	3%	34 674	9%
Occasional/Other	2 995	2%	175	0%	0	0%	3 170	1%
Undergraduate Total	100 857	72%	98 640	89%	99 161	83%	298 657	81%
PG Doctorate	4 166	3%	345	0%	475	0%	4 986	1%
PG Masters	17 301	12%	2 095	2%	2 485	2%	21 880	6%
PG Honours	7 918	6%	2 488	2%	7 864	7%	18 270	5%
PG Bachelors	5 712	4%	3 230	3%	5 824	5%	14 766	4%
PG Diploma/Certificate	3 760	3%	3 431	3%	2 937	2%	10 128	3%
PG Occasional	275	0%	52	0%	15	0%	342	0%
Postgraduate Total	39 131	28%	11 641	11%	19 599	17%	70 372	19%
GRAND TOTAL	139 988	100%	110 281	100%	118 760	100%	369 029	100%
2002								
Professional UG 1 st Bachelor	45 458	20%	22 869	25%	14 867	10%	83 194	18%
General UG 1 st Bachelor	67 240	30%	40 942	45%	82 162	57%	190 344	41%
UG Diploma/Certificate	36 256	16%	8 469	9%	8 447	6%	53 172	12%
Occasional/Other	7 095	3%	4 249	5%	18 725	13%	30 069	7%
Undergraduate Total	156 049	69%	76 529	84%	124 201	87%	356 779	77%
PG Doctorate	5 976	3%	767	1%	711	0%	7 454	2%
PG Masters	26 556	12%	5 304	6%	4 422	3%	36 282	8%
PG Honours	19 029	8%	4 907	5%	11 075	8%	35 011	8%
PG Bachelors	7 210	3%	1 578	2%	106	0%	8 894	2%
PG Diploma/Certificate	11 904	5%	1 493	2%	2 621	2%	16 018	3%
Postgraduate Total	70 675	31%	14 049	16%	18 935	13%	103 659	23%
GRAND Total	226 724	100%	90 578	100%	143 136	100%	460 438	100%

Source: SAPSE, 1993; HEMIS, 2002

University headcount enrolments grew at most qualification levels, with the notable exception of the stark decline in HDU undergraduate enrolments already noted (from 98 640 in 1995 to 76 529 in 2002).

Overall university postgraduate enrolments rose from 70 372 in 1995 to 103 659 in 2002 – a small but important increase from 19% to 23% in the proportion of postgraduates among total enrolments. The number of postgraduate diploma and certificate enrolments rose from 10 128 to 16 018. A significant increase was evident in the number of master's enrolments (from 21 880 to 36 282). Over 5 000 of the 2002 master's enrolments were at HDUs, marking an impressive growth from 2% of total enrolments in 1995 (2 095) to 6% in 2002 (5 304). In historically advantaged universities (HAUs), the proportion remained steady at 12%.

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Honours enrolments almost doubled from 18 270 to 35 011 – of which the vast majority were at HAUs. The number of doctoral enrolments rose more modestly (from 4 986 to 7 454), representing an increase from 1% to 2% of total postgraduate enrolments. Doctoral enrolments grew by the same proportion in HDUs (345 to 767), representing significant growth in this category. A noticeable decline was evident in the number and proportion of postgraduate bachelor's enrolments – probably involving mainly Bachelor of Education (BEd) enrolments.

At an aggregate level, overall university undergraduate enrolments declined from 81% in 1995 to 77% in 2002, as postgraduate enrolments increased from 19% to 23%. These are generally positive shifts.

Among undergraduates, the shifts in the number and proportion of enrolments between 1995 and 2002, as presented here, may be distorted by inconsistencies in the categorisation of enrolments. For example, UNISA reported no occasional/other enrolments in 1995, but 18 725 in this category in 2002. In the same period, UNISA's bachelor's enrolments declined from 81% to 67%, while its undergraduate diploma and certificate enrolments doubled. These shifts in proportions at UNISA may require further analysis. Overall, the reported figures show that the proportion of general undergraduate bachelor's enrolments (the 'basic' undergraduate degree) declined from 50% to 41%. In absolute terms, enrolments for this degree increased from 184 487 to 190 344 – the combined result of an increase at HAUs from 49 606 to 67 240 and a decrease at HDUs from 52 311 to 40 942 over the period under review, with UNISA virtually unchanged. Overall enrolments in the professional bachelor's degree at the HDUs declined from 26 519 to 22 869, while at the HAUs there was an increase from 36 307 to 45 458. The overall number and proportion of diploma



and certificate enrolments rose from 34 674 (9%) to 53 172 (12%), with a marked increase at the HAUs from 11 949 (9%) to 36 256 (16%) – most likely the result of the inclusion of teacher trainees enrolled in partnerships with private providers. At HDUs, by contrast, enrolments at this level declined sharply from 19 635 (18%) to 8 469 (9%). This would appear to be linked to the overall decline in HDU undergraduate enrolments, as noted.

These fluctuations at the undergraduate level require monitoring and their causes and implications need investigation. The shift in the proportion of enrolments from the general and professional bachelor's degrees to undergraduate diplomas and certificates may ultimately result in a shrinking potential pool for postgraduate study. Furthermore, while increases in the lower undergraduate qualifications are needed, these qualifications have historically been provided by technikons. Their increasing provision at universities, which have traditionally concentrated on degrees, manifests the kind of market-driven shifts in academic focus that have been of concern to the Ministry of Education. The Programme and Qualifications Mix (PQM) exercise was designed in part to address this situation (see Section 3.2.2).



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4.2.3 *Developments in Student Opportunity and Outcomes*4.2.3.1 *Overall Graduate Outputs*

A crucial feature of the higher education system with respect to its contribution to the intellectual, cultural, social and economic development of the country is, of course, the number, range and quality of its graduates and the rate at which these are produced. Table 4 illustrates graduate outputs from 1995, 1998 and 2002.

Table 4: University and Technikon Graduates, 1995-1998-2002

Institutional Type	1995		1998		2002	
Universities	65 494	80%	59 167	74%	75 664	74%
Technikons	16 269	20%	20 558	26%	26 015	26%
Total	81 764	100%	79 725	100%	101 679	100%

Source: SAPSE, 1995 & 1998; HEMIS, 2002. Note: The 1995 and 1998 figures differ from those in the CHE Annual Report 1998/99 as they have since been updated.

Graduate output from South Africa's higher education system has grown steadily since 1995, rising above 100 000 for the first time in 2002. About three-quarters of these were from universities and a quarter from technikons. However, graduation patterns have fluctuated, with two declines evident (underlying data not shown): the first in university and overall graduations between 1995 and 1998 in all fields among white, Indian and Coloured mainly male undergraduates and lower postgraduates; and the second among African university undergraduates in HSS between 2001 and 2002. The precise reasons for these fluctuations (in particular, the impact on declining enrolments at the time) are not clear, and need further investigation. By contrast, technikon graduations expanded steadily over the period, with their proportion growing from 20% to 26% of the total and, correspondingly, that of universities dropping from 80% to 74%.

4.2.3.2 *Graduate Outputs by Fields of Study*

To meet the varied labour market needs of South Africa in relation to local, regional and national development and also global competitiveness, it is vital that the higher education system produces the number of graduates in the required wide range of fields of study and qualifications levels. Graduate outputs between 1995 and 2002 showed counter trends (Table 5). At universities, the number and proportion of SET graduates rose from 13 146 (20%) to 16 735 (22%) and that of BCMS graduates from 9 203 (14%) to 15 454 (20% – quite sharply up from 8 233 in 1998 and 13 342 in 2001), with a corresponding decline in the proportion, but not the number of HSS graduates (from 66% to 57% – markedly down from 60% in 2001). At technikons, on the other hand, while the number of SET graduates increased from 6 584 to 9 373 (up from 7 943 in 2001), their proportion dropped from 40% to 36% as a result of the more than doubling of BCMS graduates (from 4 255 to 10 008 – 26% to 38%) over the period. This highlights the fact that a considerable and growing number of technikon enrolments and graduations were not in SET fields. The ratio of SET, BCMS and HSS graduates for the system as a whole shifted from 24:16:59 in 1995 to 26:25:49 in 2002. While this was a move in the right direction in relation to the *National Plan* target of 30:30:40, it is clear that the target will take some time to reach – in particular through further increases in BCMS and especially SET, rather than declines in HSS.

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Table 5: University and Technikon Graduates by Field of Study, 1995–1998–2001–2002

Institutional Type	Field of Study	1995		1998		2001		2002	
Universities	Science, Engineering & Technology (SET)	13 146	20%	12 754	22%	16 085	22%	16 735	22%
	Business, Commerce & Management Sciences (BCMS)	9 203	14%	8 233	14%	13 342	18%	15 454	20%
	Humanities & Social Sciences (HSS)	43 145	66%	38 180	65%	43 979	60%	43 477	57%
	TOTAL	65 494	100%	59 167	100%	73 406	100%	75 665	100%
Technikons	Science, Engineering & Technology (SET)	6 584	40%	7 855	38%	7 943	32%	9 373	36%
	Business, Commerce & Management Sciences (BCMS)	4 255	26%	6 368	31%	9 818	40%	10 008	38%
	Humanities & Social Sciences (HSS)	5 430	33%	6 335	31%	6 899	28%	6 634	25%
	TOTAL	16 269	100%	20 558	100%	24 659	100%	26 015	100%
TOTAL	Science, Engineering & Technology (SET)	19 730	24%	20 609	26%	24 028	25%	26 107	26%
	Business, Commerce & Management Sciences (BCMS)	13 458	16%	14 601	18%	23 159	24%	25 462	25%
	Humanities & Social Sciences (HSS)	48 576	59%	44 515	56%	50 878	52%	50 111	49%
	TOTAL	81 764	100%	79 725	100%	98 065	100%	101 680	100%

Source: SAPSE, 1995 & 1998; HEMIS, 2002. Note: The 1995 & 1998 figures differ from those on the CHE Annual Report 1998/99 as they have since been updated.

4.2.3.3 Graduate Outputs by Qualification Levels

Table 6 indicates the fluctuating patterns of a general increase in graduate outputs by qualifications level across all levels between 1995 and 2002, with the two declines at the universities mentioned above: the first between 1995 and 1998 among undergraduates (from 44 029 to 40 812) and among 'lower' postgraduates (from 16 939 to 13 728) and the second less pronounced drop between 2001 and 2002 among undergraduates only (from 48 584 to 47 944). The latter may be the result of declining enrolments around 1998, but the precise reasons for these fluctuations should be investigated thoroughly. Nonetheless, university master's graduates increased sharply between 1998 and 2001 and 2002 (from 3 952 to 6 055 to 6 667). By contrast, the number of technikon undergraduate graduates increased steadily over the 1995 to 2002 period (from 16 162 to 25 685), while master's graduates increased fourfold off a low base of 53 in 1995 to 292 in 2002 and doctorates from 2 to 24. The number of doctoral graduates produced by the system was just under 1 000 in 2002 – up from 801 in 2001, but still very low in comparative terms, constituting only 1% of graduate output. As a result of these trends, the overall proportion of university undergraduate outputs dropped from 66% to 63% between 2001 and 2002, and postgraduate enrolments increased. While this increase was welcome, it was mainly the combined result of increases at the lower postgraduate level and the decline in undergraduate enrolments noted above.



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Table 6: University and Technikon Graduates by Qualification Level, 1995–1998–2001–2002

Institutional Type	Qualification Level	1995		1998		2001		2002	
Universities	Undergraduate	44 029	67%	40 812	69%	48 584	66%	47 944	63%
	Postgraduate below Masters	16 939	26%	13 728	23%	17 983	24%	20 091	27%
	Masters	3 848	6%	3 952	7%	6 055	8%	6 667	9%
	Doctorate	679	1%	675	1%	784	1%	963	1%
	TOTAL	65 494	100%	59 167	100%	73 406	100%	75 665	100%
Technikons	Undergraduate	16 162	99%	20 445	99%	24 413	99%	25 685	99%
	Postgraduate below Masters	52	0%	17	0%	6	0%	14	0%
	M. Tech	53	0%	90	0%	223	1%	292	0%
	Laureatus/D. Tech	2	0%	6	0%	17	0%	24	0%
	TOTAL	16 269	100%	20 558	100%	24 659	100%	26 015	100%
TOTAL	Undergraduate	60 191	74%	61 257	77%	72 997	74%	73 629	72%
	Postgraduate below Masters	16 991	21%	13 745	17%	17 989	18%	20 105	20%
	Masters	3 901	5%	4 042	5%	6 278	6%	6 959	7%
	Doctorate	681	1%	681	1%	801	1%	987	1%
	TOTAL	81 764	100%	79 725	100%	98 065	100%	101 680	100%

Source: SAPSE, 1995 & 1998; HEMIS, 2001 & 2002

4.2.3.4 Graduate Outputs by ‘Race’

Table 7 indicates that the number and proportion of African graduates increased significantly between 1995 and 2001, reaching 50% of total graduates (39 633) in 1998 and rising to 53 301 (54% of the total) in 2001, but flattening out at 53 558 (53%) in 2002. Correspondingly, the number and proportion of white graduates dropped initially from 40 575 (50%) in 1995 to 32 282 (40%) in 1998, from which time they rose marginally to 33 582 (34%) in 2001 and then up to 35 368 (35%) in 2002. Coloured and Indian graduates showed modest numerical increases over this period, with a sharp increase of about 1 000 in the latter between 2001 and 2002. While the increase in the number and proportion of African graduates is to be welcomed, the outputs remain unrepresentative of the overall South African population.

Table 7: Higher Education Graduates by ‘Race’, 1995–1998–2001–2002

‘Race’	1995		1998		2001		2002	
African	31 567	39%	39 633	50%	53 301	54%	53 558	53%
Coloured	4 252	5%	4 053	5%	5 036	5%	5 337	5%
Indian	5 370	7%	3 757	5%	6 146	6%	7 147	7%
White	40 575	50%	32 282	40%	33 582	34%	35 368	35%
TOTAL	81 764	100%	79 725	100%	98 065	100%	101 680	100%

Source: SAPSE, 1995 & 1998; HEMIS, 2001 & 2002. Note: The 1995 and 1998 figures differ from those in the CHE Annual Report 1998/99 as they have since been updated

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4.2.3.5 Graduate Outputs by 'Race', Gender and Qualification Level

With respect to equity, it is important to note, as indicated by Table 8, that while the system produced more African than white graduates in 2002 (53 341 and 35 638 respectively), the vast majority of the former were undergraduates – 68% in universities (though down from 73% in 2001) and 100% in technikons. Although the proportion of African university graduates remained unrepresentative, positive changes occurred between 2001 and 2002: the proportion of African university undergraduates dropped; the number and proportion of below master's postgraduates increased from 8 122 (22%) to 9 275 (25%); master's postgraduates increased from 1 780 to 1 976 (5% each) and doctorates increased from 168 (0%) to 227 (1%). Nonetheless, white university graduates still constituted almost double the number of African graduates at the master's level (3 785) and almost treble at the doctoral level (617). The number of Coloured and Indian university graduates rose modestly over this period. Among the technikons, graduates were heavily clustered by 'race' at the undergraduate level, with proportionally slightly fewer whites at this level (96%) and more whites at the master's level (188 or 3%).

Table 8: University and Technikon Graduates by 'Race' and Qualification Level, 2002

Inst.	Qualification Level	African		Coloured		Indian		White		Unknown		TOTAL	
University	Undergraduate	24 955	68%	2 043	60%	3 703	63%	17 145	58%	98	46%	47 944	63%
	PG below Masters	9 275	25%	949	28%	1 524	26%	8 235	28%	108	51%	20 091	27%
	Masters	1 976	5%	365	11%	535	9%	3 785	13%	6	3%	6 667	9%
	Doctorate	227	1%	48	1%	70	1%	617	2%	1	0%	963	1%
	TOTAL	36 433	100%	3 405	100%	5 832	100%	29 782	100%	213	100%	75 665	100%
Technikon	Undergraduate	16 844	100%	1 910	99%	1 280	97%	5 647	96%	4	100%	25 685	99%
	PG below Masters	6	0%	0	0%	6	0%	2	0%	0	0%	14	0%
	M. Tech	57	0%	20	1%	27	2%	188	3%	0	0%	292	1%
	D. Tech	1	0%	2	0%	2	0%	19	0%	0	0%	24	0%
	TOTAL	16 908	100%	1 932	100%	1 315	100%	5 856	100%	4	100%	26 015	100%

Source: HEMIS, 2002

Likewise, Table 9 shows women graduates were in the majority at the lower qualifications levels (63% of university undergraduates – almost double the percentage of men – and 52% in technikons). Correspondingly, the number and proportion of women graduates at the upper qualifications levels was lower than that of men (constituting only 39% of doctorates in universities and 29% in technikons).

Thus, despite increases over the years in the overall number and proportion of African and women graduates, graduate output at the upper qualifications levels is still highly skewed and unrepresentative in terms of 'race' and gender.



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Table 9: University and Technikon Graduates by Gender and Qualification Level, 2002

Institutional Type	Qualification Level	Men		Women		Unknown	
Universities	Undergraduate	17 511	37%	30 433	63%	47 944	100%
	Postgraduate below Masters	8 529	42%	11 562	58%	20 091	100%
	Masters	3 700	55%	2 967	45%	6 667	100%
	Doctorate	588	61%	375	39%	963	100%
	TOTAL	30 328	40%	45 337	60%	75 665	100%
Technikons	Undergraduate	12 308	48%	13 377	52%	25 685	100%
	Postgraduate below Masters	6	43%	8	57%	14	100%
	M.Tech	168	58%	124	42%	292	100%
	D.Tech	17	71%	7	29%	24	100%
	TOTAL	12 499	48%	13 516	52%	26 015	100%

Source: HEMIS, 2002

4.2.3.6 Efficiency of Graduation

Graduate output is important not only in terms of fields of study and qualification levels, but also in terms of the efficiency with which the graduates are produced (throughput).¹⁴ While it is not possible within the scope of this report to examine the details of graduation rates for all the different qualifications levels, broad trends in graduation rates can be traced.

It can be seen from Table 10 that the efficiency of the system as a whole in terms of overall graduation rates did not improve between 1995 and 2002, remaining at 15%. By way of comparison, National Plan benchmarks for graduation rates (contact institutions) are 25% (three-year undergraduate), 60% (honours), 33% (master's) and 20% (doctoral).¹⁵

In the universities, African student rates fluctuated between 15% and 17%, while those of white and Indian students declined, though the latter improved from 12% in 1998 to 15% in 2002. Alarming, Coloured university students' graduation rates have declined steadily from 19% in 1995 to 14% in 2002. By contrast, Coloured student graduation rates in the technikons rose from 7% to 14%, as did those of African (5% to 11%), Indian (12% to 15%) and white students (15% to 18%). In graduation rate efficiency terms, therefore, technikons appear to be doing better than universities. The reasons for this require examination.



Table 11 shows that the decline in university graduation rates between 1995 and 2002 occurred in all three fields, marginally in SET and HSS and more markedly in BCMS, though this showed an improvement between 2001 and 2002. The SET graduation rate in technikons declined from 15% in 1995 to 11% in 2001, then improved somewhat, climbing to 14% in 2002, while the graduation rates of HSS increased from 7% to 15% over the period and those of BCMS showed a marginal improvement from 9% to 10%. Further investigation of the reasons underlying these patterns is important for developing strategies to improve the efficiency of the system.

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Table 10: University and Technikon Graduation Rates by 'Race', 1995-1998-2001-2002

Institutional Type	'Race'	1995	1998	2001	2002
Universities	African	15%	17%	16%	15%
	Coloured	19%	16%	15%	14%
	Indian	16%	12%	14%	15%
	White	22%	19%	20%	20%
	TOTAL	18%	17%	17%	16%
Technikons	African	5%	8%	9%	11%
	Coloured	7%	12%	14%	14%
	Indian	12%	15%	13%	15%
	White	15%	17%	17%	18%
	TOTAL	10%	10%	11%	12%
TOTAL	African	12%	13%	13%	13%
	Coloured	15%	14%	15%	14%
	Indian	15%	13%	14%	15%
	White	20%	19%	19%	20%
	TOTAL	15%	15%	15%	15%

Source: SAPSE, 1995 & 1998; HEMIS, 2001 & 2002

Table 11: University and Technikon Graduation Rates by Field of Study, 1995-1998-2001-2002

Institutional Type	Field of Study	1995	1998	2001	2002
Universities	Science, Engineering & Technology (SET)	17%	18%	17%	16%
	Business, Commerce and Management Science (BCMS)	18%	14%	14%	15%
	Humanities and Social Sciences (HSS)	18%	18%	18%	17%
	TOTAL	18%	17%	17%	16%
Technikons	Science, Engineering & Technology (SET)	15%	13%	11%	14%
	Business, Commerce and Management Science (BCMS)	9%	9%	9%	10%
	Humanities and Social Sciences (HSS)	7%	9%	15%	15%
	TOTAL	10%	10%	11%	12%
TOTAL	Science, Engineering & Technology (SET)	16%	16%	14%	15%
	Business, Commerce and Management Science (BCMS)	14%	11%	12%	12%
	Humanities and Social Sciences (HSS)	15%	16%	18%	17%
	TOTAL	15%	15%	15%	15%

Source: SAPSE, 1995 & 1998; HEMIS, 2001 & 2002

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4.2.4 Developments in Staff Equity

Policy has been clear in its view that the ability of higher education to fulfil its multiple social purposes and educational roles rests crucially on the quality of its labour force, and that continuous attention must be given to this. In addition, in the context of the inherited apartheid legacy, a key policy goal is the transformation of the ‘racial’ and gender composition of staff – especially academic and senior managerial and administrative personnel – to ensure greater equity of access and opportunity in the academy for previously marginalised social groups.

Regarding the latter, a persistent feature of the higher education system has been the slow rate of change. The promulgation of the *Employment Equity Act* has given rise to a range of strategies to address this, but progress in this regard is inhibited by a combination of factors. One factor is structural, which limits the pool of available and suitably qualified black, women and disabled academics and senior management and administrative personnel. The other is institutional and academic disciplinary culture, which, combined with micro-political dynamics, further constrains efforts to achieve staff equity.¹⁶

4.2.4.1 Overall Higher Education Workforce

Table 12 indicates that the overall size of the higher education workforce declined from 45 848 to 43 291 between 1995 and 2002. This can be construed as predominantly the result of efficiency-driven strategies of rationalisation and the outsourcing of non-core functions. Interestingly, this decline was in the universities (down by over 4 000 staff), while technikons staff numbers increased. This could signal that universities have been at the forefront of efficiency strategies, or that technikons recruited more staff to match increased enrolments.

Table 12: Overall Number of HE Staff, 1995-1998-2002

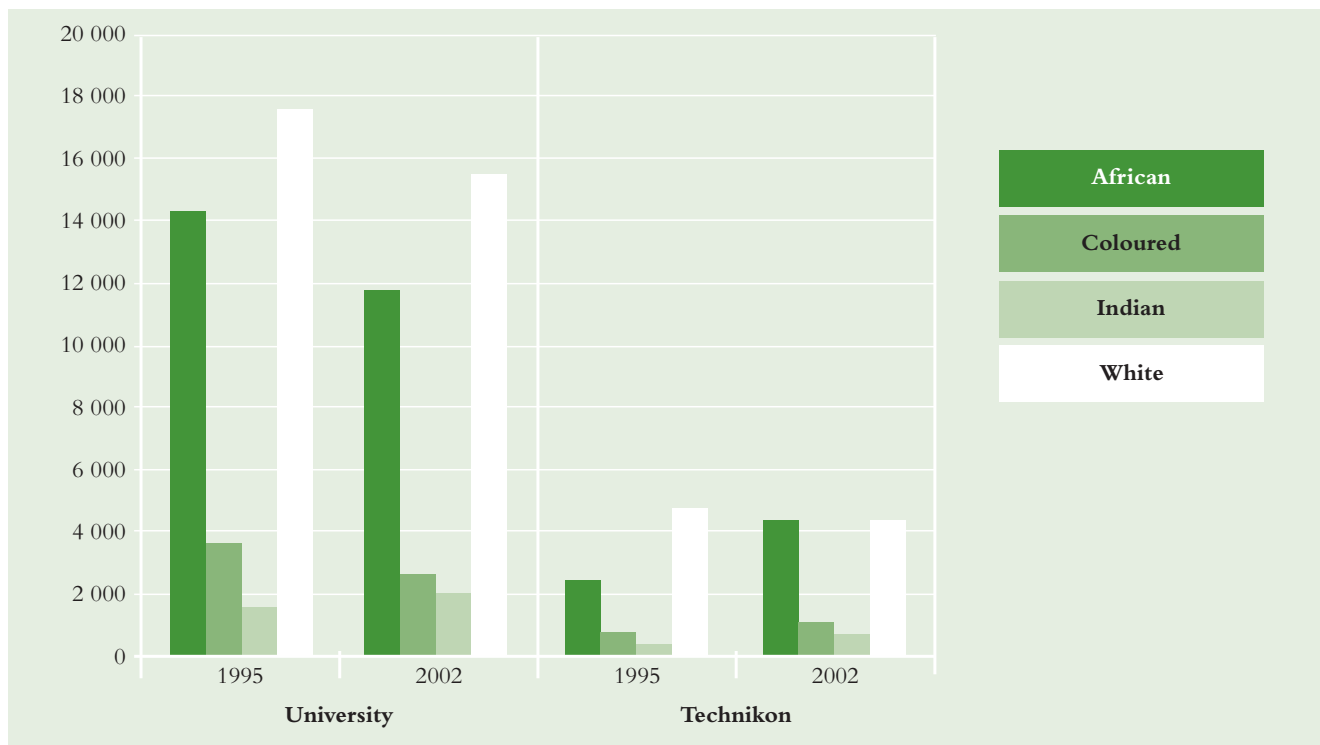
Institution	1995	1998	2002
Universities	36 847	34 780	32 061
Technikons	9 001	10 478	11 230
TOTAL	45 848	45 258	43 291

Source: SAPSE, 1995 & 1998; HEMIS, 2002. No 1995 data were available for the University of North-West, Border Technikon and Eastern Cape Technikon. Data from 1996 were used for these institutions instead.

4.2.4.2 Higher Education Workforce by ‘Race’

Regarding ‘race’ equity, Figure 13 shows that the overall shape of the higher education labour force changed little between 1995 and 2001. Noticeable, however, is the increase in the number of African staff in the technikons. Apart from this, the overall higher education workforce remained dominated by white staff and thus extremely unrepresentative.

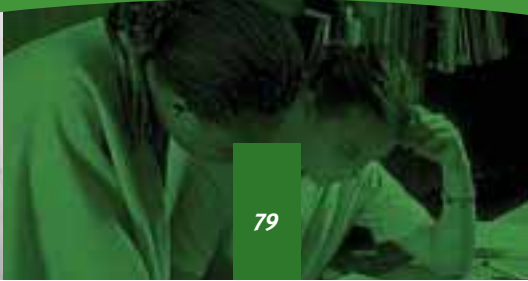
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Figure 13: Changes in the Overall HE Workforce by 'Race' 1995-2001

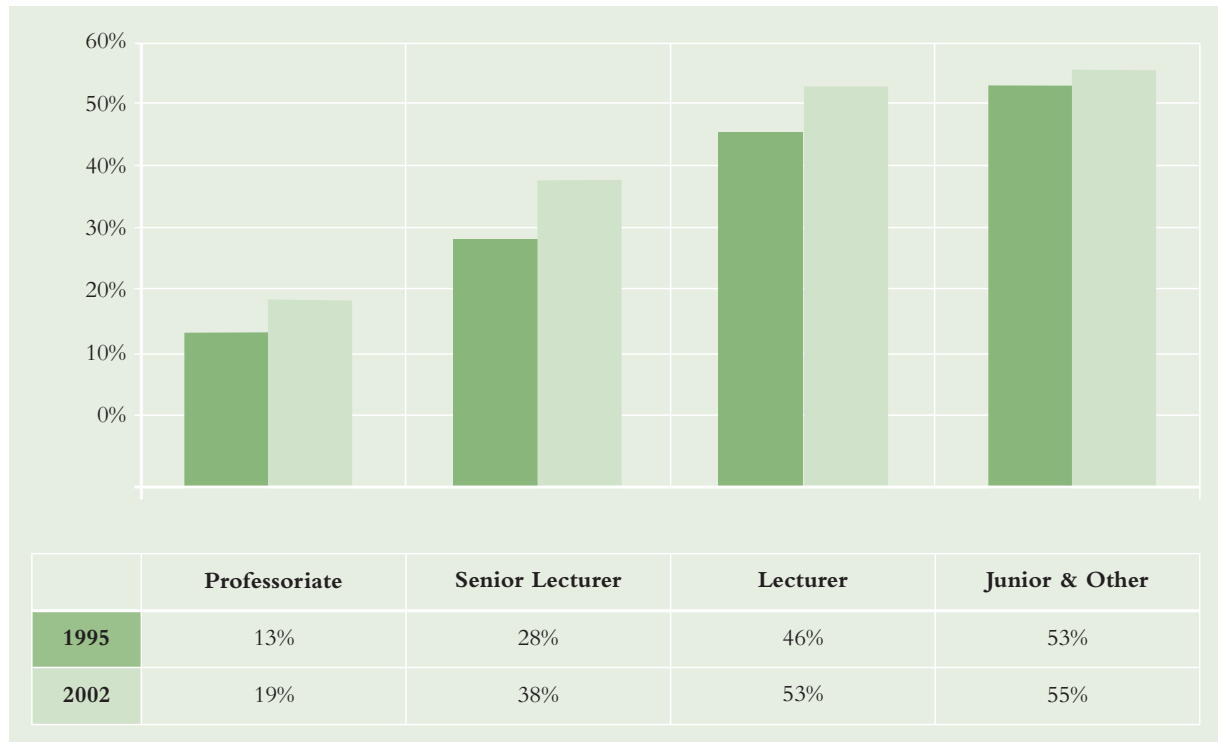
Source: SAPSE, 1995; HEMIS, 2002. No 1995 data were available for the University of North-West, Border Technikon and Eastern Cape Technikon. Data from 1996 were used for these institutions instead.

4.2.4.3 Higher Education Workforce by Gender

While women remained extremely under-represented in the academic category, their position did improve between 1995 and 2002. Figure 14 shows that between 1995 and 2002 women as a proportion of the professoriate increased from 13% to 19%. Likewise, their proportion as senior lecturers increased – from 28% to 38%, as did their proportion as lecturers – from 46% to 53%, and junior lecturers – from 53% to 55%.



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Figure 14: Changes in the Proportion of Women Academics by Rank, 1995–2002

Source: SAPSE, 1995; HEMIS, 2002

4.2.4.4 *An Ageing Academic Workforce*

There is much reference to South African higher education's 'ageing academic workforce'. Challenges associated with this include how to reproduce and transform – in terms of 'race' and gender – new generations of academics; and how to attract young scholars and retain them within the academy. It is suggested that the problem of reproducing a new generation of academics has many causes: the competition presented by more attractive remuneration packages offered by the private and public sectors; the opportunity costs for black students associated with postgraduate study; and the 'poor' remuneration of academics, especially at lower levels. However, very little empirical evidence is available on this matter.

The data in Table 13 shows some change, albeit slight, between 1995 and 2002. The number and proportion of the academic workforce (in all ranks including the professoriate) in the 44 years and younger age group shrank almost uniformly over this period. This suggests that the workforce is not being replenished with new blood. Conversely, the number and proportion of those in the age groups above 45 increased. In particular, the proportion of the professoriate showed small but noticeable increases in the 45–54 age group (from 46% to 47%), in the 55–59 age group (from 20% to 21%) and in the 60–69 age groups (from 7% to 9%). This aspect of the higher education workforce requires monitoring because it has profound implications for higher education provision in future.

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Table 13: Academic Staff by Age and Rank, 1995 and 2002

Year	Age Group	Professoriate		Senior Lecturer		Lecturer		Junior & Other		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	%
1995	Under 25 Years	1	0%	0	0%	73	1%	100	10%	174	1%
	25 – 34	79	2%	524	14%	1 966	36%	504	50%	3 073	22%
	35 – 44	893	25%	1 509	40%	2 111	39%	227	23%	4 740	35%
	45 – 54	1 626	46%	1 271	34%	956	18%	126	13%	3 979	29%
	55 – 59	693	20%	338	9%	219	4%	31	3%	1 281	9%
	60 – 69	234	7%	112	3%	59	1%	12	1%	417	3%
	70 Years & Over	3	0%	2	0%	6	0%	0	0%	11	0%
	TOTAL	3 529	100%	3 756	100%	5 390	100%	1 000	100%	13 675	100%
2002	Under 25 Years	0	0%	5	0%	53	1%	137	10%	195	2%
	25 – 34	76	2%	414	15%	1 291	33%	586	45%	2 367	21%
	35 – 44	656	21%	1 026	36%	1 416	37%	317	24%	3 415	30%
	45 – 54	498	47%	993	35%	868	22%	204	16%	3 563	32%
	55 – 59	684	21%	316	11%	189	5%	46	4%	1 235	11%
	60 – 69	278	9%	94	3%	54	1%	17	1%	443	4%
	70 Years & Over	0	0%	0	0%	1	0%	1	0%	2	0%
	TOTAL	3 192	100%	2 848	100%	3 872	100%	1 308	100%	11 220	100%

Source: SAPSE, 1995; HEMIS, 2002. Note: 1) No 1995 data were available for the Universities of the North-West, Western Cape, Natal, Transkei, Venda, North and Border Technikon. Data from 1996 were used for these institutions instead.

4.3 The Situation in 2004

4.3.1 Equity in the New Institutional Landscape

A key consideration in assessing what has been achieved by the reconfiguration of the higher education institutional landscape (as fully described in Sections 3.2 and 3.3) will be the extent to which it enhances 'race' and gender equity among both students and staff. Using 2001 data (for indicative purposes only), this section suggests an analysis of what the impacts of reconfiguration could be.

4.3.2 Student Access, Opportunities and Outcomes in the New Institutional Landscape

Table 14 examines equity with regard to the distribution of 2001 headcount enrolments by 'race'. (More detailed information is provided in Appendix 2, Table 50.)



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Table 14: Distribution of 2001 Headcount Enrolments by 'Race' across the New Institutional Landscape

Institutional Type	African		Coloured		Indian		White		Unknown		TOTAL	
University												
Independent	60 412	42%	11 042	8%	7 450	5%	64 947	45%	477	0%	144 328	100%
Merged	43 993	59%	1 494	2%	11 270	15%	16 079	22%	1 897	2%	74 733	100%
TOTAL	104 405	48%	12 536	6%	18 720	9%	81 026	37%	2 374	1%	219 061	100%
Technikon												
Independent	20 004	80%	609	2%	123	0%	4 201	17%	1	0%	24 938	100%
Merged	71 461	72%	7 193	7%	5 610	6%	15 124	15%	207	0%	99 595	100%
TOTAL	91 465	73%	7 802	6%	5 733	5%	19 325	16%	208	0%	124 533	100%
Comprehensive												
Independent	11 966	96%	42	0%	88	1%	325	3%	0	0%	12 421	100%
Merged	63 142	73%	3 148	4%	2 246	3%	18 130	21%	0	0%	86 666	100%
UNISA	123 172	59%	11 031	5%	17 674	8%	58 352	28%	46	0%	210 275	100%
TOTAL	198 280	64%	14 221	5%	20 008	6%	76 807	25%	46	0%	309 362	100%
GRAND TOTAL	394 150	60%	34 559	5%	44 461	7%	177 158	27%	2 628	0%	652 956	100%

Source: HEMIS, 2001, DoE and HEIs. Note: No 'race' data for 2001 available for Vista. Ratios for 2002 were used to estimate the 2001 distribution

African students form 59% of enrolments in merged universities and white students 22%, whereas in non-merged universities they form 42% and 45% respectively. This indicates a more representative distribution of these two 'race' groups in merged institutions. In accordance with the historic pattern of enrolments and geographical concentration, Coloured students are clustered predominantly at the universities of the Western Cape, Cape Town and Stellenbosch – non-merged institutions – and Indians in the merged universities of Durban-Westville/Natal. The distribution of African and white student enrolments is somewhat more even among the merged and non-merged technikons. Not surprisingly, given the historic pattern of enrolments, Coloured students are clustered in the merged Cape Technikon/Peninsula Technikon and Indian students in the merged university of technology (Durban Institute of Technology/Mangosuthu Technikon). The two non-merged comprehensive institutions (Venda and Zululand) remain predominantly African in profile, while the merged ones and the distance education institution are more representative.

In terms of the overall South African demography, Africans form 79% of the population, Coloureds 9%, Indians 2% and whites 10%. In this regard, Africans are still under-represented in higher education and especially under-represented at universities (48%). Whites remain strongly represented in all institutional types, especially in the universities (37%).

Table 15 shows the impact of the mergers on gender equity. (More detailed information is provided in Appendix 2, Table 51.)

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Table 15: Proportion of Women Students across the New Institutional Landscape, 2001 Headcount Enrolments

Institutional Type		% Women Students
Universities	Independent	54%
	Merged	58%
	TOTAL	55%
Universities of Technology (Technikons)	Independent	49%
	Merged	50%
	TOTAL	50%
Comprehensives	Independent	55%
	Merged	56%
	UNISA	52%
	TOTAL	54%
GRAND TOTAL		53%

Source: HEMIS, 2001, DoE and HEIs

As is apparent, women students are well represented in every institutional type, forming the majority in all except the non-merged universities of technology (technikons), where they constituted just below half (49%). They formed particularly high proportions in the merged universities (58%) and merged comprehensive institutions (56%).

4.3.2.1 *Fields of Study in the New Institutional Landscape*

Table 16 provides a 'snapshot' of the system in 2001 according to the distribution of enrolments by field of study across the new institutional types in relation to the National Plan targets. (More detailed information is provided in Appendix 2, Table 52.) Recent trends in this regard are examined in Figure 11 and Figure 12.



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Table 16: Distribution of 2001 Headcount Enrolments by Field of Study across the New Institutional Landscape

Institutional Type		Science, Engineering & Technology (SET)	Business, Commerce & Management Sciences (BCMS)	Humanities & Social Sciences (HSS)	Education (E)
<i>National Plan Target</i>		30%	30%	40%	
Universities	Independent	35%	15%	33%	17%
	Merged	33%	16%	30%	21%
	TOTAL	34%	15%	32%	18%
Universities of Technology (Technikons)	Independent	39%	41%	19%	1%
	Merged	39%	31%	19%	11%
	TOTAL	39%	33%	19%	9%
Comprehensives	Independent	24%	12%	50%	14%
	Merged	23%	27%	21%	28%
	UNISA	9%	50%	28%	13%
	TOTAL	14%	42%	27%	18%
GRAND TOTAL		25%	31%	27%	16%

Source: HEMIS, 2001, DoE and HEIs; MoE, 2001.

Given a historical preponderance of higher education enrolments in the humanities and social sciences and education, the National Plan established targets for enrolment shifts by field of study (see Section 4.2.1.1). It can be seen that both the merged and independent universities have more favourable ratios than the National Plan target for SET, particularly the latter (35% independent, 33% merged, 34% overall). There is still a need for universities to shift the balance between enrolments in HSS&E (50% overall) and BCMS (15% overall). The universities of technology (technikons) have high proportions of SET enrolments (39%) and BCMS enrolments (33%) overall, with the merged institutions showing a somewhat greater correlation with National Plan targets. The merged and independent non-distance education comprehensives are some way off the targets of the National Plan in most cases, as is the new dedicated distance education institution which shows a concentration of enrolments in BCMS (50%). It must, however, be borne in mind that the National Plan targets are overall averages sought for the HE system as a whole and that there will necessarily be institutional variation, which is not out of place in a system that is intended to be institutionally diverse and differentiated.

4.3.2.2 Qualifications Levels in the New Institutional Landscape

It is desirable that in a differentiated higher education system, different institutions concentrate on particular niche areas related to academic fields and qualification levels, and that together they provide a wide range of academic programmes and qualifications covering a variety of fields and disciplines. For various reasons, it is extremely difficult for any single institution to offer high quality academic programmes in every field and at all qualification levels. Specialisation is therefore necessary. Table 17 indicates the postgraduate headcount enrolments across the new institutional landscape. (More detailed information is provided in Appendix 2, Table 53 and Table 54.)

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Table 17: Distribution of 2001 Postgraduate (PG) Headcount Enrolment by Field of Study across the New Institutional Landscape

Institutions	PG below Masters		Masters		Doctorate		TOTAL	
Universities								
Independent	18 687	35%	18 724	54%	4 218	65%	41 629	44%
Merged	14 641	27%	6 792	20%	1 209	19%	22 642	24%
TOTAL	33 328	62%	25 516	74%	5 427	84%	64 271	68%
Universities of Technology (Technikons)								
Independent	100	0%	193	1%	39	1%	332	0%
Merged	0	0%	1 567	5%	113	2%	1 680	2%
TOTAL	100	0%	1 760	5%	152	2%	2 012	2%
Comprehensives								
Independent	1 483	3%	503	1%	121	2%	2 107	2%
Merged	7 259	13%	3 284	10%	642	10%	11 185	12%
UNISA	11 807	22%	3 261	10%	113	2%	15 181	16%
TOTAL	20 549	38%	7 048	21%	876	14%	28 473	30%
GRAND TOTAL	53 977	100%	34 324	100%	6 455	100%	94 756	100%

Source: HEMIS, 2001, DoE and HEIs

The table shows that 68% of postgraduate enrolments are in the universities, 30% in the comprehensive institutions (slightly more than half in the new dedicated distance education institution) and just 2% in universities of technology (technikons), which are relative latecomers in being authorised to offer postgraduate qualifications. It can be seen that the independent universities (including the historically advantaged universities of Wits, Cape Town, Pretoria, Stellenbosch and the Free State) have a powerful presence in postgraduate education, accounting for 44% of postgraduate enrolments, including 65% of doctorates and 54% of master's. As a result, doctoral and master's enrolments are heavily concentrated in the universities (84% and 74% respectively).

4.3.3 Staff Equity in the New Institutional Landscape

More detailed information is provided in Appendix 2, Table 55.

4.3.3.1 Academic Higher Education Workforce by 'Race' in the New Institutional Landscape

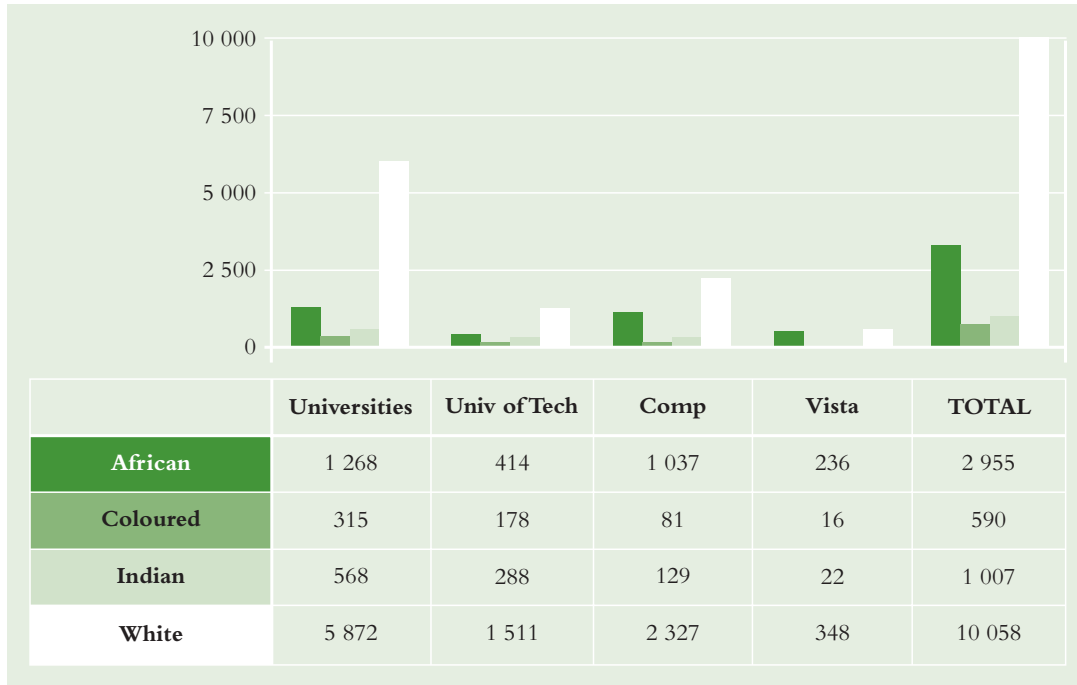
As is graphically evident from Figure 15 and Table 18, the academic staff complement in all institutional types remains dominated by whites. Overall, Africans constitute only 20% of academics, with whites constituting 69%, Coloureds 4% and Indians 7%. Table 18 shows that there is a higher proportion of white academics at universities (73%) than at comprehensive institutions (65%), universities of technology/technikons (63%) or Vista University (56%). Conversely, there are higher proportions of African academics at Vista, at



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the comprehensive institutions and at universities of technology. Higher proportions of Coloured and Indian staff are found at technikons. There are no current data to permit the analysis of academic rank by 'race'. This would doubtless indicate, as has been the historical pattern, that white academics dominate the higher ranks.

Figure 15: Academic Staff by 'Race' across the New Institutional Landscape, 2001



Source: HEMIS, 2001. Note: 1) Data for the separate Vista Campuses, for University of the North (QwaQwa) and Rhodes (East London) campuses were not available. Vista is therefore shown separately. UNIN QwaQwa staff and Rhodes East London campus staff are incorporated into their main campuses. 2) No 2001 data were available for the universities of the North and Cape Town. Data from 1999 were used for these institutions instead. 3) 77 staff classified as 'other' are omitted.

Table 18: Number and Proportion of Academic Staff by 'Race' across the New Institutional Types, 2001

Institutional Type	African		Coloured		Indian		White		Other		TOTAL	
Universities	1 268	16%	315	4%	568	7%	5 872	73%	18	0%	8 041	100%
Univ of Technology (Technikons)	414	17%	178	7%	288	12%	1 511	63%	7	0%	2 398	100%
Comprehensives	1 037	29%	81	2%	129	4%	2 327	65%	1	0%	3 575	100%
Vista	236	38%	16	3%	22	4%	348	56%	0	0%	622	100%
TOTAL	2 955	20%	590	4%	1 007	7%	10 058	69%	26	0%	14 636	100%

Source: HEMIS, 2001. Note: 1) Data for the separate Vista Campuses, for University of the North (QwaQwa) and Rhodes (East London) campuses were not available. Vista is therefore shown separately. UNIN QwaQwa staff and Rhodes East London campus staff are incorporated into their main campuses. 2) No 2001 data were available for the universities of the North and Cape Town. Data from 1999 were used for these institutions instead. 3) 77 staff classified as 'other' are omitted.

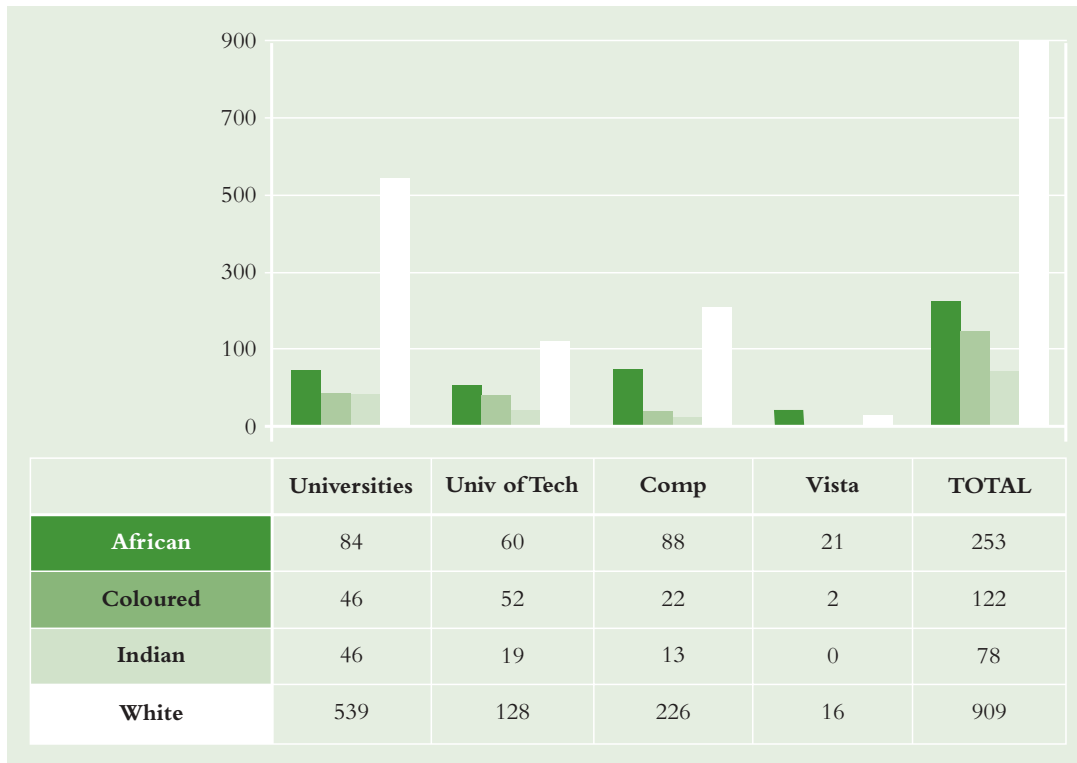
4.3.3.2 Executive/Management Higher Education Workforce by 'Race' in the New Institutional Landscape

As Figure 16 and Table 19 show, white staff dominate the key executive/management personnel category in all the institutional types. Africans constitute only 19% in this category, with whites constituting 67%, Coloureds 9% and Indians 6%. However, as with academics, there is some variation according to institutional type, with whites constituting higher proportions of executive managers at universities (75%) than at

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comprehensive institutions (65%), universities of technology/technikons (49%) and Vista University (41%). Conversely, there are higher proportions of African executives at Vista, at universities of technology and at the comprehensive institutions. Again, higher proportions of Coloured staff (20%) are found at technikons. From this it can be seen that the universities of technology and comprehensives have better equity profiles than the universities with regard to the 'race' composition of academic and executive/management staff.

Figure 16: Executive/Management Staff by 'Race' across the New Institutional Landscape, 2001



Source: HEMIS, 2001. Note: 1) Data for the separate Vista Campuses, for University of the North (QwaQwa) and Rhodes (East London) campuses were not available. Vista is therefore shown separately. UNIN QwaQwa staff and Rhodes East London campus staff are incorporated into their main campuses. 2) No 2001 data were available for the universities of the North and Cape Town. Data from 1999 were used for these institutions instead. 3) 77 staff classified as 'other' are omitted.

Table 19: Number and Proportion of Executive/Management Staff by 'Race' across the New Institutional Types, 2001

Institutional Type	African		Coloured		Indian		White		TOTAL	
Universities	84	12%	46	6%	46	6%	539	75%	715	100%
Univ of Technology (Technikons)	60	23%	52	20%	19	7%	128	49%	259	100%
Comprehensives	88	25%	22	6%	13	4%	226	65%	349	100%
Vista	21	54%	2	5%	0	0%	16	41%	39	100%
TOTAL	253	19%	122	9%	78	6%	909	67%	1 362	100%

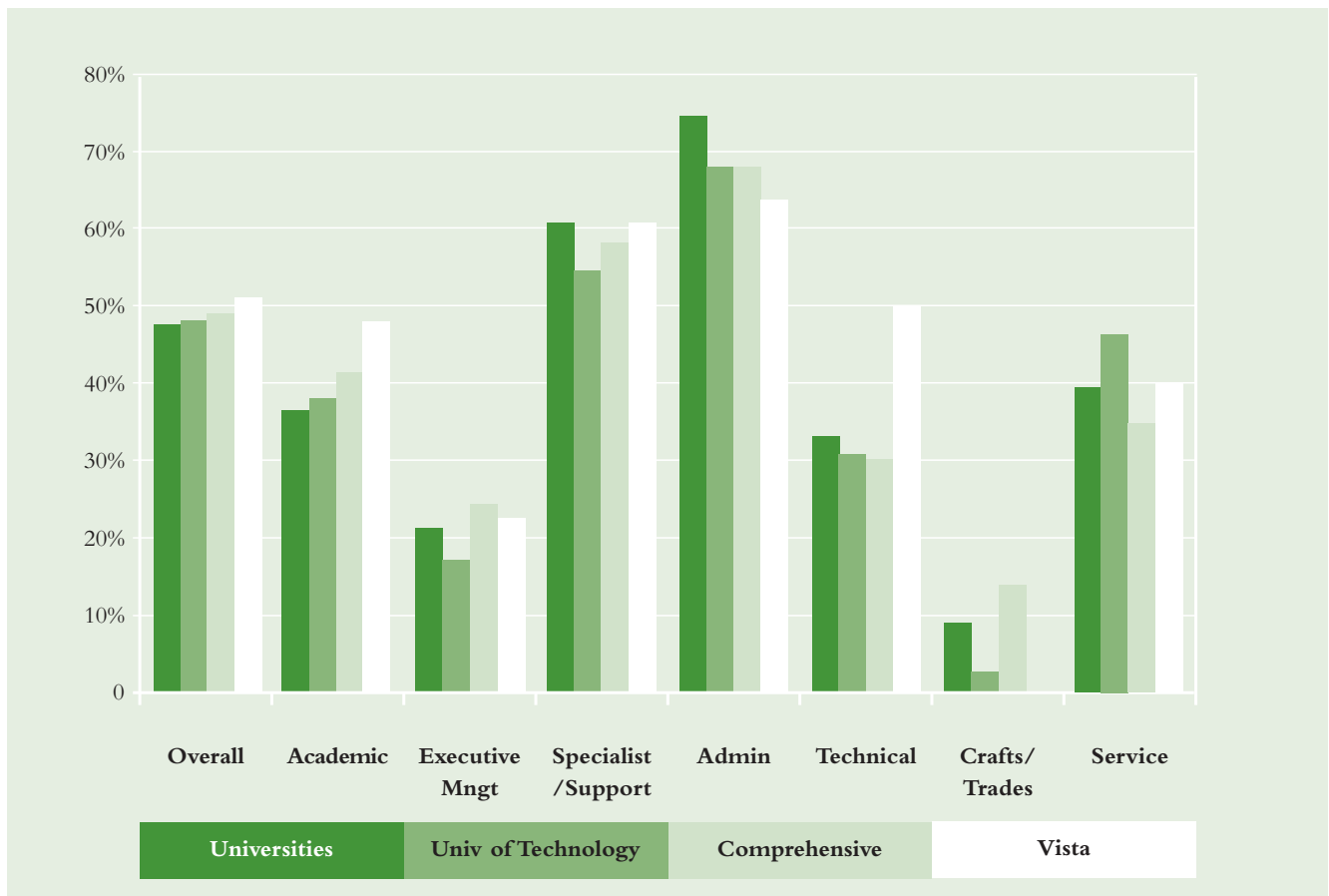
Source: HEMIS, 2001. Note: 1) Data for the separate Vista Campuses, for University of the North (QwaQwa) and Rhodes (East London) campuses were not available. Vista is therefore shown separately. UNIN QwaQwa staff and Rhodes East London campus staff are incorporated into their main campuses. 2) No 2001 data were available for the universities of the North and Cape Town. Data from 1999 were used for these institutions instead. 3) 77 staff classified as 'other' are omitted.

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4.3.3.3 Higher Education Workforce by Gender in the New Institutional Landscape

Regarding the gender of the higher education workforce, it can be seen from Figure 17 that women staff are clustered in the specialist support category (which includes libraries) and, not unexpectedly, especially in administration. They are under-represented as a whole among academics and particularly among executive managers. Women are generally better represented across all personnel categories in the universities of technology and comprehensive institutions (except administration), again highlighting that gender as well as 'race' transformation appears to be more constrained in universities.

Figure 17: Proportion of Women in Various Personnel Categories across the New Institutional Landscape, 2001



Source: HEMIS, 2001. Note: 1) Data for the separate Vista Campuses, for University of the North (QwaQwa) and Rhodes (East London) campuses were not available. Vista is therefore shown separately. UNIN QwaQwa staff and Rhodes East London campus staff are incorporated into their main campuses. 2) No 2001 data were available for the universities of the North and Cape Town. Data from 1999 were used for these institutions instead. 3) 77 staff classified as 'other' are omitted.

4.3.3.4 Higher Education Workforce by Academic Rank in the New Institutional Landscape

Table 20 shows the proportional distribution of academics staff by rank across the higher education system. It indicates that the majority of professors – 67% – are in universities, 22% are in comprehensive institutions and 8% in universities of technology (technikons).

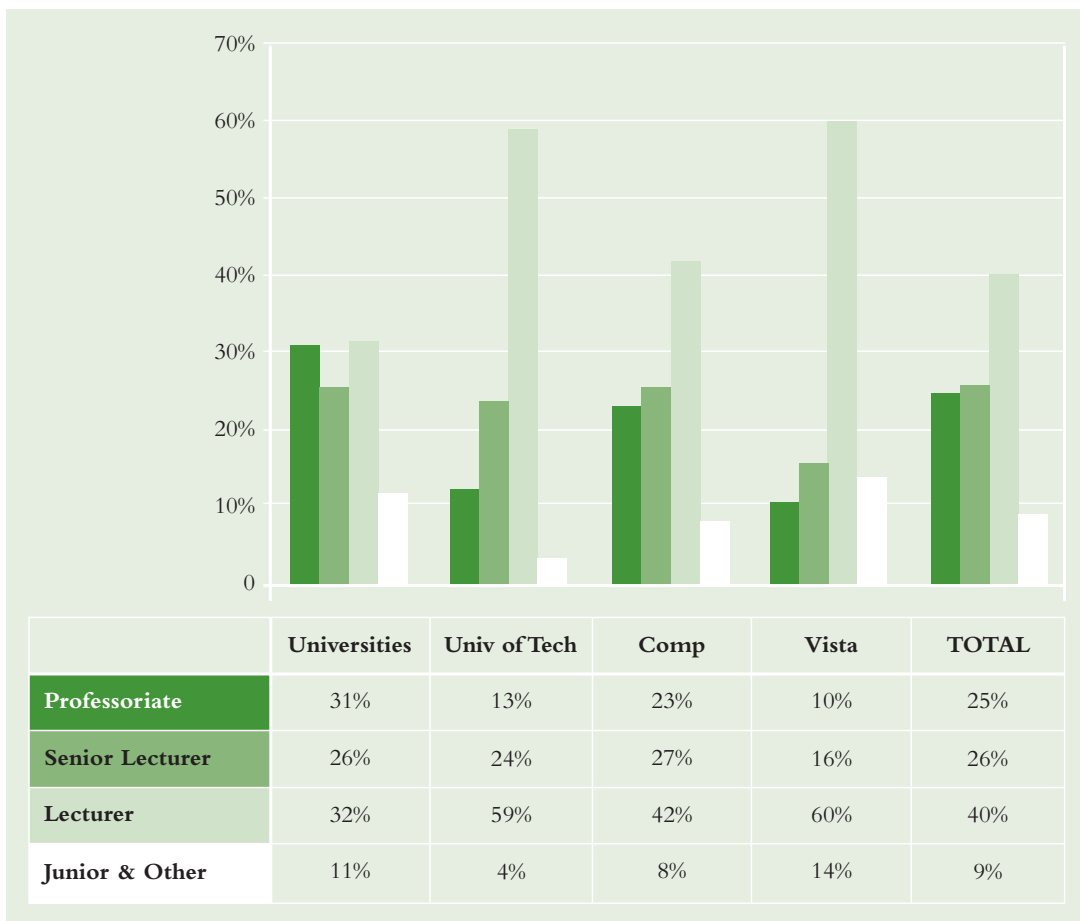
It can be seen from Figure 18 that significantly larger numbers and proportions of academics of higher rank are concentrated in the universities than in the universities of technology and comprehensive institutions. Of academics at universities 31% are professors; at comprehensive institutions 23%; at universities of technology 13%. Correspondingly, 59% of university of technology academics are at the lecturer rank, compared with 42% in comprehensive institutions and 32% in universities.

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Table 20: Proportion of Academic Staff by Rank across the New Institutional Types, 2001

Institution	Professoriate	Senior Lecturer	Lecturer	Junior & Other	TOTAL
Universities	67%	56%	44%	66%	55%
Univ of Technology (Technikons)	8%	16%	24%	6%	16%
Comprehensive	22%	26%	26%	21%	24%
Vista	2%	3%	6%	6%	4%
TOTAL	100%	100%	100%	100%	100%

Source: HEMIS, 2001. Note: 1) No data were available for the Universities of the North and UCT. Data from 1996 were used for these institutions instead.

Figure 18: Proportion of Academic Staff by Rank across the New Institutional Landscape

Source: HEMIS, 2001. Note: 1) No data were available for the University of the North and UCT. Data from 1999 were used for these institutions instead.



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4.4 Critical Issues and Key Challenges Ahead

With respect to **student equity in enrolments, opportunities and outcomes** (and associated responsiveness objectives), it appears that HEIs have responded with relative success to policy directions, to the extent that a positive trend has been achieved in:

- Overall enrolments (increased by more than 200 000 between 1993 and 2002).
- Overall graduate outputs (rising above 100 000 for the first time in 2002).
- 'Racial' composition of the student body (African enrolments increased from 40% in 1993 to 60% in 2002).
- 'Racial' profile of graduates (African graduates comprised 53% in 2002).
- Gender profile of the student body (women increased from 42% in 1993 to 54% in 2002).
- The ratio of HSS:BC:SET enrolments (reached 44:30:26 in 2002).
- The ratio of HSS:BC:SET graduations (reached 49:25:26 in 2002).
- Overall university postgraduate enrolments (rose from 19% in 1993 to 23% in 2002).
- Increased master's graduations in universities and technikons.
- Institutional reconfiguration to support student equity (merged HEIs are likely to achieve a student profile more in line with the population).

The key challenge ahead in this area is to sustain and consolidate progress, while recognising the ongoing nature of the challenge and particular weak points and inefficiencies that remain.

First, the overall efficiency of the public higher education system has not improved but has remained static. This has serious implications not only for the goals of the system, but also for individual HEIs operating

in a new funding environment that rewards student success, throughput and graduation rates (see Section 11.3). In this respect, rigorous attention to balancing equity and quality will be of the essence: equity of opportunity and outcomes will crucially depend on high quality provision in teaching and learning, curriculum innovation, and appropriate academic development and mentoring initiatives.

Second, it is clear that consistent attention will need to be given to increasing SET enrolments, to bring enrolments in line with national targets and so ensure responsiveness to economic development needs.

Third, approaches are needed to increase postgraduate enrolments and outputs, on the one hand to build higher education research capacity and on the other

to bring new blood into the ageing academy. Some signals are of concern in this regard: for example, shifts in undergraduate enrolments could result in a shrinking potential pool for postgraduate study. Also, despite increases over the last ten years in the overall number and proportion of African and women graduates, graduate output at the upper qualifications levels is still highly skewed and unrepresentative in terms of 'race' and gender. The new institutional landscape places some 98% of postgraduate student enrolments in universities and comprehensive institutions, with (unmerged) HAU who have long claimed the largest proportion of postgraduate enrolments continuing to hold sway: it remains to be seen whether the new configuration will bring about significant gains in postgraduate enrolments and graduations.



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With respect to **staff equity**, despite some small gains, major challenges remain. The higher education workforce continues to be overly representative of white men in the middle- or late middle-age group. This constitutes a major challenge for the higher education system, in terms of reproducing and transforming the social composition of the next generation of academics. The data reveal that HEIs have struggled to meet equity targets required of them. Possible reasons for this include: low turnover in academic posts, a

limited pool of black academics with qualifications to meet the requirements of high-level posts, and multiple policy change initiatives that have constrained capacity – including leadership capacity – to steer transformation. Limited progress also suggests that policy and law are not in and of themselves enough to mobilise change, and that existing conceptions of academic excellence may constitute unfortunate barriers to achieving equity. Ongoing attention to transforming institutional and academic cultures and conceptions of academic excellence appears to be the necessary starting point for meaningful change. External impetus for reflection and action

in this sphere may well come from nationally-driven quality assurance (QA) processes, which will emphasise transformation in relation to, for example, academic and research programme design, staff development and research capacity building. In addition, institutional restructuring in the form of mergers and incorporations will provide opportunities for reconsideration of staffing strategies in all categories. Given this overview's finding that staffing inequities are most marked in universities, and keeping in mind that a number of universities are not engaged in mergers (see Section 3.3.1), it could be that these HEIs will face the greatest challenge in transforming their staff profiles.



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Chapter Notes and References

- ¹ White Paper 1997: Section 1.18.
- ² Cloete, Fehnel et al. 2002: 71.
- ³ Cloete, N and Bunting, I (2000). 'Increased and Broadened Participation'. In Cloete, N and Bunting, I (2000). Higher Education Transformation: Assessing Performance in South Africa. Pretoria: Centre for Higher Education Transformation (CHET): 9–36: 14–16. Rates are approximate as adjustments had to be made to inaccurate 1991 census data in order to derive them.
- ⁴ Ibid 1–20; Cloete, Fehnel et al. 2002: 151–152.
- ⁵ Cloete, Fehnel et al. 2002: 200–204.
- ⁶ Cloete and Bunting 2000: 11–12.
- ⁷ White Paper 1997: Section 2.23.
- ⁸ White Paper 1997: Section 2.24.
- ⁹ White Paper 1997: Section 2.55.
- ¹⁰ White Paper 1997: Section 1.4.
- ¹¹ White Paper 1997: Section 1.27.
- ¹² White Paper 1997: Section 2.96.
- ¹³ Howell, C and Subotzky, G (2002). Obstacles and Strategies in Pursuing Staff Equity: a Regional Study of the Five Western Cape Higher Education Institutions. Bellville: Education Policy Unit, University of the Western Cape: 4.
- ¹⁴ In the absence of detailed cohort studies of students through the system, graduation rates provide a proxy to measure throughput efficiency. They are calculated by dividing the number of graduates by headcount enrolments of the same year. The rate is differentiated according to the length of the qualification and is affected by the number of new intakes, dropouts and the throughput rate, i.e. time to complete the qualification. The *National Plan* provided benchmark figures for the different qualifications derived from reviews of student cohort models over five years by which typical graduation rates in South African institutions were identified.
- ¹⁵ MoE 2001: Section 2.3.1.
- ¹⁶ Howell and Subotzky 2002.

CHAPTER 5

TEACHING AND LEARNING



The term ‘teaching and learning’ encompasses the *activities* of teaching and learning in the classrooms of higher education institutions (HEIs). It also encompasses *policies, strategies, plans and infrastructure* both at the higher education system level, and at institutional level, to support these activities.¹



Clearly the scope of the term is vast, drawing within its ambit all those frameworks and arrangements – at both levels – that support curriculum development for knowledge currency and contextual relevance; the development of teaching and learning methodologies that are appropriate to different knowledge forms, take into account experiential learning where appropriate, and are adapted to technological changes; strategies for student access, assessment and student success; approaches to professional development of teaching staff; and many other areas. This overview takes as its focus curriculum change in HE, considering national policy developments that provide one key context for teaching and learning in South African

HEIs. It also examines institutional responses to policy, to other contextual factors, and to intrinsic priorities of higher learning that have to do with the nature of knowledge and the manner in which it is transferred.

5.1 The Inheritance in 1994

Under apartheid, higher education teaching and learning practices and the curriculum tended to be as fragmented as the institutional structure in which they were located (see Sections 3.1 and 10.1), which presents a challenge when it comes to formulating a categorical description retrospectively. One view of teaching and learning practices prior to 1994 provides some broad suggestions, albeit emphasising the ideological freight of curriculum content²:

- English-language universities were by and large dominated by Western academic practice. As one example, medical curricula adopted a curative focus rather than a preventive one more suited to a developing country. Even after 'liberal' universities were permitted to enrol black students in the early 1980s, the substance of mainstream curricula did not significantly alter to cater to a more diverse student body (although academic development programmes with extended curricula for educationally disadvantaged students began to feature). Some curriculum content critical of apartheid was present, although this may not have been comprehensive.
- Curriculum within Afrikaans-language universities was closely tied to the concept of a *volks* university. The traditional view of an HEI as an autonomous community dedicated to the pursuit of truth was largely rejected in favour of conformity of belief and intellectual rationalisation of the apartheid society. As a reflection of this, rote learning practices were common.
- In African universities, teaching and learning approaches were in principle to be constructed around concepts relevant to Africa, but in practice were antagonistic to African culture and were more a 'watered-down version' of the education in Afrikaans-language HEIs. Curriculum was manipulated (unsuccessfully) to prevent the development of student political consciousness. Courses in science, mathematics and engineering were restricted to keep skills in these areas at a low level.
- In technikons, the vocationally oriented curriculum was nationally controlled and synchronised until the early 1990s (i.e. more along the lines of a syllabus). From this point on, a national system of programme convenorships developed, with sustained input from industry bodies and professional associations into the content of teaching and learning.



In the years before 1994, both the apartheid government and educational movements aligned with the African National Congress (ANC) political movement began to address themselves to new curriculum models, with implications for higher education. National Party policy documents of the early 1990s began to suggest a higher education sector in which the influence of the 'market' and vocational education would be more strongly marked by economically relevant curricula; and in which a stratified system of HEIs would

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allow advanced academic knowledge to be pursued in university centres of excellence (which, although ostensibly ‘de-racialised’, would entrench higher education elites). At the opposite end of the spectrum, the People’s Education Movement, organised by a National Education Crisis Committee (NECC) which took up the struggle against ‘Bantu education’ from the mid-1980s, advocated the elimination of elitist higher education in favour of collectivist educational values, and alternative curricula. In particular, it asserted a pedagogy of critical thinking, interdisciplinarity and explicit linkage between education and the world of work. The National Education Policy Investigation (NEPI) was launched by the NECC in the early 1990s, in the expectation that such ideals would find ready endorsement in a post-apartheid government.³

“After 1994, policy developments in the sphere of higher education teaching and learning have in fact been consistent with the dual emphasis adopted in all higher education framework policy from this date, namely: the imperative of responding to both the apartheid legacy and global trends.”

5.2 Key Developments since 1994

5.2.1 Policy Developments

After 1994, policy developments in the sphere of higher education teaching and learning have in fact been consistent with the dual emphasis adopted in all higher education framework policy from this date, namely: the imperative of responding to both the apartheid legacy and global trends.⁴ Some of the more radical ideas of ‘people’s education’ were therefore displaced very early on by other discourses that emphasised the need to respond to globalisation as a factor in the higher education environment and its envisaged impacts (see below), in tandem with responses to severe social inequalities.



From the early 1990s, broad policy formulations began to emerge for teaching and learning in a transformed education system, although little direct attention was given to higher education curriculum before the work of the National Commission on Higher Education (NCHE) from 1995. One reading of a range of documents – including the NEPI reports (1992); the ANC’s *A Policy Framework for Education and Training* (1994); early policy and legal documents after 1994 such as the *White Paper on Education and Training* (1995) and the *South African Qualifications Authority (SAQA) Act* (1995) – identifies the following emphases which served as a broad context for the work of the Commission:

- Desire to steer South Africa along a ‘high skills, high growth’ path of economic development.
- The mechanism of a National Qualifications Framework (NQF) to bring academic education and vocational education into closer alignment within a single coordinated system of qualifications that would allow articulation between them.
- Modularisation of curricula to allow for the acquisition of skills within flexible time frames, and facilitate portability of learning in a system of credit accumulation and transfer.
- Erosion of disciplinary boundaries, in favour of interdisciplinarity which, specifically, should serve as the basis for reconstituted, relevant, and responsive curricula.
- An outcomes-based approach which would enable cross-field outcomes from a variety of knowledge forms and would thus background specific content in favour of generic, transferable skills.⁵



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Contemporary thinking about globalisation and higher education, which influenced the NCHE, had three main themes. First, it was envisaged that a logical result of democratisation would be massification, as large numbers of previously excluded youth and adults entered HEIs. Second, it was thought that changing institutional arrangements would weaken the boundaries of academic departments and promote flexible teaching teams. Third, globalisation was expected to lead to a shift in knowledge production, from 'Mode 1' (discipline-based knowledge production in universities), to 'Mode 2' (interdisciplinary or 'transdisciplinary' research, conducted by teams of researchers based inside, and increasingly outside, universities).⁶ Mode 2 was viewed as more relevant for solving 'real world' economic, technological, social and cultural problems in developing countries and elsewhere. It also seemed to imply necessary shifts in curriculum organisation: not only from disciplinarity to interdisciplinarity, but also from 'courses' to 'credits'; from 'departments' to 'programmes'; from 'subject-based teaching' to 'student-based learning'; from 'knowledge' to 'competence'; and from 'theory-based learning' to 'problem-based learning'.

From the NCHE in the mid-1990s, through the *White Paper* of 1997, to the *National Plan* of 2001 and beyond, policy has sought to balance simultaneous challenges for higher education curriculum (social and economic transformation, and globalisation) through the application of specific principles and practices. At times it seems possible to discern ambiguity in the emphasis of policy documents (e.g. one document might stress the value of interdisciplinarity at the expense of the foundational value of disciplines more than another).⁷ However, taken over the whole



ten-year period up to the present, it can be said that, at the level of principle, higher education curriculum transformation is broadly seen by policy as requiring an appropriate balance between the canonical norms of traditional disciplines, and more open knowledge systems in dynamic interaction with external social interests, economic and student demand, and other processes of knowledge generation. Higher education is asked to generate new curricula and models of teaching and learning to accommodate a larger and more diverse student population. At the same time, it must deliver the requisite research, the highly trained people and the knowledge to equip a developing society with the capacity to address national needs and to participate in a rapidly changing and competitive global context.⁸ Specifically, the enabling mechanisms that policy has selected to meet its goals within the sphere of teaching and learning have included a programmes-based definition of higher education, which drives planning and funding, as the new funding formula and the state-determined institutional Programme and Qualifications Mix (PQM) show; an outcomes-based definition of higher education; an NQF which integrates all education and training and on which all higher education qualifications must be registered; and a coordinated national quality assurance (QA) system for higher education. To illustrate, four aspects of policy with critical relevance for teaching and learning can be highlighted: the SAQA policy and regulations, the New Academic Policy, the NQF consultative document, and the HEQC frameworks and policies.

SAQA policy and regulations⁹ developed the discourse of articulation and flexibility in learning through a set of key concepts for higher education qualifications to be registered on the NQF. Academic programmes were defined as 'a planned combination of learning outcomes with a defined purpose or purposes'.¹⁰ They must provide qualifying learners with 'applied competence' (the ability to put learning outcomes into practice); must open up access routes to additional education and training; and must promote lifelong learning by providing both specific and 'critical cross-field outcomes' (generic skills). Consistent with the

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emphasis of the *White Paper*, SAQA highlighted the importance of qualifications that might ‘be achieved in whole or in part through recognition of prior learning’ (RPL), so widening access to potential learners whose qualifications for study might not be formal.¹¹

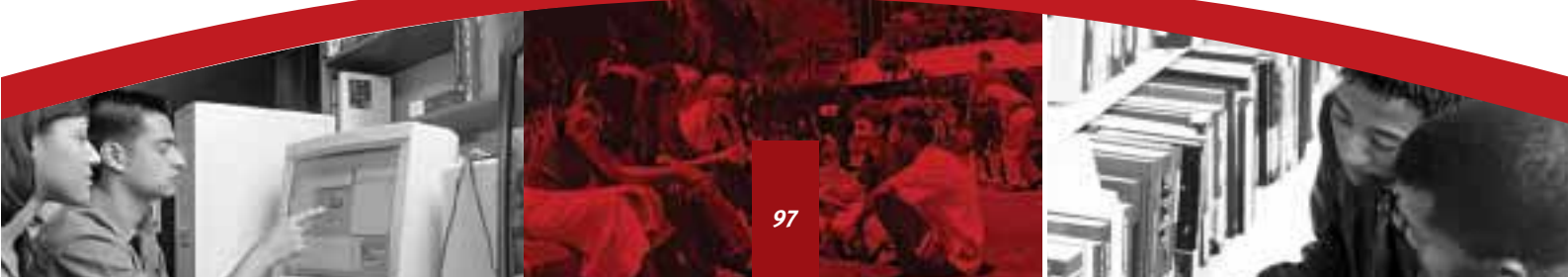
The **New Academic Policy** (NAP)¹² aimed to provide an academic planning framework to underpin the *National Plan*, connected to key policy goals such as an integrated qualifications structure for higher education, articulation between institutions, and multiple entry and exit points in the qualification structure. The NAP recognised that a programmes- and outcomes-based approach to curriculum design signified a shift away from the traditional higher education approach of apprenticeship in a single discipline: ‘This does not mean that the development of disciplinary depth will not be required in most programmes, but it does mean that the tradition of one (or two) disciplinary major(s) per qualification will not necessarily hold’.¹³ It proposed that mainstream qualifications in higher education should be placed in one of two learning pathways: the ‘general’ (traditional academic) and ‘career-focused’ (vocational) tracks. This would encourage diversity at the level of the programme,¹⁴ while ‘articulation qualifications’, appropriately pegged on the NQF, would enable learners to move between the two tracks either at the same level, or through a diagonal step up.¹⁵ Furthermore, it was proposed that higher education qualifications should be designed in a ‘nested’



way, with specialised qualifications always meeting the requirements of the generic ones within which they are nested (e.g. a Bachelor of Science in Geology would have to meet the requirements of all BSc degrees, of all general bachelor’s degrees, and of all qualifications at the same level of the NQF as general bachelor’s degrees). ‘Level descriptors’ would indicate broad benchmarks of learning as outcomes required of an NQF level, with precise capabilities acquired as the learning outcomes of specific programmes and qualifications.¹⁶

For many months, the NAP remained a discussion document, while a corresponding policy document from the national Department of Education (DoE) was awaited; this process began with the Ministry’s publication in July 2004 of a discussion document on the higher education qualifications framework.¹⁷ This document is centrally informed by the NAP and the NQF review process (see below) and gives ‘careful consideration to [the] wealth of proposals and commentary’ arising from them. It adopts the core proposals of the NAP, although with variations in the proposed qualification types and their descriptors. It states that the policy is intended to become effective from January 2006.

If proposals for a new academic policy are to unfold successfully in practice, they require a very clearly conceptualised NQF. Given that there have been complexities and contested areas of NQF implementation – especially tensions between the (institution-based) education and (workplace-based) training sectors – a review was undertaken in 2001, culminating in the 2003 **NQF consultative document**¹⁸ as a joint response by the Ministers of Education and Labour. This document proposed three types of learning and interdependent learning pathways: discipline-based learning; trade, occupational and professional (TOP) learning; and a third type, ‘which habitually emerges between these two poles’, described as ‘career-focused learning’, the higher education term, or ‘general vocational learning’, the further education and training (FET) term.¹⁹ A view



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of the relationship between learning pathways and across the three bands of the learning system (general education, FET and higher education) is proposed as the conceptual scheme on which the new organisation of the NQF is to be built (Figure 19). Critically, the focus should be on how to ensure compatibility and articulation between the pathways.²⁰ These proposals are not uncontroversial, raising as they do questions about the extent to which three distinctive – if articulated – learning pathways can be successfully integrated in practice into a single qualifications framework, or how successfully they will support the integration of theory and practice by learners in the higher education system.

The fourth key aspect of national policy development affecting teaching and learning is the QA formulated by the Higher Education Quality Committee (HEQC) – set out in more detail in Sections 8.2.1 and 8.3.

HEQC frameworks and policies signal clearly that teaching and learning are at centre stage of the QA enterprise, and also indicate the required emphases in teaching and learning practice. These include, first, the need for curriculum to be simultaneously connected to the national and regional contexts, to national policy goals and targets (e.g. for throughput and graduate success), and to a distinctive institutional mission. Second, a continuous-improvement orientation at institutional and programme levels should facilitate teaching and learning innovation and renewal. Third, teaching and learning approaches must promote access and success for students from disadvantaged educational backgrounds.

Figure 19: Revised NQF Proposed by NQF Consultative Document

NQF Band	General Pathway	Articulation Column	General Vocational Pathway	Articulation Column	Trade, Occupational & Professional Pathway
Higher education and training	Discipline-based qualifications	Articulation credits	Career-focused qualifications	Articulation credits	Occupational recognition or context-based qualifications unique to the workplace
Further education and training	Discipline-based qualifications	Articulation credits	General vocational qualifications	Articulation credits	
General education	General education qualifications (with ABET defined separately)				

Source: NQF Consultative Document 2003

5.2.2 Institutional Developments

National policy developments in the area of curriculum change have been critically received by the academic community, with critique tending to focus on assumptions that may be implied with respect to the nature of knowledge and learning. Is there a risk of undervaluing the pedagogical importance of inducting students into discipline-based knowledge as a foundation for further study (especially in a country where many are disadvantaged by a poor schooling system)? Does an emphasis on generic skills-building assume that these skills can be taught generically and then unproblematically transferred from one domain of knowledge to another? Will modularised curricula fragment learning and obstruct the outcomes envisaged for whole qualifications?²¹ Debates such as these continue, and may feed back into the policy-making process itself. Yet alongside such questioning and exploration, HEIs have also had to respond actively to policy requirements: restructuring curricula around academic programmes, reformatting curricula in an outcomes-based way to satisfy requirements for interim registration on the NQF by SAQA, and so on. This has entailed the danger that curriculum restructuring at institutional level (reflecting the preoccupations of policy) may have grappled more with form than with content, and so have failed fully to engage the most critical question

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of all: what knowledge, capacities, skills and competencies must higher education curriculum deliver, in order to meet the needs of the South African society and economy?²²

The Council on Higher Education (CHE) annual report for 2000/2001 included an account of how HEIs had engaged with curriculum restructuring through the development of academic programmes, noting that virtually all had undertaken curriculum review since 1996:

- Many professional faculties and departments, such as law, engineering, medicine, social work, pharmacy and journalism had been stimulated by the transition to democracy in South Africa to reconsider and reconstruct curriculum offerings.²³ Academic programme planning was accessible to them, as their curriculum offerings were generally already 'programmatised'. However, humanities, arts, social science and science faculties experienced far greater difficulties, especially on account of a belief that a programme had to be interdisciplinary and related to future graduate employment.
- Four basic programme types had emerged: a) the traditional bachelor's degree, constructed around one or two majors, and a range of electives; b) a programme similar to a), but with restricted student choice as to majors and electives; c) a programme similar to b), but with multiple vertical subject sequences rather than single or double majors; and d) a compulsory core made up of modules drawn from a range of disciplines. The application of these programme types varied according to historical differences between HEIs, as well as faculty type. In many cases programmes were more similar between like faculties, then between faculties in one HEI.
- Portability in the system appeared to have declined rather than increased, in spite of efforts to modularise curricula. This appeared to be the result, for example, of relatively tight restrictions on student choice within programmes, as well as compulsory programme cores that tended to match HEIs' own 'niches'.
- Attempts to achieve interdisciplinarity, had sometimes resulted in fragmentation and lack of cohesion in the curriculum. The usual response had been to retain disciplines or subjects intact within programmes, and to accept that authentic versions of interdisciplinarity could only develop over time.

Subsequent analyses of curriculum change have generally corroborated the pattern of these findings, while highlighting other important considerations. First, as already noted, they have questioned whether curriculum change has as yet addressed the heart of the matter (the necessary content of teaching and learning in South African higher education). A second consideration highlighted is that, although the wave of 'programmatisation' may be over, the *National Plan* emphases on increased throughput and success rates, and QA, have turned the spotlight firmly upon change in curriculum and teaching and learning practice at institutional level as the means of achieving these.²⁴ Third, the evidence suggests that 'changing the curriculum *in that particular way* (towards interdisciplinary programmes) was resisted by the institutions, such that attempts to break down disciplinary boundaries ... resulted in internal disciplinary enclaves ... rather than in integrated programmes'.²⁵ In other words, academics persist in their allegiances to their disciplines, as well as in their fundamental concern that knowledge be transferred and acquired coherently at all times.



Changes in teaching and learning cannot occur simply through the imposition of policy frameworks, nor is quality to be assured through the forms of programmes- and outcomes-based higher education. Indeed



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it is not clear that substantive policy-driven reform of fundamental curriculum modes is always necessary, beyond tempering the excesses of massified modes of delivery and the constraints imposed by fiscal austerity. If serious and substantive curricular reform is to be achieved, then one alternative priority might be to strengthen existing modes of curriculum through increased professionalism of academic staff with respect to teaching and learning. Another might be to find at institutional level 'bases from which to negotiate and validate new curricula, and the forms of authority and leadership needed to sustain these'.²⁶



5.3 The Situation in 2004

The overview to this point has focused on national policy frameworks and institutional responses with respect to the disciplinary or interdisciplinary nature of learning programmes, the outcomes of learning programmes, and the articulation possible between qualifications. It is unlikely that accelerated change in higher education curriculum will occur – or that systemic change *can* occur – in relation to aspects such as these until a new academic policy is in place. While this hiatus remains, a range of teaching and learning issues are receiving sustained attention at system and institutional levels, and are likely to continue to do so for the next few years at least. Four of these are selected and touched on here,

namely: teaching and learning delivery models; approaches for widening access and academic development; curriculum development in the context of mergers; and learner-centred approaches to curriculum. (A fifth key theme – how to ensure the responsiveness of curriculum in terms of meeting the high-level personpower needs of economy and society – is tackled in Chapter 9.)



The issue of **teaching and learning delivery models** is critically influenced by so-called 'new media' (especially the Internet) and the opportunities and challenges these offer for higher education. The *National Plan* expressed anxiety about the expanding use of the

Internet and real-time satellite broadcasts by public HEIs. It was concerned that proliferation of distance education programmes in 'contact' institutions would have unanticipated consequences, and therefore requested the advice of the CHE on the role of distance education in the light of current and future trends. (See Section 3.2.2.) Yet 'it is not at all clear how to develop a local policy framework – or to turn unintended consequences into intended outcomes – for an educational technology that is driven by global trends and market forces, and which is characterised by rapid change ... The conventional distinction between "contact institutions" and "distance education" is eroding rapidly, threatening the formulation of the problem in these terms with redundancy before there is the opportunity of formulating even a preliminary response'.²⁶

Some argue that the rush to implement information and communication technology (ICT) in higher education is driven by profit motives. Others warn that ICT is the tool of a 'network society' that will use it to accelerate the production of knowledge, while those who stand aside will find it harder and harder to survive. According to this argument, South Africa should be seeking to narrow the digital divide between itself and other nations, and should use ICT to advance one of its core goals: widening access to higher education. This is not to suggest that there are no risks associated with the new media, as South African HEIs who have tried to apply them have already discovered. As one example, where new media are used to substitute for small group learning support, they may serve to widen, rather than narrow, the gap between students from different educational backgrounds. Precisely because there are risks, it is certain that assertive policy is needed on the issue, although the likely outcomes of the policy debate are not yet clear. Some

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within the higher education sector believe that the Ministry should abandon the practice of classifying HEIs according to delivery modes, and should instead promote convergence of delivery modes through Open/Distance Learning (ODL), leveraged by the funding formula. They argue that best-practice ODL benchmarks should become the QA norm in South Africa, and that HEIs should cooperate in creating and providing access to ODL learning materials.²⁸

Moving to a second issue: HEIs have for the last ten years – and in some cases much longer – addressed themselves to admissions strategies, as well as teaching and learning strategies, that **widen access to higher education and facilitate the academic development** of students from disadvantaged educational backgrounds. Admissions strategies at institutional level typically include special or ‘alternative’ admissions requirements as well as RPL. Teaching and learning strategies typically include bridging, foundation or extended curriculum programmes that facilitate a special focus on building skills for academic study, expanded tutorial systems, and other forms of support such as mentoring. While excellent progress has been made by many HEIs, these are areas that continue to require attention as they reside at the heart of the equity challenge for higher education. With respect to the application of alternative admissions criteria and RPL, practices have developed unevenly across the system. In these areas, HEIs need to develop appropriate, consistent and quality-assured policies, practices and assessment instruments based on specified entry requirements and learning outcomes; the HEQC’s audit criteria include these focuses explicitly.²⁹ Further, best practices with respect to academic development programmes are resource-intensive and require the involvement of specialist expertise, especially as these programmes need to address not only widening of access, but also increased graduation rates. Thus HEIs must continually strive to design curricula that enable students from poor learning backgrounds to realise their potential, while also identifying early those who will not succeed in higher education, and providing them with meaningful exit points.



As a third issue here, **mergers and incorporations** that are reconfiguring the institutional landscape (see Sections 3.2 and 3.3) pose a range of challenges for academic integration. Policy guidelines have been formulated and are being further detailed in certain areas.³⁰ At institutional level, challenges are both structural (reorganising faculties, departments and schools) and specific to aspects of teaching and learning (determining the programme and qualifications mix, aligning quality management systems, and aligning teaching and learning delivery approaches). While the range of challenges is wide, two can be highlighted to give insight into the complexity inherent in all of them. First, a key question needs to be negotiated in all mergers and incorporations, specifically: whose curriculum matters and by whose lights? In one recent example of the incorporation of a faculty of veterinary sciences into another faculty, ‘the issue of elite science (parakeets) versus subsistence science (pigs) constituted a major fault line in the debates over curriculum’.³¹ A debate such as this involves historical, institutional and cultural differences that influence teaching and learning, as well as beliefs about how relevance and responsiveness are constituted, and about the pedagogical principles that should apply in transferring knowledge.



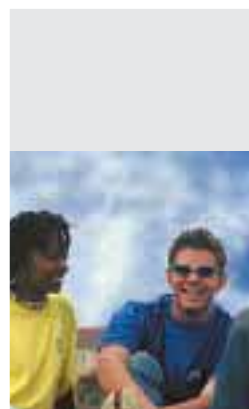
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Another specific challenge for curriculum development is posed by the new comprehensive institutions (HEIs that offer both university- and technikon-type programmes). It is hoped that these institutions will address access and opportunity issues in higher education, offering programmes with varying entry requirements, bringing diverse kinds of learning programmes (general formative, professional, vocational) within one ambit, and presenting articulation and progression pathways between general academic and



career-focused programmes and qualifications. Once again, while the possibilities give great cause for hope as to what may be achieved, complexities are present. As these HEIs seek to determine how programme diversity is to be maintained, how integration is to be achieved, and how articulation possibilities are to be constructed, distinctive properties of knowledge will have to be respected if the fundamental goals of teaching and learning are to be met: 'It is at the level of the curriculum that [true] integration may be achieved, but integration should not be seen as an overriding ideal into which all curricula must be forced. [For example,] where knowledge fields have developed a strongly applied orientation, some integration may be possible, but where this is not the case the forcing of curricula into applied mode is more likely to damage or weaken the disciplinary base than strengthen it'.³²

As a fourth and final issue, this last comment has some application to **learner-centred approaches to curriculum**, and the manner in which these are applied by South African HEIs. Recent examples of efforts to introduce such approaches in response to both national policy emphases and international trends, have included medical curricula in some HEIs.³³ However, on occasion these experiences have shown that circumspection is necessary. Wholesale conversion to problem-based curricula has resulted in some Health Science faculties having to confront unsustainably expensive curricula, and some academics expressing serious doubts about the adequacy of the disciplinary knowledge bases that graduates have acquired. Although undoubted gains may have been made in particular skills areas, the sustainability of a largely learner-centred curricular edifice may be in question.



5.4 Critical Issues and Key Challenges Ahead

The preceding section cited discussed teaching and learning issues that constitute current centres of attention, as well as key challenges that lie ahead. The varied nature of these selected issues serves to indicate the range of challenges that exists at both system and institutional levels, within the frame of teaching and learning (as consistent with the scope delineated at the beginning of this chapter). In seeking to describe in broad outline critical issues for teaching and learning in the next months and years, this overview highlights three topics.

First, as has already been noted, a systemic framework for transformation in higher education teaching and learning, and curriculum, is urgently needed and has been long anticipated. The finalisation of a new academic policy is therefore awaited as a system-level guideline that will serve to focus and instruct institutional-level teaching and learning approaches.³⁴ The resolution of the NQF review will be an important support or corollary.

Second, HEIs must continue to address themselves to the demand that the *National Plan* has made of them: to ensure that teaching and learning practice supports specific policy goals, including achieving equity in student throughput and success rates, and overall increases in these. As has already been suggested, this needs to be done in ways that are congruent with the priorities and concerns of the academy, and that seek to align the particular insights and experience of academics with new directions in curriculum development.

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Third, a comprehensive understanding of teaching and learning practices across the South African higher education system will be an important aid to identifying and resolving associated systemic issues, and to formulating guides for good practice. Given that institutional audits by the HEQC commencing in 2004 (see Section 8.3.2.2) provide a key mechanism for collecting such data, means should be sought to 'close the loop', feeding observations and learnings back into the system rapidly so as to raise the level of institutional practice effectively and consistently.

Chapter Notes and References

- ¹ Definition informed by: Council on Higher Education/Higher Education Quality Committee (June 2002a). A Framework for Improving Teaching and Learning Project. Pretoria: Council on Higher Education (CHE): 8.
- ² With respect to universities, the points below reference Davies, J (1994). 'The University Curriculum and the Transition in South Africa.' *European Journal of Education* 29(3): 255-268: 255-257.
- ³ Ibid: 259-262; Moore, R (2002). 'The Restructuring of Higher Education Curricula: Contrasting Models of Interpretation'. *Journal of Education* 27: 33-57: 34.
- ⁴ The nature of this dual challenge is set out in the Introduction to this report.
- ⁵ Ensor, P (2002). 'Curriculum'. In Cloete, N, Fehnel, R, Maassen, P, Moja, T, Perold, H and Gibbon, T (eds) (2002). *Transformation in Higher Education: Global Pressures and Local Realities in South Africa*. Cape Town: Juta: 270-295: 272-3.
- ⁶ Gibbons, M (1998). 'Higher Education Relevance in the 21st Century'. Washington: World Bank.
- ⁷ NCHE 1996: 6. Ensor 2002: 278-282 analyses how policy documents shift uneasily at times between an emphasis on the value of disciplinary knowledge and an emphasis on open knowledge systems.
- ⁸ White Paper 1997: Section 1.13.
- ⁹ Republic of South Africa (1998). Regulations under the SAQA Act 1995. 'NSB Regulations'. *Government Gazette* No. 18787, Regulation Gazette No. 6140, 28 March 1998. Pretoria: Government Printers.
- ¹⁰ Ibid: Section 8.1.
- ¹¹ Ibid: Section 1.
- ¹² Council on Higher Education (January 2002). A New Academic Policy for Programmes and Qualifications in Higher Education (Discussion Document). Pretoria: Department of Education (DoE). The NAP was proposed by the CHE at the request of the DoE.
- ¹³ CHE January 2002: Section 4.3.
- ¹⁴ CHE January 2002: Section 4.6.2.
- ¹⁵ CHE January 2002: Sections 4.6.3.
- ¹⁶ CHE January 2002: Sections 4.4 and 5.1.
- ¹⁷ Ministry of Education (July 2004). The Higher Education Qualifications Framework. Policy Issued under the Higher Education Act, Act No. 101 of 1997. Draft for Discussion. Pretoria: Government Printers.
- ¹⁸ Department of Education/Department of Labour (July 2003). An Interdependent National Qualifications Framework System: Consultative Document. Pretoria: Department of Education/Department of Labour (DoE/DoL).



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- ¹⁹ DoE/DoL July 2003: 11.
- ²⁰ DoE/DoL July 2003: 12-14.
- ²¹ Some of these questions are suggested by: Luckett, K. (2001). 'A Proposal for an Epistemically Diverse Curriculum for South African Higher Education in the 21st Century'. *South African Journal of Higher Education* 15(2):49-61: 50-51.
- ²² Ibid: 52; Muller, J. (2003). 'Knowledge and the Limits to Institutional Restructuring: the Case of South African Higher Education.' *Journal of Education* No. 30: 101-126: 107.
- ²³ In certain cases, these were influenced by international developments in tandem with transformation imperatives inside South Africa. As a case in point, medical curricula have been influenced by international developments in favour of primary health care and problem-based learning approaches. See for example: Beyliefeld, AA and Jama, MP (2002). 'Incorporating Transferable Skills in an Undergraduate Medical Curriculum: Learning from Experience'. *South African Journal of Higher Education* 16(1): 113-121; London, L, Ismail, S, Alperstein, M and Baqwa, D (2001). *Diversity in the Learning Environment and Curriculum Reform in the Health Sciences: Challenges for a Country in Transition*. Paper presented at the Globalisation and Higher Education: Views from the South Conference, Cape Town, 27-29 March.
- ²⁴ Ensor 2002: 291.
- ²⁵ Muller 2003: 107.
- ²⁶ Moore, R (2003). 'Curriculum Restructuring in South African Higher Education: Academic Identities and Policy Implementation.' *Studies in Higher Education* 28 (3): 303-319: 318.
- ²⁷ Hall, M (2001). *New Media: Prospects and Concerns for Higher Education Teaching and Learning*. (Paper prepared for Council on Higher Education Annual Report.): 1.
- ²⁸ SAUVCA July 2003: 2-3.
- ²⁹ See for example: Council on Higher Education/Higher Education Quality Committee (2004). *Institutional Audit Criteria*. Pretoria: Council on Higher Education (CHE): 16 (Criterion 14).
- ³⁰ MoE April 2003: Ch 5.
- ³¹ Jansen, JD (2003). 'How Mergers Shape Institutional Curriculum.' *Education as Change* 7 (2): 3-19: 16-17.
- ³² DoE January 2004: 39.
- ³³ See this chapter, Endnote 23.
- ³⁴ MoE July 2004: 17, states that such a policy is intended to be in place from January 2006.

CHAPTER 6

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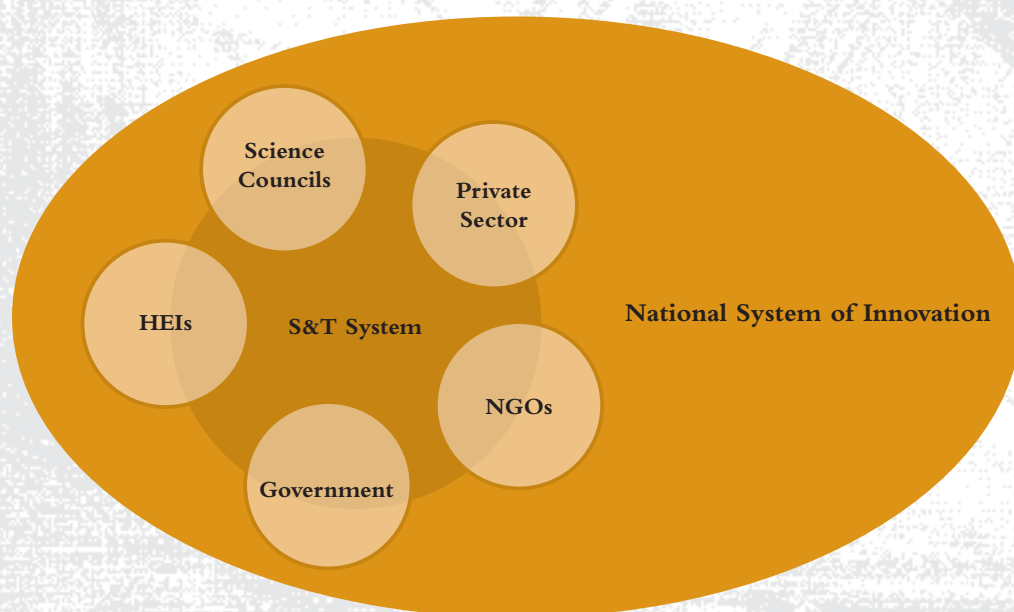
That the higher education research system can perform in more effective and efficient ways is not in doubt. That it must focus on its core business and increase both the quantity and quality of its outputs is also not in doubt. However, it has to work hard to establish a critical understanding of the size and shape of the research spectrum. It must engage in a set of processes that allow it to understand exactly what it needs to perform these activities optimally. And perhaps most importantly, it has to seek, with the rest of the higher education system, a new social contract with the people of South Africa.¹



As in many other countries, higher education (HE) research in South Africa forms one component of a national system of research and development (R&D). The R&D system is a subset of the national science and technology (S&T) system, which is in turn a subset of the national system of innovation (NSI), i.e. all institutions and individuals directly or indirectly engaged in formal innovative activities. Figure 20 shows that higher education institutions (HEIs) and science councils are primarily contained within the S&T system. In contrast, the activities of non-governmental organisations (NGOs), government, and the private sector are only partly contained within the S&T system and partly within the broader context of the NSI. R&D institutions are located in four sectors: higher education, private business enterprise, science councils, and government (national and regional departments that support and integrate R&D, museums, research institutes). While the institutions that constitute the S&T system are formally involved in training and innovative adaptation of products, processes and technologies (indirect involvement), the R&D system includes only those institutions that actually create new knowledge, technologies and products through research.

This overview focuses on research in the higher education sector and also provides key contextual information about the system in which it is located.

Figure 20: South Africa's National System of Innovation



Given research interlinkages within a single national system, and the recognition of R&D as a critical enabler of social and economic development, there is widespread demand that higher education research should align with the priorities of the national economy. This in turn has sparked concerns within higher education that fundamental research may be systematically eroded in the academic sector. This theme of 'responsiveness' in higher education research (links between research outputs and societal needs) forms part of the focus of this chapter, and is more fully considered in Chapter 9, alongside the 'responsiveness' required of higher education teaching and learning to ensure high-level personpower needs are met.

6.1 The Inheritance in 1994

South Africa's research system developed from the mid-eighteenth century onward, under the impetus of various stimuli: exploration of the natural history of new colonial territories, including the work of

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astronomers who travelled to the Cape Colony; the discovery of diamonds and gold and the industrialisation of the Witwatersrand area; animal epidemics and plant diseases and centres established to research these, such as the Onderstepoort Veterinary Institute; the endeavour of former Prime Minister Jan Smuts to construct a research system with the universities at its centre, and with a focus on serving South Africa's needs in such areas as mining and agriculture; the Second World War, which spurred innovation in the local market; and the establishment of the science councils, beginning with the Council for Scientific and Industrial Research (CSIR) in 1946.² Such a history ensured that South Africa was in a position to construct a modern S&T system on a broad and established research base.

From the advent of the National Party government in 1948, national research priorities became increasingly identified with state security goals, strongly influencing the R&D agendas of the science councils and some of the universities as well. As one significant case in point, apartheid South Africa's response to an arms embargo was to develop its own 'atom bomb project' and to channel research resources into the nuclear and materials sciences.³ Other powerful drivers of innovation were of course present, especially the need to develop core sectors of the economy such as agriculture and mining. Aside from highlighting particular innovation priorities, the apartheid state had other direct impacts on national and higher education research programmes by virtue of its special nature and purposes.

As a first example, the S&T system was highly fragmented. To begin from an higher education perspective, the institutional landscape of higher education under apartheid (see Section 3.1) meant that institutional research agendas developed disparately, leading to skewed patterns overall. In addition, universities and science councils operated in separate silos. Apart from higher education, fragmentation across the system was just as pervasive. The science councils



operated in oblivion of each other; government departments conducted research operations independent of the science councils and the universities; private sector laboratories were isolated – unless they specifically chose not to be. The consequences of such fragmentation were severe and deeply interconnected: poor – or non-existent – communication and coordination across the system; disjuncture between the science system and the challenges of development; and failure of the system to complete the cycle of innovation.



As a second example of the impact of the apartheid state on national and higher education research programmes, research in the social sciences became marginalised under the pressure of academic boycott, so tended to insularity even if it was relatively prolific.⁴ As a third and final example, the apartheid-related missions of historically black universities (HBUs) largely precluded research development and meant that teaching and research functions became sharply separated in many instances – although some of these institutions were able to develop innovative research programmes, linked to undergraduate and postgraduate teaching, and typically oriented towards community service initiatives.⁵

In 1993, a Science and Technology Initiative (STI) was initiated by the African National Congress (ANC) and aligned trade union and civic organisations, as a process to address issues relating to South Africa's S&T



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system and to develop policy for the political transition and beyond. The participation of key organisations and institutions in the national research system at that time⁶ was also invited. The STI emerged against the backdrop of an investigation into the S&T system and policy, commissioned by the ANC and conducted during 1992–1993 by a Canadian International Development Research Centre mission. The report of this mission highlighted the following issues which became the focus of more detailed STI reports, and which in turn informed the national research policy development process after 1994:

- S&T policy did not allow for public participation and was not transparent (e.g. the Scientific Advisory Council, which advised the Minister of National Education on matters of science policy, did not include representation of stakeholder groups, and was characterised by ‘race’, class and gender inequities).
- The S&T system served South Africa’s white minority: research priorities were guided by criteria of state security rather than social equity, and failed to recognise South Africa’s status as a developing African nation, rather than a member of the industrialised world.
- The system of S&T institutions was fragmented and without articulated economic or social goals towards which the institutions should direct their efforts.
- There was a leadership vacuum, given that South Africa was one of relatively few countries that did not coordinate S&T policies at the executive level of government.
- The education system was producing too few natural scientists, engineers, technologists and technicians: enrolments and graduate outputs in these fields were declining.⁷

With respect to research in the higher education sector specifically, studies in the early 1990s revealed that:

- R&D activity was undertaken by South African HEIs in relatively equal shares with government and industry.
- HEIs received about 40% of state expenditure on R&D – which totalled around 0.8% of gross domestic product (GDP) between 1989 and 1994.
- Funding for research was *directly* allocated to universities through the Department of National Education on the basis of numbers of students and research publications, with different weightings for the natural and human sciences (technikons did not receive direct research funding). In effect, research funds were allocated ‘blindly’ in that there were no measures to ensure that the 15% of subsidy funding allocated to universities for research infrastructure was in fact used for research purposes. Research funding was also *indirectly* allocated via contracts from government departments and science councils.
- The business sector was the source of just under 10% of R&D income for HEIs.
- South Africa was undertaking approximately 0.5% of the world’s scientific research in 1994, with the balance of output favouring social sciences and humanities rather than natural sciences. Universities performed 98.7% (by expenditure) of academic research – with the balance of expenditure by technikons. While universities produced 70% of South African indexed research publications, nearly 80% of these were concentrated in five institutions (Cape Town, Natal, Pretoria, Stellenbosch, and Witwatersrand).
- Despite awareness of the need to shift resources towards the science, engineering and technology (SET) fields, there appeared to be a lack of adequate discrimination regarding funding across disciplines; this was consistent with the absence of central direction as to academic research output. Thus, for example, South African universities were spending only one third as much as their international counterparts on engineering research (5% compared to 15%) and almost twice as much as other countries on the social sciences, arts and humanities.⁸



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Exacerbating the bias towards humanities and social sciences research in the higher education sector, the strong R&D missions for technology developed by the Nationalist government were systematically stripped off between 1990 and 1994. In addition, the acceleration of corporate restructuring in the face of globalisation appeared to be weakening South African firms' enthusiasm for undertaking bold innovation missions, with consequent fall-off in their R&D investment.⁹ Against this background, it was recognised that under a democratic government 'an inclusive S&T policy [would] have to play the compounded role of purger and pathfinder. As purger, it [would] have to root out the legacy of the old dispensation without causing social disintegration. As pathfinder, it [would] have to be forward-looking, and help chart a course for future national development'.¹⁰

6.2 Key Developments since 1994

6.2.1 Higher Education Policy Process

National development goals and the establishment of a national research system to support social and economic priorities, have thus served as critical frameworks for developments in higher education research since 1994. This said, it should be noted from the outset that the higher education policy process has not been well incorporated into the S&T policy process (see below) which took the lead. This has created continuing difficulties for the development of an integrated system, which will be discussed later.



For their part, higher education policy documents such as the *White Paper* and the *National Plan* have joined the call for increased responsiveness of higher education research (see Section 9.2.1). They have, however, also reiterated the traditional purposes of research as conducted in an higher education environment. Thus, while acknowledging the importance of applications-driven research on the one hand, the *White Paper* also highlighted higher education's role in the creation, sharing and evaluation of knowledge within the specific context of academic scholarship and open-ended intellectual inquiry.¹¹ It underscored the importance of basic research, 'as it is crucial in nurturing a national intellectual culture, generating high-level and discipline-specific human resources, and providing opportunities for keeping in touch with international scientific developments – all of which facilitates innovation'.¹² The *National Plan's* strategies recognised the importance of sustaining research strengths already well established in the higher education system, at the same time as promoting

responsiveness and new kinds of knowledge output.¹³ Between them, the *White Paper* and *National Plan* identified a comprehensive list of priorities and strategies to support effective higher education research:

- Postgraduate enrolments and outputs needed to be increased, with priority access for black and women students to master's, doctoral and postdoctoral programmes. The *National Plan* outlined forms of funding support intended for this.
- Institutional research outputs and quality needed to be enhanced – e.g. through quality assurance measures and through revised policies and procedures for the measurement of research outputs.¹⁴
- New centres of excellence and niche areas needed to be developed in HEIs with demonstrable research capacity or potential – while sustaining existing capacity.



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- Collaboration and partnerships needed to be increased – especially at regional level – in research and postgraduate training; the *National Plan* proposed earmarked funding to support this.
- Greater articulation and coordination of research activities was needed across the national system.
- A national research plan should be in place, setting out priorities for research and postgraduate training; processes to identify centres of excellence; targets to achieve a more representative research community; and incentives for collaboration and partnerships.
- Research funding strategies and mechanisms were needed to add value to research priorities, to reduce fragmentation and to build capacity in higher education research. These strategies and mechanisms would need, among other things, to promote institutional accountability for the use of research funds; to draw universities and technikons within one research funding framework; and to expand the institutional base for research through redress funding for historically disadvantaged institutions (HDIIs). The *National Plan* outlined a new system of earmarked and block grant funds for research.¹⁵

6.2.2 Science and Technology Policy Process¹⁶

As stated above, the S&T policy process has been primary in renewing the national research system as a whole; policy developments and initiatives after 1994 have been extensive. Some of the principal developments are summarised here.

A first key focus of the S&T policy process has been the achievement of structural and conceptual changes to reduce fragmentation in the system. As a first structural intervention, a Department of Arts, Culture, Science and Technology (DACST) was established in 1994. The *White Paper on Science and Technology*¹⁷, developed under the auspices of this department (1996), set in process a review of the S&T system and related policies, ultimately forging the notion of the NSI. The NSI is intended to promote synergy between the various sectoral, institutional and infrastructural elements of the system; to promote innovation; and to develop a research framework in line with national priorities. Thus it provides in principle the overall coordination framework cited as necessary by the *White Paper* (HE) and the *National Plan*, although the higher education policy process was at a remove from this one.



A second key focus of S&T policy initiatives has been the laying of foundations for a national research plan – also cited as a priority need by higher education policies. A review of the NSI was completed by 2000 through a series of evaluative exercises conducted by DACST (National Research and Technology Audit 1997/98, review of science councils and national facilities 1998/99, and National Research and Technology Foresight exercise 1998/2000). These appraisals were intended as groundwork for the development of a national research plan. A *National Research and Development Strategy*¹⁸ (not yet a detailed plan) materialised in 2002, and set out an approach based on three pillars. The first pillar is innovation: the establishment and funding of technology missions critical to national development: biotechnology and information and

communication technology (ICT); technology for manufacturing and natural resource sectors; and technology for poverty reduction. The second pillar is an increase in investment in the science base, with a focus on changing ‘frozen demographics’ (largely ageing, white and male) in the SET workforce and establishing centres of excellence to attract young people into sustainable research careers. The third pillar is the creation of a fully integrated S&T system.

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A third key focus of S&T policy initiatives has been the establishment of funding drivers for transforming the research and innovation system: these include changes in the overall system of funding, and the introduction of special funding strategies (examined in more detail below). In this sphere, specific aims have included achieving increased public and private funding of research across all sectors of the system; ensuring that the distribution of funds supports the research needs of post-apartheid South Africa; and ensuring that research funds are used accountably. (As already mentioned, the old higher education funding formula, with its 15% of subsidy for research infrastructure, allocated research funds 'blindly'.) It can be noted, however, that this is one area where integration between higher education and S&T policy processes has been weak, with the implications of funding drivers for the higher education sector scarcely explored before their implementation.

One development was the transfiguration of former funding agencies – the Foundation for Research Development and Centre for Science Development – into the National Research Foundation (NRF) which reports to DACST and distributes DACST funding to HEIs on a competitive-bid basis. The NRF has consolidated funding agency functions for the human and natural sciences, and has also drawn together university- and technikon-based research funding. The Parliamentary mandate of the NRF requires it to distribute funding within focus areas that reflect the development, equity and capacity-building priorities of the state, and to this extent it is responsible for a degree of 'engineering' of higher education research priorities.

Other sources of governmental funding for higher education (and other) research were introduced as strategies for creating synergy between the different elements of the NSI. The first of these is the Technology and Human Resources for Industry Programme (THRIP), managed by the NRF for the Department of Trade and Industry (DTI). THRIP was established in 1991 and functions as a matching grant scheme between research entities in public HEIs and the private sector: i.e. contributions to approved projects are made by private-sector partners, the DTI and the participating HEI. Higher education projects that qualify for THRIP funding are ones that involve industry collaboration, and that foster high-level human resource development (HRD). In particular, THRIP provides incentives for the participation of graduate students historically excluded from SET activities (black and women students). The DTI budget for THRIP increased from R3 million in 1994 to R96.5 million in 1999, with private sector expenditure increasing from R6 million to R105 million in the same period (further analysis is provided in *Section 6.3.1.1*).

The second source, in part an outcome of the Technology Foresight Exercise, is an Innovation Fund that was established to encourage NSI partnerships that complete the cycle of innovation by developing well-defined products in strategic areas. These strategic areas are identified in relation to governmental priorities by the National Advisory Council on Innovation (NACI), established after 1994 to advise Cabinet on S&T and innovation matters. Government funding for the Innovation Fund grew from R30 million in 1998/99 to R125 million in 2000/2001, by means of downscaling direct funding to the science councils and instead making it subject to competitive bids through the Fund. The extent to which the Innovation Fund has achieved its objectives of completing the innovation cycle is still subject to evaluation, and substantial funding from the fund has been awarded to science councils rather than to HEIs.



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In effect, these developments in the research funding arena mean that, as of 2004, HEIs have access to three streams of research funding. The first is subsidy from the Department of Education (DoE) which, in terms of the new funding formula for higher education, is distributed via research output (block) grants calculated on the basis of actual research graduates and publication unit outputs, and – where HEIs are eligible – via research development funds. The second can be acquired on a competitive basis through agencies such as the NRF (The Medical Research Council and Agricultural Research Council perform similar agency functions.) The third is available to HEIs through direct contracts and external funding sources, including contributions from government departments (e.g. Water Affairs, Environment and Tourism) and donations.¹⁹

6.2.3 Outcomes of Developments since 1994

A key question is whether policies and initiatives highlighted in the sections above have moved South Africa significantly closer to the achievement of its policy goals. Some recent surveys and studies of the national research system suggest answers to this question and shed light on problematic areas that persist.

As an overview, the 2004 Human Sciences Research Council (HSRC)/Department of Science and Technology *National Survey of Research and Experimental Development* for 2001/02²⁰ reveals the following:

- Total R&D expenditure for 2001 was R7.5 billion. In percentage terms,²¹ gross expenditure on R&D was relatively steady between 1993 and 2001 at around 0.75% of GDP (0.76% in 2001, with a low point 0.69% in 1997). The challenge remains to reach the goal of 1% of GDP by 2005, as set by the *National R&D Strategy*. By comparison, Sweden spends 4.27% of GDP on R&D; the United States 2.82%; European Union member states on average 1.93%; and Australia 1.53%. South Africa closely follows China (1.09%) and Spain (0.96%) but with a higher R&D intensity than most other developing countries.
- South Africa distributed its 2001 expenditure on R&D by major research field as follows: Natural Sciences (22.2%); Engineering Sciences (20.0%); Applied Sciences and Technologies (15.0%); Computers and ICT (12.9%); Social Sciences & Humanities (10.6%); Medical & Health Sciences (10.1%); Agricultural Sciences (9.2%).
- By type of research, 2001 gross expenditure on R&D was as follows: applied research: 40.0%; experimental development: 33.2%; strategic basic research: 14.9%; pure basic research: 11.9%. On the face of it, these figures would appear to indicate a clear shift in the direction of applications-driven research. South Africa's spending on basic research as a percentage of GDP in 2001 was 0.19% (compared to the United States 0.59%; Japan 0.38%; Norway 0.25%; and Spain 0.15%).
- R&D expenditure by province was as follows: Gauteng 53.6%; Western Cape 15.1%; Free State 9.7%; Kwazulu-Natal 8.0%; North-west 5.1%; Eastern Cape 3.5%; Mpumalanga 2.3%; Limpopo 1.3%; and Northern Cape 1.3%. In part these figures might be explained by the location of science councils – e.g. the CSIR, HSRC, NRF and South African Bureau of Standards are all in Gauteng; the National Energy Corporation of South Africa is in the North-west Province).
- As an indicator of the availability of research skills, the number of full-time equivalent (FTE) researchers per 1 000 employed in 2001 was 0.9 – up from the 1997 figure of 0.71. Comparative figures were Australia 7.2; Malaysia 7.0; South Korea 6.4; Spain 5.0; Argentina 2.0; and China 1.0. These figures indicate that the South African research community remained comparatively small.



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- In South Africa, women researchers made up 35% of the total (compared with Argentina 49%; Russia 44%; Spain 35%; Norway 28%; South Korea 11%; and Japan 10.7%.)
- The balance of R&D was carried as follows: industry 54%; higher education 25%; government and science councils 20%.

As a positive finding in the context of national policy goals, an HSRC 2003 audit of THRIP and the Innovation Fund²² found that these two strategic funding mechanisms had achieved considerable success and therefore served as exemplars of how partnerships might be used to develop S&T innovation in South Africa. Specifically, these funding strategies had incentivised partnerships in 423 projects; had contributed financially to incentivising linkages (R869.1 million on HE/SET-industry linkages); had involved 573 industry partners in two or more projects; had involved 41 institutions as primary beneficiaries; had involved 1 293 students; had produced 35 patents and 296 artefacts; and had resulted in increased publications (885), increased industry support for basic research and a sharing of intellectual property between industry and HEIs.



More soberingly, there is evidence that the national system of research and innovation has weakened by international comparison since 1994. Thus the HSRC 2003 review of HRD, *Education, Employment and Skills in South Africa*,²³ highlighted the following:

- South Africa ranked 94th out of 162 countries in the human development index in 2001 and dropped to 107th out of 173 countries in 2002. Factors contributing to this decline were low life-expectancy rates and the high percentage of adults living with HIV/AIDS.
- The country rated 39th out of 72 countries in the technology achievement index in 2001, ahead of other developing economies such as Brazil (43rd), China (44th), Algeria (58th) and Indonesia (60th).
- South Africa occupied seventh place out of 24 African countries in the African Competitiveness Report in 2000/01. It boasted good electricity, telephone, internet connectivity and cellular infrastructure, and had a very high secondary school enrolment ratio compared with other African countries.
- Research output faced difficulties, meaning that South Africa could lose its small edge against other middle developing economies. The total output of scientific articles had remained largely static over the past decade, with a slight apparent decline since 1997. HEIs were struggling to recruit and retain young scholars and there was a gradual 'ageing' of the existing publishing population. Combined age and 'race' data suggested a serious looming crisis as the white 'over-50' cohort moved closer to retirement with little evidence of a commensurate younger black cohort waiting in the wings.

Concerns about the 'frozen demographics' of South Africa's research community were clearly articulated by the *National R&D Strategy*, and have been reiterated by an HSRC 2004 study on the mobility of R&D workers, *Flight of the Flamingos*,²⁴ commissioned by NACI. It cited a South African S&T system plagued by the low numbers of learners with higher-grade passes in mathematics and physical science; 'race' and gender inequities; inadequate high-level graduate output; and insufficient funding for postgraduate students and postdoctoral fellowships. In examining the mobility of R&D workers, this study did not find evidence to suggest a 'brain drain' crisis in South Africa, although neither was its 'brain gain' evidence conclusive



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(suggesting that gains from other countries may exacerbate symptomatic difficulties for nationals in accessing higher education). Strategies recommended for addressing national R&D capacity included inter-ministerial cluster approaches; the establishment of centres of excellence with the support of industry and international partnerships in order to draw younger researchers into sustainable careers; and promotion of 'brain circulation' through exchange and transfer of skills with the rest of the world (e.g. short R&D visits; a human mobility strategy; and strategic decisions as to the optimal mix between importing foreign skills and growing local ones).

Taken as a whole, the findings of these studies are ambiguous. While they reflect some successes in achieving greater responsiveness and mobilising productive partnerships within the national research system, they also suggest that the internal dynamics and composition of that system may have changed little. Moreover the South African science system is weakening, to the detriment of its global competitiveness. In sum, it seems fair to say that the envisaged benefits of policy have not yet been achieved, and to hypothesise that reasons for this may include as yet inadequate or insufficient implementation mechanisms to support policy goals, as well the legacy of fragmentation in the system. Integrated cross-governmental and cross-sectoral efforts to develop and implement an effective NSI therefore remain a priority.

Specific developments within the higher education research sector since 1994 are discussed below.

6.3 The Situation in 2004

This section provides a picture of key developments in higher education research over the last ten years, to shed light on the situation in 2004. The analysis compares the 'old' and 'new' institutional landscapes of higher education (using 2001 figures for indicative purposes). Radical structural reconfiguration (as fully discussed in Sections 3.2 and 3.3) may clearly be anticipated to impact on higher education research patterns and it is therefore critical to understand the capacity of the system to sustain and reproduce itself, as well as to grow and transform. Against this background, the analysis is conducted in terms of three themes:

- The responsiveness of higher education research to national goals, interpreted through levels of collaboration between higher education and industry or government.
- Research output and the implications of the new institutional landscape for research output patterns.
- Scientific productivity and the potential blurring of institutional research 'boundaries'.

A fourth key theme, namely patterns of postgraduate enrolment, is dealt with separately in Chapter 4, in particular under Sections 4.2.2, 4.2.3.3, 4.2.3.5, and 4.3.2.2.

6.3.1 The Responsiveness of HE Research to National Goals

6.3.1.1 THRIP Funding

The first indicator of the responsiveness of the higher education sector to national goals is the number and monetary value of projects funded under the THRIP initiative. Table 21 lists the number and value of THRIP projects according to the new institutional clusters of reconfigured higher education. The monetary values represent the total project funding, i.e. both DTI and industry contributions.



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Table 21: Number and Value of THRIP Projects by Sector, 1995, 1998 & 2001

Institutions		1995	1998	2001
Universities	No.	63	324	231
	R 000	14 914	124 732	238 908
Univ of Technology (Technikons)	No.	10	28	22
	R 000	634	10 776	9 360
Comprehensives	No.	5	28	15
	R 000	912	8 878	8 658
HE TOTAL	No.	78	380	268
	R 000	16 460	144 386	256 926

Source: THRIP Annual Reports 1995 & 1998/99; and www.nrf.ac.za/thrip/annualreport2002

Total THRIP funding in higher education in 2001 was nearly 16 times greater than funding in 1995 (R16 million and R257 million respectively). The number of projects also significantly increased from 78 to 268. These figures represent a growth of 1 461% in the funding amount and of 244% in the number of projects over the six-year period. This also means that the average amount of funding per project increased markedly (from R211 000 per project in 1995 to R959 000 per project in 2001). The result is a significantly higher number of higher education research projects with industry collaboration.

The distribution of THRIP allocations among the new institutional types is predominantly located within the university sector (93% of all THRIP monies in 2001). Moreover, while THRIP funding increased over this period in the universities (from R125 million in 1998 to R239 million in 2001), it declined in the technikons (from R10.7 million to R9.3 million) and comprehensive institutions (from R8.8 million to R8.6 million).

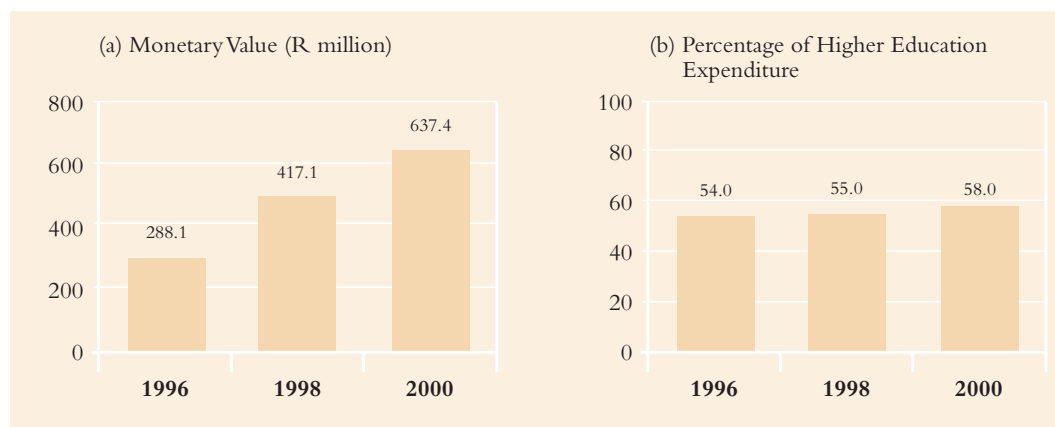
6.3.1.2 Contract Income

Collaboration with industry is regarded as a highly desirable mode of R&D collaboration in higher education, given that it facilitates skills and technology transfers that, in turn, benefit the national economy. Higher education collaboration with other sectors, such as government departments, science councils, and NGOs is also strongly promoted as part of responsiveness to the needs of the broader society. Consequently, the value of contract income flowing into HEIs (so-called 'third-stream' funding) constitutes a second measure

of responsiveness. It is, however, necessary to raise a caution: while HEIs must find ways to encourage contract research, they must beware that it does not edge out basic research as it has the potential to do – with devastating results. While increases in contract income indicate responsiveness, they must be managed so as not to erode the higher education research enterprise in the long term.



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Figure 21: Contract R&D Expenditure within the Higher Education Sector, 1996, 1998 & 2000

Source: Centre for Research on Science and Technology (CREST), University of Stellenbosch. Note: These figures are based on a survey of directors of research at universities and technikons in 2001, conducted by CREST. Twenty-one institutions responded to the survey. Since these institutions' proportional contribution to higher education R&D expenditure in the 91/92 R7D survey was about 85%, the survey figures were upwardly adjusted by 15%.

Figure 21 shows that contract income in the higher education sector has drastically increased between 1996 and 2000 (from R288 million to R637 million). Expressed as a percentage of total R&D expenditure in higher education, it has only marginally improved from 54% in 1996 to 58% in 2000. Contract research, however, remains a very significant source of R&D income in the higher education sector.

6.3.2 Research Output

A key question regarding the scientific output of the higher education system is whether the new institutional configuration will produce a significantly different research landscape. This is addressed in the following sections by comparing the institutional landscape prior to restructuring with the new version.

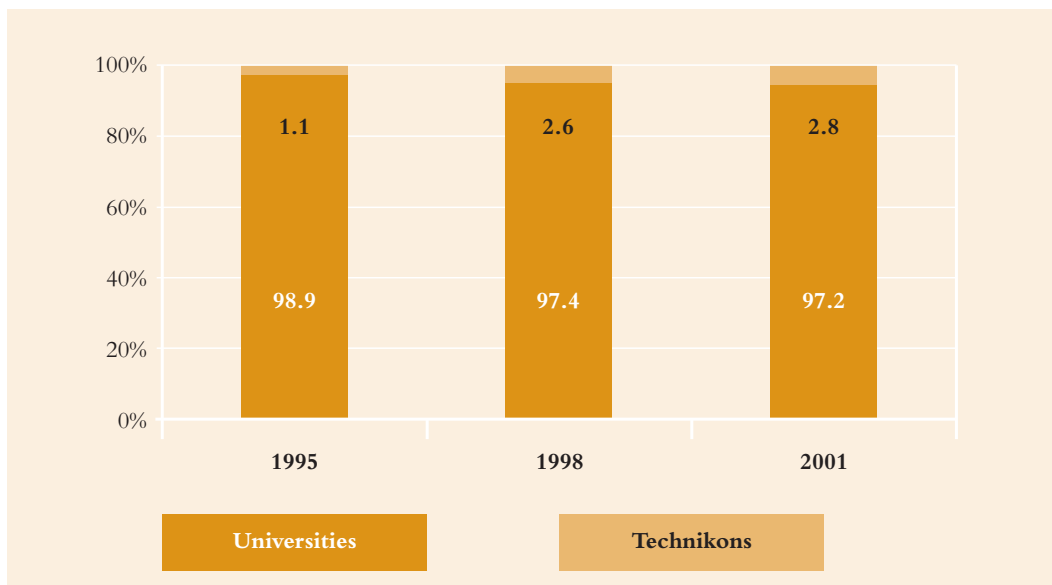
6.3.2.1 SAPSE Research Outputs in the Old Institutional Landscape

South African Post-Secondary Education (SAPSE) article output data²⁵ in universities dropped by a little more than 2% over the six-year period 1995–2001 (from 5 438 publication units in 1995 to 5 311 in 2001 – see Appendix 2, Table 56). The output of technikons increased from 62 to 153, representing a growth of 149% (from a low base). As a result, the contribution of technikons to the total SAPSE output increased from 1.1% of all SAPSE publications in 1995 to 2.8% in 2001 (Figure 22). This expansion in technikon outputs can be ascribed primarily to significant increases in scientific publications at four technikons: three of them historically advantaged (Natal, Port Elizabeth and Pretoria) and one historically disadvantaged (ML Sultan).



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Figure 22: Contribution (%) of Universities and Technikons to the Total SAPSE Research Output, 1995, 1998 & 2001

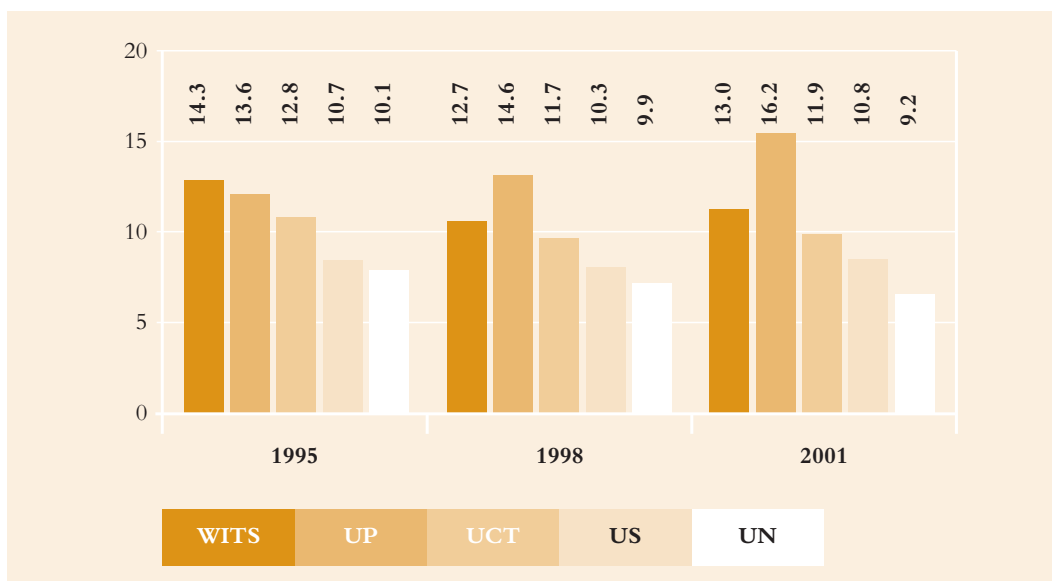


Source: DoE, SAPSE research output

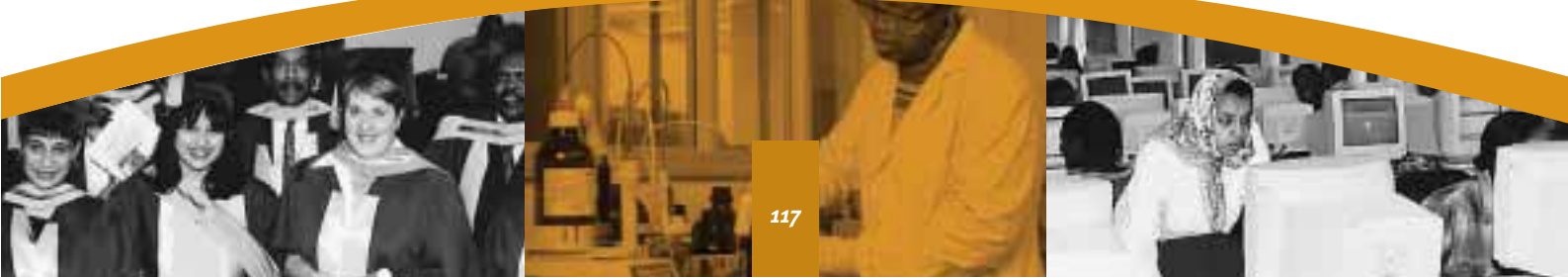
The detailed figures in Appendix 2 indicate that, among the universities, only three institutions showed a consistent increase in the number of publications between 1995 and 2001: the universities of the North (37.1%), Port Elizabeth (53.8%) and Pretoria (17.6%).

Figure 23 shows that five universities dominate the higher education scientific output: the universities of Cape Town, Natal, Pretoria, Stellenbosch and the Witwatersrand. Their combined contribution to the total SAPSE output varied between 59% and 62% over this period.

Figure 23: Individual Contribution (%) of the Five Highest Publishing Universities to the Total SAPSE Research Output, 1995-2001



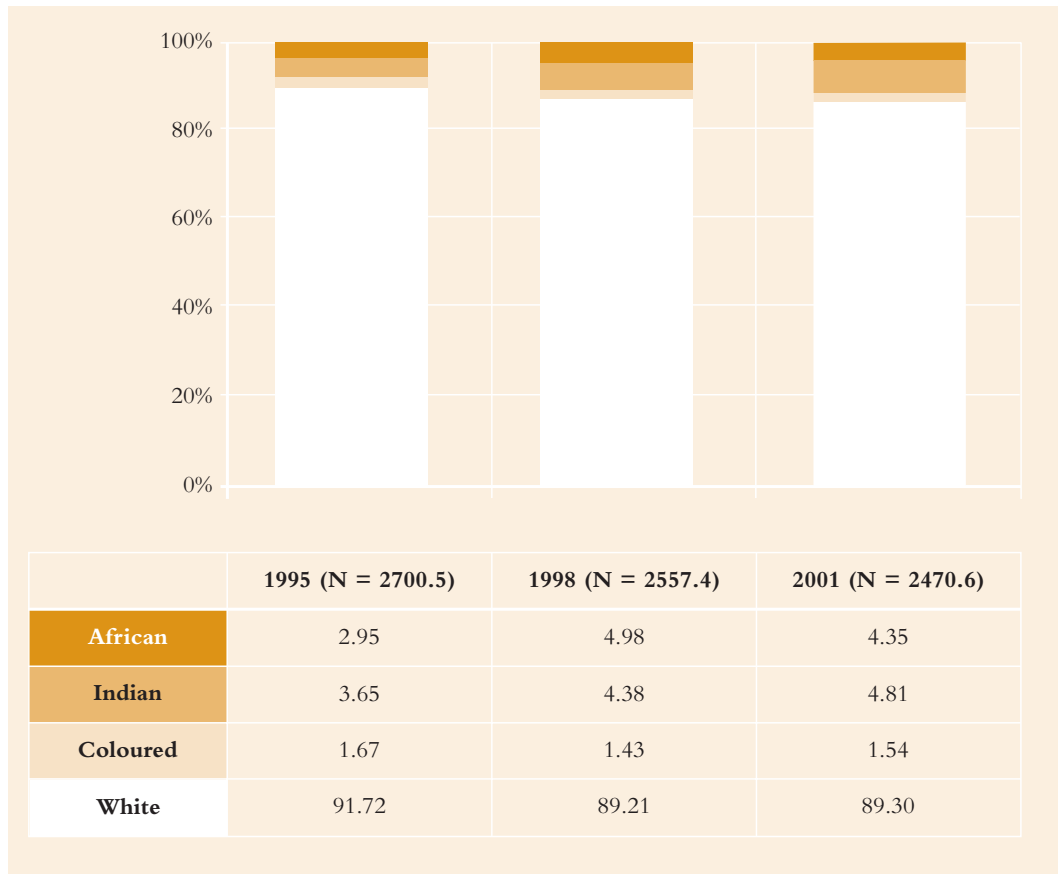
Source: DoE, SAPSE research output



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Regarding 'race' and gender trends within the scientific output of higher education, Figure 24 shows that white academics produced the vast majority of articles (around 90%) during the period under review. However, a slight decrease in their proportion of the total was evident from 91.72% in 1995 to 89.30% in 2001. Concomitantly, the contributions by African and Indian authors increased slightly by 1.4% and 1.2% respectively.

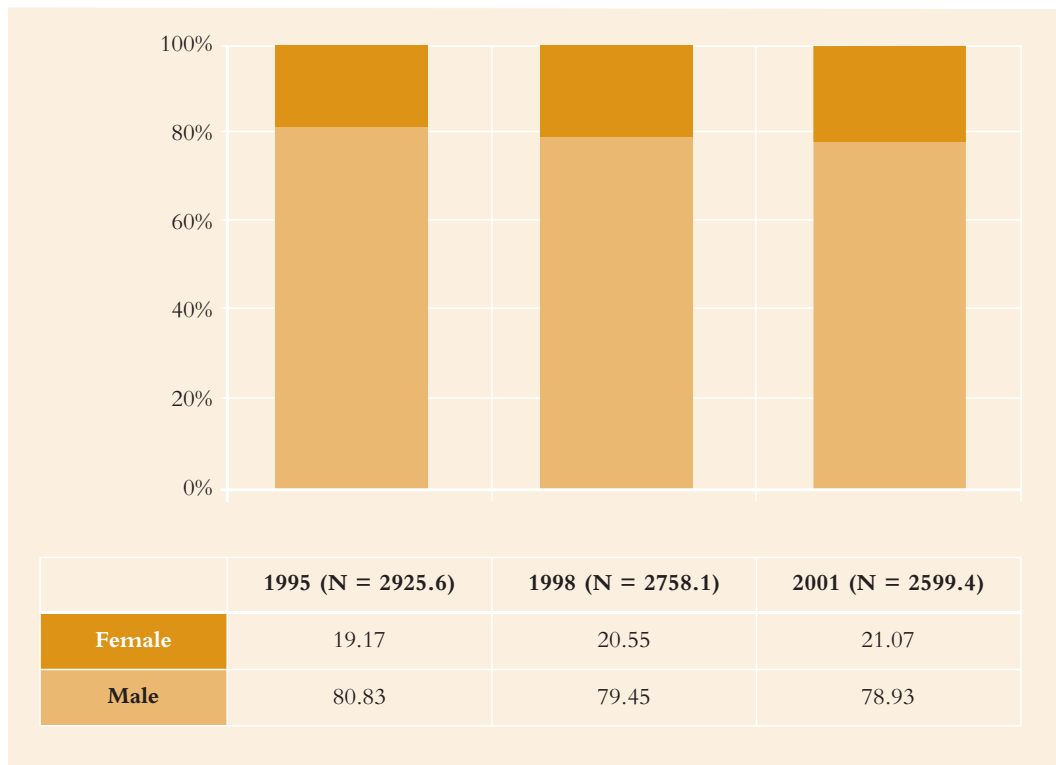
Figure 24: Distribution of Publications in the Higher Education Sector by 'Race', 1995, 1998 & 2001



Source: SA Knowledgebase, CREST, University of Stellenbosch

Finally, regarding the gender contribution to higher education scientific publishing, Figure 25 shows that about 80% of research articles in 1995, 1998 and 2001 can be ascribed to male academics. There was a marginal increase in the percentage of female-authored articles between 1995 (19.17%) and 2001 (21.07%).

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Figure 25: Distribution of Publications in the Higher Education Sector by Gender, 1995, 1998 & 2001

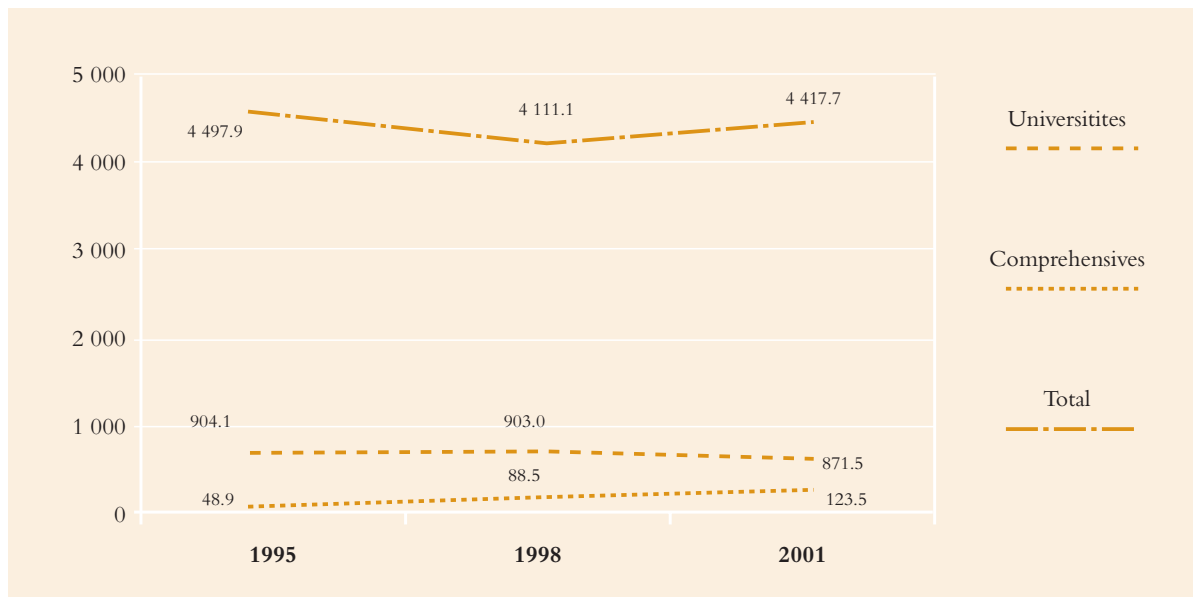
Source: SA Knowledgebase, CREST, University of Stellenbosch

6.3.2.2 *SAPSE Research Outputs in the New Institutional Landscape*

Figure 26 presents the distribution of SAPSE research output according to the new institutional groupings. Noticeable is the fact that universities dominate in terms of outputs, but showed a decline between 1995 and 1998, followed by a recovery by 2001. However, the end result was that university SAPSE research outputs did not increase between 1995 and 2001. The output of the comprehensive institutions was more static, but still showed an overall decline over this period. Part of the reason may be the increase, reported above, in contract research output. While the latter is desirable, the concomitant decline in accredited scientific publications output is clearly not. Technikon (university of technology) outputs, on the other hand, though much lower in absolute terms, show a considerable increase.

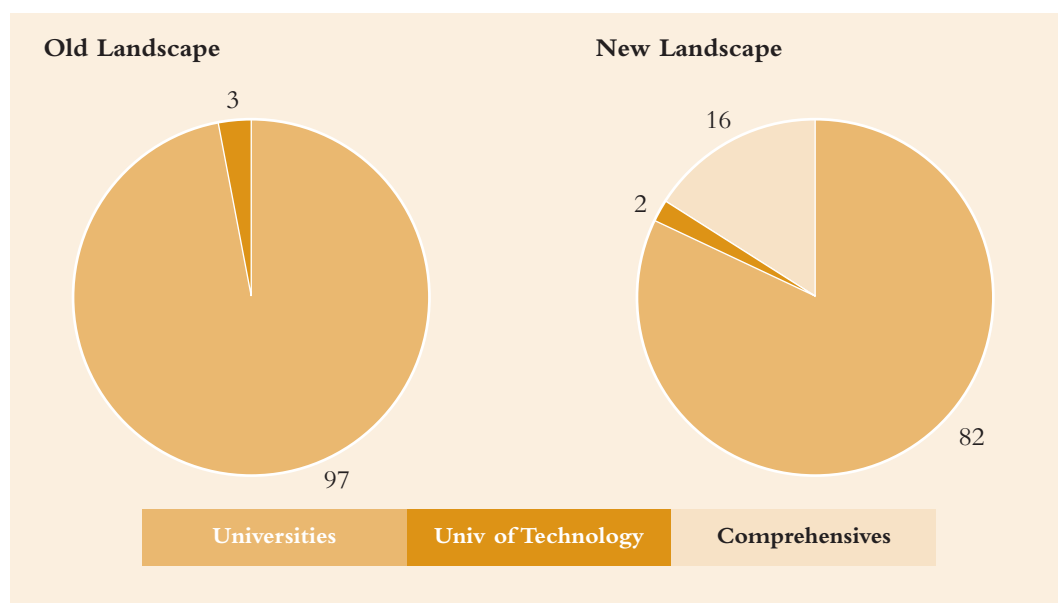


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Figure 26: SAPSE Research Output in the New Institutional Types, 1995, 1998 and 2001

Source: DoE, SAPSE research output. Note: SAPSE output for VISTA excluded

Figure 27 compares SAPSE output in the new institutional landscape with the landscape prior to restructuring. While the 'new' university sector still dominates in terms of scientific output (based on 2001 figures), its contribution (82% of total higher education output) is significantly less than that of the 'old' university sector (97%). This decline is because the comprehensive institutions account for 16% of SAPSE outputs. The 'new' technikon (university of technology) sector seriously lags behind in terms of scientific output (2.3% of total higher education output in 2001, slightly lower than the 2.8% produced in the 'old' technikon sector). The contribution of the 'new' technikon sector, however, increases, although only marginally so, from 0.9% of the total in 1995 to 2.3% in 2001.

Figure 27: Distribution of SAPSE Output by Old and New Institutional Landscapes, 2001

Source: DoE, SAPSE research output. Note: SAPSE output for VISTA University excluded in new classification

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6.3.3 Scientific Productivity

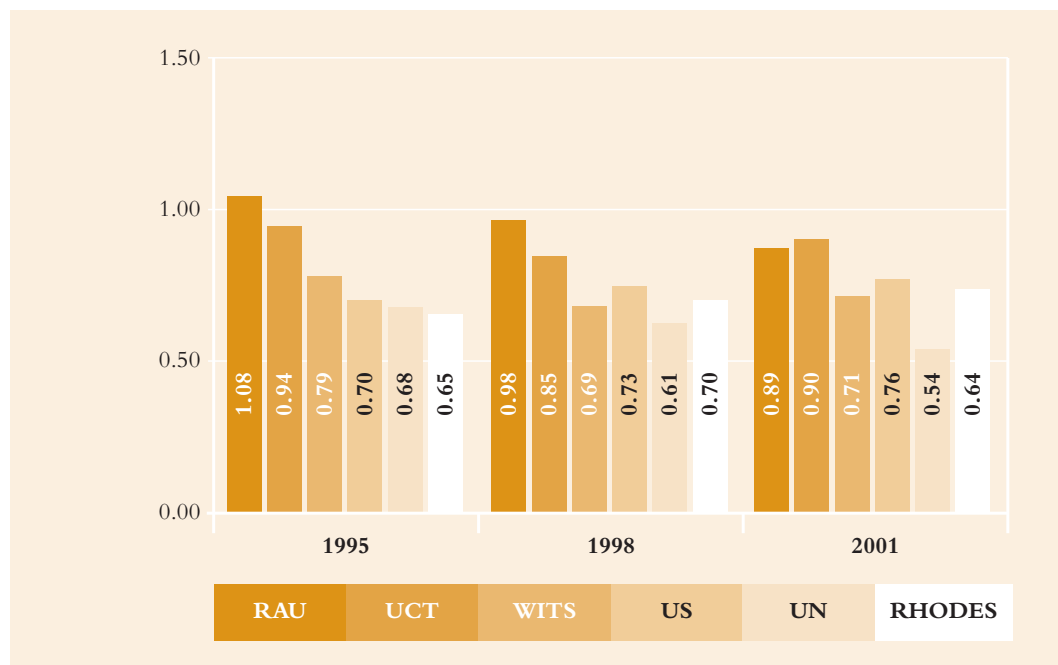
6.3.3.1 The Old Institutional Landscape

While the absolute output of institutions and institutional types is a key indicator, this needs to be seen in relation to productivity, that is, the number of SAPSE publications per academic staff member in any institution. Appendix 2, Table 57 provides academic staff figures per institution, as well as the number of SAPSE publications per academic staff member. From this, it can be seen that the average annual publication output in technikons was one publication per 50 academic staff members in 1995, ($1/50 = 0.02$) and one per 25 academics in 1998 & 2001 ($1/25 = 0.04$). For the most recent 2001 figures, the two most productive technikons are Port Elizabeth and Pretoria, with about one publication for every 12 academics (output/staff ratio = 0.08).

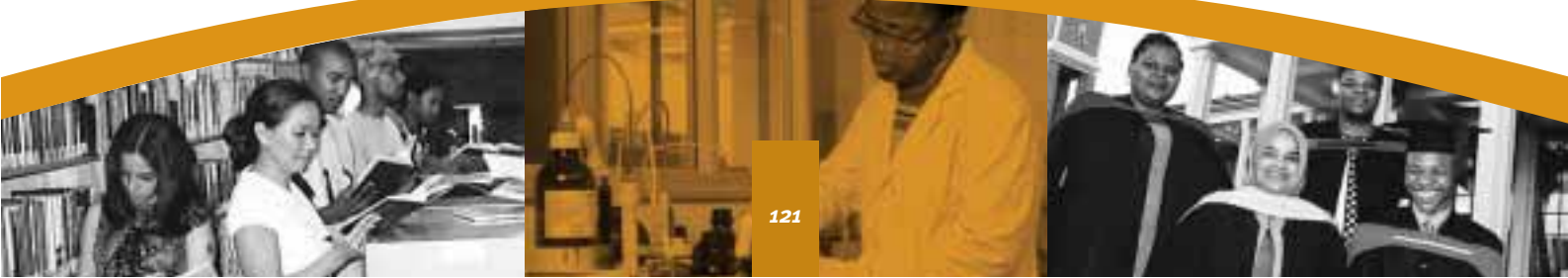
The comparison of scientific productivity with the scientific output data (see Appendix 2) is revealing. As far as scientific output is concerned, the technikons of Pretoria, Port Elizabeth, Natal and ML Sultan recorded the largest output in 2001. When controlling for number of academic staff, however, Technikon Free State was on a par with Natal and ML Sultan with an output/staff ratio of 0.06 in 2001.

Among the universities, the average output per academic ranged between 0.46 and 0.49 for the three years under review. This translates into about one publication for every two academics per year. As can be seen in Figure 28, RAU topped the list in both 1995 and 1998 with close to one article for every academic in these years. However, its productivity, while very high, declined over the period. It is not clear whether RAU's productivity was surpassed by UCT in 2001, as UCT's academic staff component for that year is an estimate, derived from the average for 1995 and 1998 (Appendix 2).

Figure 28: Number of SAPSE Publications per Academic Staff Member at the Six Most Productive Universities, 1995, 1998 & 2001



Source: DoE, SAPSE research output and HEMIS



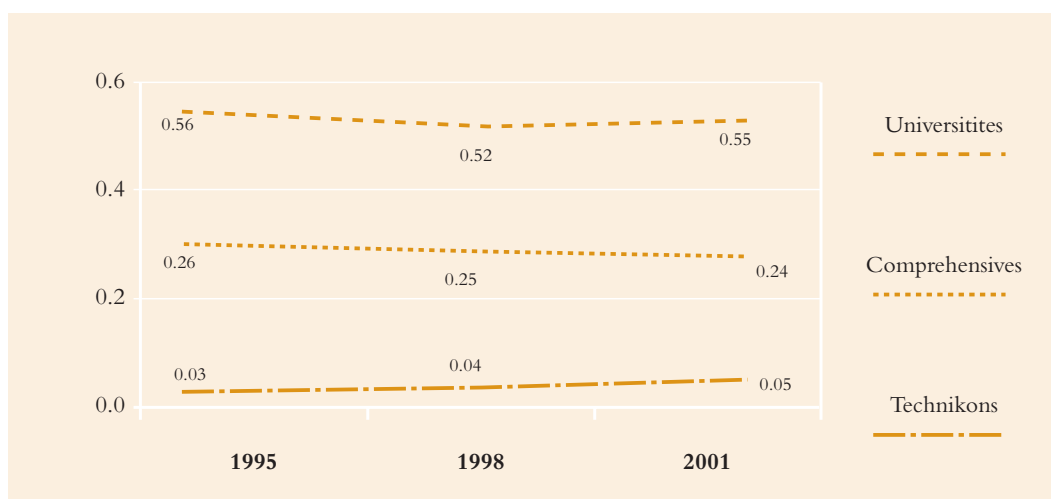
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What is perhaps most striking about Figure 28 is that the University of Pretoria, although top in absolute output, was not among the top five universities in terms of productivity. Smaller universities such as RAU and Rhodes emerged among the most productive. A consistent, upward trend in scientific productivity is evident in the case of only two universities, namely Port Elizabeth (from 0.34 publications per academic in 1995 to 0.42 in 1998 and 0.52 in 2001) and Stellenbosch (from 0.70 in 1995, to 0.73 in 1998 and 0.76 in 2001).

6.3.3.2 *The New Institutional Landscape*

Scientific productivity figures in 2001 for the ‘new’ university and technikon (university of technology) sectors depicted in Figure 29 do not differ substantially from those for the old landscape (Appendix 2, Table 57). Among the ‘old’ universities, the output was 0.48 publications per academic in 2001, and in the new university landscape it was 0.55, with both figures translating into about one publication for every two academic staff. Among the ‘old’ technikons, the output was 0.04 publications per academic, and among the ‘new’ technikons (universities of technology), it was 0.05. The main difference in scientific productivity between the old and new landscapes is the introduction of an intermediate layer comprising the comprehensive institutions, which produce about one publication for every four academic staff per year.

Figure 29: SAPSE Publications per Academic Staff Member in Universities, Technikons and Comprehensive Institutions, 1995, 1998 & 2001



Source: DoE, SAPSE research output and HEMIS. Note: Figures for VISTA University excluded.

In summary, when compared to the ‘old’ situation, the new institutional landscape does not reveal a fundamentally different picture of scientific capacity. Given the dominance of the top five universities in the current situation, and the fact that four of them (Cape Town, Pretoria, Stellenbosch, Witwatersrand) are unaffected by the mergers, this is not surprising. The key questions relate to the new intermediate layer of comprehensive institutions. Will universities such as RAU and UPE retain their positive productivity profiles after merging with ‘weaker’ research institutions? Will the newly merged technikons – where two or three technikons are merging as universities of technology – increase their output and productivity because of a larger pool of skills and infrastructure? Or will the productivity and outputs of the currently more productive ones decline as a result of merging with weaker institutions? Ongoing monitoring will be necessary to answer these questions.

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6.3.3.3 *The Blurring of Institutional Boundaries in Public R&D*

A recent survey has focused on ‘research utilisation’ in public R&D²⁶: how and by whom project research outcomes are used. The results noted in Table 22 highlights the key similarities and differences in the research and innovation goals and practices of South African universities, technikons and science councils. Results suggest that, as far as research output is concerned, the traditional boundaries between institutional types are in some cases blurring.

Table 22: Intended Beneficiaries of Project Research by Sector

Intended Beneficiary	Science Councils		Universities		Technikons	
	No.	%	No.	%	No.	%
Colleagues/scholars/peers in own discipline	228	42%	739	68%	112	61%
Colleagues/scholars/peers in other disciplines	97	18%	326	30%	43	24%
The contracting agency	126	23%	135	13%	10	6%
Industry/firms	225	42%	250	23%	71	39%
Government	206	38%	262	24%	46	25%
Specific interest groups (e.g. farmers, consumers)	222	41%	275	25%	33	18%
General public/society/community	172	32%	330	31%	51	28%

Source: NACI (2003) Survey on Research Utilisation

Regarding the modes of dissemination of research, there were very small differences between universities and technikons in the use of conference proceedings and input to official documents (Appendix 2, Table 58). However, significant differences were evident between universities and technikons with regard to publishing in scientific peer-reviewed journals (66% vs. 30%). Very surprising, however, is the finding that a greater proportion of university researchers than technikon researchers (30% vs. 16%) disseminated their results through contract reports. This is yet another indication of the degree to which contract and commissioned research has become a central feature of the university research culture in South Africa. Other interesting similarities point to substantive use of different forms of cooperative interactions with potential users and clients by both university and technikon research.

To conclude: in the traditional science policy literature, it is assumed that universities are the main sites of fundamental and basic research and postgraduate education. Technikons or technological universities are traditionally associated with industry-specific, applied research, with science councils predominantly undertaking national mission-oriented or strategic research. In an ‘ideal type’ innovation system, therefore, the division of labour would see fundamental, applied and strategic research being mainly (if not exclusively) undertaken by universities, technikons and science councils respectively. This ideal typical (even somewhat ‘idealistic’) picture has obvious advantages. These three modes of knowledge production presuppose different kinds of infrastructure, training, skills and research cultures. In the case of universities, a strong culture of fundamental research is essential as the obvious concomitant of a healthy postgraduate education capacity.

However, the findings of the NACI utilisation survey – which are consistent with the data on increases in contract income presented – reveal a much less clear-cut division of labour. In fact, it shows how all three



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forms of research (fundamental, applied, strategic) are present in differing proportions in all sectors. It is likely that the decline in research funds for fundamental research, the increased pressure on public research performers to generate more own income, and the lack of in-house R&D capacity in government and industry, all contribute to the current trends.

6.4 Critical Issues and Key Challenges Ahead

Given the broad scope of this chapter, it is perhaps helpful to recap its key findings at this point:

- South Africa has the best developed and capacitated national research and innovation system on the African continent, although its standing in the wider international research array has weakened. Although some strides have been made in overcoming the fragmented system inherited from apartheid, an ongoing internal challenge is the need for the system to respond in a coordinated way to national development priorities, to equity imperatives, and to requirements to renew and grow the research community from within.
- Higher education continues to be a key component of the national system for research and innovation, alongside government and industry, especially as its traditions of free intellectual inquiry are not obviated by demands for responsiveness.
- Signals of the higher education research sector's increased responsiveness to societal needs include dramatic increases in the number and volume of funding of THRIP-funded research projects, as well as growth in contract income, which is a key source of research income for the higher education sector.
- Universities (and five universities in particular, over a long period) continue to dominate higher education research in terms of research output and scientific productivity. Nevertheless the evidence shows that while overall higher education research output has dropped slightly, the technikon proportion of overall input has increased, albeit still small as a proportion of the total. In the new institutional landscape, the university share of research output and scientific productivity will decrease as a new intermediate layer of comprehensive institutions claims its share.
- Small increases in higher education research output by black and women researchers can be noted, although white male researchers predominate.
- Institutional boundaries appear to be blurring with respect to research, given that fundamental, applied and strategic research are present in varying proportions in each of the university, technikon and science council sectors.

“South Africa has the best developed and capacitated national research and innovation system on the African continent, although its standing in the wider international research array has weakened.”



Against this background, a set of principal challenges ahead can be distilled from an higher education perspective.

First, higher education needs to ensure it is centrally located in ongoing processes of research policy development and implementation. This is particularly important for the development of a substantive national research plan which will allow for differentiation in the research and innovation functions of various sectors of the NSI, and which will highlight what the

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most appropriate and specific functions of higher education research need to be within a coordinated NSI. The most significant changes in the national research system since 1994 have been wrought by the S&T policy process, rather than by the higher education policy process – and one result of this may be a strong emphasis on responsiveness and instrumentalist notions of research. Policy flowing from the Ministry of Education has echoed emphases on responsiveness while also proffering reminders of the time-honoured research functions of HEIs – but these have been relatively muted in the process overall. Thus there is a danger of higher education research tending in the identical direction like all other elements of the national system. Given that higher education has purposes related to, yet distinct from, those of government and industry, this cannot be either satisfactory or right.



Second, the impact of new funding drivers on higher education research needs to be more fully explored and understood. (This is a need from a system perspective also, especially in so far as knowing whether the funding drivers are succeeding in transforming the system in desirable ways, in particular aligning it with the priorities of a post-apartheid society.) This overview has shown that targeted research funding strategies are working effectively to promote responsiveness and research partnership formation by HEIs, and that contract income is a very significant source of research income for HEIs. In combination, these factors represent a significant pull towards the strategic and applied ends of the research spectrum and thus some clear and present dangers for research in the higher education sector. The most evident is that the proportion of basic research conducted in HEIs will decline irrevocably. As consequent dangers, academics may become disaffected from research careers and potential academic researchers may be alienated altogether. As an equally, if not more, dire consequence, given that applied research competence rests on the foundations of basic research, a general decline of R&D capacity may threaten not only higher education, but the national research system as a whole.²⁷ Thus understanding the extent to which funding drivers may or may not distort the research spectrum is critical to ensuring the sustainability of the system.

Third, the higher education sector must find sustainable ways of reproducing its capacities and traditions in new generations of knowledge producers – while simultaneously transforming its equity profile. The point subsumes a cluster of issues and problems. This overview has noted a decrease in higher education research output in recent years. It is also striking that, despite the success of targeted funding strategies in promoting responsiveness, their goal of supporting the development of young, black and women researchers seems further from being achieved: ‘race’ and gender inequities in the research population stubbornly persist. The ‘frozen demographics’ of an ageing research population have also been highlighted. These difficulties can be ascribed to multiple causes: the high rate of change in the last ten years has not provided the stability critical for fostering research, and has drawn resources away from research; the institutional cultures of HEIs are not yet fully conducive to satisfying the aspirations of a diverse set of young scholars; postgraduate



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scholarships and fellowships are thin on the ground; HEIs may offer unattractive remuneration and turbulent work environments in contrast to the private sector; 'brain drain' may be a factor. Accordingly, multifaceted



solutions undoubtedly need to be developed by higher education and potentially include: further research into the origins and potential trajectory of the current situation; advocacy of the value and benefits of academic labour and careers; increased postgraduate funding and improved academic remuneration.²⁸ Quality assurance of higher education research, which focuses on the institutional arrangements for assuring, developing and monitoring the quality of research and postgraduate education, should undoubtedly also assist in the goals of developing research

capacity and increasing research productivity.

Finally, research cultures need to be effectively sustained and/or developed, especially within those HEIs with demonstrable research capacity or potential. This overview has pointed out the long predominance of universities – and a subset of universities – in research output in South Africa. The reconfiguration of the institutional landscape has created space for the crafting of differentiated institutional missions, including research profiles, and has thus created opportunities for diversifying research strongholds. A key challenge for the new institutional landscape is how effectively it can promote HDIs or newly merged entities to the 'research elite'. It may also be hoped that the research output of the higher education sector as a whole will be consistently enhanced by restructuring, at least in the medium to long terms.



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CHAPTER 7

COMMUNITY ENGAGEMENT



Higher education institutions (HEIs) have a longstanding tradition of teaching, research and service. Of these, 'service' remains the most undefined and the one least considered in institutional policies, planning, and resource allocation processes. It is moreover a highly challenging area to the extent that the nature, scope and disciplinary application of service activities must be defined; that different agents must participate in service partnerships and broach attendant political and knowledge interface issues; and that institutionalising aspects of service in academic environments may in some circumstances necessitate change management.



Irrespective of these perennial complexities, in recent years in South Africa the spotlight has fallen increasingly on the role of service in higher education, as an overarching strategy in the transformation of higher education in relation to community development priorities. This is in line with expectations that higher education will fulfil its contribution to the reconstruction and development of civil society,¹ as well as to scholarly activity;² and that it will provide a complementary alternative to the marketisation of higher education, so strengthening the mission of HEIs to contribute to the public good.³ These concerns are not South Africa's alone: in 1982 the President of Harvard University, Derek Bok, called on universities to function as genuinely civic, socially and morally engaged institutions in order to fulfil their educational mission: 'If we could teach our students to care about important social problems and think about them rigorously, then clearly our institutions of learning must set a high example in the conduct of their own affairs. In addition to responding to its students, a university must examine its social responsibilities if it wishes to acquire an adequate understanding of its proper role and purpose in present-day society'.



Since the mid-1980s, discourse and practice regarding community service in higher education have shifted from the notion of 'outreach' towards 'community engagement'. The latter term implies a less paternalistic, more mutual and inclusive community-higher education relationship. The focus of this chapter will be on 'service', not as an end in itself, but as a vehicle for engaging the other primary functions of higher education (teaching and learning, and research) in a more reciprocal relationship with the social and economic development priorities of South Africa, for the public good.

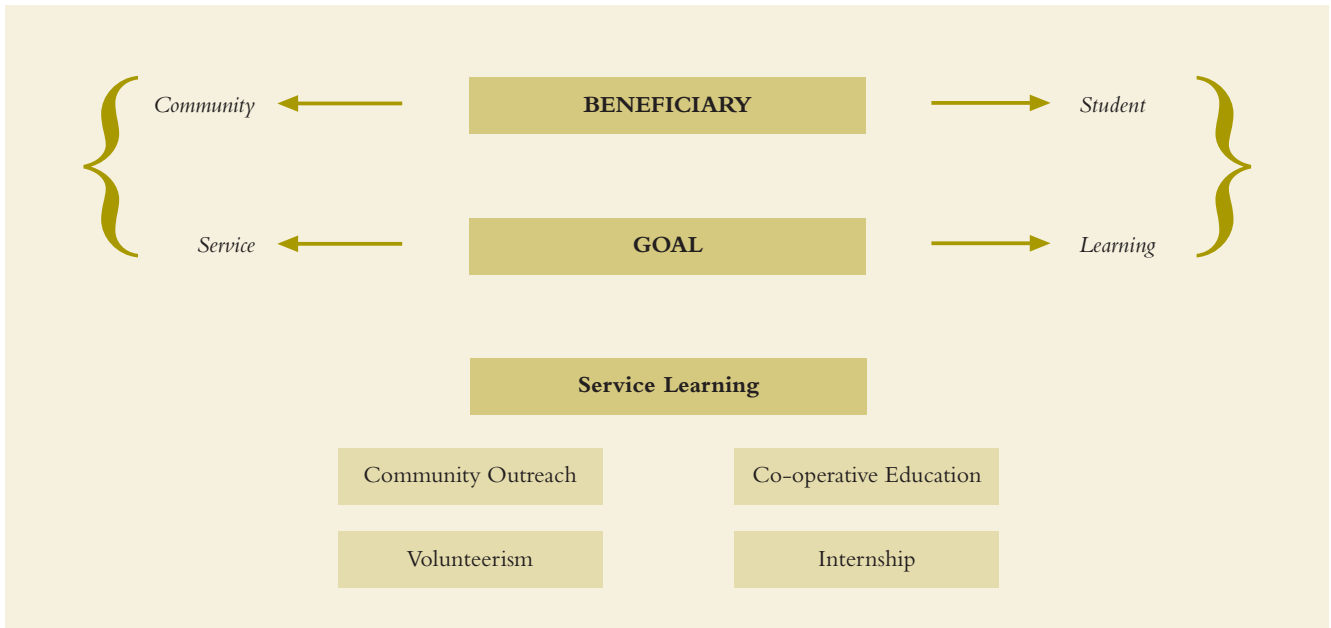
It can be noted that the boundary between the public and private good is sometimes blurred in higher education. Beyond their community service functions (emphasised in this chapter), HEIs also perform services in meeting the needs of industry, government and civil society, for example through HEI-industry partnerships which are increasingly recognised as a necessary condition for innovation and competitive engagement with the global economy. This aspect of higher education is more fully examined in Chapter 9 (Responsiveness).

7.1 *A Typology for Community Service in Higher Education*

An possible obstacle to integrating community service as a core function of the academy is the way 'service' is understood (or misunderstood), and applied within higher education. It is therefore helpful to clarify some of the interpretations and applications of 'service' at the outset, in order to reflect more meaningfully on its development in South African higher education after ten years under democracy.

Terms used to describe forms of community service in higher education are illustrated in Figure 30. The forms of community service are differentiated along a continuum determined by two important distinctions: (i) who the primary *beneficiaries* of the service are (i.e. community or student); and (ii) what the primary goal of the service is (i.e. community service or student learning). Figure 30 also shows that categories are neither necessarily discrete nor mutually exclusive. First, a characteristic common to all categories is that they include a measure of experiential learning. Second, boundaries between volunteerism and community outreach; internship and cooperative education; community outreach and service-learning; and cooperative education and service-learning, are often blurred and programmes may shift one way or the other on the continuum. Discussion in this chapter will focus on categories of community service that fall on the left of the continuum.

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Figure 30: Distinctions among Service Programmes ⁴**7.1.1 Volunteerism**

Volunteerism engages students in activities whose primary beneficiary is the recipient *community* and whose primary goal is to provide a *service*. Although students may learn from the programmes, these are generally not related to, or integrated into, the student's field of study. Volunteer programmes are essentially altruistic, extra-curricular, non-credit-bearing, small in scale, and funded by external donors and through student fund-raising.

7.1.2 Community Outreach/Extension Service

As with volunteerism, community outreach/extension service engages students in activities whose primary beneficiary is the recipient *community* and whose primary goal is to provide a *service*. However, these programmes are initiated from within the HEI by a department or faculty, or as an institution-wide initiative. They involve more structure and commitment from students and may give recognition in the form of academic credit or research publications. Where service activities become more integrated with academic coursework, the programme may move closer to the centre of the continuum to become more like service-learning.⁴

7.1.3 Internships

On the other end of the continuum, internships (*'practicum'*) engage students in activities where the primary beneficiary is the student and the primary goal is student *learning*. Internships are generally fully integrated with the curriculum and are intended to provide students with hands-on practical experience that enhances their understanding of the area of study, achieves their learning outcomes and provides them with vocational experience. Internships are used extensively in many professional programmes such as social work, medicine, education, and psychology.



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7.1.4 Cooperative Education

The primary beneficiary of cooperative education programmes (also called field education) is the *student* and the primary goal is student *learning*. Cooperative education provides students with co-curricular opportunities that are related to but not always fully integrated with the curriculum. The primary purpose of cooperative education is to enhance the student's understanding of the area of study. Cooperative education has been used extensively in technikons throughout South Africa.

7.1.5 Service-learning

South Africa's Joint Education Trust (JET) has defined service-learning as 'a thoughtfully organised and reflective service-oriented pedagogy focused on the development priorities of communities through the interaction between and application of knowledge, skills and experience in partnership between community, academics, students, and service providers within the community for the benefit of all participants'.⁵



Service-learning programmes (also called academic service-learning, academic community service and community-based learning) engage students in activities where *both community and student* are primary beneficiaries and where goals are to provide a service to the community and, equally, to enhance student *learning* through provision of this service. Reciprocity, mutual enrichment and integration with scholarly activities are central characteristics of service-learning.

Unlike other categories of community service, service-learning is entrenched in a discourse that proposes the development and transformation of higher education in relation to community needs. Proponents of service-learning argue that it reconnects higher education to society by making its academic mission more responsive and relevant to the pressing contemporary problems of society.⁶

7.2 The Inheritance in 1994

Prior to the *White Paper* of 1997, there were no policy mandates or directives for community engagement in South African higher education.

Given a dearth of empirical research and social science literature on community engagement in South African higher education prior to 1994 and immediately thereafter, much of the information presented in this section is based on a survey undertaken by JET during 1997 and 1998.⁷ The survey sought to develop some understanding of community engagement and its potential role in South African higher education and to stimulate informed debate around the issue. It included studies of historically advantaged and historically disadvantaged universities and technikons in urban and rural settings and analysed programmes identified in terms of their goals, design, scale, participants and beneficiaries, costs and financing, partners and institutional support, and relationship between the programme and the curriculum. Key findings of the research were:

- The mission statement of most HEIs included the notion of community service.
- No HEIs had a policy to operationalise the community service component of their mission statement.
- Most HEIs had a wide range of community service projects.
- Most projects were initiated by students and academics attempting to address specific community needs, rather than as a deliberate institutional strategy.
- Few projects embraced all three traditional functions of higher education (i.e. teaching, research, and service).

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- Few projects included any form of partnership model in their conceptualisation and implementation.
- In the few instances where projects included teaching, research and service, and where a partnership had developed between participating constituencies, the benefits to community, academics, students and service agencies had been significant.

JET's research identified five categories of community service programmes (links between these categories and the typology already provided are indicated).

Volunteer programmes identified in JET's research (as defined in the typology) included activities organised by the University of Pretoria-based Southern African Student Volunteers (SASVO) and the University of Cape Town-based Students Health and Welfare Centres Organisation (SHAWCO).

Work-study programmes were initiated by external donors during the 1980s with the primary goal of providing disadvantaged students with financial aid. The programmes introduced participating students to on-campus (e.g. library, administration, research) and off-campus (e.g. advice offices, non-governmental organisations) work opportunities that would enhance their knowledge and skills in a variety of contexts. During the 1980s and early 1990s the universities of Cape Town, Natal, and Stellenbosch and the Cape and Peninsula Technikons had well-developed work-study programmes; some were discontinued after needy students gained better access to financial aid.

Community outreach and extension service programmes were probably the major category of higher education–community engagement prior to 1994. In the main, these programmes were initiated by innovative and progressive academic staff in response to the social, economic and political needs of communities at the time. As programmes were coordinated through on-campus 'service organisations' attached to, or formalised in, HEIs, they provided a 'safe haven' during the apartheid years and a conduit for academic staff to apply the expertise of their discipline to community development initiatives.⁸ The approach tended to view social responsiveness as an integral part of academic functions: the University of the Witwatersrand's Rural Facility and the University of the Western Cape's Community Dentistry initiative served as examples of this kind of programme. Sadly, it appears that many of the campus-based service organisations that emerged during the apartheid era were 'forced' to close or switch their focus to serving industry and the private sector in order to survive in the new democracy. This is because sources of funding available to these organisations dried up or were directed elsewhere. Only those organisations with strong ties to the mainstream teaching and research initiatives of HEIs managed to keep their community focus and remain sustainable.

'Placements' were similar to *cooperative education*. In JET's 1997 research, curriculum-related programmes generally referred 'to *internships* integrated into the curriculum which have been a feature of mainstream professional education for many years'. The primary purpose was learning and skills development rather than financial aid or provision of service to the community.

Although the term *service-learning* (as already defined) was seldom used in South African higher education prior to 1997, JET's research suggested that several of the programmes surveyed incorporated most if not all the principles of service-learning.



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7.3 Key Developments Since 1994

During the past ten years, perceptions of the nature and role of community engagement have shifted significantly in a more favourable policy environment.

7.3.1 National Policy Initiatives

The *White Paper* laid the foundations for making community service an integral part of higher education in South Africa, calling on institutions to ‘demonstrate social responsibility ... and their commitment to the common good by making available expertise and infrastructure for community service programmes’. It stated that one of the goals of higher education is ‘to promote and develop social responsibility and awareness among students of the role of higher education in social and economic development through community service programmes’. It showed receptiveness to ‘the growing interest in community service programmes for students’ and gave in-principle support to ‘feasibility studies and pilot programmes which explore the potential of community service in higher education’.⁹



Early national policy initiatives included the Green Paper¹⁰ (1998) on National Youth Service developed by the National Youth Commission (NYC) which calls for the integration of community service into mainstream academic programmes in HEIs throughout South Africa. In 1999, the Southern African Student Volunteers (SASVO) released a Position Paper calling for mandatory community service in higher education. In early 2000, the South African Qualifications Authority (SAQA) formed a Task Group and commissioned a Discussion Document on community service. This aimed to stimulate debate and action within a framework of key conceptual and implementation issues.

As yet, no national policy for community service in higher education has been finalised. However, in December 2000, the Department of Education (DoE) commissioned the development of a policy framework to give expression to the community service mandate of the *White Paper* and to provide direction for the growing interest in, and proliferation of, service-learning programmes in higher education. The policy, still in draft form in mid-2004, was informed by research data generated through more than 200 accredited pilot service-learning courses (see Section 7.3.4.4); and interviews with numerous higher education stakeholders including Vice-Chancellors, DoE officials and student bodies.

Finally, an important support for academically based community service going forward is the link that has been established between this and conceptions of quality in higher education. The Founding Document¹¹ (2001) of the Higher Education Quality Committee (HEQC) identified community engagement as a key area of quality assurance (QA), along with teaching and research. During 2003, a collaborative effort between the HEQC, a number of HEIs and JET generated comprehensive criteria for the QA of service-learning at an institutional and programmatic level.¹² These serve as useful implementation guidelines for the final HEQC criteria published in April 2004.¹³ The HEQC audit criteria call on HEIs to have ‘quality related arrangements for community engagement (which) are formalised and integrated with those for teaching and learning, where appropriate, and are adequately resourced and monitored’. In order to meet this requirement, examples of what might be expected include:

- Policies and procedures for the quality management of community engagement.
- Integration of policies and procedures for community engagement with those for teaching and learning and research, where appropriate.

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- Adequate resources allocated to facilitate quality delivery in community engagement.
- Regular review of the effectiveness of quality-related arrangements for community engagement.

7.3.2 Joint Education Trust Initiatives

Since 1997, the JET has been a major force supporting the development of 'feasibility studies and pilot programmes which explore the potential of community service in higher education' called for in the *White Paper*. During 1997 and 1998, JET conducted a survey of community service in South African higher education, and published its findings in two monographs.¹⁴ Indicative of the importance of this work, the Steering and Research Committees for this survey included a number of senior officials from the DoE, as well as the Minister of Education.

Building on the results of the survey, JET launched its Community–Higher Education–Service Partnerships (CHESP) project in 1999. The purpose of this project has been to support the conceptualisation, implementation, monitoring, evaluation and research of pilot service-learning initiatives and to use the data generated through this process to inform higher education policy and practice at a national, institutional and programmatic level. The initiative was launched with the development of a graduate programme in Community–Higher Education–Service Partnerships registered through the Leadership Centre at the then University of Natal. It has also assisted a number of HEIs to conduct an institution-wide audit of community engagement; develop an institution-wide policy on community engagement; develop a strategy for implementing this policy; and conceptualise and implement a range of accredited academic courses that incorporate the principles of service-learning across a variety of disciplines.



7.3.3 Vice-Chancellors Meeting

In July 2000, the Minister of Education chaired a meeting on community engagement, convened by JET and with participation by Vice-Chancellors, and representatives from the DoE, the CHE and the South African Universities Vice-Chancellors Association (SAUVCA). A range of key issues emerged from this meeting, as follows:¹⁵

- Purpose of higher education: Concern was expressed about the overemphasis on 'education for the market place' and the need for this to be balanced with 'education for good citizenship'. It was suggested that HEIs should revive the notion of civic responsibility through their teaching, research and service programmes.
- Compliance or serious engagement: It was suggested that community engagement should not be optional in South African higher education. However, given the current constraints within HEIs, compliance could be counterproductive. Instead, HEIs should be encouraged and supported to take seriously their responsibility to inculcate the notion of citizenship in students through integrating community service into mainstream academic programmes.
- Add-on or integrated approach: It was agreed that community engagement should not be an 'add on' or purely philanthropic exercise. It should be an integral part of the mainstream teaching and research business of every HEI.



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- **Faculty roles and rewards:** The dominant paradigm of scholarship focuses on and rewards teaching and research. It was agreed that if higher education is to take its reconstruction and development role seriously its leaders will need to promote, support and reward a scholarship of community engagement.
- **Opportune moment:** Given that HEIs are currently facing significant challenges in terms of their own transformation, it was suggested that this might be an opportune moment for institutions to reflect on their own mission and purpose and integrate community service into their teaching and research programmes.
- **Resources:** Given the current resource constraints experienced by HEIs, it was recommended that consideration be given to the allocation of national resources towards a reconstruction and development agenda within higher education. These resources should encourage and support the development of academic programmes that engage in the reconstruction and development of poor communities through teaching, research and service.
- **The role of national higher education stakeholders:** Although government should not necessarily drive the role of HEIs in reconstruction and development, government should provide the necessary encouragement, support and direction. The role of HEIs in reconstruction and development should be reflected in the agenda, plans and policies of government. For example, HEIs' three-year rolling plans should reflect their community engagement agenda.
- **Leadership support:** For the reconstruction and development agenda to take effect in higher education, it would need the vocal, visible and tangible support of top leadership within HEIs.
- **Institutional audits:** All HEIs should be encouraged to do an audit of existing community engagement activities linked to their institution. This audit would contribute towards a national audit on community engagement in South African higher education.



7.3.4 *Higher Education Institution Initiatives*

During the past few years, numerous HEIs made significant progress in integrating academic service-learning into the mainstream academy. Initiatives have fallen primarily into the categories discussed below.

7.3.4.1 *Institutional Audits on Community Engagement*

Numerous HEIs conducted an audit of their community engagement initiatives¹⁶ while others are in the process of doing so. Generally, the results of these audits have concurred with the results of JET's 1997 survey. Most HEIs have a wide range of community engagement initiatives, although these may not be integrated with curricula, and tend to be ad hoc and driven essentially by interested and innovative academics and/or students.

7.3.4.2 *Institutional Policies and Strategies for Community Engagement*

Several HEIs developed institution-wide policies, guidelines and strategies for community engagement and service-learning.¹⁷ While some policies have been approved by the senate of a given institution, others are still in the process of approval. Generally these policies include issues such as: a rationale for community engagement and service-learning; a definition of the HEI's interpretation of community engagement and service-learning; objectives to be achieved through the policy; mechanisms for implementing the policy; staff promotion and rewards pertaining to community engagement; organisational structures and staffing required for implementation; risk management in terms of student placements; and the allocation of resources towards implementation. A number of institutions have identified community engagement through service-learning as a strategic priority and have allocated resources from their central budget towards its implementation.

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7.3.4.3 Organisational and Staffing Structures

Most HEIs that have made significant progress in terms of community engagement have dedicated physical space and financial and human resources towards the implementation of their community engagement policy and strategy. Several institutions have established a central office dedicated to community engagement and service-learning. In most cases, the office falls under the auspices of the Deputy Vice-Chancellor: Academic. The primary functions of these structures are to represent the community engagement agenda at appropriate institutional committees (e.g. academic planning, teaching and learning, research); to facilitate engagement between neighbouring communities, service agencies and the HEI; and to support academic staff with the conceptualisation and implementation of academic programmes that embrace service-learning.

7.3.4.4 Academic Service-learning Courses

Between 2000 and 2004, JET supported the conceptualisation, implementation, monitoring and evaluation of approximately 200 accredited academic courses¹⁸ including 39 academic disciplines across nine HEI campuses involving more than 6 000 students ranging from first year to master's level. All courses were designed to incorporate the principles and practice of service-learning. Academic disciplines included agriculture, architecture, botany, business science, construction management, dentistry, drama, economics, education, engineering, environmental health, fine arts, information technology, language and linguistics, law, library science, medicine, nursing, pharmacology, political science, psychology, radiography, sociology,

theology and zoology. Each course was designed to apply the theory of its discipline to an identified community development priority. These included child and adolescent development, dental technology, entrepreneurship, environmental education, HIV and AIDS education, human rights, information technology, job creation, literacy, local government, rural development, school improvement, skills development, small business development, sport and recreation, sustainable construction and the prevention of violence.

An extensive monitoring and evaluation programme of these courses¹⁹ identified factors that determine the success or failure of academic programmes that include service-learning. In the conceptualisation phase, the critical factors are: the extent to which the course addresses a need perceived as important by the recipient community; the extent to which the course is designed collaboratively with the recipient community and participating service agency;

and the initial feasibility analysis in terms of finances, logistics and readiness of community members and service providers to participate. In the implementation phase, critical factors include student readiness and preparation; appropriate placement of students; preparation of the community for service-learning intervention; alignment of student capabilities and community needs; proper logistical and resource-planning and allocation; integration of the theory of the discipline with the service provided by students; and structured time for critical reflection on both theory and practice.²⁰

Student responses to questionnaires distributed before and after the courses show an overwhelmingly positive attitude towards service-learning. Table 23 summarises the students' attitudes towards and experiences of service-learning. Large percentages of the nearly 400 students surveyed indicated that their course helped to improve their relationship skills, leadership skills and project planning abilities. The fact that these courses also made them aware of cultural differences and opened their eyes to their own cultural stereotypes is just



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as significant. The responses summarised in the table were supported by a large number of rich comments of which the following are a few:

- I acquired important life skills through this course. Through the facilitation skills acquired I have become empowered to such an extent that I now no longer fear to facilitate workshops.
- Community visits empowered me in project planning. The course gave me more training and skills in community development facilitation.
- In a community setting the course made me aware of some of my own stereotypes and prejudices. The work I performed in the community enhanced my ability to communicate my ideas in a real world context.
- I think it is vitally important that courses include learning outside the university. It is the only way to gain some form of experience. It is satisfying to be able to help others with the tools of knowledge that we have gained in engineering.
- I was given a great chance and I am grateful for it. The chance I was given has definitely taught me a lot about myself and my own abilities. I was awakened to the link between the community and learning. I would say that is the best way to learn.

Table 23: Student Experiences of and Attitudes towards Service-Learning

	No.	% Agree	% Neutral	% Disagree
All university courses should involve a community component	393	84	13	3
The course helped to develop my relationship skills	166	78	18	4
Community participation helped to improve my leadership skills	395	76	19	5
The course helped me to learn how to plan and complete a project	393	74	20	6
I benefited with community members from a different cultural background	396	74	22	4
Community work made me aware of some of my own stereotypes	395	71	22	7

7.3.4.5 Criteria for the Quality Assurance of Service-Learning

In addition to collaborative work done with the HEQC and JET on the development of comprehensive criteria for the QA of service-learning, some HEIs have developed – or are in the process of developing – their own criteria for meeting the broad community engagement criteria contained in the HEQC Criteria for Institutional Audits.

7.3.4.6 Community Engagement and Service-Learning Research

The monitoring and evaluation of service-learning courses identified a number of areas requiring more in-depth research to further inform the implementation of community engagement and service-learning in higher education. Current research initiatives include questions about what factors promote or prohibit the institutionalisation of service-learning; what criteria, standards and methods could be used to measure good practice of service-learning; what kind of organisational/partnership structures best facilitate the implementation of service-learning; what are the respective roles of the course convener, community and service partner in service-learning; how is student-learning best assessed in service-learning; what are the

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cost implications of service-learning; what are the benefits of service-learning; and how does service-learning contribute to knowledge production?

7.4 *The Situation in 2004*

Ten years on from 1994, a good number of HEIs have developed an understanding of the potential of community engagement for transforming higher education in relation to societal needs, and for generating graduates with a sense of civic responsibility and an ability to apply the theory of their discipline to local development issues. Many volunteer and community outreach programmes are in operation, while some HEIs have recognised that, if the primary function of higher education is to generate and disseminate knowledge, then service-learning in particular provides the context to inform and enrich both.

National policy initiatives in process have flagged the importance of community engagement and have encouraged feasibility studies and pilot programmes which explore the potential of community service in higher education. Spurred by these initiatives, their own convictions, and assistance from agencies such as JET, numerous HEIs have developed, monitored and evaluated a range of pilot programmes identifying the potential of community engagement as an integral and necessary part of academic scholarship – particularly in the South African context.

As a result of this work, HEIs have at their disposal research instruments to conduct audits of their community engagement initiatives; examples of institution-wide policies and strategies for community engagement; guidelines for good practice of community engagement through service-learning; instruments to measure good practice at an institutional, faculty, departmental and course level; and a wide range service-learning case studies in a variety of academic disciplines as exemplars.²¹

7.5 *Critical Issues and Key Challenges Ahead*

After ten years of higher education under democracy, the achievements with respect to community engagement are relatively small in relation to the overall potential of the contribution that community engagement can make in South Africa. The challenge of enhancing community engagement will require more settled and enabling conditions in higher education. In addition, a key step will be the finalisation of the pending DoE policy framework on community engagement, to provide the necessary impetus and direction to take community engagement to scale.

A perception that community engagement and service are merely add-on, nice-to-have, and philanthropic activities remains a key challenge to its integration as a core function in the academy. Yet, increasingly, scholars who engage their teaching and research practices with community are encouraged and enthused by the

new energy and insights that community engagement infuses into their endeavours. This may be the key to finding approaches that meet the challenge of capacity-building for community engagement. The expertise and materials developed by HEIs who have made significant progress in academically based community engagement, can benefit other HEIs as they endeavour to advance their community engagement agenda. This may be especially true given that the knowledge, skills and experience required to conceptualise

“A perception that community engagement and service are merely add-on, nice-to-have, and philanthropic activities remains a key challenge to its integration as a core function in the academy.”



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and implement a community engagement agenda are different at times from those required to drive other processes within the institution.

The reconstruction and development mandate of South African local government facilitates HEIs' partnering with local government to implement local and regional social and economic development plans. The potential knowledge contribution of HEIs to the implementation of these plans is enormous and, conversely, HEIs can benefit; first, from having a local community context for integrating teaching and research programmes with development priorities and, second, from having access to a wider pool of resources. Yet, as noted at the beginning of this chapter, implementing community engagement poses a range of conceptual and practical difficulties which can render the process slow and painful – even if ultimately liberating. As a first example, effective and sustainable community engagement must rely on partnerships between communities, the academy and service agencies – yet achieving these is complex and time-consuming.



Identifying appropriate partners is one challenge, and building the notion of community is another. Thus, each partner group comes to the table with different histories, values, capacities, power and expectations and will see the proposed service-learning programme through a different lens. While this makes for rich dialogue and potentially transformative discourse and actions, it requires patience, and careful and sensitive brokering and mediation. Frequent turnover of participants at community-based sites may impact on the continuity of the programme and necessitate sustained capacity-building within the community.

As a second example, engaged institutions are often confronted with the need to make decisions they may not have encountered before. Should they appoint community leaders and service providers who contribute to student learning and research as adjunct faculty? Should they provide participating community leaders, local authorities and service agencies with access to campus facilities, such as the library? As a third example, logistical challenges are numerous. Commuting between community-based sites, service agencies and the HEI can be time-consuming and costly for students. Placing students in the community may be difficult when faced with an inflexible academic timetable. Ensuring the safety of students at community-based sites is yet another challenge.



In conclusion, it needs to be said that, unlike in some other academic endeavours, HEIs cannot 'go-it-alone' when it comes to community engagement. Community engagement implies and necessitates 'engagement' with recipient communities, local authorities and service agencies. If the traditional 'boundaries' of the academy are not challenged and stretched through community engagement, this may be a sign that insufficient engagement has taken place.

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CHAPTER 8

QUALITY ASSURANCE

8.1 *The Inheritance in 1994*

In the early 1990s, a systematic and comprehensive focus on quality and quality assurance (QA) in South African higher education tended to be little, or unevenly, developed. This situation was no doubt only to be expected of a higher education system fractured along numerous fault lines. No national framework policy for

quality in all higher education sectors existed. While awareness of QA as an issue for higher education was stirring at three levels (system, sectoral and institutional), awareness in many parts of higher education was still relatively erratically linked

to action. The technikon sector, however, had a system of external QA in place from 1986 and some professional councils engaged in periodic QA in relation to professional programmes and qualifications.



8.1.1 System Level to 1994

In the systemic sphere and with a forward gaze, the National Education Policy Investigation (NEPI) civil society initiative addressed questions of quality within a framework of equity-, access- and development-related concerns for post-secondary education. It placed firmly on the agenda an issue that has continued to demand attention up to the present day, namely the challenge of balancing quality and equity. It concluded that linking conceptions of equity directly to equalisation of resources could impair the overall quality of the system, and so retard economic development. Furthermore, widening access to higher education could lead to excessive levels of government expenditure on the sector or to a set of graduates dramatically skewed towards non-scientific and non-technological fields. NEPI therefore highlighted two questions for future resolution: how could the demands of equity be made consistent with the need for a higher education system of high quality and how could the development needs of the country be met if priority were to be given to the elimination of inequalities in the system?¹

8.1.2 Sectoral Level to 1994

Approaches to quality differed between the university and the technikon sectors. In the university sector, the University and Technikons Advisory Council (AUT) was responsible for approving the offering of new programmes by universities, and it used the criteria laid down in the report NATED-02-116 to consider both the structure and content of new programmes, as well as the suitability of the applying university to offer them. In practice, it tended to treat each university as a certification or QA body in its own right, as was in line with the growing autonomy which universities had achieved in apartheid years. The Committee of University Principals (CUP)² was concerned about wide variation in academic standards and initiated discussions about a QA system for the universities from 1987. It determined that possibilities for the external QA of universities should urgently be further investigated and implemented, although always on the basis of conditions which would reinforce the principle of institutional autonomy.³ In the meantime, quality standards remained fully within the autonomous ambit of individual universities.



In the technikon sector, the Certification Council for Technikon Education (SERTEC) had been established under its own Act in 1986,⁴ although implementation only commenced following the appointment of the first council (1988) and of an executive director (April 1989). The original conception of SERTEC was heavily influenced by the origins of the technikon movement, namely: given their roots as senior technical colleges, technikons remained, even after their declaration as institutions for advanced vocational learning in 1979, subject to central control with respect to syllabus, national examinations and certification by the national Department of Education (DoE). In turn, SERTEC's terms of reference were to ensure equal standards and to certify on that basis. By 1991, when SERTEC began a first four-year cycle of institutional visits, the DoE had handed over responsibility for examinations to the technikons. Furthermore, the SERTEC council had developed a view of the body's role as a quality monitoring one in addition to certification, focusing on programme accreditation via broad peer group evaluation and employing minimum, rather than equal, standards to satisfy employers and professional bodies.⁵ Thus halfway through the first cycle of visits in 1993, SERTEC extended its focus beyond regulations and conditions for examinations, to include issues such as requirements for resource centres, staff qualifications, course content, research and institutional aims, goals and objectives. At this point in the life of SERTEC, technikons tended to question the need for external QA in their sector, particularly given the absence of any equivalent in the university sector.⁶

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8.1.3 Institutional Level to 1994

In this period, universities guaranteed their own quality standards with respect to teaching and learning, assessment and the granting of degrees, in terms of their own Private Acts. In some universities, regular self-evaluation – sometimes combined with external review – was carried out at departmental level, although this could not be labelled a consistent practice across the sector. An external examiner system was also in place at many universities, although this was not always a consistent and credible system. Technikons submitted descriptive reports to SERTEC prior to evaluation visits, focusing largely on compliance with requirements set by the council.

In addition, all higher education institutions (HEIs) had relationships – formal and/or informal, depending on the case – with professional boards and associations in such areas as medicine, nursing, accounting, and engineering. Acts governed all the professional bodies, although their status differed from statutory bodies to regulated voluntary bodies. They were empowered and obliged to carry out functions related to the establishment, development, maintenance, promotion and control of both the educational and practitioner aspects of the profession. Their QA roles were variable but included accreditation of providers; evaluation and approval of courses, programmes and providers; administration of qualifying examinations and competence assessment prior to registration as a professional; setting of standards for registration as a practitioner; and development of codes of conduct for practitioners. Their QA processes by and large comprised self-evaluation by HEIs, a follow-up visit by an evaluation panel and specific interventions to address problems. Their criteria for quality of teaching and learning ranged from the satisfactory nature of the mission statement, through teaching and learning methodologies, methods of assessment, staff qualifications and facilities.⁷ SERTEC quickly involved members of professional bodies and employer representatives in its range of institutional evaluation committees. This encouraged the evolution of a consistent approach to quality issues as far as SERTEC and professional bodies were concerned, although a difference of emphasis in reporting continued in line with the distinct purposes of these bodies.⁸

8.2 Key Developments since 1994

This section focuses on developments relating to QA in the period 1994 to 2001 (a watershed year which marked the establishment of the Higher Education Quality Committee/HEQC). In this period, a focus on quality in higher education became much more prominent, as national policy processes and infrastructural initiatives influenced the emerging QA environment.

8.2.1 System Level to 2001

The National Commission on Higher Education (NCHE) convened a Technical Task Team on Quality and linked its recommendations to both operational developments in the QA field and to management issues in HEIs. It endorsed quality as a key principle for a transforming higher education system, and as the basis for a new relationship between government and sector (including private providers). Accordingly, it stressed the importance of comprehensive, development-oriented external QA for a single, coordinated higher education system with effective planning and monitoring capacity. External QA was, in the NCHE's view, the only way of tackling quality differences across institutions and programmes. It emphasised effective self-evaluation at institutional level as a key feature of the management systems of autonomous institutions. It recommended that the external QA system operate within the framework of the *South African Qualifications Authority (SAQA) Act*;⁹ with an 'HEQC' fulfilling the statutory functions of a Higher Education Council to accredit programmes, and quality promotion handled on an agency basis.¹⁰



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As the policy and legal framework for higher education, the *White Paper* and *Higher Education Act* took up the spirit if not all the detail of the NCHE's findings. The *White Paper* adopted quality as a principle,¹¹ and – consistent with its adoption of principles of institutional autonomy and academic freedom – placed the primary responsibility for QA with institutions.¹² Notwithstanding, it endorsed a QA authority, as a permanent committee of the Council on Higher Education (CHE), to fulfil functions of programme accreditation, institutional audit and quality promotion. The *Higher Education Act* made provision for the CHE to establish a permanent sub-committee to discharge its mandate for quality (the HEQC). In an amendment to the *Higher Education Act*, the HEQC was deemed to be accredited by SAQA as the Education and Training Quality Assurer (ETQA) for the higher education band of the National Qualifications Framework (NQF), with an obligation to comply with SAQA policies and requirements, and powers to delegate QA functions to other appropriate bodies.¹³ Finally, the *Act* allowed private providers to offer higher education qualifications, provided that they registered with the DoE; that their programmes were accredited by the HEQC; and that their qualifications were registered on the NQF by SAQA.¹⁴

SAQA was established as the infrastructural cornerstone of an integrated qualifications framework, and of a coordinated external QA system. SAQA's functions as set out in the *SAQA Act* of 1995 included: registering standards-setting bodies, accrediting QA bodies (ETQAs), and implementing the NQF.¹⁵ Accordingly, SAQA set about developing regulations for National Standards Bodies (NSBs) and ETQAs; requiring all HEIs to 'interim register' their qualifications on the NQF in an outcomes-based format; and establishing procedures for the preliminary accreditation of private providers and their programmes, in the absence of an HEQC which still had to be established.

Sector Education and Training Authorities (SETAs) were established in terms of the *Skills Development Act*¹⁶ by the Department of Labour, in order to monitor education and training in their specific sectors. All SETAs were accredited by SAQA as ETQAs, and many have claimed and were assigned qualifications within the higher education band, usually at NQF level 5, sometimes at NQF levels 6–8. Professional councils continued to exercise their functions within the higher education band as already set out. The significant number of SETA-based ETQAs and professional councils now operating within the band signalled a burgeoning complexity in the realm of QA jurisdiction.

Figure 31: HEQC Mandated Roles¹⁷

Role	Definition
Accreditation (programmes)	- The accreditation of public providers to offer stipulated learning programmes leading to NQF-registered qualifications - The accreditation of private providers to offer stipulated learning programmes leading to NQF-registered qualifications - Collaboration with professional councils and SETAs on the accreditation and evaluation of professional and work-based programmes leading to NQF-registered qualifications
Audit (institutions)	The review and evaluation of the effectiveness of QA policies and systems of all public and private providers of higher education, with particular emphasis on teaching and learning, research and knowledge-based community service arrangements
Quality promotion and capacity development	- The development of a programme of activities to institutionalise a quality culture in higher education and the commitment to continuous quality improvement - The development and implementation of initiatives to build and strengthen the capacity for high quality provision systems at institutional, learning programmes and individual levels

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The Interim HEQC was established by the CHE in June 1999 and published the HEQC Founding Document¹⁸ in 2000. This set out the HEQC's mandated roles (Figure 31), its definition of quality (Figure 32) and its emphases in approach, namely: quality development, accountability for quality, quality partnerships, and the achievement of a balance between quality and equity. The document explained that the HEQC in its preparatory phase would emphasise developmental and capacity-building activities (i.e. a quality improvement role), in order to prepare for rigorous external validation in its operational phase (i.e. an accountability role).¹⁹

Figure 32: HEQC Definition of Quality

Attribute	Definition
Fitness of purpose	Quality within the context of national goals for the higher education system, including equity, access, effectiveness and efficiency (responsiveness)
Fitness for purpose	Quality in relation to a specified institutional mission within a national framework that encompasses differentiation and diversity
Value for money	Quality judged in relation to the full range of higher education purposes set out in the <i>White Paper</i>
Transformation	Quality higher education that develops the capabilities of individual learners for personal enrichment, as well as the requirements of social development and economic and employment growth educational and social effectiveness

To recap the system-level focus on quality in this period: the need for, and the principle of, QA was embedded in the policy foundations of the higher education system, and the case was built for external QA as a key support to higher education transformation and consistent quality of provision. A consensus was reached that QA should remain primarily the role of HEIs themselves in a model combining institutional self-evaluation and external validation by the HEQC. A focus on key elements to be kept in balance emerged, especially with respect to balancing the quality development/improvement and accountability roles of the HEQC, and balancing quality and equity in the system as a whole. An infrastructure for qualifications standards and QA was established and gave early signals of complexity requiring coordination in the higher education system.

8.2.2 Sectoral Level to 2001

Both SERTEC and the CUP (later the South African Universities Vice-Chancellors Association/SAUVCA) responded in this period to signals emerging from national policy and associated processes with respect to the accountability and developmental dimensions of QA; as well as to the internal needs and priorities of their respective sectors. The CUP's search for a QA system for universities led to the establishment of a Quality Promotion Unit (QPU) in January 1995. SERTEC continued to develop its approach and methodology, in line with its evolving conception of its role. (SERTEC had also assumed responsibility for the QA of agricultural colleges and an external evaluator role for technical colleges in Namibia, Lesotho and Zimbabwe.) A summary of the contribution made to the QA environment by the QPU and SERTEC is provided in Figure 33.



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Figure 33: Contribution to the Quality Assurance Environment of QPU and SERTEC, 1994–2001²⁰

	Approach	Evaluation
QPU	- Voluntary, collegially-based audit of university QA systems (not quality <i>per se</i>) - Quality promotion and development in an unevenly-capacitated sector - Self-evaluation and external audit on basis of a manual - Defined quality flexibly but advocated ‘fitness for purpose’, ‘fitness of purpose’ and ‘transformation’ - Terminated activities in 1999	- Created a positive response to quality issues in the universities and provided some useful experience of QA at institutional level - Gave clear and explicit guidelines to support the development of self-evaluation - Defined quality too vaguely and failed to convey its purpose clearly to its constituency - Adopted overly developmental approach - Was vulnerable in a dynamic environment of system transformation
SERTEC	- Shifted emphasis in this period to self-evaluation (initially focused on compliance) - Self-evaluation and external review on the basis of a manual (continually updated in line with expanded focus) - Terminated its activities with advent of HEQC	- Increased the autonomy and credibility of technikons, enabling them to award degrees and facilitating mobility of students - Heightened awareness of QA and standards issues, and of self-evaluation - Highlighted deficiencies and best practices, leading to infra-structural improvements - Built QA capacity - May have set up a conflict between improvement and accountability purposes - Sometimes criticised for lack of clear indicators of evaluation, and mechanistic ‘checklist’ process

By the end of this period (2001), both bodies had ceased their activities and the HEQC assumed responsibility for QA in higher education (including QA of agricultural colleges and the Polytechnic of Namibia, which is evaluated in terms of a three-way agreement between the HEQC, the Polytechnic and the National Qualifications Authority of Namibia).

8.2.3 Institutional Level to 2001

Selected research studies²¹ provide glimpses into institutional quality approaches in this period:

- There was great unevenness in the development of institutional QA and quality management systems (QMS). These ranged from traditional, collegial and unsystematic procedures to strategically managed, policy-driven, centrally coordinated systems, and covered a highly varied range of activities.
- Institutions were implementing QMS in isolation from each other and with hardly any support structures.
- Systems could not be sustained on the ground without institutional vision, leadership and effective resourcing.
- The implementation of QMS was a slow and demanding task and a range of practical concerns faced QA practitioners (lack of QA expertise and capacity; lack of funding; difficulties in operating in a national policy vacuum; negative views by academic staff owing to ignorance of QA purposes).

Thus, notwithstanding the efforts of SERTEC, the QPU and professional councils, and the advent of SAQA, a gap existed between the broad intentions of national policy on quality issues as established in this period, and the individual quality approaches of HEIs as they had taken shape – or failed to take shape – in the course of years, and in the absence of congruent QA frameworks.

8.3 The Situation in 2004

This section focuses on accelerated developments in the quality environment since 2001, as centrally informed by the existence and operations of the HEQC. The HEQC was formally established in 2001; in 2004, its work

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of systems-building is culminating in the finalisation of key policies and frameworks for institutional audit and programme accreditation, and the start of implementation.

The critical backdrop of the HEQC's systems-building work has been a set of major higher education system changes, as set in train by the *National Plan* (e.g. restructuring of the system through mergers and incorporations, rationalisation of programme offerings, new funding formula). In addition, a New Academic Policy (NAP)²² has been drafted (but not finalised). A substantive review of the implementation of the NQF has been undertaken by the DoE and Department of Labour (DoL) – triggered by an attempt to broach the complexity of policy and infrastructure put in place before 2001 – with proposals on the table for a revision of national arrangements for standards-setting and QA.²³

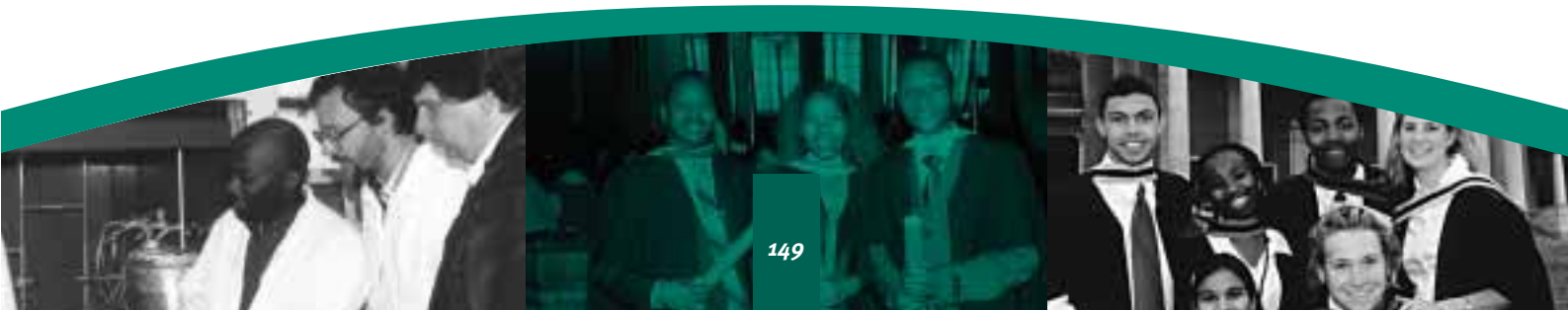
The *National Plan* demonstrated clearly that quality was henceforward to be viewed as one of three principal levers for steering the transformation of the higher education system, alongside planning and funding. For example, equity targets and objectives for higher education could only be met on the basis of quality provision; QA would be a critical component of the 'differentiation' machinery leading to mission and programme mix identification; and – while the *Plan* did not detail the mechanisms for this – the restructuring and implementation of the new funding framework could only be effective in tandem with QA processes in tune with goals of equity and efficiency.²⁴ While the notion of quality as a steering instrument has flowed naturally from a national policy conception of quality as one of the elements in a new relationship between state and institutions, members of the higher education sector have at times sought reassurances that external QA will support their development and not undermine their academic autonomy.

8.3.1 HEQC Approach

The HEQC works within the framework of the mandate established in its Founding Document (see Figure 31 and Figure 32 which summarise HEQC mandated roles and definition of quality). Internationally, it is being increasingly recognised that improvement/enhancement/and accountability functions of QA have to be constantly balanced with one another. This is even more critical in the case of the HEQC, with its intention of addressing the highly uneven capacities of the South African higher education system within a consistent transformation framework. In other words, well-targeted capacity development has been conceived as the underpinning of effective audit and accreditation activities, and the basis on which HEQC requirements can reasonably be met.

The HEQC indicates that it has approached its work with respect for institutional autonomy, and with an intention to assist HEIs in developing their capacity to address quality issues, while simultaneously seeking to impress upon institutions their accountability for quality in a transforming system. The quality environment in South African higher education has acquired a distinctive character as the HEQC has sought to give effect to this balance in terms of philosophical approach, policy development process, policy content, and specific promotion initiatives – including the country's first national QA frameworks and systems.

In terms of process, the HEQC has followed a detailed (and lengthy) course of interaction and consultation with HEIs, higher education role players and stakeholders, to develop consensus and understanding around its key policies (from its Founding Document through to the finalisation of institutional audit and programme accreditation frameworks and criteria). It has engaged institutional representatives directly in its activities and structures.



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Furthermore, it has sought to locate South African higher education quality debates in a broader continental and international context, establishing links with the Association of African Universities (AAU), the International Network of Quality Assurance Agencies in Higher Education (INQAAHE), the UNESCO Global Forum on International Quality Assurance, Accreditation and Recognition of Qualifications, and others; and using these links to put on the agenda the issue of the nature and role of QA in developing countries.

In terms of broad content, the HEQC has developed a focus on the following issues:

- **Development/improvement and accountability purposes of QA:** While some HEIs have voiced support for a primarily developmental emphasis for the national QA dispensation, the HEQC has clearly stated its intention of embracing the creative tension between these purposes, requiring accountability of HEIs and developing their capacity to render it.
- **Fitness of and fitness for purpose (see Figure 32):** While ‘fitness for purpose’ has been an enduring definition of quality in South African higher education over the past 15 years, ‘fitness of purpose’ has been more contested, with some seeing this definition as a potential infringement on their autonomy, while others regard it positively as the natural corollary of the transformation imperative for higher education. The HEQC requires HEIs to address both definitions in its quality approaches. Specifically, it expects HEIs to have in place effective QMS to monitor the implementation of the institutional mission and the mission’s relationship with the national policy environment.
- **Alignment of QA with strategic planning and resource allocation:** The HEQC has emphasised the need for HEIs to design their QA approaches in the context of broader institutional arrangements for planning and budgeting. In particular, it advocates a linkage between issues of quality and institutional planning. This is seen as a fundamental means of facilitating and monitoring the effective achievement of goals as established in the institutional mission (given that the planning process should take account of institutional targets and priorities, special improvement areas, and monitoring of all of these with the support of management information systems).
- **Quality and equity:** In South African higher education, a tension between equity and redress, and quality, is a consequence of apartheid distortions. (See the questions formulated by NEPI under Section 8.1.1.) The HEQC has been alert to this tension and to the challenge of finding an appropriate balance between the elements, through planning development initiatives. It has conveyed to HEIs the necessity of engaging where necessary with the legacies of inequity, lack of opportunity and poor quality provision; and of adapting as far as is possible within their constraints to new knowledge and skills requirements and new modalities of academic provision – particularly where such adaptation is implicit (or even explicit) in the mission choices of a given HEI.
- **Quality management:** The HEQC evaluates HEIs on the basis of criteria for institutional audits (policies, systems, strategies, processes and activities for the quality management of the core functions of teaching and learning, research and community engagement); and programme accreditation (minimum standards to support and enhance the quality of teaching and learning). Under quality management, the HEQC includes a number of dimensions including quality control, quality support, quality development and enhancement, and quality monitoring.
- **Quality of teaching and learning:** While the HEQC addresses all aspects of the core business of HEIs (teaching and learning, research and community engagement), it has placed a particular emphasis on teaching and learning as the heart of the QA enterprise (some might say, redressing the balance of other aspects of national policy which scarcely mention it). In this regard, the HEQC has not only developed criteria which stress teaching and learning but also developed a number of good practice guides.
- **Institutionalisation of a quality culture:** An emphasis on self-evaluation as the cornerstone of QA in public institutions has grown steadily over the past decade (particularly as a result of the activities of SERTEC, the

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QPU and professional councils, and associated capacity-building efforts). The concept may be less well-established in private providers. The HEQC aims to support the development of a self-evaluation culture in all HEIs, as a key element of external QA which encourages HEIs to achieve 'self-accrediting' status for certain of their programmes. In addition, the HEQC promotes a culture of continuous improvement that supports innovation and diversity, and points beyond minimum standards to excellence.

8.3.2 HEQC Systems

In terms of specific policies and related implementation initiatives, the HEQC has focused to date on the following:

8.3.2.1 Accreditation

- **Development of a new accreditation system:** The HEQC has wrought formerly separate accreditation systems (for universities, technikons and private providers) into a single new system with a common set of criteria. The system, to be implemented from 2004, was developed by a working group of specialists and HEQC staff, with advice from a reference group drawing in stakeholder organisations and international experts. It has also been informed by the experiences of the HEQC in the accreditation of programmes of public and private institutions over the past three years. The accreditation system is buttressed by framework policy, accreditation criteria (minimum standards), guidelines and manuals. Essentially, it aims to grant recognition status to programmes that can satisfy the HEQC's minimum standards for provision, or timeously demonstrate their potential to do so; to protect students from poor quality programmes through accreditation and re-accreditation arrangements; and to encourage and support providers to institutionalise a culture of self-managed evaluation that builds on and surpasses minimum standards.²⁵ The new system will focus on new programmes in a two-step process that includes a candidacy phase and a full accreditation phase.
- **Accreditation of programmes of public and private providers since 2001:** Applications have been processed through a combination of activities that included expert evaluations of applications, committee screening for approval, conditional approval or rejection, and occasional site visits. In the interim period preceding implementation of the new system, the applications were processed by the HEQC's Interim Joint Committee (IJC) (universities and technikons), and the Accreditation Committee (private providers). As an indication of volumes: during the period from the beginning of 2002 until the end of June 2004, the HEQC processed 572 applications from public HEIs (including agricultural colleges and the Polytechnic of Namibia) to offer new programmes and qualifications, and accredited 373 (68%); in the same period, the HEQC processed 860 applications from private providers and accredited 445 (52%).
- **Specific re-accreditation initiatives:** Private providers provisionally accredited by SAQA before 2001 were re-accredited by the HEQC during 2002 and 2003. (Details of this exercise have been provided in Section 3.2.4.) This re-accreditation exercise highlighted matters of serious concern, including uncertain correlation between labour market requirements and private programme provision; uneven teaching and learning practices in private institutions owing to factors such as inadequately qualified staff and poor academic infrastructure and support; little knowledge of national policies and regulations; 'HE' qualifications that would more rightly be pegged in the Further Education and Training (FET) band of the NQF; and – for all the aforementioned reasons – qualifications that could not deliver what they promised.²⁶ While the exercise afforded a basis for constructive engagement between private providers and the HEQC, it signalled significant challenges ahead



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in developing quality in the private higher education sector. A second re-accreditation exercise was related to Master of Business Administration (MBA) degrees in both public and private providers. This exercise ended in May 2004, and led the HEQC to grant full accreditation to the MBA programmes of six providers; to grant conditional accreditation to the programmes of a further 12; and to withdraw accreditation from the programmes of ten providers.²⁷ The MBA review has been concluded with the release of a report on the State of MBA Provision in South Africa which analyses the information from the review, and identifies areas for further research and development.²⁸

- **Coordination:** In giving effect to its responsibility for coordination of QA, the HEQC has entered into discussions with professional councils and SETA-ETQAs, with the object of concluding Memoranda of Understanding (MOUs) that will outline the respective QA roles of each and ensure that HEIs are not burdened with multiple QA visits, philosophies, approaches and systems. Up to 2004, these efforts have been significantly hampered by unresolved complexities in the system and conflicting legislation which perpetuates these. The HEQC has developed criteria for a range of partnership and delegation arrangements for the MOUs.



8.3.2.2 *Audit*

- **Development of a system of institutional audit:** As in the area of accreditation, the HEQC has used inclusive consultative processes to develop framework policy, criteria and manuals for institutional audits. The audit cycle begins in 2004. The goals of the audits include: encouraging and supporting providers to maintain a culture of continuous improvement, by means of institutional quality processes that build on HEQC and institutionally-set requirements; enabling HEIs to develop reliable indicators that will assure institutional stakeholders and the HEQC that policies, systems, strategies and resources for assuring and enhancing quality in teaching and learning, research and community engagement are effective; and providing information and evidence that will enable HEIs and the HEQC to identify areas of strength and excellence, and areas in need of focused attention for planned improvement in the short, medium and long terms.²⁹
- **Preparation for institutional audit:** A key aspect of preparations has been the collection of information from HEIs in order to develop an understanding of QA arrangements and issues at institutional level, and an understanding of what audits could involve in terms of expectations and requirements. This was done using a questionnaire in 2001; and a programme of institutional visits to all public, and a sample of private, providers during 2002–2003. Up to this point, information furnished by institutions has been neither ‘evidence-based’ nor systematically collected, and has therefore not been appropriate for the drawing of definitive conclusions. However, these interactions have broadly indicated that while the HEQC has had a mobilising effect on the quality approaches and systems of HEIs, and while they are willing to assume accountability for quality systems, the actual implementation of audit will be crucial to accelerate the institutionalisation of QMS.
- **Pilot audits:** Three pilot audits were undertaken during 2003 at a university, a technikon and a private provider. The pilots furnished a wealth of instructive lessons which were used to finalise the audit framework and criteria. They also sent useful signals to the higher education community (both public and private) about the scope, intensity and seriousness of the audit system, and the need for comprehensive and thorough preparation.

8.3.2.3 *Quality Promotion and Capacity Development*

Although the HEQC has engaged in a number of quality promotion and capacity development initiatives, it is still in the process of finalising a policy framework for this area of work. The HEQC’s work in this area supports and reinforces the work of the audit and accreditation directorates and sends HEIs the clearest signal about the HEQC’s commitment to quality development support.

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- Development by the Improving Teaching and Learning Project of guides for good practice in teaching and learning, identified as a priority need by HEIs: The guides are in the areas of programme development and review, staff and student development, assessment and moderation.
- Project to explore QA in the context of mergers: The HEQC's focus has been to support affected HEIs in managing QA in the context of mergers, and in determining how to prepare for audit and accreditation requirements where HEIs' missions, identities, programme profiles and institutional systems are still evolving. The HEQC project also covers quality issues in programme rationalisation and consolidation, and the development of a new academic programme profile.
- Facilitating discussion, dissemination of information and the sharing of QA experiences: First, this has included sharing experiences and information between all HEIs and the HEQC, through a QA Managers' Forum and other regional and national workshops and discussions. Second, there has been exchange between local HEIs and those from other national systems. Third, opportunities have been facilitated for senior HEQC staff to draw from experiences of other national QA agencies in setting up systems and running institutional audits and programme reviews. In addition, international experts have participated in HEQC site visits, and HEQC staff have observed evaluation activities in other countries.
- Running auditor and programme evaluator training workshops: The HEQC has run a series of such workshops in the last two years, having developed its own training materials and programme after initial assistance from the Australian Universities Qualifications Agency. This has had a significant impact on the system, as participants in the workshops (including deputy vice-chancellors, registrars, deans, heads of schools, and members of professional councils and SETAs) have carried back to their institutions more detailed information about HEQC QA requirements.

8.4 Critical Issues and Key Challenges Ahead

The overview of QA in South African higher education shows that the existence of the HEQC since 2001 has facilitated an accelerated focus on quality across the system. In structural terms this has entailed a shift from an ad hoc and uneven system to a situation in which the HEQC is generating and applying national QA frameworks and criteria across a coordinated system. In doing so, it is giving effect to the key quality-related goals of national

policy; namely, to establish quality as one of the key elements in the relationship between the state and the higher education sector, and as a key support to planning and monitoring, consistency of provision, and effective management in public and private institutions. Now, as the HEQC shifts from systems-building to implementation, a range of challenges lies ahead.

First, from a systemic perspective, and especially in an environment of system restructuring, it is clear that explicit strategic and operational links between planning, funding and QA must be developed and sustained in ways that reinforce the goals of policy, while also enabling HEIs to achieve the benefits of those linkages. The role-players in this task are not only the HEQC and the HEIs, but the DoE as well.

Second, there is a range of difficulties for the QA system that can be defined broadly as the difficulties of a system in flux. They include the continued delay in finalising a new academic policy and, associated with this, the delay in the resolution of the NQF implementation review process; the complexities of academic



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programme and QA/QMS integration associated with mergers; and the difficulty of knowing how to determine quality standards in untried institutional environments – e.g. universities of technology and comprehensive institutions.

Third, it is a key concern for the system and for HEIs, that institutional autonomy be safeguarded in the presence of an external QA dispensation. The approach of the HEQC remains to be tested in practice, although its stated intentions are to balance improvement and accountability roles, and to build a culture of self-managed evaluation to support self-accrediting institutions. However, despite a laudable set of objectives, there may yet be risks and unintended consequences: perceptions of checklist compliance, or an excessive and expensive bureaucracy.

“Academics and students must be successfully engaged in, and committed to, the QA process; the voices and needs of both must be heard; and the quality of their interactions in the context of actual programmes must be fully interrogated if real transformation in higher education is to be achieved.”

Fourth, the equity/quality debate remains an important one. The new funding formula does not reward under-capacitated institutions and these HEIs have to find ways of delivering quality despite their disadvantages. The

throughput focus of the new funding formula leverages the tension between equity and quality in that it may suggest a trade-off is necessary between standards and throughput. Pressure for throughput poses a challenge, for example, for academic development programmes.

Fifth, policy frameworks for QA – no matter how well developed and implemented these may ultimately be – are not enough to secure quality in and of themselves. Academics and students must be successfully engaged in, and committed to, the QA process; the voices and needs of both must be heard; and the quality of their interactions in the context of actual programmes must be fully interrogated if real transformation in higher education is to be achieved.

Finally, and crucially, the institutionalisation of internal quality management and continuous improvement within HEIs remains to be achieved, and a common understanding of QA remains

to be instilled in public and private providers alike. HEQC information – from private provider re-accreditation visits, from one-day institutional visits and other interactions with HEIs, from the MBA review, and from the self-reports of HEIs themselves – suggests that quality approaches at institutional level remain extremely uneven and that HEIs are still in the early stages of implementing their QMS, on the basis of responding to HEQC requirements.

The establishment of the HEQC, its processes of systems development and the beginnings of implementation of external QA have already altered institutional behaviours and operations in relation to quality. Both in the public and private provider sectors, more attention is being given to policies, structures, resources and capacity for QA. Institutional staff responsible for QA are now playing a greater role in planning structures. Initiatives like the MBA review have made the general public, employers and students more aware of quality issues and of institutional responsibilities for quality. The key policy and systems elements for improved quality have thus been established since the setting up of the HEQC in 2001. What remains is for all role-players to ensure that the transformation agenda in higher education benefits from QA, rather than being constrained or weakened by it.



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Chapter Notes and References

- ¹ Strydom, AH and van der Westhuizen, L (2001). A Guide for Institutional Quality Assurance and Management Based on Self-Evaluation in Higher Education. Bloemfontein: Unit for Research into Higher Education, University of the Free State: 10–11; Griesel, H, Strydom, AH and van der Westhuizen, L (eds) (2002). Quality Assurance in a Transforming University System: Lessons and Challenges. Bloemfontein: Unit for Research into Higher Education, University of the Free State: 38–39.
- ² Predecessor sectoral body to the South African Universities Vice-Chancellors Association (SAUVCA).
- ³ Strydom, Kalie (1996). 'A Quality Assurance Model Meeting the Ideals and Realities of South African Higher Education'. In Strydom, AH, Lategan LOK, and Muller, A (eds). Quality Assurance in South African Higher Education: National and International Perspectives. Bloemfontein: University of the Free State Press. The CUP used the term 'accreditation' at the time in accordance with practice in the United States.
- ⁴ SERTEC was established as an autonomous statutory body through the Certification Council for Technikon Education Act of 1986 (Act 88 of 1986). Council on Higher Education/Interim Higher Education Quality Committee (June 2000). An Evaluation of SERTEC and the Quality Promotion Unit: A Report Commissioned by the Interim Higher Education Quality Committee of the Council on Higher Education. Pretoria: Council on Higher Education (CHE): Section 4.1.1.
- ⁵ These changes were duly formalised via the Certification Council for Technikon Education Amendment Act of 1993 (Act 185 of 1993), which extended the functions of SERTEC to that of an accreditation body for both technikons and agricultural colleges.
- ⁶ Information in this paragraph draws on: CHE/HEQC June 2000: Section 4.1; Strydom, AH (September 1998). The Relationship and Connection Between SERTEC of the CTP and the QPU of SAUVCA. (Unpublished paper.)
- ⁷ Council on Higher Education/Higher Education Quality Committee (March 2001). Quality Assurance in Higher Education: the Role and Approach of Professional Bodies and SETAs to Quality Assurance. Pretoria: Council on Higher Education (CHE): 43–50.
- ⁸ CHE/HEQC June 2000: Section 4.1.3.
- ⁹ Already promulgated at the time of the NCHE report: Republic of South Africa (1995). South African Qualifications Authority Act No. 58 of 1995. Notice 1521, 4 October 1995. Pretoria: Government Printers.
- ¹⁰ National Commission on Higher Education (22 August 1996). An Overview of a New Policy Framework for Higher Education Transformation. Pretoria: National Commission on Higher Education (NCHE): Sections 1.3.1 and 1.4.1.
- ¹¹ 'The pursuit of the principle of quality means maintaining and applying academic and educational standards, both in the sense of specific expectations and requirements that should be complied with, and in the sense of ideals of excellence that should be aimed at. These expectations and ideals may differ from context to context, partly depending on the specific purposes pursued. Applying the principle of quality entails evaluating services and products against set standards, with a view to improvement, renewal or progress.' White Paper 1997: Section 1.21.
- ¹² White Paper 1997: 2.69.
- ¹³ Higher Education Act 1997: Section 7.
- ¹⁴ Higher Education Act 1997: Chapter 7. The DoE has made HEQC accreditation a prerequisite for registration. See DoE 2003.
- ¹⁵ SAQA Act 1995: Section 5.
- ¹⁶ Republic of South Africa (1998). Skills Development Act No. 97 of 1998. Government Gazette No, 19420, Notice 1400, 2 November 1998. Pretoria: Government Printers: Section 10.
- ¹⁷ CHE January 2001: Section 9.
- ¹⁸ Council on Higher Education (January 2001). Higher Education Quality Committee: Founding Document. Pretoria: Council on Higher Education (CHE).
- ¹⁹ CHE January 2001: Section 7.

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- 20 Sources include: CHE/HEQC June 2000: Sections 4–6; Brink, JA (undated). Institutional Quality Auditing in the South African Universities: The Experience of the Quality Promotion Unit of the CUP/SAUVCA. (Miscellaneous paper.); South African Universities Vice-Chancellors Association (undated). Quality Promotion Unit: Quality Audit Manual. Pretoria: South African Universities Vice-Chancellors Association (SAUVCA).
- 21 Griesel et al. 2002: Chapter 3; Luckett, K and Kotecha, P (March 2000). An Analysis of Institutional Profiles: Implications for Building a National Quality Assurance System. Pretoria: South African Universities Vice-Chancellors Association (SAUVCA). (SAUVCA Occasional Publications and Reports 1.): Section 3.
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- 23 These effectively propose that the HEQC provide the organisational base for a Higher Education Quality Council with responsibility for higher education standards–generation, qualifications design and quality assurance. See DoE/DoL July 2003.
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CHAPTER 9

RESPONSIVENESS



Responsiveness applies to all the purposes of higher education: teaching and learning, research and community engagement, and the web of interactions between higher education and policy-makers, industry and commerce, local communities and the wider society. A consultation document of the Association of Commonwealth Universities (ACU) has suggested that responsiveness is a thoughtful, argumentative interaction by higher education with the world outside higher education in at least four spheres: setting the aims, purposes and priorities of higher education institutions (HEIs); relating teaching and learning to the wider world; the back-and-forth dialogue between researchers and practitioners; and assuming wider responsibilities as neighbours and citizens.¹



This definition makes it clear that responsiveness is a concept linked to the ‘case’ that has already been made for higher education (Chapter 1). Higher education’s social and public value is related to the links between itself and societal needs: developing a citizenry capable of participating effectively in democratic processes; producing intellectuals who can engage the most intractable problems of society and so develop the ability of citizens to participate politically, economically and socially; and producing high-level skilled graduates and new bases of knowledge to drive economic and social development, and to enhance the overall levels of intellectual and cultural development. Given that notions of responsiveness have application to all aspects of the core business of higher education, the current chapter has conceptual and substantive links to the chapters of this report dealing with teaching and learning (Chapter 5), research (Chapter 6) and community engagement (Chapter 7), and may be read as complementary to these as well as to Chapter 1.

At the outset, it is necessary to signal concern within higher education about a disjuncture that has emerged in recent years. This is a disjuncture between a broad or ‘thick’ notion of the social responsiveness of higher education, and a ‘thinner’ notion – which tends to be increasingly emphasised – that reduces the broader concept to mere market responsiveness. The ‘traditional knowledge responsibilities of universities (research as the production of new knowledge, teaching as the dissemination of knowledge, and community service as the applied use of knowledge for social development) are increasingly being located within the demands of economic productivity and its requirements for particular kinds of knowledge and skills’.² The danger, of course, is that the concept of responsiveness could become emptied of most of its content except for those factors which advance individual, organisational or national economic competitiveness. Yet it is vital in a country like South Africa, where higher education transformation is part of a larger process of democratic reconstruction and development, that social responsiveness not be entirely subsumed to economic responsiveness. The consequences of such a one-dimensional approach could greatly impoverish the broader social role of higher education. The responsiveness of higher education to the general and specific needs of the economy can only be a subset of a more complex and multi-faceted notion of responsiveness.



With this caution prominently raised, it is nevertheless necessary to examine higher education’s ability to satisfy the economic development needs of South African society, especially to produce the high-level skills required by the labour market, and the knowledge required to meet development challenges. This chapter highlights this aspect specifically, given that it is broached only indirectly elsewhere, and given that other chapters already mentioned combine with this one to facilitate an understanding of the ‘thicker’ notion of responsiveness.



The fact that both internationally and in South Africa there has been a trend in recent years to emphasise the economic ‘angle’ on responsiveness has to do with the conceptual connection that is readily made between education and development. The contribution of higher education is increasingly recognised as central by the world’s most knowledgeable, wealthy and socially equitable societies (for reasons more fully explored below). Given the scale of South Africa’s reconstruction and transformation challenges, it is clear that successful outcomes of higher education – in the form of graduate competencies and skills, knowledge and research relevant to social and economic priorities – are critical enablers of equity, democracy and development in this society also.

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When considering responsiveness specifically in the sense of the relation between higher education and economic development, it is apparent that higher education responsiveness is predicated on an effective three-way relationship between government, higher education and industry. To illustrate how this aspect of higher education responsiveness may play out in practice, some of the potential forms of this linkage are suggested:

- Exchange between higher education and the economic sector in respect of academic planning and curriculum development to ensure that the needs of private business and public corporations are comprehensively met (without undermining the traditional educational purposes of higher education).
- Collaboration between business and higher education institutions (HEIs) in research, especially in the areas of science and technology, (without weakening the fundamental knowledge base traditionally provided by higher education). Collaborative mechanisms include the provision by business of grant and contract funding for research, commercialisation of intellectual property produced by HEIs, and sharing of research facilities.
- Collaboration in local or regional economic development.
- Knowledge transfer between the two sectors (e.g. academic consultancy to businesses, and professional upgrading and retraining of employee skills by higher education).
- Work placements for higher education students (experiential, or workplace-based learning).
- Critically, employment of higher education graduates.

While both business and higher education can profit financially from these relationships, their strategic benefits go well beyond the instrumental and immediate and, where relationships are well implemented, have the potential to embrace the social and public interest fully, as is consistent with the case that has been made for higher education's value to democratic societies. 'Business and academia can engage in a dialogue to improve their mutual understanding and address broad issues such as the changing nature and requirements of the world of work; the role of higher education and business in combating social exclusion and in widening opportunities for all; [the ways in which] business and higher education can together tackle some of the major social as well as economic issues of the day; [and] the development of a culture that encourages and rewards enterprise, innovation and lifelong learning.'³

While all of this is true in theory, a key challenge for higher education is to strike the balance that allows it to achieve *all* its social and public purposes in an environment in which there is an increasing tendency to reduce the notion of responsiveness to 'market responsiveness'. While this chapter (as a companion to other chapters) focuses primarily on the relationship between higher education responsiveness and economic development, it also seeks to highlight these attendant dangers.

9.1 The Inheritance in 1994

The responsiveness of South African higher education prior to 1994 is difficult to track, given firstly a paucity of research and information from that period, and more significantly the very nature of apartheid. Apartheid was geared to serve only a minority set of social and economic interests, with resultant specific behaviours: for example, the apartheid state systematically underinvested in human resource development (HRD), and skewed such investment that did occur in order to constrain the potential of the majority of the country's human resources and especially to limit their technical skills.



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Bearing the particular focus of this chapter in mind, three indicative areas of responsiveness (employability, innovation and business–higher education partnerships) are referenced here to suggest the overall picture in the years just prior to 1994.

As an indicator of the fundamental relationship between higher education and business – employability – a Human Sciences Research Council (HSRC) study of graduates between 1991 and 1995 found that 59% of respondents surveyed found employment immediately after obtaining a degree and a further 25% within one year, although with wide variability between groups of respondents. Most successful in finding immediate employment were medical sciences (91%) and engineering (77%) graduates; least successful were graduates in humanities and arts (34%), law (40%) and natural sciences (48%). While 67% of graduate respondents from historically white universities (HWUs) found employment immediately, only 28% of their counterparts from historically black universities (HBUs) were as fortunate; 34% of Coloured graduates immediately found employment, as did 56% of Indian graduates.⁴



With respect to research and development (R&D) and innovation, the overall picture in 1993 was somewhat bleak. South Africa was spending less than 1% of gross domestic product (GDP) on R&D in science and technology and had a trade deficit in high-technology products of over R12 billion a year. The innovative activities of local firms – especially smaller ones – were in many instances not linked to the science councils. Higher education research output was apparently in decline, with five out of 21 universities contributing more than 75% of the total, and the ten historically black universities contributing just 5% of published research output. In 1993, only 7.1% of R&D conducted by HEIs was funded by the private sector. As a more hopeful signal, 1991 had seen the establishment of the Technology and Human Resources for Industry Programme (THRIP) as a consortium and matching grant scheme involving government, industry and the higher education sector. (THRIP made its first research grants in 1994.)⁵ (Section 6.1 provides a much fuller picture of South Africa's research system before 1994.)

One 1998 study made an early attempt to map the relationship between higher education (universities) and business (albeit undermined by a poor response from HEIs themselves). It found that the commonest relationship between universities and business was research but that institutional capacities to engage in research – and other – relationships were extremely uneven. In 1993/1994, 85% of private contracts, gifts and donations for research were received by historically advantaged universities (HAUs), with more than 50% received by the universities of Cape Town, Natal, Stellenbosch and the Witwatersrand. Business was the biggest funder of R&D in South Africa (55%), with 90% of this expenditure directed to research undertaken by business itself, and only 2% directed to HEIs (the remaining 8% went to government projects). The research spend directed to HEIs appeared to be declining, did not incorporate the human sciences, and was largely allocated (80% in 1993/1994) to three HAU's (Cape Town, Natal and Pretoria). Aside from research relationships, other relationships between business and higher education existed to a limited extent (e.g. teaching partnerships, facilities sharing, fund-raising, community services partnerships). While HAU's appeared to be beginning to develop policies to manage such relationships, especially under the impetus of financial pressure to find productive partnerships, historically disadvantaged universities (HDUs) had not yet begun to do so.⁶

Unsurprisingly against this background, assessments of the responsiveness of South African higher education to economic development needs were not flattering in the early years of democracy – as witness a sample of frank views from one round-table discussion between senior business and higher education representatives in 1998.

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- There are too many "universities" and not enough institutions to respond to the country's development needs';
- We pretend to have 21 universities when in fact we do not. Many graduates are excluded from consideration for jobs because they come from such poor quality institutions';
- 'We should honestly acknowledge that the quality of research [in the social sciences] coming out of universities is unimpressive and of declining value'.⁷



Clearly such comments fail to do justice to those arrangements and initiatives that were in place. Professional bodies by definition worked with universities to ensure responsive higher education in their specific professions. Technikons too, by their nature and from their inception, worked closely with industry in crafting relevant curricula and establishing cooperative education relationships (although it is true that technikon enrolments in the early 1990s showed a shift away from science, engineering and technology/SET fields to social sciences, business and commerce).⁸ Generally speaking, however, the tenor of these comments was indicative of a significant systemic gap needing to be closed between higher education and societal needs, including economic development ones.

9.2 Key Developments since 1994

9.2.1 Higher Education Responsiveness and National Policy and Strategy

In policy terms, responsiveness was encapsulated in the four elements of the vision for transformed higher education as set out in the *White Paper* (as well as in the purposes for higher education which are referenced in Section 1.1):

- Equity of access, eradication of unfair discrimination and redress of past inequalities.
- The meeting of national development needs through well planned and coordinated teaching, learning, and research programmes.
- Support for a democratic ethos and culture of human rights by educational programmes and practices conducive to critical discourse, creative thinking, and tolerance.
- Contribution to the advancement of all forms of knowledge and scholarship, especially the demands of location on the African continent.

Policy-makers formulating this vision did so in the context of dual challenges facing higher education: the apartheid legacy and emerging global trends.⁹ Thus higher education was to provide capacities not only for a transforming society, but also for an internationally competitive nation with developmental responsibilities in its continent.

International experience therefore served as a key context for policy-makers seeking to determine how concrete effect should be given to higher education responsiveness. Especially from the mid-1980s on, international experience had shown economic globalisation to be a force behind a changing 'triple helix' relationship between government, business and higher education. In the context of global competition and market influence, industrial innovation had in some cases become as important as teaching, research and community service in HEIs' range of activities, and many governments had encouraged businesses to outsource research to higher education through policies and funding provisions that further stimulated the process. Moreover, the demands of a knowledge-based economy had been seen to apply not only to high technology, but to be just as vital in programmes of poverty relief and the development of markets in communities previously excluded from the benefits of modern innovation.¹⁰



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In South Africa, policy came to emphasise that giving effect to responsiveness would require addressing directly questions of how to ensure that higher education made its necessary contributions to HRD, graduate employability and the national system of innovation (NSI – discussed in the introduction to Chapter 6, and Section 6.2.2). Even before 1994, the National Qualifications Framework (NQF) had emerged as a key idea for an integrated system of education and training in South Africa, oriented to generic skills development and lifelong learning for participation in a global economy. The National Commission on Higher Education (NCHE) and the *White Paper* argued strongly for a closer link between higher education and economic activity. The NCHE highlighted the chronic mismatch between higher education's output and the needs of a modernising economy and argued that greater responsiveness would require higher education to engage with the problems and challenges of its social context. Particular adaptations, in its view, would include changes to the form, content and mode of

delivery of the curriculum; new forms of management and assessment of knowledge production and dissemination; and more dynamic

and more accountable interaction between higher education and the broader society. The *White Paper* highlighted as particular priorities increased numbers of graduates in SET and commerce fields, and teaching and research policies that would give attention to the pressing local, regional and national needs of South African society. It saw global economic and technological changes as shaping an agenda for higher education in reconstruction and development, namely: mobilising human talent and potential through lifelong learning; providing high-level personpower that could match globally equivalent skills with social responsibility; and continuous technological improvement and innovation, driven by a vibrant research and development system integrating the capacities of higher education with the needs of industry and of social reconstruction.¹³



Higher education policy developments at this time were accompanied by other national initiatives with implications for higher education and indicating the complex web of relationships implicit in ensuring an higher education system responsive to economic development needs. These included, for example, the 1996 *White Paper on Science and Technology* and interlinked initiatives conducted under the auspices of the Department of Arts, Culture, Science and Technology (DACST), and the Department of Trade and Industry (DTI). (See also Sections 6.2.2 and 6.2.3.) This pattern of interlocking policy and strategic developments has continued up to the present, sending ample signals of the importance of higher education in contributing to the national supply of high-level personpower, and to a robust NSI. These developments, which provide the essential national context for higher education responsiveness, are summarised below.

- The *National Plan for Higher Education* of 2001 included amongst its strategic goals and objectives, first, the production of graduates with requisite skills and competencies to meet the human resource needs of the country and, second, the building of high-level research capacity. Strategies identified to meet the needs of the labour market included greater participation in higher education; improved graduate outputs; recruitment of non-traditional and international students, especially from the Southern African Development Community (SADC) region; and shifting the balance of enrolments by field of study in favour of SET. Strategies identified to sustain and promote research included specified funding mechanisms through the new funding formula and additional earmarked funds for research capacity-building and collaboration; greater coordination in determining national research priorities and funding between government departments, the science councils, the National Research Foundation (NRF), and others; the establishment of an integrated national database for research; and improvements in enrolments and outputs at master's and doctoral levels.
- The *National Human Resource Development Strategy*¹⁴ of 2001 homed in on the development of high-level skills in SET fields. It counts on the achievement of higher participation rates in higher education and further

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education and training (FET); better distribution of students across study programmes and careers; and the recruitment of foreign skilled workers and placement issues. In its forecast, growth of employment through industrial policies, innovation, research and development will depend on the capacities of higher education to accumulate knowledge and to broaden access to its benefits.

- The *National Skills Development Strategy*¹⁵ of 2000, whose execution is largely the responsibility of the Sector Education and Training Authorities (SETAs) established by the *Skills Development Act* of 1995, focused on skills development in the formal economy and small business sector for productivity and employment growth. Its emphases on access and lifelong learning align with those in the National Plan and underscore the need for effective coordination between education and training in the higher education band of the NQF.
- The *Driving Competitiveness*¹⁶ Framework of the DTI (2001) argued that knowledge-driven activities are critical to secure a competitive edge – even in sectors that are labour intensive.
- The National Biotechnology Strategy of the DACST (2001) argued for greater coordination between the key institutions within the NSI – in particular higher education, industry and government – in order to build appropriate human resources and scientific and technological capacity in biotechnology.
- The *National Research Development Strategy*¹⁷ of the Department of Science and Technology (2002) highlighted amongst other concerns South Africa's 'demographically frozen' and shrinking scientific population (i.e. a largely aging, white male research community, with less than one researcher per 1 000 of this population); and a significant and measurable decline of R&D undertaken by South African companies since 1998. It proposed as strategies the establishment and funding of technology missions crucial to economic and social development (e.g. biotechnology and information technology); the establishment and funding of centres of excellence in areas of basic science where South Africa has natural or knowledge advantages – to be critically leveraged through NRF links to higher education; and the creation of a fully integrated science and technology system.
- The HSRC HRD review of 2003 *Education, Employment and Skills in South Africa*¹⁹ was commissioned by the Department of Science and Technology as strategic research in support of the national HRD strategy. It has identified 'joining up' between state, employers and civil society as a critical strategy for creating and implementing coherent economic and HRD approaches. 'Joining up' and infrastructural investment are needed, in its assessment, in order to solve a range of systemic problems in the youth labour market (inadequate progression from school to employment and other learning opportunities); the workplace (dualism between an advancing high-technology export sector and a larger intermediate-skill middle economy and low-skill peripheral economy); and the national science system (which is weakening in relation to industrialised countries).



- The HSRC 2004 study on the mobility of R&D workers *Flight of the Flamingos*²⁰, commissioned by the National Advisory Council on Innovation (NACI), has reiterated that the South African science and technology system is plagued by the low numbers of learners with higher-grade passes in mathematics and physical science; 'race' and gender inequities; inadequate high-level graduate output; and insufficient funding for postgraduate students and postdoctoral fellowships.

Strategies recommended for addressing national R&D capacity include 'joining up' (as above) and inter-ministerial cluster approaches; the establishment of centres of excellence with the support of industry and international partnerships in order to draw younger researchers into sustainable careers; and promotion



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of exchange and transfer of skills with the rest of the world (e.g. short R&D visits; a human mobility strategy; and strategic decisions as to the optimal mix between importing foreign skills and growing local ones).

This overview of policy and strategic developments since 1994 in areas that broadly delimit the field of higher education responsiveness to economic development needs, indicates at least three things. First, in aiming to address such needs, government, business and higher education must act in the knowledge that South Africa confronts a strongly constrained skills base and limited research and innovation capacity. Second, these fundamental challenges require comprehensively formulated policy and plans. Third, strategies must be collaborative, coordinated and focused. While the initiatives described show that the way is opening up for the three sectors so to act, plan and collaborate, they also make it plain that policy and strategy need to progress to implementation as a matter of urgency.

9.2.2 *Mobilising Higher Education Responsiveness*

The Council on Higher Education (CHE) put the issue of higher education responsiveness on the agenda of its second consultative conference of all national stakeholders in 2000. In part this came out of its own concern – stemming directly from its involvement in the transformation of higher education – to investigate fundamental aspects of the relationship between higher education and the public and private sectors. It was also partly prompted by uncomfortable murmurs about employers' dissatisfaction with the performance of South Africa's higher education graduates. The conference agreed that – consistent with its statutory responsibilities – the CHE should

undertake work conducive to advising the Minister of Education on the nature of the relationships needed between public and private sectors in order to address and contribute to the high-level personpower and knowledge needs of South Africa.

In particular, it was necessary to develop an understanding of the changing requirements of knowledge, skills and competencies in the world of work, and their implications for higher education; as well as the various theoretical and methodological approaches that underpin the issue of responsiveness and the different ways of organising the relationship between higher education and industry derived from them. Accordingly, the CHE commissioned research (2001–2002)



and held a colloquium (June 2002) to discuss the outcomes of its research and to begin a dialogue about the nature, strengths and weaknesses of prevailing relationships between higher education and the public and private sectors. This initiative has served to identify critical issues related to higher education responsiveness in the current environment, as well as to map a potential path ahead; its findings are drawn upon extensively in the rest of this chapter.²¹

9.3 *The Situation in 2004*

The CHE-commissioned research analysed features of the terrain within which responsiveness by South African higher education must be located.

First, despite the relationship between science and technological development and social progress, the evidence strongly suggested that the relationship between educational outcomes and economic growth and social development is not a simple matter of predicting labour demand and supply. Internationally, the relationship between higher education and the world of work is more complex than this, and signals from the employment system appear to be becoming more rather than less ambiguous. In South Africa, one of these areas of ambiguity is the phenomenon of non-absorption of labour. It can be argued that economic growth over the last ten years has not been 'jobless' but rather that jobs have been created in areas that cannot accommodate new entrants to the labour market. In such an environment, the acquisition of higher learning does not equate to improved or equal employment opportunities.²²

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Second, the complex relationship between economic and social development and education was found to have been confounded by incomplete definitions of ‘employability’. The research showed that some consensus may be emerging on the attributes of an employable graduate. A UK study and a South African study came up with similar notions that included traditional intellectual skills (critical evaluation of evidence, application of theory, logical argument); new core skills (communication, information and communications technology, application of numbers, teamwork and improving performance); personal attributes (self-reliance, adaptability, flexibility, creativity); and knowledge about how organisations work. The South African case study found that the match between employer expectations and graduate attributes against these criteria may be imperfect – but it is not clear that HEIs can control this, given the range of socio-cultural circumstances and personal traits that come into play alongside the outcomes of learning.²³

Third, a direct correlation between responsiveness and employability could not be accepted without reservations. The role of higher education remains one that is much greater than responsiveness to the labour market, and higher education’s obligation to the public good lies in responding to the wider societal goal of a socially committed and critical citizenry. Any narrowing of higher education’s remit to the demands of specific and identifiable high-level professions, vocations and careers, places higher education’s intellectual and critical functions at risk. Figure 34 sets out various sectoral perspectives and understandings which emerged from South African research into the link between responsiveness and employability, and which illustrate the contestations in play.²⁴



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Figure 34: Sectoral Views on Responsiveness and Employability in South Africa

	Purpose of higher education	Higher Education/Labour Market Relationship	Definition of Graduateness	Necessary Partnerships	Higher Education/Own Sector Relationship
Public Sector	Contribute to national economic and social development and redress the inequalities of the past	A direct relationship	Preparation for jobs in areas of current scarce skill with generic skills and specialised skills to be immediately effective in the workplace	Internships and placements critical to prepare for employability	Public sector has direct mechanisms for intervention to develop HEIs
Private Sector	Contribute to global competitiveness and development of a knowledge economy, recognising the demands of national development	A direct relationship, taking into account the knowledge production role of higher education	Preparation in generic skills to be immediately effective in the workplace and equipped to create own employment	Collaborative institutional partnerships with industry to ensure employability	HEIs should take initiative to determine demand
Professional Associations	Mould young people in response to what society generally and specifically needs	An indirect relationship mediated by professional associations and employers in a structured process	Curricula should be broadened to include soft skills and the professions should be opened to promote equity and access	Accreditation by professional associations critical to prepare for employment	Professional associations have direct mechanisms to develop HEIs and ensure the profession opens up
SETAs	A partner contributing to the national skills development	A direct relationship	Preparation in life skills to enter the world of work with ease and to become productive rapidly	Consultation of sectoral skills plans critical to prepare for employability	Structured partnerships and linkages with SETAs are desirable and necessary
HEIs	Meet long-term economic and social needs, particularly knowledge production, to contribute to national economic and social development and global competitiveness	A close, but not direct, exclusive, or unilinear relationship	Preparation to enter the labour market and at the same time assume active citizenship in society at large, and ensure future knowledge generation	Internships and work experience to prepare for employability are in tension with traditional academic/ technological roles	Sector is grappling with change and building partnerships unevenly between and within HEIs

Somewhat ironically, while there is a fair degree of information about the extent to which South African HEIs are contributing to the production and dissemination of knowledge, and the induction of learners into knowledge, skills and competencies, very little is known about their contribution to critical citizenship. If notions of responsiveness in South African higher education are to be fully apprehended, then this is clearly an area for further exploration.

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Fourth, the notion of the ‘entrepreneurial’ university was found to be problematic. While HEIs are implored to be entrepreneurial in the face of declining public subsidies, and to act as businesses like any other, there are concerns about unintended consequences for traditional practices of knowledge production, for the nature and trajectory of teaching and learning, and for academic cultures, communities and conduct. Historically disadvantaged HEIs that lacked opportunities in the past to develop strong relationships with the public and private sectors are wary of calls for entrepreneurship as possible new bases of disadvantage and privilege.

Fifth, the research found that there is contestation and potential conflict over the ownership, use and diffusion of knowledge and technology and the rights attached to it. In particular, there is apprehension that closer ties between higher education and industry might emphasise commercially relevant research at the expense of basic and fundamental research. In practice, a balance between applied and ‘blue-sky’ research will be crucial to obviate systematic threats to disinterested research, academic freedom and inquiry across the spread of disciplines.²⁵ These arguments relate to the seeming incompatibilities between industry and higher education with respect to research objectives, policies concerning the disclosure of research findings, ownership of proprietary rights in research and conflicting financial interests.

9.3.1 Further Developments

Following its research and the June 2002 colloquium on responsiveness, the CHE launched a follow-up initiative to explore concrete modes of cooperation between HEIs and public and private institutions and organisations that are employers of graduates and users of knowledge. The initiative aimed to identify new avenues for stimulating the building of relationships and partnerships between the public and private sectors and higher education. A key outcome was the signing of a Memorandum of Cooperation between the City of Johannesburg and the public HEIs that operate within the city (University of the Witwatersrand, Rand Afrikaans University, Technikon Witwatersrand; and – as part of the new institutional configuration – Vista Soweto, Vista East Rand, and UNISA). The agreement was signed at a ceremony at the Johannesburg City Council in November 2003.

A further opportunity to explore dimensions of responsiveness has been afforded by the Higher Education Quality Committee (HEQC) review of Master of Business Administration (MBA) programmes in South Africa. (See Section 8.3.2.1.) To conclude this review, the CHE has published a report on the state of MBA provision.²⁶ Amongst other issues, the report explores:

- MBA graduates’ contribution to business innovation in South Africa.
- MBA programmes’ contribution to social development in South Africa (e.g. the role of the MBA in relation to effective black economic empowerment at corporate level, and in terms of small and medium enterprises; and the extent to which government-sponsored MBA students contribute to the introduction of new practices and perspectives in central government administration).

The release of the report took place at a public meeting where directors of MBA schools, alumni, business leaders and government had an opportunity to engage with some of these issues and identify areas for action. Already there have been suggestions about the need to establish a closer relationship between business and MBA schools, and a more interactive relationship between the HEQC and the South African Association of Business Schools.

The CHE’s work to date in the area of responsiveness is being consolidated, with the intention that policy advice will reach the Minister of Education in late 2004 or early 2005.



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9.4 Critical Issues and Key Challenges Ahead

The analysis suggests that an enduring challenge for higher education in South Africa – as elsewhere in the world – will be to reconcile conceptions of higher education as a public good, with conceptions of higher education responsiveness and accountability shaped by private and particular interests. This overview has shown how sectoral views of higher education responsiveness vary – and hence that the public good role of higher education is not self-evident and may be a bone of contention as higher education seeks to satisfy competing claims. To reiterate: the key pressure that higher education will have to resist is allowing the notion of responsiveness to be reduced to one of pure market responsiveness, rather than encompassing the broader range of societal and economic purposes that higher education has traditionally served, and continues to serve. This in itself constitutes an argument for continuous exploration of the knowledge, skills and competencies required by the world of work, the market and the knowledge economy, the way these relate to the diverse social purposes of higher education, and how they can be integrated into common learning networks for government, business and higher education.

Against this background, exploration would seem to require an ‘outward’ and an ‘inward’ dimension. ‘Outwardly’ the central issue to be addressed in the months and years ahead is the identification of specific mechanisms for constructive collaboration between higher education and public and private sectors. In particular, institutional and organisational partnerships are needed, to supplement the individual partnerships between HEIs and other organisations that have long existed. Relationships can and should be pursued at three levels at least, namely: between HEIs and local government; between HEIs and regional businesses; and between HEIs and economic sectors at national level.²⁷

‘Inwardly’, the higher education sector and its constituent HEIs must continually examine themselves – their internal organisation and their approaches to curriculum development and knowledge production – to monitor the extent of their economic, social, cultural and intellectual contribution to South African society (acknowledging that if they are not responsive private institutions will increasingly take on their functions). The current process of higher education restructuring, which aims to achieve differentiated institutional missions across the system, as well as to create a set of comprehensive institutions capable of drawing academic and vocationally oriented knowledge within one ambit, provides one opportunity for such reflection. Policy emphasis on pursuing regional collaboration opportunities provides another. HEQC insistence on ‘fitness of purpose’ as part of the definition of the quality of higher education provision provides yet a third, as it seeks to tie institutional missions to transformation priorities and local and regional contextual needs.

“...an enduring challenge for higher education in South Africa – as elsewhere in the world – will be to reconcile conceptions of higher education as a public good, with conceptions of higher education responsiveness and accountability shaped by private and particular interests.”

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9.5 HIV and AIDS²⁸

The HIV/AIDS pandemic, of course, has serious implications for South Africa: it compromises the country's ability to respond effectively to the needs of reconstruction and development, challenges economic sustainability, and impacts negatively on the health and psychological well-being of individuals and organisations. For South African higher education too, HIV/AIDS is of enormous significance.

Students enrolled each year at higher education institutions (HEIs) are the lifeblood of the system and its endeavours. These 18- to 30-year-olds are among the most capable and promising members of the society and represent the future high knowledge and skills base of the economy. The same age group is at greatest risk of contracting the HIV-virus: many may enter an institution already infected; others will become infected in the course of their studies, owing to a range of factors that make HEI environments a focal point of social and sexual interaction. The pandemic also affects academic and administrative staff as illness, death, trauma, and reduced capacity to work take their toll.



A Department of Education (DoE) impact assessment carried out in 2000 found that:²⁹

- Infection levels for university graduates were at around 22%; by 2005 this would reach 33%.
- The infection level amongst postgraduate university students was at around 11% and would rise to 21% by 2005.
- The infection level for technikon undergraduate students was close to 24.5% and would increase to 36% by 2005.
- Around 0.7% of university undergraduates had AIDS, and this would increase to 3.7% in 2010.
- About 0.5% of postgraduate students had AIDS, and this would increase to around 4.2% by the end of the decade.



This report has argued strongly for the social and public value of higher education (Chapter 1). In a context where every aspect of society is being affected by HIV/AIDS, HEIs – through their teaching and learning activities – shape the attitudes and practices of future decision-makers. They generate and disseminate new knowledge which may limit and mitigate the effects of the pandemic. Furthermore, HEIs are capable of influencing policy and shaping the national development agenda: research can be leveraged as a decision-making tool, best practice can be advocated, and new standards can be set. Finally, HEIs play a role in the leadership of their communities, representing and defending values which are essential in the fight against HIV/AIDS: openness, freedom of choice, the worth of knowledge, and a belief in the beneficial effects of social and economic progress.

9.5.1 Developments Since 1999

In 1999, a *Tertiary Institutions against AIDS* conference marked a turning-point in HIV/AIDS engagement by education authorities and HEIs. Many institutions had put effort, thought and resources into a wide range of prevention and education strategies over a number of years. However it was clear that the higher education sector was not yet approaching HIV/AIDS systematically or with a consistent sense of priorities. Consequently, the conference rallied the commitment of higher education leaders to respond to HIV/AIDS in a more institutionalised way.



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In May 2000, after an intensive period of consultation within the higher education sector and with experts in the area of HIV/AIDS, the South African Universities Vice-Chancellors Association (SAUVCA) began to assess the extent of responses to HIV/AIDS by the sector, in terms of management, policy, planning and programmes. It established that virtually no data were available, especially as three-year institutional rolling plans, initiated in 1998, required neither planning nor programmatic commitments with respect to HIV/AIDS. SAUVCA launched a project to identify the elements of a comprehensive strategy to address HIV/AIDS at a national and institutional level, and with short-, medium- and longer-term goals.

9.5.2 Higher Education HIV/AIDS Programme (HEAIDS)

In late 2001, with support secured by the DoE from the United Kingdom's Department for International Development (DFID)³⁰, the higher education sector established a nationally co-ordinated capacity-building programme on HIV/AIDS. The Higher Education HIV/AIDS Programme (HEAIDS) involves all public HEIs and is based on a partnership agreement between the DoE, SAUVCA and the Committee of Technikon Principals (CTP). Around 60% of programme funding goes to HEIs in the form of programme grants. HEAIDS aims to mobilise the higher education sector's response to HIV/AIDS through a focus on core functions of teaching and learning, research and service; and through a continuum of interventions, ranging from prevention, through treatment, to care and support.

An audit of all (35) HEIs³¹ conducted by HEAIDS during 2003, found that:

- Only five HEIs had completed a risk assessment of the threat posed by HIV/AIDS to the HEI, and its impact on the HEI workforce; however, nearly half of HEIs planned such a risk assessment in order to support strategic planning processes.
- 30 HEIs had an HIV/AIDS policy. Most had confidentiality and non-discrimination clauses, and some contained clauses prohibiting mandatory and pre-employment testing. Few policies contained clauses relating to plans for managing employees living with HIV/AIDS. Thirteen of the policies contained clauses on the inclusion of HIV/AIDS issues in the curriculum.
- Half of the HEIs had additional financial resources allocated to HIV/AIDS planning and activities. Seven HEIs received additional funding from external donors and/or businesses. Less than 50% featured HIV/AIDS activities in their three-year rolling plans.
- 26 HEIs had voluntary counselling and testing services, and uptake of these services was increasing (more students than staff, and more females than males, used the services). Most of these services were provided free of charge.
- 27 HEIs offered sexually-transmitted infection services. The quality of these services needed attention, especially in terms of ensuring consistent supplies of drugs.
- 25 HEIs had a voluntary, student peer education programme; the most common model delivered both peer education and peer counselling.
- Seven HEIs had a staff peer education programme.
- 30 HEIs had on-site clinic or health services, with 13 offering an after-hours emergency service (few of these services were free, and they were hampered by stock-outs of common drugs and supplies need for management of clients).
- Nearly two-thirds of academic programmes sampled in the audit were attempting to infuse HIV/AIDS issues into their curricula, using such means as core courses and service learning (this was most in evidence in university and undergraduate curricula, and least in evidence in distance education programmes).



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- Nine HEIs had a staff workplace programme in place and ten others were developing programmes. General training on HIV/AIDS for employees was delivered by 25 HEIs; legal training by about half; and training for wardens in student residences by 13.
- Six technikons and eight universities had units dedicated to HIV/AIDS research.
- 25 HEIs (mainly universities) had ethics policies containing reference to the ethics of HIV/AIDS research.

9.5.3 *Future Focus*

The grave challenges posed by the HIV/AIDS pandemic have spurred substantial action on the part of most HEIs. These efforts are the result of own initiative, of the HEAIDS programme, and in some cases of available external resources. The findings of the audit suggest that individual institutions should still address a range of gaps in order to deliver comprehensive approaches across the spectrum of possible interventions (including treatment, and participation in provision of anti-retroviral therapy). Critically, HEIs should ensure that implementation of HIV/AIDS initiatives is linked to strategic planning; and they may need to consider the possibility that the differences between HIV and AIDS could require separate strategic responses in the future. Moreover, HEIs need to give ongoing attention to the integration of HIV/AIDS policy and curriculum development. Finally, HEIs should develop incentives for researchers focusing on HIV and AIDS, and encourage research in areas such as the social and psychosocial impact of the pandemic. Better tracking of research progress and output is also needed, on the one hand to enable effective linkages with teaching; and on the other to maximise HE's knowledge contribution to combating HIV and AIDS.

“The grave challenges posed by the HIV/AIDS pandemic have spurred substantial action on the part of most HEIs.”

Chapter Notes and References

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- 30 From May 2002, Ireland Aid became a joint sponsor of the programme.
- 31 I.e. the audit covered the 35 HEIs constituting the institutional landscape before mergers and incorporations that took effect in 2004.

CHAPTER 10

GOVERNANCE

For the purposes of this overview, governance is defined as the structures and processes of policy design, decision-making and oversight of policy implementation. Such structures and processes occur at both the system level and the institutional level of higher education.

At system level, the central governance dynamic is the relationship between the state and higher education institutions (HEIs), while relationships with and between other role players and stakeholders come into play as well. At institutional level, the key governance dynamic is in the relationships between specified governance bodies, and their relationships with stakeholders.



Thus, by means of its structures and processes, governance encompasses configurations of power, relationships, values and principles. While one element of governance is authority and decision-making – or, at system level more specifically, authoritative steering – this is not its whole substance: it also involves such elements as participation, representation, consultation and negotiation. Higher education governance can be seen as an intersecting terrain where the higher education system as a whole, and individual institutions, converge.¹ This concept is of particular importance for the South African system which, since 1994, has emphasised the public accountability of institutions, while recognising their autonomy and academic freedom (their right to teach and conduct research without outside interference).

Given that the policy and legislative framework of higher education is the critical context within which governance takes place, this chapter on governance, and the chapter dealing with the legal and policy context (Chapter 2), should be read as complementary to each other.

10.1 The Inheritance in 1994

The governance of higher education systems in developing countries has tended to be influenced by one or more models from the West. In particular, the traditions of European nations greatly influenced the configuration of HEIs in the colonies of these countries – and South Africa was no exception. Early institutions such as the South African College and the University of the Cape of Good Hope were dependent on the University of London for the recognition of their qualifications, while their emerging structures and modes of organisation were heavily influenced by Scottish universities. However, early dissension about the medium of instruction led to an initial split between English- and Afrikaans-medium public universities; further divisions by ‘race’ and by ethnic affiliation followed. Eleven public institutions were founded in apartheid ‘bantustans’ and self-governing territories between



1959 and 1988, under the Extension of University Education Act of 1959 which was closely linked in spirit and practice to the Promotion of Bantu Self-Government Act. In addition, colleges of advanced technical education were established by Act of Parliament from 1967, serving as the basis of the technikons movement, which promoted vocational education and training. Fragmentation of institutional types was mirrored by unevenness of governance arrangements and, under the apartheid regime, the relationship between individual public institutions and the state varied considerably.

The ten universities initially reserved for white students enjoyed considerable autonomy as recommended by the Van Wyk de Vries Commission (1973). They were funded with block grants allocated on a notional formula basis according to retrospective student enrolments, research outputs and a number of other factors, and enjoyed a large degree of freedom in the deployment of their block grants in internal budgeting. The four English-medium institutions in this group – the ‘liberal universities’ – emerged as centres of opposition to apartheid policies but were subjected to comparatively little state interference as a consequence. The Afrikaans-medium universities were given equal freedom. It should nonetheless be noted that this autonomy was relative: all historically white institutions had to operate within state structures, the Afrikaans institutions collaborated directly with the apartheid project, and the system as a whole reproduced apartheid social stratification and the ‘racially’ determined division of labour. In contrast, the six universities in the ‘bantustans’ and self-governing territories were specifically designed as extensions of these bureaucracies, with tight controls over the appointment of teaching staff and similar attempts to control the curriculum. Their budgets were line-item extensions of administration budgets, as an integral part of the civil service. The technikons had a nationally controlled and synchronised curriculum, and weak or non-existent traditions of academic freedom. Consequently, the South African higher education system of the 1980s was so idiosyncratic that it defied easy categorisation.²

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The National Commission on Higher Education (NCHE) classified higher education prior to 1994 as a system of state interference:³ more accurately perhaps it was a mixed system of direct state control and pronounced institutional autonomy. Certainly the apartheid state, interacting with higher education in the aim of reproducing its own political and socio-economic system, actually produced contradictory effects. In some cases HEIs acquired a remarkable degree of autonomy and freedom, while in others racist legislation and the use of state security apparatuses turned institutions into ideological and physical battlefields.⁴ Nevertheless, the system was consistently distinguished by the comprehensiveness and scope of the massive social-engineering undertaking which underpinned its purpose and strategies. A complete rupture with the apartheid system had therefore to be the goal of the democratic dispensation after 1994.

10.2 Key Developments since 1994

10.2.1 Public Higher Education Governance

After 1994, two key themes can be discerned with respect to developments in higher education governance. These are consistent with policy imperatives which emerged at this time; namely, responding to the twin challenges of social and economic transformation, and globalisation.⁵ First, higher education governance had to be transformed in order to break the apartheid mould, and in order to meet newly formulated national goals of equity, democratisation, responsiveness and efficiency. Second, South African higher education governance had to be re-integrated with global trends. While these priorities co-existed, changes in South Africa were driven in the first instance rather by local political considerations than by neo-liberal economic policies.

This is in contrast to higher education reform movements in many other parts of the world – e.g. the Americas, Europe, Asia – where quasi-market approaches have been chosen as a means to achieve alignment of accountability

“One of the critical governance challenges with which higher education is wrestling currently is the effective governance of mergers and incorporations.”

and control over higher education. In these countries, higher education has been deregulated and resources competitively allocated, using mechanisms such as incentives and performance funding. A development from state control to state supervision has been promoted, because of a belief that higher education would perform better with the state in a supervisory rather than controlling role. In South Africa, however, the market was not relied upon to correct the injustices and imbalances of apartheid, nor was there a belief that change at individual institutional level would result in a coordinated, equitable and efficient system. Instead

transformation was to be driven by stakeholder participation under the auspices of a supervising state.

Key milestones in the process of reconstructing higher education governance were the publication of the report of the NCHE in 1996, the White Paper and Higher Education Act of 1997, and the release of the National Plan in 2001. In essence, the first three served as the basis for the creation of a single, national coordinated system of higher education and – specifically – delineated a system of ‘cooperative governance’. The fourth has been seen to mark a shift to stronger central regulation, with the nature of policy goals perceived to have altered the model of governance in practice. This is a critical issue in assessing the current state of governance of South Africa higher education, and more is said of it below.



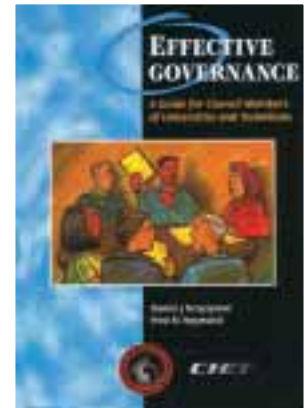
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10.2.1.1 Cooperative Governance in Principle⁶

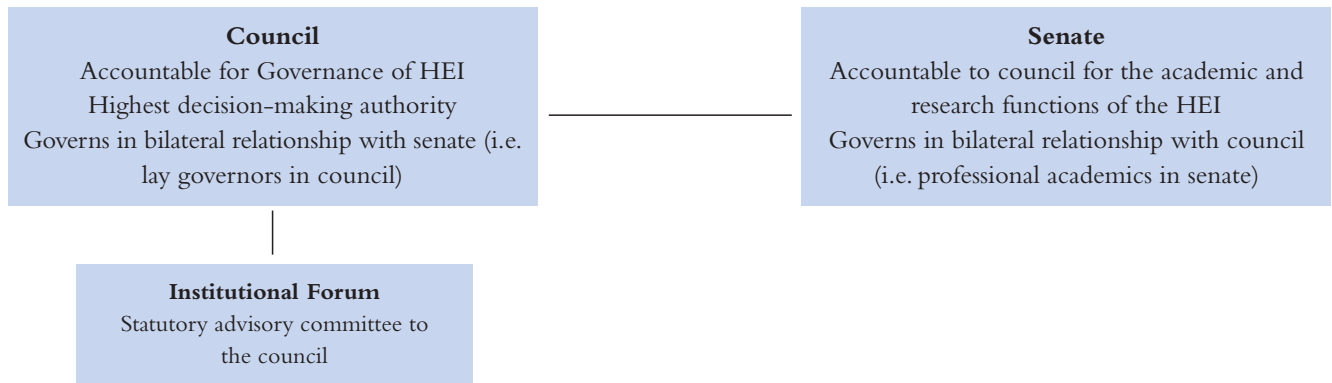
Cooperative governance was developed as a philosophy for higher education governance grounded in the South African constitution. The Constitution declares that all organs of state (whether these be government departments, or any institution exercising a public power or performing a public function) must cooperate with one another in mutual trust and good faith. Accordingly, in the higher education sphere, cooperative governance advocated that while different interests exist and contestation is inevitable, governance should enable cooperative rather than conflicted negotiation of these differences. Given that no single actor could effect change, the responsibilities of governance partners must be clarified and new structures must be established to promote cooperative behaviour. Maximum participation of all stakeholders in as many decisions as possible was seen to be desirable.

At the system level, this meant elaborating a particular relationship between principles of public accountability, institutional autonomy and academic freedom. First, government would adopt a state steering role – i.e. instead of controlling all aspects of higher education from the centre, it would delegate to the institutional level authority over inputs and resource use, while demanding accountability for outputs. (This is the same step taken by many international counterparts, albeit for different reasons, as already explained.) Using a system of state supervision, the state would drive the transformation of higher education, while respecting academic freedom, being transparent and avoiding the micro-management of institutions. Autonomous HEIs would work in a range of cooperative partnerships with a proactive government and with others – including national stakeholder bodies, regional higher education associations, student bodies, business, trade unions and others. While formal responsibility for higher education, and for the allocation of resources, would remain with the national Department of Education (DoE), a statutory Council on Higher Education (the CHE) was established. The CHE was conceived as an independent, expert body to give strategic advice to the Minister of Education on matters of higher education policy, in order to support the effective transformation and development of the system. This special role was seen to make the CHE the logical locus of responsibility with respect to external quality assurance (QA), alongside state responsibility for planning and funding the system. (It can be noted that this conception of the CHE combined two intermediary bodies proposed by the NCHE: an advisory council and a higher education forum, so ‘collapsing’ expertise and institutional interests into one body. In addition, the location of QA responsibility within the CHE – which links it tightly to policy development processes – is unlike other national systems.)

At the institutional level, cooperative governance meant a set of institutional structures and processes which would enable differences to be negotiated in participative and transparent ways, and would support governance principles of democratisation, effectiveness and efficiency. Most critically, institutional governance would comprise a council and a senate in a bicameral relationship. The council would fulfil fiduciary and oversight responsibilities in the public interest, and would include external members in order to do so effectively. The senate, comprising a majority of professional academics, would be accountable to the council for the academic and research functions of the HEI. An institutional forum would be constituted as a representative stakeholder body to advise the council on issues of transformation and institutional culture. Key features of these governance bodies are set out in Figure 35.



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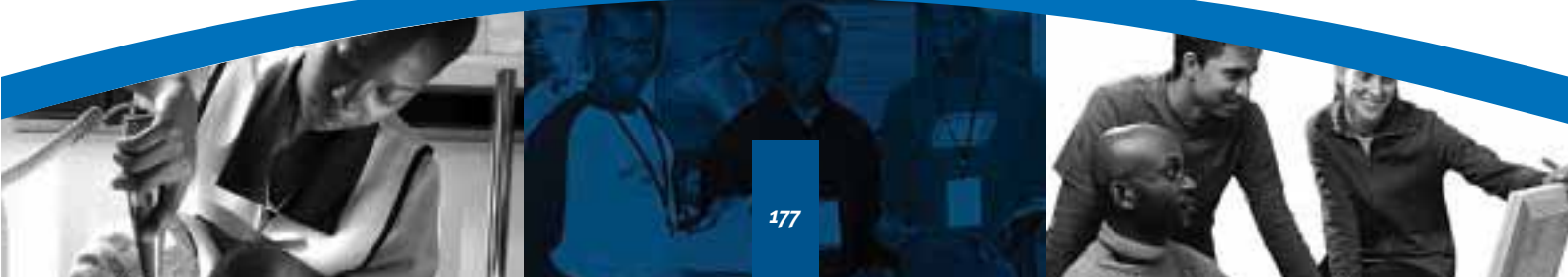
Figure 35: Institutional-level Structures of Co-operative Governance

Structure	Role	Composition
Council	- Accountable for the institutional statute and rules, policy, strategy, establishment and monitoring of key internal processes - Has fiduciary responsibility for the HEI: applies the goals of public policy, is accountable for the use of public funds, and reports on results achieved using formats prescribed by the DoE where necessary - May delegate responsibility by appointing committees (and must appoint key committees, e.g. Audit Committee) - Appoints the VC whom it holds as accountable for the management and administration of the institution - Members of council act in the best interests of the institution and <i>not</i> as mandated representatives of their constituencies	- At least 60% are external (lay) members – i.e. individuals with a range of competencies and perspectives who serve as trustees of the public interest - Lay governors are appointed by the HEI under processes determined in the institutional statute - Internal members include the VC (principal) and vice-principal/s; senate, staff and student representatives
Senate	Focuses on the maintenance of academic standards and the principle of academic freedom in teaching and research	- Majority of academic members - Balance comprises representatives of council, non-academic staff and students - VC is the chair of the senate
Institutional Forum	- Advises on issues affecting the institution including: - Implementation of legislation and national policy 'Race' and gender equity policies - Selection of candidates for senior management positions - Codes of conduct, mediation and dispute resolution procedures - Fostering of an institutional culture which promotes tolerance and respect for fundamental human rights and creates an appropriate environment for teaching, research and learning	Membership comprises stakeholder representatives drawn from students, staff, management, council and senate (and may include external representatives if so determined by the institutional statute)

10.2.1.2 Cooperative Governance in Practice

As cooperative governance was implemented, it became evident that agreement in principle between actors did not always translate into unity in practice.

At system level the state, through the *National Plan* in 2001, gave a strong signal that in its view voluntary initiative on the part of institutions to transform had been insufficient, had yielded little, and that the period of consultation



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with respect to institutional restructuring was over. This prompted it to adopt a stronger version of state steering than the cooperative governance model had premised. Accordingly, the *National Plan* marked a new watershed in policy development as it turned the spotlight firmly upon policy goals and change implementation strategies, including a revised funding framework to place an emphasis on student throughput, rather than enrolments; central determination of institutional programme and qualifications mixes for funding approval, subsequently given effect through the Programmes and Qualifications Mix (PQM) exercise of the DoE in 2002; regional-level programme collaboration and rationalisation; and restructuring through a process of mergers and incorporations.

Additional indications of a stronger steering model being adopted by the state became apparent in a series of amendments to the *Higher Education Act* (every year since 1999) which gave the Minister powers, for example, to appoint an administrator in troubled institutions (1999); to determine the seat of an institution (2001); and to set limits on institutional capital expenditure and overdrafts (2000). Institutions reacted to these developments with trepidation, believing they detected intensification in the degree and scope of state steering which impinged directly on guarantees of institutional autonomy. Another set of concerns among some stakeholders related to the fact that the emphasis of policy appeared to be moving away from democratisation, equity and redress in favour of an emphasis on efficiency and responsiveness.

At institutional level, failures of 'unity in practice' were also evident and a range of reasons was advanced for this. Firstly, it seemed there might be two distinct notions about democratic priorities in institutional governance. One view held that the priority was to increase the participation of previously excluded groups in institutional governance structures. The other held that the role and functions of governance structures themselves must change to support transformation.

Secondly, even though the *White Paper* and *Higher Education Act* provided some detail on the functions and powers of governance structures such as the council, senate and the institutional forum, they were silent on the role and functions of management; and, crucially, on who must drive and be accountable for transformation. Finally, neither the NCHE nor the *White Paper* predicted that there would be an almost immediate demand for efficiency in the higher education system – given that immediate massification did not occur and enrolments actually dropped after the mid-1990s.

Efficiency improvements in response to this pragmatic reality required strong measures to reduce expenditure, led to staff retrenchments, and generated conflict in a number of institutions in the late 1990s.

These implementation problems did not completely hinder the transformation of institutional governance structures; in addition, governance capacity-building efforts within the sector, such as those implemented for the DoE by the Centre for Higher Education Transformation (CHET), the South African Universities Vice-Chancellors Association (SAUVCA) and the Committee of Technikon Principals (CTP),⁷ provided much-needed support in some cases. By 2001, HEIs had by and large restructured their primary governance structures in line with new legislative requirements and thus accomplished representative structures. In a number of institutions the restructured councils had played central roles in the appointment of vice-chancellors (VCs) within institutions. On the other hand, some developments had been less positive and ran the risk of marginalising academic, student and staff participation. Choices made by HEIs to reconfigure their senates tended to be uneven, and there was an uneasy sense that the central role of the academic sector in governance was being eroded. The implementation of institutional forums had been slow and/or ineffective and, across the board, there appeared to be a lack of clarity and some tensions regarding the



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functions, role and accountability of the major governance structures. As an example, there was some contestation around the appropriate role of the institutional forum, with some stakeholders believing it should adopt the kind of direct role in policy-making that was played by the 'broad transformation forums' convened as a support to legitimating council governance prior to 1994. (The Act in fact stipulates an *advisory* role and not an authoritative one for institutional forums.) In three HEIs (the universities of Fort Hare, the North and Transkei) governance had collapsed altogether, prompting the Minister to request a report in each case by an independent assessor, and followed by the appointment of an administrator to fulfil the governance functions of disbanded councils. Key reasons for governance collapse in these cases included:

- Council failed in its fiduciary role and exhibited weakness by abdicating decision-making power inappropriately.
- Stakeholder groups wielded influence inappropriately and outside the bounds of a properly-constructed institutional forum – either through cooption in terms of patronage, or through inappropriate attempts to dominate the governance process.
- Senates were marginalised.
- The relationship between council and executive management broke down, with significant attribution to failures or abuses by senior leadership, with the breakdown being largely attributed to the failures or abuses of senior leadership.⁸

In May 2001, the Minister of Education requested the CHE to initiate an investigation and advise him on the state of cooperative governance in higher education. Commissioned research culminated in a policy report by the CHE in May 2002, whose substance is summarised in Figure 36.⁹ In essence, the investigation concluded that the vision and principles underpinning cooperative governance needed to be reconceptualised in order better to align with practice; and that consistent good governance at institutional level needed to be promoted through specific revisions to the policy and legislative framework, as well as continued capacity-building efforts.



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Figure 36: Findings of CHE Investigation into Co-operative Governance

Governance Level	Findings and Recommendations
System	- System governance has marked a path from comparatively loose state steering, to intensified state steering effected through procedural controls (e.g. legislative, planning, funding, and academic accreditation controls). - This state of affairs can be described as one of ‘conditional autonomy’,¹⁰ to the extent that, while the substantive autonomy of institutions to teach and conduct research without outside interference must be guaranteed, it is also ‘conditioned’ by procedural controls that allow the state to fulfil its role of directing higher education in the interests of development. - Given developments in practice, the concept of co-operative governance may now confuse policy and inhibit the development of good practice. - The vision and principles underlying public higher education policy should be reconceptualised through an inclusive and participatory process. - State and sector should recognise the in-practice relevance of ‘conditional autonomy’ in order to negotiate to common benefit the consequences of policy.
Institutional	- There is wide variability in the governance capacities of institutions: they satisfy the criteria of democratisation (representivity/public interest), effectiveness and efficiency to different degrees (and, in cases where governance is highly contested, not at all) - Problems in institutional-level governance could be resolved through a range of amendments to the <i>Higher Education Act</i> and to policy, as well as through internal capacity-building efforts which would enable more effective participation in governance - With respect to councils: - Size should be restricted while retaining 60% external membership.¹¹ - Mechanisms should be found to ensure that Ministerial council appointments¹² (or alternatively, endorsements) are effectively implemented. - Council meetings should be held between four and six times a year - Every council should have an executive committee, an audit committee and a council nominations committee - The audit committee must act independently and cannot be chaired by the chair of council - Councils should establish a schedule of delegated responsibilities - Councils should ensure a process for appropriate transparency of council decisions - With respect to institutional forums: - Unlike the council, the institutional forum should be free to debate mandated stakeholder positions where feasible - The chair of the institutional forum should be elected from membership other than representatives of council and the executive - On election, the chair of the institutional forum should become a member of council - The council should be obliged to report to the institutional forum on the implementation of advice received, or reasons for not accepting advice given - With respect to senates: - Institutions should be encouraged to review the composition and functioning of their senates to ensure effective functioning

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10.2.2 *Other Aspects of Higher Education Governance***10.2.2.1 *Regional Cooperation***

Over a number of years, in the various regions of South Africa, public HEIs have established regional consortia on a voluntary basis, as a support to regional collaboration efforts (e.g. shared academic programme offerings, and shared provision of infrastructure in such areas as libraries and information and communications technology). Regional consortia include, for example, the Cape Higher Education Consortium (CHEC, Western Cape), the Eastern Cape Higher Education Association (ECHEA), the Eastern Seaboard Association of Tertiary Institutions (esATI); and the Forum of Tertiary Institutions in the Northern Metropolis (FOTIM).

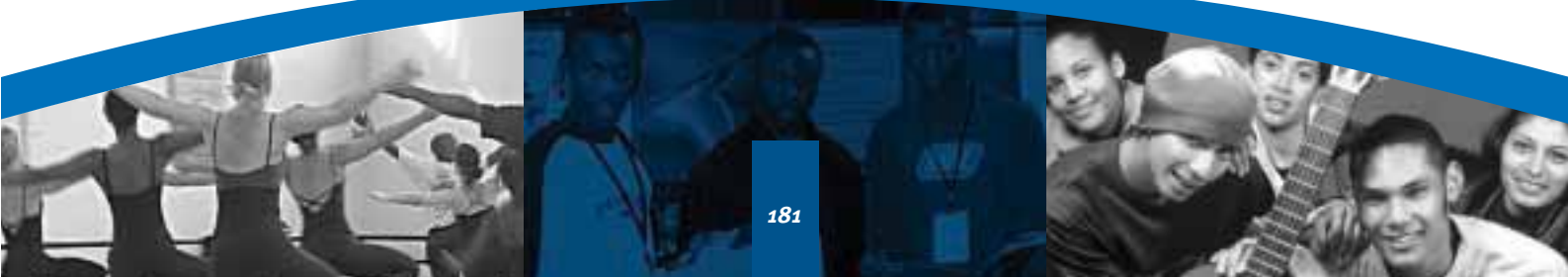
There is no formal level of 'regional governance' in South African higher education. Since 1996, national policy and legislation have set out clear roles for regional collaboration, including providing support to national and institutional planning in a context of transformation and rationalisation, and providing a means to achieve effectiveness and efficiency in the application of institutional resources. Regional collaboration has been viewed as a mechanism for institutional responsiveness to policy goals, although the exact form that collaboration takes has been clearly delineated as the domain of the institutions themselves and there has never been any encouragement for statutory structures at regional level. The state has increasingly employed regional review processes and structures as coordination and clearing house mechanisms, most notably in the cases of institutional three-year rolling plans and the submission of new programmes for funding approval (as of 2002, following the DoE's PQM exercise). Regional consortia and their members have developed, or are developing, their own internal governance arrangements to meet these needs, as well as to take account of governance considerations in the offering of shared or joint programmes.

10.2.2.2 *The Governance of Private Higher Education*

Private provision of higher education has grown steadily over the past 15 years, and the *White Paper* acknowledges that 'private provision plays an important role in expanding access to higher education, in particular in niche areas, through responding to labour market opportunities and student demand'.¹³ The very importance of the private provision of higher education made it necessary to include these providers in a regulatory framework that ensured they would function as part of a single coordinated higher education system serving broader societal needs and upholding quality standards.

Accordingly, private providers are required to register with the DoE; to ensure acceptable academic standards; to ensure the keeping of records and regular audits; and to provide access to audit reports.¹⁴ Specifically, private providers of higher education must submit their programmes for accreditation via the Higher Education Quality Committee (HEQC) as a condition of registration.¹⁵

Internally, the governance arrangements of private providers have typically been based on business, rather than academic, models. However in recent months, exposure to key concepts of public higher education governance – mediated, for example, by the HEQC in visits for re-accreditation and like purposes – has encouraged some providers to reconsider their governance practices and to establish new structures, such as academic boards.



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10.3 The Situation in 2004**10.3.1 The Governance of Merger**

One of the critical governance challenges with which higher education is wrestling currently is the effective governance of mergers and incorporations. Mergers and incorporations approved by Cabinet in December 2002 are being implemented in two phases with effect from 1 January 2004 and 1 January 2005 respectively. Provision is made in the Higher Education Act (Section 23) for a set of formal governance steps to be followed, as set out in Figure 37.

Figure 37: Legislated Phases of Merger¹⁶

Phase 1: Pre-Merger Phase (lasts a minimum of 90 days)

1. The Minister gives written notice to inform councils of affected institutions of the intended merger, and publishes the intention and reasons to merge (Section 23(2)a-b)
2. The affected councils and interested persons have 90 days to respond (Section 23(2)c)
3. The Minister must consider responses (Section 23(2)d)
4. The Minister must consult councils on the date of establishment, type and name, location and address of the merged institution (Section 23(3)b)
5. The Minister must consult the CHE (Section 23(1))
6. The Minister must invite nominations for the interim council from institutions (at least 60 days prior to the publication of the Gazette notice) and appoint interim councillors (Section 23 (12), Section 23(8) and Section 23(13))
7. The merging institutions can still rationalise the workforce according to applicable labour legalisation and agreements (Section 23(2G)) until the date of establishment of the merged institution
8. The Minister publishes a merger notice in the Government Gazette with the date of establishment, type and name, location and address of the merged institution (Section 23(1))

Phase 2: Transitional Phase (lasts up to 12 months from the date of establishment)

9. On the date of establishment of the merged institution (previously announced in the Gazette), the merged institution formally comes into legal being (Section 23(3)b(i))
10. On the date of establishment, the interim council starts its function for 6 to 12 months (Section 23(5 – 6))
11. The interim council governs the merged institution (Section 23(5)) in this period
12. The interim council must appoint an interim management body, and establish institutional governance structures in accordance with the Standard Institutional Statute (Section 23(10))
13. The interim council must ensure a new council is constituted (Section 23(10))
14. All assets, liabilities, rights and obligations of the former institutions devolve upon the merged institution (Section 23(4) [Section 22(1)b])
15. The existing workforce is transferred automatically to the merged institution (Section 23(2A–2F))
16. All academic programmes offered by the former institutions (and the associated rules) immediately before the date of the merger must continue until such programmes and rules are amended or restructured by the new council of the merged institution (Section 23(2H)i)

Phase 3: Integration Phase (from the appointment of the new council)

17. The interim council may carry out its operations until such time as determined by the Minister (maximum of 12 months' existence), whereafter the new institutional council becomes accountable for the governance of the merged institution, and makes an institutional statute

Experience of an early merger (the merger of ML Sultan Technikon and Natal Technikon as the Durban Institute of Technology/DIT with effect from April 2002) and early incorporations (of colleges of education into universities, after 2000; and of the Medical University of South Africa /MEDUNSA faculty of veterinary sciences into that of the University of Pretoria, after 1998) illustrated that 'the origins, forms and outcomes of mergers are conditioned

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by, and contingent on, the specific forms of interaction between institutional micro-politics, on the one hand, and governmental macro-politics, on the other, especially in turbulent or transitional contexts'.¹⁷ In other words, the quality of the relationship between the state and individual HEIs is critical to the resolution of besetting institutional circumstances in particular cases. This is consistent with the finding of the CHE that good governance requires state and sector to negotiate the consequences of policy decisions to common benefit (see Figure 36).

Certainly it is clear that the governance of merger will require customised solutions, as there is unlikely to be any 'one-size-fits-all' pattern. In so far as it is possible to anticipate where state and sector will need to seek mutual clarity on issues of merger governance, early indications are that these could include:¹⁸

- Substantive policy issues:
 - Given that South African higher education restructuring is grounded in policy objectives that seek to break the apartheid mould of higher education, and given that merging institutions and incorporating subdivisions represent the full range of institutional histories and contexts, governance of these processes cannot be reduced to the simple model of takeover that predominates in corporate environments. Although the Ministry has applied the notion of equality to both mergers and incorporations in its communications, it may be dangerous to assume that the Ministry and institutions are at one in their understanding of how the notion of equal partnership is to be applied, especially as far as incorporations are concerned.
 - There is currently some indeterminacy about policy respecting, 'comprehensive institutions' (resulting from the merger of a university and a technikon). The Ministry's merger guidelines promised elaboration of models of academic arrangements in comprehensive institutions, and that this would be done in consultation with institutions.¹⁹ While this process has begun, bones of contention, both general and specific, are likely to emerge – in the debate between state and sector, between merging institutions, in the merged comprehensive institution, or all of the above.
 - Required outcomes at each stage of the merger process may not be coherently understood by the state and the merging institution. As one key example, there may not be aligned understanding of what constitutes 'unitary governance'. While the Ministry has been clear that merged institutions should be governed by one council, one senate and one executive body, negotiations by merging parties may envisage arrangements that are more federal in practice (e.g. campus-level senates in multi-campus institutions).
- Issues of capacity and resources: Although the Ministry has set out a clear and reasonable framework for financing mergers in its merger guidelines, questions remain. These include the quantum of funds available for restructuring, and the impact of the new funding formula on mergers that were determined on the basis of information under the old formula.
- Issues of public accountability: An interesting case would emerge if the governors of an autonomous institution were to find cause (for example, through a process of due diligence), to exert their fiduciary responsibility in *opposition* to a mandatory merger.



At institutional level, it is clear that mergers are intended to contribute positively to the quality of institutional governance across the system. This is to be achieved by the successful negotiation and establishment of institutional



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systems that meet the conditions of good governance (e.g. representivity, effectiveness, efficiency, shared institutional identity); that are unitary; and that have capacity to resolve governance contestations. On the other hand, it is possible to conceptualise in broad terms how disruptions of good governance practice might occur in the process of merger, and to infer how these might ultimately impact on good governance in the merged institution. As examples, the process of merger could result in contested governance in the merged institution under the following conditions:²⁰

- If the process of merger were to unfold without clear agreement between the merger partners on matters of principle and approach, or without necessary agreement by the Minister of Education.
- If the councils of merging institutions were not to exercise to the full their fiduciary duty.
- If pre-merger and interim structures and processes of governance were not to conform to the standards of representativeness, participation, consultation and disclosure established (or aspired to) by the merging institution/s prior to the initiation of the merger.
- If the merger were to proceed without adequate communication to internal and external stakeholders, or without sufficient engagement of the community.
- If decision-making at any stage of the merger process were to be inappropriately concentrated in the hands of a small group at the centre – whether formally (e.g. the interim council) or informally constituted.
- If the basis of authority for decision-making by individuals, or by structures of governance, in the merger process, were not established in law, agreed in principle, or transparent to all.
- If the merger process were to unfold without a clear, agreed and prioritised plan of action.
- If incompatibilities in institutional culture were to translate into policy and system inefficiencies that disable governance after the merger.
- If geographical distance between campuses were to lead to gaps, duplications and redundancies in the administration of the merged institution.
- If the merging institutions (prior to the merger), or the merged institution, were to ignore key developments in the external environment, owing to preoccupation with the process of merging.

Finally, a range of unintended consequences of restructuring are possible at institutional level, and would signal significant diversion from the transformative goals of policy. These are discussed in Section 3.4.

10.4 Critical Issues and Key Challenges Ahead

At the end of the first decade of democracy, South African higher education governance has managed to shake off the notoriously fragmented characteristics that defined it during the apartheid era and to make clear progress towards achieving a single, coordinated higher education system. Challenges undoubtedly remain: ongoing debates

mirror, in particular, a concern to develop appropriate models of governance at the institutional level (including in the process of merger); and a concern to ensure appropriate relationships between the state and the higher education sector as a whole. The latter systemic issue is the one which appears most to require detailed debate, exploration and resolution.

To recap: the apartheid higher education system was entirely rejected after 1994; any remnants of continuation in governance were abandoned; and cooperative governance was intended as the new model of governance. While cooperative governance is clearly a participatory framework, problems encountered in its implementation suggest it gave inadequate guidance on how to make decisions. Participation and cooperation on their own did not lead to greater equity and democracy, and an automatic improvement of higher education. From the late 1990s therefore, central implementation approaches, efficiency and responsiveness have been foregrounded, as

apparent in the *National Plan* (although the vagaries of a market approach to the governance of higher education continue to be rejected). The tension therefore is between an approach that simultaneously emphasises control,



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accountability and performance within a regulatory framework, and a commitment to equity and redress and the participative framework. With stronger state steering, there is a danger that other role players may oppose the intended reforms, or at least feel threatened: institutional anxiety about infringements of institutional autonomy is certainly of this order.

The CHE has advanced the idea that the principles underpinning cooperative governance should be re-evaluated to match new realities. This position is not always shared by other analysts, who argue that no true solution to problems of policy implementation is afforded by simply changing the policy.²¹ On the other hand, some thread of consensus may be emerging with respect to the fact that the roles of state and sector in higher education need to be negotiated in context if transformation is to be genuinely achieved: 'A different notion of higher education transformation, based on a more targeted, differentiated, information-rich policy interaction between government, institutions and society has to be developed. This implies not only a new approach to policy, but even a new notion of the state'.²²

At the heart of the matter remains the need to fully elaborate an understanding of the governance dynamics implicit in a system of higher education that embraces as principles of equal value public accountability, institutional autonomy and academic freedom. Accordingly, a set of key questions to be answered would appear to include:

- What are the appropriate nature and modes of government involvement in higher education transformation?
- What are the appropriate relationships between government (and other bodies with higher education regulatory functions) and HEIs?
- What are the most appropriate conceptions of institutional autonomy, academic freedom and public accountability in the specific context of South African higher education transformation?

The CHE has established (2004) a Task Team of distinguished members of higher education and civil society, with the purpose of enabling a dialogue and building a consensus around these concepts and questions including evaluating claims as to infringement – or non-infringement – of institutional autonomy.

Chapter Notes and References

- ¹ Marginson, S and Considine, M (2000). *The Enterprise University: Power, Governance and Reinvention in Australia*. Cambridge: Cambridge University Press.
- ² Hall, M, Symes, A, Luescher, TM (2002) *Governance in South African Higher Education*. Pretoria: Council on Higher Education (CHE): Section 1.2.3.
- ³ NCHE 1996: 175–6.
- ⁴ Moja, T, Muller, J and Cloete, N (1996). *Towards New Forms of Regulation in Higher Education: the Case of South Africa*. Higher Education Vol. 32. Kluwer Academic Publishers.
- ⁵ The nature of this dual challenge is set out in the Introduction of this report.
- ⁶ Sources for this section: Constitution 1996: Chapter 3, Section 41; White Paper 1997: Chapter 3; Higher Education Act 1997: Chapters 2 and 4.



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- 7 See for example two publications frequently cited by institutions as being of particular value to them in consolidating cooperative governance: CHET's 'handbook' for members of council (Ncayiyana, DJ and Hayward, F (1999). *Effective Governance: A Guide for Council Members of Universities and Technikons*. Pretoria: Centre for Higher Education Transformation (CHET)); and its overview of the functioning of institutional forums and the practices and procedures that render them effective (Harper, A, Olivier, N, Thobakgale, S, Tshwete, Z (2002). *Institutional Forums: An Overview of their Establishment and Functioning at South African Public Higher Education Institutions*. Pretoria: Centre for Higher Education Transformation (CHET)). SAUVCA and the CTP have run a range of initiatives for their members and these are continuing jointly – e.g. the SAUVCA/CTP Higher Education Leadership and Management Programme.
- 8 Full analyses are provided in: Department of Education (1998). *Investigation Conducted at the University of Transkei, Report by Advocate TL Skweyiya SC (Appointed as Independent Assessor in terms of Sections 44 and 45 of the Higher Education Act, No. 101 of 1997)*. Government Gazette No. 19501, 20 November 1998. Pretoria: Government Printers; Habib, A (2001). 'The Institutional Crisis of the University of the Transkei.' *Politikon* 28(2): 157-179; Department of Education (1999). *Investigation Conducted at the University of Fort Hare, Report to the Minister of Education, the Honourable SME Bengu by Emeritus Professor SJ Saunders*. Government Gazette No. 19842, 12 March 1999. Pretoria: Government Printers; Department of Education (2000). *Investigation into the Affairs of the University of the North by the Independent Assessor [Professor T. Nhlapo] appointed by the Minister of Education in terms of Chapter 6 of the Higher Education Act, No. 101 of 1997*. Government Gazette No. 21654, 10 October 2000. Pretoria: Government Printers. Also see: Hall et al. 2002: 99-104
- 9 Council on Higher Education (May 2002) *Promoting Good Governance in South African Higher Education*. Pretoria: Council on Higher Education (CHE).
- 10 Term suggested by the work of Guy Neave and Latin American higher education policy analysts. See: Neave, G (1988). 'On Being Economical with University Autonomy: Being an Account of the Retrospective Joys of a Written Constitution'. In Malcolm Tight (ed). *Academic Freedom and Responsibility*. London: Society for Research in Higher Education and Open University Press: 31-48; Gomes, A (2000). 'Higher Education Autonomy Policy and Brazil: Changing the Relationship between the State and Higher Education'. *Higher Education Review* 32(2): 35-59.
- 11 In 2002, an Amendment to Section 27 of the Higher Education Act limited the size of Councils to 30 members.
- 12 The Higher Education Act makes provision for council members appointed by the Minister (not more than five). Higher Education Act: Section 27(4)c).
- 13 White Paper 1997: Section 2.55.
- 14 Higher Education Act 1997: Chapter 7.
- 15 DoE 2003.
- 16 Figure adapted from Hall, M, Symes, A, and Luescher, TM (2004). *The Governance of Merger in South African Higher Education*. Pretoria: Council on Higher Education: 47.
- 17 Jansen 2002: 157.
- 18 Hall et al. 2004: Chapter 3.
- 19 MoE April 2003: Section 1.1. The process has begun with a concept document produced by the DoE: DoE January 2004.
- 20 Hall et al. 2004: 57-58.
- 21 Moja, T, Cloete, N and Olivier, N (November 2002). 'Would Moving from Cooperative Governance to Conditional Autonomy Contribute to Effective Governance?'. In Council on Higher Education (2003). *Good Governance in Higher Education: Reflections on Cooperative Governance in South African Higher Education*. Pretoria: Council on Higher Education (CHE). (Kagisano CHE Higher Education Discussion Series Issue No 2 (Summer 2003).)
- 22 Cloete, N and Maassen, P (2002). 'The Limits of Policy'. In Cloete, N, Fehnel, R, Maassen, P, Moja, T, Perold, H and Gibbon, T (eds) (2002). *Transformation in Higher Education: Global Pressures and Local Realities in South Africa*. Cape Town: Juta: 447-486: 484-5.

CHAPTER 11

FINANCING



The financing of higher education has three primary elements: the funding of students through the National Financial Aid Scheme (NSFAS); public funding of higher education institutions (HEIs), and the models and mechanisms used for this; and the private income earned by HEIs through a range of channels such as student fees, investments, fund-raising through grants and donations, and various entrepreneurial activities.¹



In South African higher education, which is a mixed system of public and private HEIs, no public funding is made available for private providers. These rely on their own enterprise to remain financially afloat, although the regulatory framework requires them to give evidence of their financial health to government.²

Public HEIs receive a large proportion of their total income from the state, through specific funding mechanisms that are described in the course of this chapter. (The current trend within the system is that HEIs acquire 50% of their finance via public funding.)³ As described in Section 10.2.1, the system of governance requires HEIs to be accountable for their use of public money and to achieve demonstrable results in the public interest with it. Thus, on the one hand, public funding of higher education can be seen as the state's way of fulfilling its obligation to support higher education as a public good; on the other hand, funding provides government with a powerful instrument for steering the system in the direction of specific national policy goals and targets.

11.1 The Inheritance in 1994⁵

A relatively detailed picture of the inheritance of higher education financing is provided here, given that many of these arrangements have survived right up to the present. This is because a key element of the apartheid funding system – its funding formula for historically white universities (HWUs) – was gradually applied to all HEIs between 1985 and 1995, and continued to be so applied up to the end of 2003. Understanding this legacy therefore provides the necessary perspective for understanding the changes that are envisaged through the implementation of a new funding framework from 2004, and associated critiques.

11.1.1 Funding Mechanisms for Public Higher Education to 1994

Funding models and mechanisms for South African public higher education, as originally put in place by the apartheid state prior to 1994, were fragmented in accordance with the system's fragmented institutional landscape (described in Section 3.1) and disparate governance arrangements (described in Section 10.1). At least three sets of funding policies and practices were implemented, as follows:

- **Formula funding:** This form of funding was initially associated with the HWUs. Global amounts available for higher education were allocated to institutions in terms of a formula which contained as input variables full-time equivalent (FTE) student enrolments and as output variables student success rates and research publications. These global amounts could be spent at the discretion of the council of the HEI, and unspent balances could be retained.
- **Negotiated budgets:** This form of funding was initially associated with the historically black universities (HBUs) and technikons. These HEIs submitted 'needs' budgets to a government department, showing expenditure and partial income (student fees). Final approved amounts (approved expenditure less fees) appeared as line items in the department's budget. Expenditure by the HEI had to be strictly in terms of this budget, and unspent balances had to be returned to the government. These funding practices meant that the HEIs built up no reserve and – given that their expenditure budgets were not linked to student enrolments, but rather represented a percentage increase year on year – were not in a position to catch up with institutions funded under the formula system. On the other hand, the funding of the HBUs was generally on a higher level than that of the HWUs: this is confirmed by 'adjustment-factor' values given for 1986 in the explanation of the SAPSE formula below (1.2 for HBUs vs 0.83 for HWUs). This funding differential is significant because, when all HEIs were brought onto the same formula a few years later, funding for HBUs had to be reduced to enable the manoeuvre.



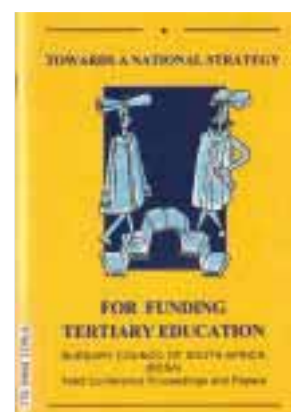
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- **Full funding:** This form of funding was mainly associated with the college sector. In these cases, government departments accepted responsibility for all the costs of an HEI, in the absence of any institutional budget submission and without preparation of independent institutional accounts. Expenditures were taken as those of the relevant government department.

The South African Post-Secondary Education (SAPSE) SAPSE-110 funding formula was developed during 1982–1983 for the 11 HWUs in the system at that time. It was applied from 1984 as administered by the Department of National Education. In 1985, HBUs in South Africa – but not those in the ‘bantustans’ – were also placed on the SAPSE formula as a consequence of pressure for uniformity in funding policies and practices. By special arrangement, the University of Fort Hare (in the Ciskei) was placed on the formula in 1986, and the remaining three ‘bantustan’ universities (North-West, Transkei and Venda) eventually followed suit in 1995. By 1988, an adapted version of the formula was applied to the 12 historically white and historically black technikons (HWTs and HBTs). Adaptations included lower rand values for the technikon cost unit for academic staff, and lower ratios between cost units and subsidy students (see below for an explanation of these terms). They were meant to reflect the different cost structures of technikons as vocationally oriented institutions and thus reinforced the binary divide between university and technikon institutional types.

The SAPSE formula was complex in its make-up and included the following elements:

- **Subsidy students:** Student input variables were composites comprising 50% FTE enrolled students and 50% FTE successful students.
- **Subject groupings:** These were natural sciences (life, physical and mathematical sciences; health sciences; engineering; computer science; agricultural sciences; architecture and building sciences), and humanities (all other disciplines).
- **Course levels:** Subsidy students were weighted at doctoral level by 4; at master’s level by 3; at fourth-year or honours level by 2; and at other levels by 1.
- **Cost units (sometimes referred to as ‘c-values’):** Based on actual 1981 costs of HWUs, ten cost units covered various categories (staff, supplies, services, building renewals, library books and periodicals). These increased each year in line with inflation in the higher education sector.
- **Gross formula totals:** Tables of ratios between cost units and subsidy students in the subject groupings permitted calculation of estimates of the gross subsidy income needed by individual HEIs.
- **Net formula totals:** Income that HEIs had to raise from student fees and other private sources was subtracted from the gross total. The private income portion was determined by institutional size and ranged from 10%–25% (18%–22% for HWUs in the early years).
- **Adjustment factors (‘a-factors’):** This external adjustment on net formula totals brought subsidies paid to individual HEIs in line with the national budget. The a-factors fell during and after the 1980s from a starting point close to 1. As examples, average a-factors for HWUs were 0.83 in 1986, 0.8 in 1989, 0.7 in 1992, 0.63 in 1995; for HBUs: 1.2 in 1986, 0.83 in 1989, 0.68 in 1992, 0.79 in 1995; for all universities: 0.84 in 1987, 0.79 in 1989, 0.67 in 1992, and 0.65 in 1995; for all technikons: 1 in 1986, 0.9 in 1987, 0.71 in 1989, 0.61 in 1992, and 0.62 in 1995.



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The SAPSE formula was underpinned by the principle that both government and the users of the higher education system would cover costs, given that both public and private benefits accrued from higher education. A number of problematic issues became associated with this principle. First, the formula assumed all students were in a position to pay part of the costs of their education, and this was not necessarily true in all cases. Second, the formula treated all HEIs as equal and – unsurprisingly, given the apartheid context – contained no mechanisms to account for unequal fund-raising opportunities across the sector, or to fund the academic development needs of educationally disadvantaged students. Third, although the apartheid state articulated objectives for higher education – for example, with respect to efficiency in the use of resources – the mechanism to achieve this was a combination of ‘rational choice’ and competition. Students and their families as ‘rational agents’ would choose directions of study of most benefit to them and so shape the system as HEIs competed for their attention. In effect, the state’s application of the formula entailed a ‘hands-off’ approach to steering and funding, leaving the higher education system to be determined by the ‘market’.

“...on the one hand, public funding of higher education can be seen as the state’s way of fulfilling its obligation to support higher education as a public good; on the other hand, funding provides government with a powerful instrument for steering the system in the direction of specific national policy goals and targets.”

Given these difficulties in principle, it is unsurprising that the SAPSE formula produced inequitable consequences in practice. This was especially true once the formula was applied to HBUs catering for historically disadvantaged students, as these institutions generated very different expenditure and income data from that on which the formula had been statistically based. As one element of the apartheid system of funding, the formula was not designed to deal with a disparate group of HEIs, and thus, when the pressure came to finance all HEIs in the same way, it would have been better to revise it completely.



As a first difficulty in practice, the formula had the effect of generating and perpetuating institutional inequities. This was because it used output measures and weighting factors in combination with assumptions about the reasonable cost patterns of the ‘average HEI’. On this basis, higher subsidy amounts were available to HWUs that understandably had larger numbers of natural science enrolments, produced better student success rates, had more postgraduate students, produced more research outputs, had better management capacities, and so on. Second, the requirement that HEIs should provide private income did not take into account potential constraints on historically disadvantaged institutions (HDIIs) to increase tuition fees or to locate other external sources of income. Third, the formula encouraged growth which was not financially sustainable – especially as student enrolments increased from the mid-1980s – and which was not linked to issues of quality. Fourth, the a-factors introduced to contain the effects of growth created a climate of financial uncertainty for HEIs, acting as disincentives to creative planning

at institutional level and as incentives to expanding cash reserves, or devising strategies of cross-subsidisation, including distance learning activities. Finally, the formula encouraged larger numbers of cheaper enrolments in humanities, rather than in the more costly natural sciences.

One analysis⁵ has shown that not all funding inequities that developed could be directly attributed to the application of the SAPSE formula, which incorporated some forms of redress of its own. Over and above the fact that a-factors for HBUs were generally higher than for HWUs (as already noted), this analysis observed that, although they were more reliant on subsidy and tuition fee income than HWUs, HBUs were able to increase their total income from 1988 to 1993 by 23% (compared to 5% for HWUs). These facts aside, it was clear by 1994 that

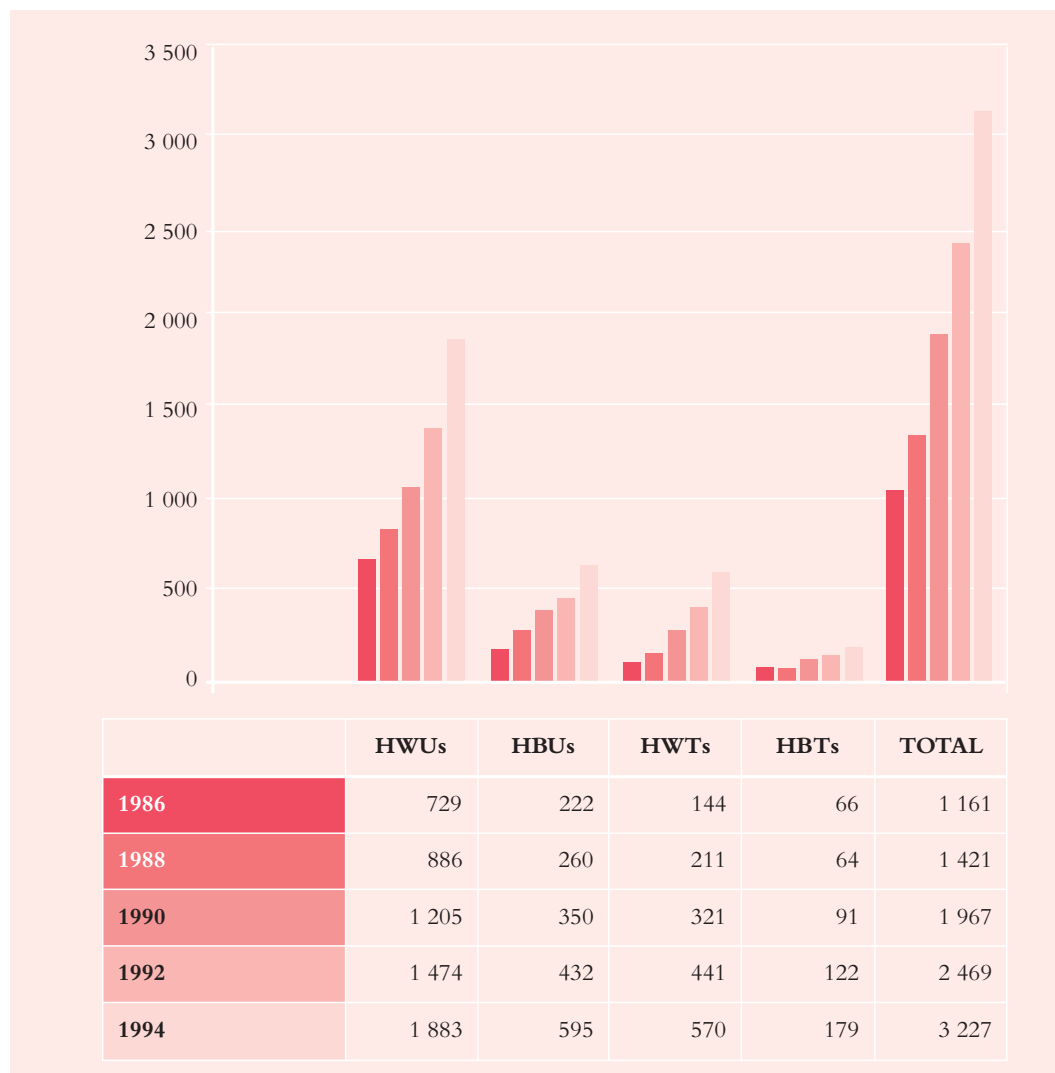
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institutions catering predominantly for historically disadvantaged students were becoming increasingly vulnerable to failures in collecting projected fee income. HDIs as a category fell short of historically advantaged institutions (HAIs) in their ability to generate alternative income from investments, donations, grants and contracts. While all HEIs were operating in an environment of insufficient funds (see below), HDIs suffered more than most from shrinking funding for new buildings and land improvements.⁶ Building backlogs assumed crisis proportions in some of these institutions.

11.1.2 Government Appropriations and Institutional Income to 1994

Government appropriations for higher education increased nearly threefold between 1986 and 1994: from R1 161 billion in 1986 to R3 227 billion in 1994 (Figure 38). However, although growth in nominal rands was 178%, the growth in real rands (i.e. deflated by the consumer price index) was only 3%, owing to South Africa's high inflation rate at the time. Given that student enrolments grew by 73% in the same period, the unit value of government spending per student actually fell sharply.

Figure 38: Government Appropriations for Universities and Technikons (Rands millions), 1986–1994



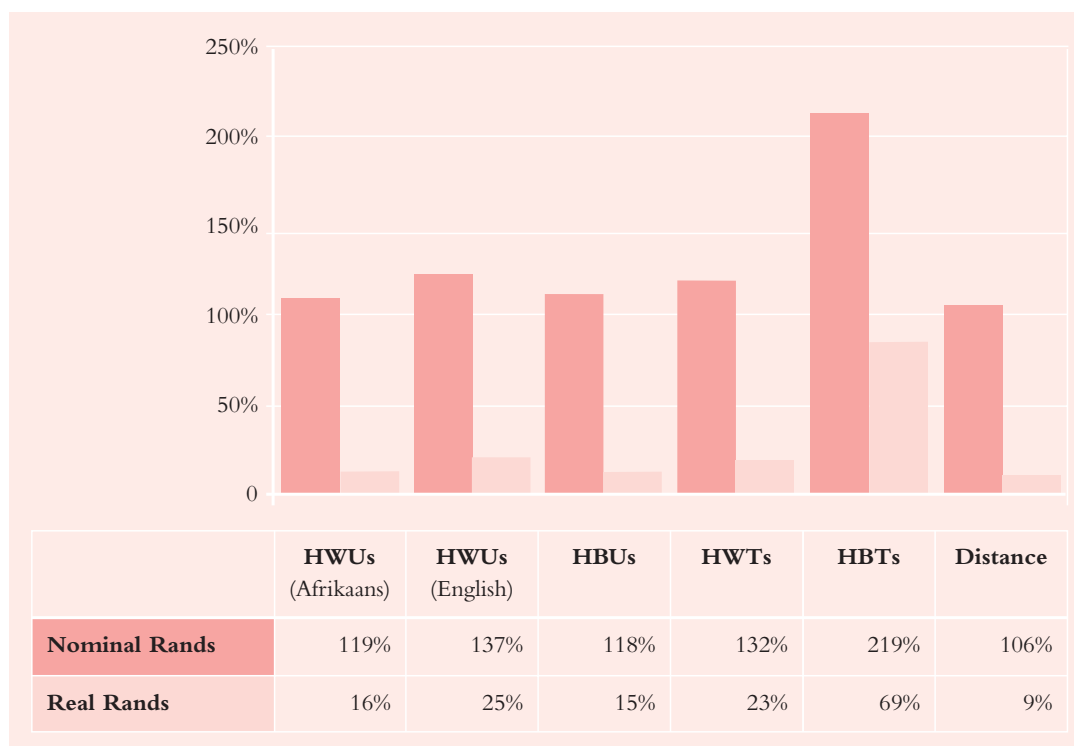
Source: Cloete, Fehnel et al 2002: Chapter 2



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As already indicated, the state's difficulty in meeting financial demands on higher education resulted in falling a-factors, pressure on HEIs to generate private funding sources, and increases in student fees. Accordingly, the proportion of institutional income constituted by government appropriations fell across most sectors in this period: from 54% to 47% for HWUs; from 73% to 49% for HBUs; from 64% to 54% for HWTs; remaining constant at around 63% for HBTs. The burden of student fee increases on individual students is shown in Figure 39.

Figure 39: Increases in Tuition Fees per Student, 1993 compared with 1998



Source: Cloete, Fehnel et al 2002: Chapter 4

11.2 Key Developments since 1994

11.2.1 The Policy Development Process for a New Funding Framework to 2004

The National Commission on Higher Education (NCHE) highlighted those problems and unintended consequences associated with the SAPSE funding formula as already outlined. It recommended in 1996 that 'a new funding framework ... should be developed which is consistent with the principles of equity (including redress), development, democratisation, efficiency, effectiveness, financial sustainability and shared costs'.⁷

Accepting this recommendation, the *White Paper* of 1997 concluded that, as the expansion, transformation and redress of the higher education system would entail additional costs, public funding of the system should be goal-oriented and performance-related. Such a model of funding would be intended to result in more equitable student access; improved quality of teaching and research; increased student progression and graduation rates; and greater responsiveness to social and economic needs. Features of the model would include a simplified mechanism for allocating general-purpose block funding to HEIs on a rolling three-year basis; and increased provision of earmarked funds to achieve specific purposes, including institutional redress and student financial aid. In other words, the basic public funding components of block funding and earmarked funding would be retained, but differently applied. Furthermore, public funding would be conditional on HEIs' providing strategic plans and reporting performance against institutional goals.⁸ The Minister would approve HEIs' three-year rolling plans, and reference these in negotiating a budgetary allocation for higher education with the national Department of

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Finance. Amounts allocated in the national higher education budget would, with the national plan for higher education (see below), and the approved institutional plans, determine the allocation of funds in any given funding year. Thus the *White Paper* gave clear indications that the distribution of public funds to HEIs was intended to change significantly, as the former 'rational choice' model was abandoned in favour of tightly interlinked planning and funding as preferred steering mechanisms. It was also clear that while redress was one of the goals to be achieved through a new funding formula, earmarked redress funds would only be allocated to HEIs for clearly specified and pre-identified purposes (according to the *White Paper*, on the basis of Ministerial audits).⁹

The implementation framework for achieving the vision and goals of the *White Paper* was outlined in the *National Plan* of 2001, which established indicative targets for the size and shape of the higher education system, overall growth and participation rates, institutional and programmes mixes, and equity and efficiency goals, including benchmarks for graduation rates.

The development of a new funding framework for South African higher education proceeded slowly. The Department of Education (DoE) established a Funding Reference Group consisting of knowledgeable persons in higher education to act as its sounding board in the development of a new funding approach; this discussed some key issues in the period prior to the preparation of a first draft of the new funding framework in early 2001.



The Centre for Higher Education Transformation (CHET) and a consortium of four HEIs researched steering mechanisms as part of both block grant and earmarked funding and had an opportunity to present preliminary findings to the DoE.¹⁰ Also under the auspices of the DoE, during 1998 and 1999, a joint finance committee of the South African Universities Vice-Chancellors Association (SAUVCA) and the Committee of Technikon Principals (CTP) developed a comprehensive analysis of the costs of higher education, and the outcomes of this investigation were used in developing the new funding framework.

In March 2001 the DoE released a discussion document on a new funding framework and a revised document was published in November 2002.¹¹ The new funding framework was gazetted in December 2003,¹² following consultation with the

Council on Higher Education (CHE), in August 2003, and with the approval of the Minister of Finance (although as yet in the absence of additional research on potential impacts, recommended by the higher education sector).

As required in terms of the new framework, the Ministry of Education (MoE) subsequently released a statement on higher education funding for the fiscal years 2004/5 to 2006/7. The statement sets out forward determinations of grant totals likely to be available to the public higher education system in this period, and other forecasts¹³.

Details of the new funding framework are provided in Section 11.3.1.

11.2.2 *The National Student Financial Aid Scheme to 2004*

An important development after 1994 was the DoE's establishment of the NSFAS, a type of scheme advocated by the NCHE and endorsed by the *White Paper*. As a mechanism for ensuring that capable students are not excluded by poverty from participating in higher education, the NSFAS has been a widely praised development in higher education financing.

In 1991, the Tertiary Education Fund of South Africa (TEFSA) had been established as a not-for-profit company, administering a national scheme of student bursaries and loans. In 1995, TEFSA was asked to administer the



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NSFAS, whose optimal scope and functioning were being fully researched. In 1999, following a framework report setting out recommendations for the NSFAS model to be implemented, the NSFAS was formally established by Act of Parliament. In 2000, TEFSA was reconstituted as the NSFAS – a statutory agency with a board appointed by the Minister of Education.

The NSFAS functions as an income-contingent loan and bursary scheme – i.e. loan recipients only start repayments once they are in employment and earning above a threshold level of income. The initial student award is a 100% loan: for 2004, a minimum loan is R2 000 and a maximum loan R25 000. Interest accrues on loans at approximately 2% real rate of interest: for 2004, the interest rate is 7%. Up to 40% of the loan is converted into a bursary, with the extent of the conversion determined by the student's academic results.

The NSFAS works in partnership with 41 financial aid offices based at the campuses of 29 public HEIs around South Africa. It allocates funding to the HEIs in terms of a formula that takes into account the number of students, their general needs, and the cost of study at the respective institution. Students apply for aid at the institutional offices and are means-tested and academically assessed in order to determine the size of their award. In essence, the intention is to ensure that aid is given to the poorest of the most academically able students.

Further details about the achievements of the NSFAS since 1994 are provided in Section 11.2.3.

11.2.3 *Public Funding of Higher Education to 2004*

11.2.3.1 *Patterns of Government Funding*

With respect to recent patterns of government funding of higher education, Table 24 and Table 25 show that the overall allocation to higher education has risen in nominal terms from R4 072 billion in 1995/6 to R8 926 billion in 2003/4.

The proportion of government expenditure allocated to education as a whole peaked at 24.1% in 1996/7, decreased to 20.6% in 2003/4, and is projected at 19.9% in 2005/6. The proportion allocated to higher education peaked in 1999/2000 at 3.05% of total government expenditure. It has since declined to 2.72% in 2003/4 and is projected at 2.6% in 2005/6. This decline mirrors the steady decline in the proportion of total government expenditure allocated to schools and colleges, which peaked in 1996/7 at 20.9% and is projected at 17% in 2005/6. The allocation to higher education as a proportion of the overall education budget has remained fairly constant, rising from around 12% between 1995 and 1998 to around 14% between 1999 and 2001, and then declining to around 13% from 2002 on. As a percentage of gross domestic product (GDP), expenditure on higher education has declined since 1999/2000.



Mr Trevor Manuel
Minister of Finance
Since April 1996

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Table 24: Government Expenditure on Education and Higher Education (Rands billions)

Item	1995 1996	1996 1997	1997 1998	1998 1999	1999 2000	2000 2001	2001 2002	2002 2003	2003 2004	2004 2005	2005 2006
Total education allocation	33.8	42.1	44.1	45.2	46.9	50.8	54.9	61.9	68.8	73.9	78.6
% of total government expenditure	22.4	24.1%	23.2%	22.5%	21.8%	21.7%	20.9%	21.2%	20.6%	20.4%	19.9%
Schools & Colleges allocation	29.4	36.6	38.5	38.7	39.8	43.2	46.9	53.1	58.9	63.5	67.5
% of total government expenditure	19.5%	20.9%	20.3%	19.3%	18.5%	18.5%	17.8%	18.2%	17.6%	17.5%	17.0%
Higher Education allocation	4.1	5.2	5.4	6	6.6	7.1	7.5	8	8.9	9.7	10.3
% of total government expenditure	2.69%	2.97%	2.86%	2.98%	3.05%	2.98%	2.86%	2.72%	2.58%	2.7%	2.6%
% of education allocation	12.1%	12.4%	12.3%	13.4%	14.1%	13.9%	13.7%	12.8%	12.6%	13.0%	13.0%
% of GDP	0.72%	0.82%	0.78%	0.8%	0.81%	0.77%	0.75%	0.72%	0.72%	N/A	N/A

Source: DoE 2001; SAUVCA June 2004. Notes: The data exclude educational services not administered by the Departments of Education. Data include the incorporation of 28 teacher training colleges into universities and technikons which had the effect of partially veiling the fall in government funding over the period. Figures for 2004/5 and 2005/6 are projections from the Treasury's Medium-Term Expenditure Framework.

Average corresponding percentages for 18 representative countries in the world, from all continents, are 3.3% (of state budget), 22.1% (of education budget) and 1.1% (of GDP), seeming to indicate a relative under-funding of higher education in South Africa.¹⁴

A summary of the government allocation to universities and technikons is set out in Table 25. Fuller details are provided in Appendix 2 (Table 59).

Table 25: Government Appropriations for Universities and Technikons, 1995–2003

Institutions/Type	1995/96		1998/99		2001/ 2		2002/ 3		2003/04		2004/05	
Universities	3 066	75%	4 337	72%	5 399	72%	5 708	71%	6 071	68%	6 391	65%
Technikons	1 006	25%	1 663	28%	2 123	28%	2 216	28%	2 564	29%	2 759	28%
Other	0	0%	0	0%	0	0%	0	0%	0	0%	728 ⁽¹⁾	7%
Subsidy	3 566	87%	5 309	88%	6 620	88%	6 985	87%	7 818	88%	8 568	87%
Earmarked	506	13%	694	12%	814	11%	897	11%	1 107	12%	1 311	13%
Total	4 072	100%	6 004	100%	7 532	100%	8 019	100%	8 926	100%	9 879	100%

Source: DoE 2003. Note: 'Other' funding in 2004/5 comprises: a) topsliced earmarked funds of R84.7m for foundation teaching programmes; b) R515m in other earmarked funds including for institutional restructuring (R502m); c) R128m in recovered funds from UDW (R12.45m), Technikon Pretoria (R11.164m) and Technikon SA (R11.825m) owing to incorrect student data provided to the DoE in previous years. Furthermore, R77.834m is held back from UNISA until its data issues have been resolved. An additional R14.283m not distributed via the migration strategy is included as well.

Total allocations to higher education have been (and will continue to be) made up of subsidy block grants and earmarked funds. It can be seen that the proportion of subsidy to earmarked funds has fluctuated over the years in a ratio of approximately 87%:13%, shifting to 90%:10% in 1997/8 (see Appendix 2), and subsequently back to 87%:13% in 2004/5. However, the absolute allocation of earmarked funding has increased from R506 million in 1995/6 to R1 311 billion in 2004/5.

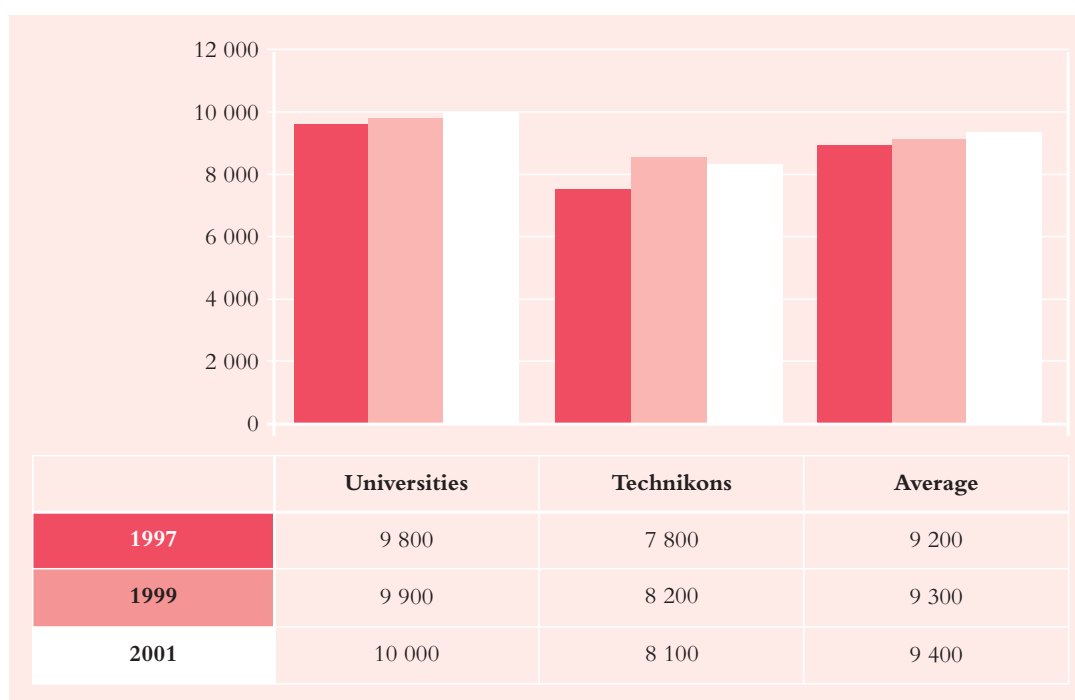


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In contrast to increases in NFSAS funding (described below), a total of just R117.6 million was allocated for redress funding after 1998/9. This included R27 million allocated in 1998/9 for unspecified usage on a pro-rata basis (0.45% of total higher education allocations – not shown in Appendix 2). In 1999/2000, R60 million (0.9%) was allocated to ensure the financial viability of three institutions – the universities of Fort Hare, Transkei and MEDUNSA. In 2000/1, redress funding was reduced to R30 million and was directed exclusively towards academic development on the basis of submitted proposals.

One analysis¹⁵ has shown that growth in real rands (i.e. nominal rands deflated by the consumer price index) which occurred in government appropriations for the system between 1995 and 2001, was matched by growth in student enrolments. This meant that although government was not able to increase in real terms its appropriations per student, overall government appropriations per subsidy student remained constant. This was in contrast to the years before 1994 when subsidies per student were in decline.

Figure 40: Government Appropriations per Subsidy Student Unit in Real Rands (1997 value)



Source: Cloete, Fehnel et al 2002: Chapter 4

Another analysis has suggested that an apparent constancy of real subsidy per FTE student may be misleading in the light of a complex of factors. First, higher education operates outside of ordinary inflationary boundaries in that it depends on highly qualified academic staff, imported research equipment and expensive academic information material. Second, from the late 1990s funds were increasingly shifted from capital projects, to finance current expenditures, in an attempt to prevent a-factors from falling too far (a-factors continued to decline after 1994, from an average 0.65 in 1994, to 0.6 in 2003). Third, enrolments in natural sciences grew faster than in social sciences in the period 1993–2001 – i.e. in sciences where laboratory and journal costs are higher.¹⁶

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11.2.3.2 Funding through the NSFAS

Government allocations to the NSFAS have settled at around 5%–6% of the higher education allocation; the new funding framework makes provision for an ongoing allocation of 6%.

Table 26 shows the state's allocation to the NSFAS in relation to the scheme's other sources of income. Noteworthy is the fact that total state expenditure up to 2002/03 amounted to R2.6 billion – indicating a firm commitment to subsidising greater access to disadvantaged students. Importantly, this has been supplemented by the HEIs (over R191 million from 1996/7 onwards), foreign donors (R365.2 million), the private sector (R21.4 million since 1998/9) and – significantly – recovered funds (R343.1 million since 1997/8). Also notable is the joint state funding for the NSFAS through both the DoE and the Department of Labour (DoL). These diversified sources of income meant that 69% of NSFAS income in 2002/3 was contributed by the state, while recovered funds accounted for 20%, and donor funding 11%. In 2002, university students received 59% of NSFAS expenditure and technikons 41%.

Table 26: Amount and Source of NSFAS Funding, 1991–2002

Financial Year	Independent Development Trust and Kagiso Trust (1996/7 and 1997/8) ⁽¹⁾	Foreign Donors	SA Private Sector	Higher Education Institutions	Recovered Funds ⁽²⁾	State	Other	TOTAL
1991/92	21.5							21.5
1992/93	25.0	14.0						39.0
1993/94	30.0	39.0						59.0
1994/95	30.0	37.0				10.5		77.5
1995/96	20.0	76.0				57.1		153.1
1996/97	16.0	18.5		15.0		283.8		333.3
1997/98	48.2	71.9		30.3	2.0	198.3		350.9
1998/99		37.9	4.6	26.7	23.1	296.5	5.5	394.5
1999/00		19.2	4.9	17.7	14.2	384.9		441.0
2000/01		35.0	5.0	24.1	9.3	437.4		510.8
2001/02		7.2	5.6	32.9	146.6	439.9	2.8	635.0
2002/03		19.5	1.3	44.4	147.9	506.7*	13.5	733.4
TOTAL	190.7	365.2	21.4	191.1	343.1	2 615.1	21.8	3 749.0

Source: DoE 2003; Education Portfolio Committee Briefing, 12 November 2002. Note (1): 1997 Kagiso Trust refers to a grant awarded to Kagiso Trust by the European Union which was taken over by TEFSA, the precursor of NSFAS. Totals do not always add up due to rounding up of figures. Note (2): Recovered funds refer here only to HEIs. Table 28 below includes total funds recovered by NSFAS. Note (3): * 15.6m was provided by DoL.

The number of total awards made by the NSFAS has risen steadily over the past decade from 7 240 in 1991 to 99 873 in 2002. Over the past six years, this represents an annual percentage increase of 5.4%, made up of 11.5% in the technikons and 1.4% in the universities. The size of awards ranged from below R1 000 to over R18 000. The majority (49%) were clustered between R 3 000 and R 8 000.



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Table 27: Number of Awards made by NSFAS, 1991–2002

Year	No. of Awards
1991/92	7 240
1992/93	14 160
1993/94	20 811
1994/95	28 260
1995/96	43 876
1996/97	72 788
1997/98	70 574
1998/99	75 764
1999/00	75 345
2000/01	83 251
2001/02	93 532
2002/03	99 873
TOTAL	685 474

Source: DoE 2003; Education Portfolio Committee Briefing, 12 November 2002

Of significance, as shown in Table 28, is that the amount recovered from NSFAS loan recipients has steadily increased from 1993 onwards, reaching R112 million in 2001.

Table 28: Total Amount Recovered from Loan Recipients by NSFAS

Loan Year	Amount Recovered
1993	983 456
1994	2 364 000
1995	6 861 344
1996	18 973 606
1997	24 814 200
1998	30 372 190
1999	68 408 652
2000	90 763 154
2001	112 000 000
TOTAL	355 540 602

Source: Education Portfolio Committee Briefing, 12 November 2002. Note: This includes total funds recovered by NSFAS, as opposed to funds recovered by HEIs (see Table 26 above)

Table 29 shows that the vast majority of NSFAS loan recipients are African students, (assuming that a large number of the 'unknowns' in 2001 are African).

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Table 29: Number of NSFAS Awards by 'Race', 1995–1998–2001

Year	African		Coloured		Indian		White		Unknown		TOTAL	
1995	37 280	85%	2 367	5%	1 362	3%	196	0%	2 664	6%	43 869	100%
1998	63 800	84%	2 063	3%	1 144	2%	1 563	2%	7 197	9%	75 767	100%
2001	20 335	22%	524	1%	365	0%	397	0%	71 916	77%	93 537	100%

Source: NSFAS Office

Finally, success rates in terms of courses passed by NSFAS-funded students have averaged at 74% in the period from 1996 to 2002.¹⁷

11.2.4 Evaluating Developments around Financing of Higher Education to 2004

As already noted, the process of shifting models and mechanisms of public funding for higher education has been a slow one: the implementation of a new funding framework has taken the full ten years since 1994 to begin. Three principal reasons may be given for this. In the first place, policy and planning frameworks had to be developed to inform the specifics of a new funding model. Secondly, the period was marked by uncertainty about the size and shape of the higher education system: the process for determining the new institutional landscape (described in Section 3.2.1) was concluded only in December 2002, and until it was finalised the funding framework process was held in abeyance. Finally, the higher education environment has been turbulent throughout this decade, characterised not only by multiple policy change initiatives that have placed a burden on HEIs, policy-makers and implementation agencies, but also featuring new developments (such as the rapid entry of private providers, requiring regulation) and some crises (especially governance and management crises at institutional level, which brought some public HEIs to the brink of collapse).

Government expenditure on higher education has increased in nominal terms, while remaining fairly constant as a percentage of state budget, of education budget, and of GDP, and in terms of the subsidy value per student. However, despite this relative consistency, an overall decline in expenditure has been evident in recent years; and it is not clear that subsidies per student have been as constant as some analyses suggest, given other underlying

shifts (e.g. patterns of inflation in higher education, enrolment shifts by field of study). Also, although the *White Paper* advocated increasing provision of earmarked funding, and although the NSFAS was established on this basis, earmarked funding as a proportion of overall government appropriations for higher education did not actually increase. Comprehensive attention to redress and institutional equity through public funding was therefore delayed, and significant institutional redress funding did not materialise. A key reason for this was undoubtedly the slow pace of policy elaboration. While the NSFAS has been a clear step in the direction of direct redress measures for disadvantaged students, and has facilitated widening of access for black students, it has impacted only indirectly at institutional level.



In conclusion, it should be noted that the time lag between the broad formulation of funding policies by the *White Paper* and detailed attention to their implementation, has meant, first, that the impact of unintended consequences of the SAPSE formula has been prolonged, and, second, that HEIs were for



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a long interval left to make their own interpretations of the directions funding policy would take – with uneven results on both scores. The SAPSE formula was sensitive to shifts in enrolments: as enrolments shifted in this period in favour of HAIs – especially Afrikaans-medium ones – funding shifted in the same direction (albeit that costs and pressure on facilities followed suit). Adaptive strategies adopted by HAIs in this period further influenced shifting enrolment patterns. One analysis¹⁸ describes these adaptive strategies and their link to enrolments as follows:

- The ‘window of opportunity’ strategy: HEIs redefined their missions in compliance with the *White Paper*, but some used the autonomy they had under the SAPSE framework to ‘accumulate funds as rapidly as possible – primarily by boosting student enrolments’. Thus a core group of HAIs retained their white enrolments, while boosting African enrolments through partnerships with private providers in distance education programmes, and the establishment of satellite campuses. (Although this analysis suggests ‘opportunism’, in defence it can be observed that reserves were prudently managed by these institutions as provisions in terms of Generally Accepted Accounting Practice (GAAP). Furthermore – while it soon emerged that ‘surpluses’ could be made, owing to the special characteristics of funding for distance education – expansion into distance education was adopted in good faith by some institutions in response to ‘massification’ as envisaged by the NCHE.)
- The ‘increase the product range strategy’: A small number of HEIs, both advantaged and disadvantaged, began to offer a wider range of programmes, in the hope (not always fulfilled) of attracting more students and hence more subsidy and fee income.
- The ‘wait for redress’ strategy: Many HDIs relied on their expectation of substantial government redress funds, were largely disappointed, and in the interim lost students to HAIs and accumulated substantial student debt.
- The ‘internal-consolidation-first’ strategy: Some HEIs focused on internal transformation in such areas as curriculum, governance, finance and administration, rather than explicitly adapting to a new funding framework. In general, they had stable low-growth enrolments.
- The ‘go-with-the-flow-of-change’ strategy: A group of mainly HAIs accepted that they could not control student enrolments and anticipated that institutional redress funding would be the only significant impact of a new funding framework. Their enrolments tended to grow rapidly.



Between 1994 and 2004 there were scarcely any shifts in the situation as already described with respect to skewed institutional capacities for accessing private income from fees and other sources and the percentage of government appropriations as a portion of total institutional income. Taken in combination, all these factors meant ‘an entrenchment, rather than a weakening of the divide in terms of institutional viability’ between HAIs and HDIs.²⁰ Taking circumstances into account, it is difficult to see how this situation could have been entirely avoided. However, the unhappy consequences make the achievement of positive change through a new funding framework all the more urgent.

11.3 The Situation in 2004

The new ‘goal-oriented, performance-related’ funding framework is being implemented from 2004, and current debates about the financing of higher education are dominated by consideration of the nature and effectiveness of this framework. This section describes the new funding framework and its intentions, and follows this with commentary and critique.

It can be anticipated that the new funding framework will impact fundamentally on HEIs, as government seeks to shape institutional behaviours to make them congruent with national policy goals. It can also be noted that,

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to the extent that public funding will not cover all the funding required by HEIs, the need to derive additional and alternative funding income through fees and other income streams will necessarily also shape institutional behaviours.

11.3.1 *The New Funding Framework: Elements and Intentions*²⁰

To recap: the new funding framework retains the two main components of the SAPSE framework: block grants and earmarked funding for specific purposes. However, it differs from the SAPSE model in its policy underpinnings, with the consequence that these components are to be applied differently.

Before 1994, the apartheid system separated HEIs along 'racial' lines and funded and governed them differently using models that ranged from relative autonomy to full control. The SAPSE formula, originally designed to allocate funds efficiently to HWUs, produced mixed and contrary effects when it was subsequently applied to the system as a whole under a 'student-as-rational-agent' approach. The new funding framework represents strong steering of the system, shaped by fiscal constraint, and – perhaps paradoxically – a commitment to equity, development and efficiency. Consistent with the *White Paper*, the new funding framework favours a planning-steering approach. Within this model, government has announced its intention to take into account labour market signals requiring responsiveness, without resorting to a narrow 'manpower planning' stance. In addition, the new framework departs from the former's conceptualisation of cost sharing. It is essentially intended as a distributive mechanism by which government pays HEIs for delivering core services (teaching and learning, and research) as specified by government-approved plans. It is dependent neither on calculations of institutional costs nor on calculations of so-called 'ideal income' totals for efficient HEIs. Rather, the new framework sees institutional costs as functions of income; in particular, what is available to be spent in terms of government's Medium-term Expenditure Framework (MTEF), the key basis for determining the budgets of various departments. In an acknowledged 'top down' approach, the various mechanisms in the framework come into operation only after government has determined the total of public funds that should be spent in a given year on higher education, as well as what services should be delivered by higher education. Accordingly, HEIs play no role in determining the overall amount of funds, although their three-year rolling plans must indicate planned inputs and outputs.

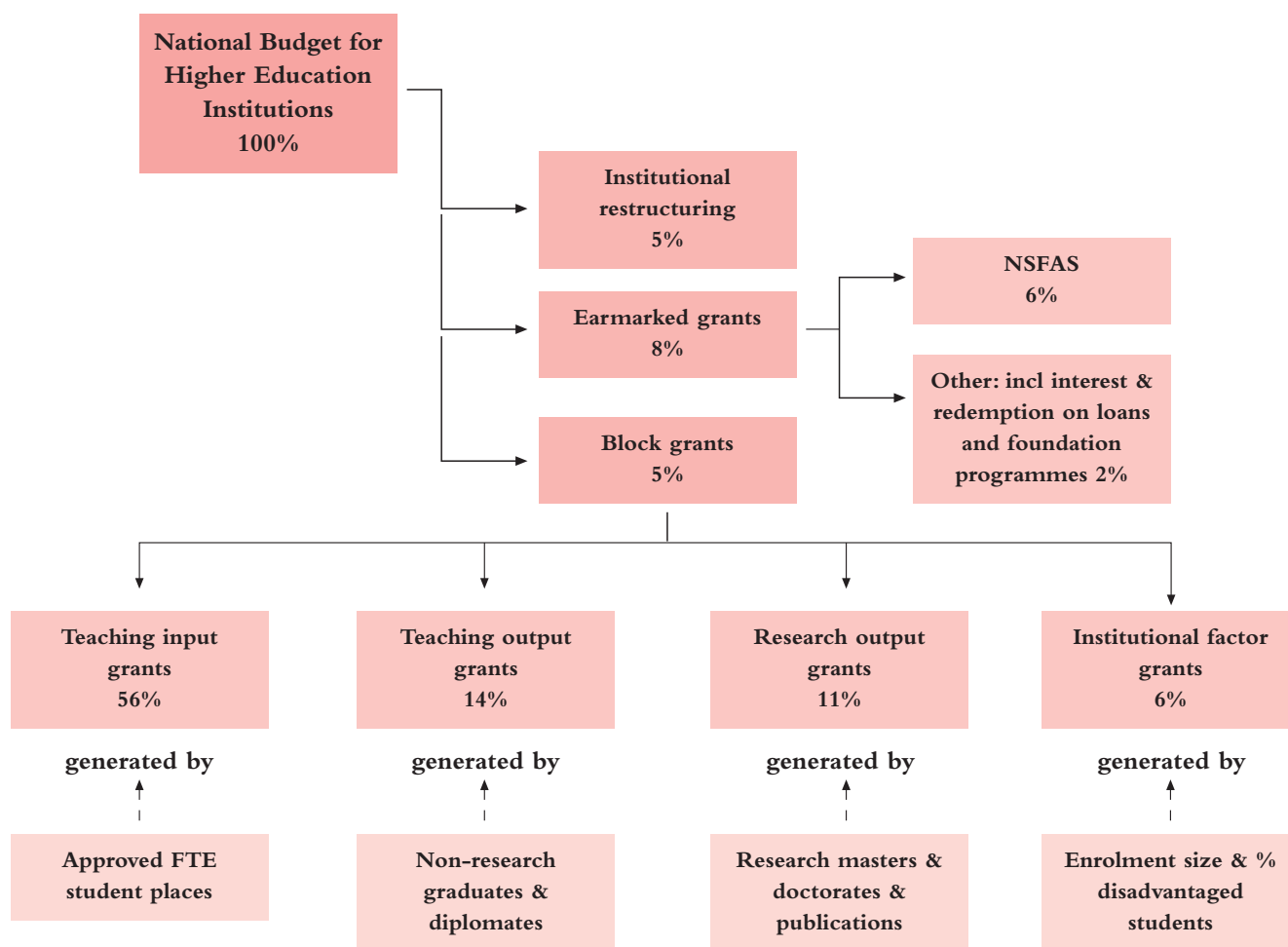
11.3.1.1 *Division of the Government Budget*

The latest indication of trends from the Ministry is that government grants cover on average 50% of public higher education funding, with 25% from fee income and 25% from other private income sources. It is acknowledged that the capacity of HEIs to generate alternative sources of income varies widely, from 35% to 65%.²¹ As these variations remain largely (if not exclusively) a function of institutions' historically defined purpose, location and academic profiles, they must be noted from the outset as significant. They provide potential indicators of unintended consequences, this time initiated by the new funding framework itself: exacerbating, rather than reducing, institutional disparities.

The categories and sub-categories of the higher education grant as approved for the next three-year period are shown in Figure 41. In summary, the government higher education budget for 2004/5 to 2006/7 is divided into two main components: earmarked grants (13% of the total, with 5% of this in special earmarked funds for institutional restructuring) and block grants (87%).



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Figure 41: Division of Government Budget between Grant Categories, 2004/5 to 2006/7

Source: MoE February 2004a and February 2004b.

11.3.1.2 Institutional Restructuring

Institutional restructuring grants (5% of budget) are special earmarked amounts to be used to assist HEIs merging in 2004 and 2005. These grants will be allocated after the business and academic plans of merging institutions have been considered.

11.3.1.3 Earmarked Funding

Most of the earmarked funds (6%) are set aside for the NSFAS. The second category of earmarked funding (2%) is available for specific 'other' purposes, such as teaching (including foundation programmes), research and community development; interest and redemptions payments on approved government loans; and the higher education quality assurance (QA) framework. In the period 2004/5 to 2006/7, 1% of this second category of earmarked funds is to be allocated to interest and redemption on loans. The other 1% is allocated to foundation programmes²² (R85 million in 2004/5), on the basis of formal institutional applications for funding over a three-year period.

11.3.1.4 Block Grants

The new framework aims to relate funding to performance: it focuses on HEIs' teaching and research outputs, as demonstrable results of public funding utilised for approved purposes.

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- **Research Output Grants**

Research output grants are to be calculated on the basis of *actual* research graduates and publication unit outputs, weighted as follows: publications units 1; research master's graduates 1; doctoral graduates 3. *Normative* research output totals are then calculated using a government-determined publications benchmark. For universities, the approved benchmark for 2004/5 to 2006/7 is 1.25 research outputs per full-time academic staff member per year and for universities of technology (technikons) it is 0.5 research outputs. Any shortfall between an HEI's normative and actual research output may be allocated to it as a research development grant on the submission of a research development plan.

No provision is made for research input grants. This is in line with the *National Plan's* emphasis on concentrating research resources in HEIs with demonstrable or potential research capacity, on accountable use of research funds,²³ and on enhanced research productivity.

- **Teaching Output Grants**

Teaching output grants are intended to act as an incentive to HEIs to reach national targets for student success, throughput and graduation. (While teaching output grants were more important in the old formula, this linked them to course-level passes.) The grants are calculated on the basis of *actual* non-research graduates and diplomates,²⁴ weighted by qualification level, and as a proportion of *normative* totals for the system. These totals are based on government-determined graduation rate benchmarks, similarly weighted (Table 30). Any shortfall between an HEI's normative and actual teaching output totals may be allocated to it as a teaching development grant on the submission of a teaching development plan.

Table 30: Weighting Factor and Graduation Benchmarks for Teaching Outputs, 2004/5 to 2006/7

	Weighting Factor for Actual Teaching Outputs	Graduation Benchmarks: Graduates/Diplomates as % of Headcount Enrolments	
		Contact	Distance
1st certificates and diplomas of 2-years or less	0.5	22.5%	13.5%
1st diplomas and bachelor's degrees: 3 years	1.0	22.5%	13.5%
Professional 1st bachelor's degree: 4 years and more	1.5	18%	9%
Postgraduate and post-diploma diplomas	0.5	54%	27%
Postgraduate bachelor's degrees	1.0	54%	27%
Honours degrees/higher diplomas	0.5	54%	27%
Non-research masters degrees and diplomas	0.5	30%	22.5%

Source: Adapted from MoE February 2004a.



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- *Teaching Input Grants*

These are calculated on the basis of FTE enrolled student numbers, weighted according to the following cost elements: a) four funding group levels, differentiated by field of study; b) four course levels: undergraduate, honours, master's and doctoral and their equivalents; and c) contact and distance students. This generates a weighted grid of 32 cells, as illustrated in Table 31.

Table 31: Weighting Factors for Teaching Inputs, 2004/5 to 2006/7

Funding Group	Undergraduate & Equivalent		Honours & Equivalent		Masters & Equivalent		Doctoral & Equivalent	
	Contact	Distance	Contact	Distance	Contact	Distance	Contact	Distance
1	1.0	0.5	2.0	1.0	3.0	3.0	4.0	4.0
2	1.5	0.75	3.0	1.5	4.5	4.5	6.0	6.0
3	2.5	1.25	5.0	2.5	7.5	7.5	10.0	10.0
4	3.5	1.75	7.0	3.5	10.5	10.5	14.0	14.0

Source: MoE 2004b. The funding groups are structured as follows:

Group 1: education, law, librarianship, psychology, social services/public administration.

Group 2: business/commerce, communication, computer science, languages, philosophy/religion, social sciences.

Group 3: architecture/planning, engineering, home economics, industrial arts, mathematical sciences, physical education.

Group 4: agriculture, fine and performing arts, health sciences, life and physical sciences.

- *Institutional Factor Grants*

The new funding framework does not make provision for institutional set-up, as the old formula did. However, it does make provision for addressing historical institutional disadvantage by means of two factors applicable to HEIs with large proportions of disadvantaged students. At this stage, in the absence of reliable information regarding the socio-economic status of students, 'race' (defined for the purposes of these grants as African and Coloured students) serves as a proxy for disadvantage: this means that it is not possible to distinguish between advantaged and disadvantaged African and Coloured students.

The first institutional factor grant enables HEIs with a large proportion of disadvantaged South African students to have their teaching input grant increased. The grant is applicable where students are enrolled in contact programmes, and in distance education programmes only in the case of the dedicated HEI (UNISA). The increase to the teaching input grant ranges from 0% additional income for those HEIs in which African and Coloured South African students make up less than 40% of FTE enrolment to 10% additional income for those with 80% and above.

The second institutional factor grant allows additional amounts to be added to teaching input grants for small institutions, depending on the size of their FTE enrolments. This works on a sliding scale from 0% additional funds for HEIs with 25 000 or more FTE enrolments, through 9.3% for HEIs with 12 000 FTEs, to 15% additional funds for HEIs with 4 000 FTEs or fewer.

The MoE has committed itself to undertaking during 2004/5 investigations into the operations of newly merged and other multi-campus HEIs. This would determine the appropriate basis for a third institutional factor grant, for multi-campus institutions.

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11.3.1.5 Migration Strategy

A migration strategy has been designed for moving from the old to the new funding framework over a three-year period. This is intended to allow HEIs to accommodate the impact of the new system, as well as to deal with the funding implications of mergers across the system. The essential mechanism of the migration strategy is the calculation of a ratio between an HEI's new framework grant and its baseline grant in terms of the old formula. This will determine institutional funding in 2004/5. In second and subsequent years, the baseline becomes the final grant of the previous year, plus any increase in the national budgetary provision for block grants.

The migration strategy is based on the assumption that there will be stability in the shares which HEIs have of total FTE enrolments in the public higher education system. Changes in relative shares of block grant totals will occur only if some HEIs are able to increase their shares of research and teaching output totals. This implies in turn that the Ministry must keep growth in the total number of FTE enrolments as low as possible (i.e. between 0% and 2%), at least in the short term.

11.3.2 Issues Raised by the New Funding Framework

The new funding framework is intended to represent a radical departure from the old, and to provide a public financing platform for achieving national policy goals in higher education. As such, it elicits many opinions about its appropriateness and viability. Key issues raised by the framework are highlighted here as a critique of the aforementioned description, and with links to key issues and challenges ahead, as addressed in the final section of this chapter.²⁵

11.3.2.1 Institutional Redress

Although hardly mentioning the phrase, the new funding framework incorporates a number of mechanisms to address aspects of institutional redress. Some would argue that, in conjunction with the merger process, the new funding framework largely and effectively deals with this issue, rendering the need for a large-scale separate redress policy redundant, and leveraging more funding than HDIs might have originally anticipated from a dedicated redress fund.

Examples of how the framework addresses institutional redress are as follows. First, it is to be assumed that specific aspects of redress would be built into the plans of merging institutions and hence funded through institutional restructuring grants. Second, to the extent that the NSFAS provides additional fee income to disadvantaged students at HDIs and merged HDIs, it could support an institutional redress element as well. (More is said about this in the final section.) Third, earmarked funds for development grants provide the opportunity for institutions to apply for funding on the basis of identifying worthwhile projects. In this way, non-merging HDIs could seek funding for redress-related capacity-building to enable them to contribute effectively to their approved missions and programme and qualifications mixes, and thus to key policy goals.



Institutional factor grants based on large proportions of disadvantaged students are more problematic from the perspective of redress. First, as the framework itself acknowledges, the definition of disadvantage remains crude. Second, if HAIs are able to attract wealthy African and Coloured students (in large proportions), these institutions will be doubly advantaged: not only will they attract this aspect of institutional factor funding – they will also enjoy the benefits of greater funding through higher graduation rates, postgraduate enrolments and enrolments



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in higher-income-generating fields. Third, if HAIs are not able to attract sufficient numbers of students from the designated groups, students from these groups in these HEIs may suffer from resultant fee differentials between institutions with different 'racial' make-ups. It may be that such problems as these could be addressed as soon as more elaborate and accurate data regarding the socio-economic status of students become available through the Higher Education Management Information System (HEMIS); however, the right to privacy of students may mean that socio-economic status remains difficult to determine.

The jury must remain out on the true potential of the new funding framework to address institutional redress, until such time as indicators of real progress emerge.

11.3.2.2 *Institutional Autonomy*

A critical concern around the implementation of the new funding framework, from a sectoral point of view, is closely related to concerns about the complex interrelationship in South African higher education governance between public accountability and institutional autonomy (examined in Sections 10.2 and 10.4).



In terms of the new funding framework, government determines the total of public funds for higher education without input from HEIs, except in so far as this is mediated via their three-year rolling plans. (It was not the case either that HEIs made a direct input to the annual allocation under the old formula: this derived an 'ideal figure', quite distinct from a sectoral input.) In terms of the new arrangements, the Minister of Education has a very large degree of freedom to change (within the context of the MTEF) the definitions and values of all the framework's associated components. This includes defining what constitutes research and teaching outputs; defining what constitutes 'disadvantage'; determining the weightings attached to research and teaching outputs; determining benchmark

ratios for research and teaching outputs; and deciding whether formal applications must be submitted for the use of research and teaching development funds. The power of the Minister to effect these changes may in consequence significantly – some may perceive drastically – curtail autonomous choices on the part of HEIs.

It appears this concern would need to be dealt with through a revitalised process of engagement between state and sector around the dynamics of system-level governance, as well as through apposite policy advice from the CHE.

11.3.2.3 *Growth in Enrolments*

It has been noted (Section 11.1.1) that the SAPSE formula encouraged growth which was not financially sustainable. In the new funding framework, input subsidies have a higher weighting than previously, and some within the sector have argued that the incentive for HEIs to increase student numbers will therefore be even stronger. Clearly, such an effect would be in tension with concerns to maintain the affordability of public higher education funding. The DoE intends that parameters for growth will be determined by the planning process. During 2004, the DoE is engaging in a system-wide student enrolment planning exercise to ensure that institutional enrolment plans are affordable and sustainable in the context of the MTEF; in the interim, it has proposed the introduction of enrolment caps for the short term.

11.3.2.4 *Financial Uncertainty*

Under the SAPSE funding system, a-factors created a climate of financial uncertainty for HEIs and curbed creative planning (Section 11.1.1). Some believe that the new funding framework may exacerbate uncertainty. HEIs will not have the sectoral figures necessary to estimate their income for the coming year, as they had in the old system;

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and, as already discussed, the Minister can change funding values from year to year. On the other hand, the new formula releases three-year forward projections which will be available to HEIs to determine their allocations.

11.3.2.5 *Academic Development*

There are concerns that while HEIs may apply for funding for foundation programmes, there are no other designated mechanisms for supporting academic development (e.g. extended curriculum programmes, tutoring and mentoring schemes – see Section 5.3). The burden of funding the redress of the inadequacies of South Africa's schooling system will thus continue to be borne by HEIs.

11.3.2.6 *Tensions in the Framework*

It is suggested by the sector that there are some tensions and contradictions in the new funding framework. First, it is argued that merger processes and the funding formula could be in tension with each other. While mergers are creating larger HEIs (see Section 3.3.1), the funding formula rewards smaller ones through an institutional factor grant. It is possible, but not certain, that an institutional factor grant for multi-campus HEIs could resolve these tensions. Second, the sector has pointed out that although policy is aiming for a diverse and differentiated institutional landscape, the formula may encourage HEIs to become research universities, meaning that research funds could be dissipated. Third, the sector has argued that the framework may neutralise its own efficiency incentives: while it rewards outputs, it makes provision for funding to underperforming HEIs via development grants. An effective balance between development and quality needs to be crafted as an outcome of the new funding framework if it is to be judged effective.

The extent to which these tensions – and indeed other cautions and concerns raised in this part of the report – are real, will be determined in practice, as the efficacy of the measures contained in the new funding framework is tested in the months and years to come.

11.4 *Critical Issues and Key Challenges Ahead*

Government expenditure on higher education has been relatively stable over the last ten years, as a percentage of state budget, education budget and GDP. Notwithstanding this consistency, there has been a perceptible decline in the years after 2000. South African expenditures are lower than international norms, and apparently steady



values of subsidy per student have been achieved to the detriment of capital expenditure. For the higher education sector, this raises a set of interrelated concerns – including that government may not be able to maintain levels of funding; that the ways in which inflation affects higher education may require fuller exploration; and that capital funding needs are to go unaddressed. This in turn suggests that the provision of public funding for higher education should be monitored closely and critically – especially with the introduction of a new funding framework that has the potential for unanticipated impacts. The need for this monitoring is underscored, in the view

of the sector, by the fact that the new funding formula departs from well-defined cost units closely related to cost inflation, as well as from the restrictions on projected student numbers used in the SAPSE formula. The Ministry has indicated its intention of managing enrolment planning (e.g. keeping the growth of FTE enrolments at 0–2% in the short term) and has projected funding increases in the light of MTEF amounts announced to date,



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and the associated implications for unplanned growth. Yet there is at least the possibility of a scenario materialising in which HEIs become caught between trying to satisfy student demand and the funding constraints set by government.

A potential (if partial) way of addressing the set of concerns highlighted above could be for government to increase available funding for the NSFAS, so dealing directly (rather than via HEIs) with the problems encountered by poor students. Individual means-testing as applied in the NSFAS system is an internationally accepted way of dealing with social redress. The NSFAS mechanism may hold much further potential for addressing problems of poverty and disadvantage in the South African higher education system, especially if intended institutional redress measures falter. The need to broach these problems is urgently raised for both state and sector by the student protests that have erupted in recent months on campuses around the country. These have typically been in response to attempts to control student debt and the distribution of financial aid (e.g. at the University of the Witwatersrand), or to real or potential fee increases, especially in the context of mergers (e.g. at the North-West University and at Tshwane University of Technology).



A crucial question for both state and HEIs is the extent to which the funding framework will be able to steer institutional behaviour in the desired policy directions. It will be necessary for the CHE, as part of its monitoring and evaluation responsibility, to track the implementation of the new funding framework in order to find answers to this question. The critique of the new funding framework, as made in the previous section, indicates some of the key themes that monitoring and evaluation must pursue. In general, it will be important to track the range of institutional behaviours

which are elicited by the new funding framework and to assess these in relation to the intentions of national policy and its unintended consequences. Furthermore, attention will have to be given to the impact of the new framework on institutional equity within the new higher education landscape and the extent to which it addresses institutional redress concerns. Finally, it will be important to track the impacts of the new funding framework, both positive and negative, on all institutions, and especially on HDIs, both during the three-year period of the migration strategy and afterwards as the new framework comes into full-scale operation.

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Chapter Notes and References

- ¹ Contract income for research may be regarded as another source of income, although it cannot be used for general funding, and is unlikely to cover overheads.
- ² Higher Education Act 1997: Chapter 7.
- ³ Ministry of Education. (February 2004b). A New Funding Framework : How Government Grants are Allocated to Public Higher Education Institutions. Available at <http://education.pwv.gov.za/contents/documents/405.pdf> (June 2004): 2.
- ⁴ Sources for this section are: Bunting 1994: Chapter 9; Bunting, I (1996). Quality Assurance and Higher Education Funding Policies and Mechanisms in South Africa. Paper prepared for Conference on Quality and Quality Assurance, University of the Orange Free State: Sections 4 and 5; Bunting, I (2002). 'Funding'. In Cloete, N, Fehnel, R, Maassen, P, Moja, T, Perold, H and Gibbon, T (eds) (2002). Transformation in Higher Education: Global Pressures and Local Realities in South Africa. Cape Town: Juta: 115-146: 115-126; Stumpf, R. (1997). Redress Funding within the South African University System. Paper presented at the South African Universities Vice-Chancellors Association (SAUVCA) Meeting, 24 July 1997, Magoebaskloof Hotel: Section 2; Stumpf, R. (2001). Higher Education: Funding in the Period 1994-2001: Paper commissioned as support material for Cloete, N et al. (2002). Transformation in Higher Education: Global Pressures and Local Realities in South Africa: Section 2. In addition, detailed commentary was provided by Professor A Melck, Adviser to the Vice-Chancellor and Principal, University of Pretoria.
- ⁵ Stumpf 1997: 4-8.
- ⁶ Funding for buildings was incorporated into the subsidy, in an attempt to stabilise falling a-factors.
- ⁷ NCHE 1996: 216.
- ⁸ White Paper 1997: Chapter 4.
- ⁹ White Paper 1997: Section 4.37.
- ¹⁰ Stumpf 2001: Section 4.2.
- ¹¹ Ministry of Education (15 November 2002). Funding of Public Higher Education: A New Framework. Pretoria: Ministry of Education (MoE). (Revised Version.)
- ¹² Ministry of Education. (December 2003). Funding of Public Higher Education. Government Gazette No 25824, Notice No 1791, 9 December 2003. Pretoria: Government Printers.
- ¹³ Ministry of Education. (February 2004a). Statement on Higher Education Funding: 2004/05 to 2006/7. Available at <http://education.pwv.gov.za/content/document/404.pdf> (June 2004).
- ¹⁴ South African Universities Vice-Chancellors Association (June 2004). Presentation to the Parliamentary Committee on Education by the South African Universities Vice-Chancellors Association (SAUVCA): 3.
- ¹⁵ Bunting 2002: 136-7. The analysis used DoE 2001 information on the state budget.
- ¹⁶ SAUVCA June 2004: 7.
- ¹⁷ Taylor, A (2004). National Student Financial Aid Scheme. Briefing to the Education Portfolio Committee. 27 January 2004. Available at <http://pmg.org.za/docs/2004/appendices/040127nsfas.ppt> (June 2004).
- ¹⁸ Cloete, Fehnel et al. 2002: 174-180.
- ¹⁹ Stumpf 2001: 15.
- ²⁰ Sources for this section include MoE 15 November 2002; MoE December 2003; MoE February 2004a; and MoE February 2004b.
- ²¹ MoE February 2004b: 2.

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- ²² Foundation programmes provide entry-level students from disadvantaged educational backgrounds with grounding in key knowledge and skills areas, enabling successful students to register for a degree programme.
- ²³ Under the SAPSE formula, research funds were allocated 'blindly' in that there were no measures to ensure that the 15% of subsidy funding allocated to universities for research infrastructure was in fact used for research purposes. See Chapter 6.
- ²⁴ Research master's and doctoral graduates are not included in the determination of teaching output grants as they are already included in the determination of research output grants.
- ²⁵ Sectoral perspectives in this section and the final section of the chapter are largely drawn from SAUVCA June 2004.

INTERNATIONALISATION

‘Internationalisation’ is a term increasingly used to describe the international dimension of higher education – although it is often used loosely, and may therefore mean different things to different people. As a context for the purposes of this overview, some indications are provided as to the application of terms here.





As a starting point, internationalisation of higher education is widely viewed as valuable, for a range of reasons that include: increasing communication and respect between people of different cultures, advancing the purposes of learning and scholarship, facilitating international relations and enhancing leadership in a global community. However, constructions placed upon the notion of a 'global' higher education community can be problematic. Globalisation and internationalisation are viewed here as distinct concepts rather than as different sides of the same coin. Globalisation is one aspect of the context within which higher education operates, and which renders consideration of the international dimension of higher education important. However, internationalisation of higher education does not mean a

blurring of the boundaries between state, market and higher education institutions (HEIs) – as globalisation does.

Rather 'internationalisation is closely linked to the fact that nation-states which have autonomous but interdependent higher education institutions, have a fair degree of control over who can provide higher education and what counts for higher education'. It has essentially to do with the fact that 'international exchange students and staff, and international collaboration in the production of knowledge, are central to the life-world of the modern nation-state university'.¹

Against this background, globalisation is defined as 'the flow of technology, economy, knowledge, people, values, ideas ... across borders' in a sense that is worldwide in scope and substance and does not highlight the concept of nation. Internationalisation is defined as 'the process of integrating an international, intercultural or global dimension into the purposes, functions or delivery' of higher education, whether this be at national, sectoral or institutional level. A distinction can be drawn between 'internationalisation at home' and 'cross-border' or 'transnational' higher education – this is helpful in clarifying that internationalisation incorporates different 'streams' of activity. 'Internationalisation at home' refers to the intercultural and international dimensions of teaching and learning and other activities on a home campus; these can include: learning outcomes that support international/intercultural understanding, efforts to create a culture of (international) diversity supported by campus activities, student exchange and study abroad, and international agreements, partners or projects. Cross-border higher education refers to activities which happen transnationally and which can include cross-border programme delivery using a variety of modes (contact, distance, e-learning) and arrangements (franchises, twinning, branch campuses), and the international mobility of students and academic staff (whether self-funded, or in terms of bursaries and similar arrangements).² Cross-border activities are often motivated by profit.

"Promoting the vision of the African renaissance requires that a way be found of casting the question of curriculum development and change in a framework that nurtures the democratic ideals of an African country, while stimulating the expertise needed to compete in the global context."

The definitions set out above are widely used and are applicable in the South African context. However no definition of internationalisation taking specific account of the context of developing countries is available.³ This may be a significant gap, for reasons this overview will highlight.

12.1 The Inheritance in 1994

Prior to 1994, international cooperation as an aspect of South African higher education was greatly restricted as a consequence of the country's political and economic isolation, and the attendant marginalisation of its HEIs. Thus, well-established centres for international education did not exist in South Africa, although internationalisation of higher education became a feature of higher education systems in many other parts of the world following the Second World War.

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In addition, the development of the global economy accelerated most rapidly and visibly during the 1980s and 1990s. This was accompanied on the one hand by significant technological advances, especially in information and communication technology (ICT), and on the other, in many parts of the world, by a neo-liberal ideology holding to the rule of the market and the desirability of free trade and liberalisation. Thus the global economy was becoming inextricably linked with the so-called 'knowledge economy' and creation of a global higher education 'market' in which HEIs would increasingly compete with foreign providers, using technology to extend their reach into the local education market and to attract globally mobile students and staff away from their home regions. Detailed exploration of the impact of these changes on higher education, and conceptualisation of the responses higher education should offer on its own account, were thus intensifying just as South Africa re-entered the international community.

12.2 Key Developments since 1994

After 1994, South Africa reintegrated rapidly into the world community, as it was welcomed back as a member of the United Nations, the Organisation of African Unity, the Commonwealth and a host of other international organisations. South Africa has assumed a leading role in the African renaissance and associated initiatives such as the African Union (AU), the New Partnership for Africa's Development (NEPAD), the Southern African Development Community (SADC) and the Indian Ocean Rim Association for Regional Cooperation (IORARC).

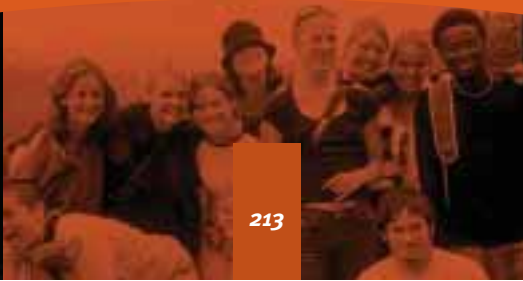
12.2.1 National Policy Developments

National policy after 1994 identified the apartheid legacy and globalisation as twin challenges to be addressed by higher education.⁴ Both the National Commission on Higher Education (NCHE) and the *White Paper* set out the balancing act that South African higher education would have to perform, in simultaneously serving the reconstruction and development needs of the country and confronting the challenges posed by globalisation. Thus the *White Paper* recognised that 'this national agenda is being pursued within a distinctive set of pressures and demands characteristic of the late twentieth century often typified as globalisation. This term refers to multiple, interrelated changes in social, cultural and economic relations, linked to the widespread impact of the information

and communications revolution, the growth of transnational scholarly and scientific networks, the accelerating integration of the world economy and intense competition among nations for markets'.⁵

In line with these twin imperatives, policy identified key responses that were needed of higher education (e.g. widening access, achieving equity and diversity in the student and staff bodies, supporting lifelong learning, and ensuring generic skills as outcomes of teaching and learning). However, neither the NCHE nor the *White Paper* detailed a specific vision, or specific principles, goals or strategies for the internationalisation of higher education. It was the Council on Higher Education (CHE) Task Team on Shape and Size that in 2000 clearly isolated a key issue facing the system: 'South Africa is not focusing sufficiently on promoting its higher education system internationally. There is immense potential to attract students

from the Southern African region, other parts of Africa and elsewhere without reducing efforts to expand access to South African students'. The Task Team believed that an appropriate framework and infrastructure drawing in various relevant government departments should be created for this purpose and internationalisation should be promoted. 'International students must be specially catered for to ensure that they enjoy rewarding social and



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educational experiences. Enrolling students from the rest of Africa would be a means of contributing to their human resource development and giving expression to our commitment to African development and the African renaissance. It would also be a source of revenue for institutions and the country.’⁶

Accordingly, the issue was taken up by the *National Plan*, which envisaged (as one of the outcomes of its strategic objective to produce graduates with the skills and competencies to meet the human resource needs of the country) increased student recruitment from within the SADC region. The *Plan* noted that although several thousand SADC students were enrolled in South African higher education, some SADC countries were negotiating with private providers both in South Africa and elsewhere to increase access to higher education for their nationals. From 2002, policy came into effect treating SADC students as South African students for subsidy purposes and advice was sought from the sectoral bodies to advise on the appropriate fee levy, if any, for SADC students.⁷

Furthermore, as a support to the achievement of staff equity and transformed institutional cultures, HEIs were encouraged to recruit academics actively from the rest of the Africa, as well as recruiting and retaining black South Africans. This would ‘contribute to the broader development of intellectual and research networks across the Continent, thus contributing to the social and economic development of Africa as a whole’.⁸



Although the *National Plan*’s policy signals were positive with respect to ‘imports’ of students and staff, it was more wary of ‘exports’ of higher education by other countries into the South African market, and of distance provision by local HEIs (both within South Africa and beyond her borders). These reservations were rooted

in core policy goals for the creation of a single coordinated higher education system, transforming in the interests of equity and efficiency. Thus the Ministry expressed concern that ‘the rapid expansion of foreign institutions, especially in fields of study that are already well provided for by public and local private institutions, may adversely impact on the public higher education system at a time when the latter is undergoing fundamental restructuring. The Ministry will continue to monitor the impact of overseas institutions on the sustainability of the higher education system as a whole, and, if necessary, make appropriate policy adjustments’.⁹

The regulatory framework for the registration and accreditation of foreign and private providers was accordingly strengthened, and regulations were introduced with respect to distance education programmes offered by contact institutions, while ‘the virtual university and the role of distance education [were to be] interrogated to assess both its promise and peril for higher education in South Africa and the Continent as a whole’.¹⁰

Policy developments such as these relevant to internationalisation have not always met with universal approval. As one example: some have questioned how additional services provided by HEIs for SADC students are to be funded if such students pay fees equivalent to local students.¹¹

An overarching national policy on internationalisation for South African higher education remains a significant gap. Accordingly, there is continued scope for *ad hoc* decisions by different higher education role players, with sometimes conflicting results.

12.2.2 Regional Developments

South Africa is party to the SADC Protocol on Education and Training as ultimately ratified in 2000, which takes as its point of departure that human resource development (HRD) and socio-economic and technological research are critical for tackling problems facing the region, and for its sustainable development. The Protocol envisages a concerted effort to implement coordinated, comprehensive and integrated programmes of education and training addressing the needs of the region. Stipulations with respect to higher education include that member states will:

- Recommend that HEIs reserve at least 5% of student admissions for students from SADC nations other than their own (to a target maximum of 10% overall).

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- Work towards harmonisation, equivalence, and eventual standardisation of entrance requirements.
- Devise mechanisms for credit transfer.
- Encourage the harmonisation of academic years in order to facilitate student and staff mobility.
- Collaborate in the production of teaching and learning materials.
- Promote student and staff exchange programmes.
- Establish a SADC distance education centre to improve distance education systems in the region.
- Establish centres of specialisation for teaching and learning, and centres of excellence for research.¹²

As some indication of the challenges implicit in the implementation of such a protocol, a research study¹³ conducted in 1999 into international student and staff mobility to South Africa, and academic linkages between local institutions and their counterparts in Africa, was of the opinion that ‘while policy is implicitly oriented towards playing a constructive role in Africa, practice mainly focuses on partnership building with non-African countries’.

In its view, this state of affairs was as much a matter of choice as it was a consequence of practical limitations. ‘The neglect of regional intellectual practice and academic traditions is in many ways an effect of the deliberate cultivation of ties with higher education institutions in Europe and the United States.’¹⁴



A new study would no doubt reveal that South African HEIs have embarked more earnestly upon the establishment of links with their African counterparts since 1999. Certainly, South Africa is now providing many places for SADC students (see below) – to the extent that an imbalance in student movement in the region is apparent. In general, it would appear that issues identified in the Protocol, and derived strategies and measures, have suffered seriously from a lack of concreteness and operationalisation.¹⁵ In recent months, higher education leadership in the SADC region has been working

on the establishment of a regional association (formal launch, early 2005) to support implementation of the SADC Protocol on Education and Training and to foster regional and international dialogue in higher education more broadly. The South African Universities Vice-Chancellors Association (SAUVCA) has acted during 2003 and 2004 as the interim secretariat for this initiative.

The review of international students and staff in South African higher education in the next section attempts to provide an overall picture of internationalisation, with a special emphasis on the extent to which regional links have been achieved.

12.2.3 *International Students and Staff in South African Higher Education*

At present, the Higher Education Management Information System (HEMIS) is not especially well-adapted as an instrument for collecting and analysing data on international students in South Africa, and there appears to be a need for the national Department of Education (DoE) and the sector to agree on ways of reporting these students.¹⁶ Defining an ‘international student’ presents a challenge in itself. In April 2004, the Institute of International Education suggested as one possible definition: an individual who has moved from one country to another primarily for the purposes of study.¹⁷ Yet it is recognised that there are other types of international students, including those enrolled in distance education programmes offered from HEIs in another country, or students enrolled in branch campuses or programmes taught by faculty from another country.



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A range of sources are used here to provide snapshots of international students and staff in the local higher education system, in the period after 1994.

The 1999 research study already cited¹³ found the following:

- There had been a significant increase in the number of international students in South Africa since 1994 (a growth of about 25% between 1988 and 1996).
- Most international students (55% in 1996) were registered at UNISA, suggesting they might not live in South Africa. The second largest cluster was registered at historically advantaged institutions (HAIs), especially in the Western Cape and Gauteng. There were very few international students at historically disadvantaged institutions (HDIs) – on average fewer than 30 per institution.
- Overall, international students comprised about 3% of students at universities and 2% at technikons. Most international students were registered for degree programmes, with most postgraduate students in master's programmes.
- International students from Africa comprised 70% of the total of foreign students. Most students from SADC countries were registered for undergraduate courses, while students from other African countries were registered for postgraduate degrees. SADC students were drawn to higher education in South Africa on account of proximity, cultural and linguistic links, and quality of educational resources.
- The number of international students from all sending regions increased throughout the 1990s, and had risen most sharply among students from Asia as a result of a successful recruitment strategy by UNISA.
- Most international students were male, although the percentage of female international students at postgraduate level had recently increased.
- Almost two-thirds of foreign staff employed at HEIs came from Europe and were male. In particular, foreign staff were more likely to be male, qualified with a doctorate, and employed at a senior level in historically white HEIs.
- Staff from SADC countries comprised 10% of foreign staff at HEIs in 1998 (and 90% of these were male). Staff from other African countries comprised less than 10% of the total foreign staff complement in the sector.
- While after 1994 structured agreements between South African HEIs and their counterparts increased in line with South Africa's international acceptance, most signed (and pending) agreements were with partners in Europe and North America. Few HEIs had agreements with counterparts in Africa, although these appeared to be increasing. Few South African students were studying in other parts of Africa as a result of such agreements.



DoE HEMIS data for international students in 2001 and 2002 brings this picture up to date and illustrates developments in the last five years. An immediately noticeable trend is that increases in the numbers of foreign students (observed in the 1999 study) have continued and have accelerated: rising from 14 124 in 1995 to 46 687 in 2002, with a sharp increase from 39 752 in 2001 (Table 32, while noting that data for several institutions for 1995 and 1998 are missing). In 2002, foreign nationals represented 7% of total enrolments. However, these enrolments were not distributed evenly among HEIs. Universities accounted for 82% of foreign enrolments and technikons for 18%, with foreign students making up 8% of total university enrolments and only 4% of technikon enrolments.

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Table 32: Headcount Enrolments by Country of Permanent Residence, 1995–1998–2001–2002

Institutional Type	Country of Permanent Residence	1995		1998		2001		2002	
		No.	%	No.	%	No.	%	No.	%
University	SADC	6 360	45%	9 222	54%	19 987	50%	25 545	53%
	Other African Countries	1 482	10%	2 454	14%	4 383	11%	5 735	12%
	Asia	660	5%	1 629	10%	1 456	4%	1 475	3%
	Europe	3 362	24%	2 465	14%	2 966	7%	3 061	7%
	North America	304	2%	367	2%	761	2%	1 012	2%
	South America	71	1%	91	1%	163	0%	205	0%
	Australia & Oceania	118	1%	99	1%	102	0%	116	0%
	No information					2 674	7%	1 343	3%
UNIVERSITY TOTAL		12 357	87%	16 327	95%	32 492	82%	38 492	82%
Technikon	SADC	1 137	8%	578	3%	5 559	14%	6 179	13%
	Other African Countries	287	2%	139	1%	471	1%	582	1%
	Asia	134	1%	19	0%	50	0%	110	0%
	Europe	191	1%	50	0%	135	0%	161	0%
	North America		0%	2	0%	4	0%	7	0%
	South America	1	0%	4	0%	3	0%	1	0%
	Australia & Oceania	17	0%	10	0%	8	0%	8	0%
	No information					1 030	3%	1 147	2%
TECHNIKON TOTAL		1 767	13%	802	5%	7 260	18%	8 195	18%
TOTAL		14 124	100%	17 129	100%	39 752	100%	46 687	100%

Source: Table 2.8, SAPSE, 1995 & 1998, HEMIS, 2001, 2002. Note: No data available for 1995 and 1998 for universities of North-West, Transkei, Vista; and technikons Natal, Mangosuthu, North-West and Eastern Cape. No data for 2001 for Transkei. No information on country of permanent residence was available for 10% of foreign student enrolments in 2001 and for 5% in 2002.

The majority of foreign students (30 724 or 66%) in 2002 were from SADC countries. A rapid increase in SADC students was evident at both universities (up to 24 545 in 2002, markedly up from 19 987 in 2001) and at technikons (up to 6 179 in 2002). Enrolments from other African countries also increased. Foreign students were enrolled predominantly at the HAUs (40% in 2002), followed by UNISA (31% – up sharply from 27% in 2001), the historically advantaged technikons (HATs, 13%) and HDUs (11%). Especially high numbers of foreign students were enrolled at the universities of Cape Town (3 597 in 2002) and Pretoria (3 153), at Technikon Pretoria (2 785), and at the universities of Potchefstroom (2 151), Natal (2 086) and, among the HDUs, the North-West (1 573 – the vast majority of whom were from neighbouring Botswana). Fairly high enrolments were found at the Afrikaans-language institutions, showing that language is not a significant barrier in this respect. (Appendix 2: Table 60 and Table 61, show foreign enrolments by individual universities and technikons.)

Noteworthy was the fact that just under a quarter (22%) of 2001 foreign enrolments were at postgraduate level, of which most were at HAUs (72%), with a sizeable 10% in master's programmes and a further 3% at the doctoral level. Of foreign students, 69% were indigenous African and 20% white.



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Table 33 shows the distribution of SADC enrolments in South African HEIs by nationality. Most emanated from Zimbabwe (29%), followed by Botswana (19%), Namibia (17%) and Lesotho (11%). The impact of the planned establishment of a second university in Botswana or a second campus outside Gaborone, and the overall expansion of enrolments in that country, will undoubtedly reduce future enrolments from there. It is interesting to note that proportionally more Botswana students were enrolled at technikons (35%) than at universities (15%). The same held true for Lesotho, while proportionally more students from Zimbabwe and Namibia were enrolled in universities than technikons. These trends are probably shaped by gaps and patterns in existing provision in these countries, and might provide guidelines for institutional recruitment drives.

Table 33: SADC Headcount Enrolments by Nationality, 2002

Nationality	University		Technikon		Total	
	No.	%	No.	%	No.	%
Angola	448	2%	231	4%	679	2%
Botswana	3 848	15%	2 189	35%	6 037	19%
Democratic Republic of Congo	224	1%	72	1%	296	1%
Lesotho	2 528	10%	855	14%	3 383	11%
Malawi	346	1%	11	0%	357	1%
Mauritius	1 615	6%	12	0%	1 627	5%
Mozambique	535	2%	46	1%	581	2%
Namibia	4 714	18%	675	11%	5 389	17%
Seychelles	4	0%	0	0%	4	0%
Swaziland	1 213	5%	408	7%	1 621	5%
Tanzania	200	0%	6	0%	206	0%
Zambia	2 201	8%	244	4%	2 445	8%
Zimbabwe	7 669	30%	1 430	23%	9 099	29%
TOTAL	25 545	100%	6 179	100%	31 724	100%

Source: HEMIS, 2002

DoE HEMIS data available¹⁸ for instruction/research staff employed by public HEIs in 2000 (Table 34) showed that 36 184 (94%) were South African citizens or permanent residents. Less than 0.5% (164) were from SADC countries (compared to 3.8% of the 2001 headcount of foreign students), while 2.2% (832) came from Europe (compared to their 0.5% share of 2001 student headcount).

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Table 34: Headcount Totals of Full-time and Part-time Instruction/Research Staff at South African Public Universities and Technikons, 2000

Citizenship	Universities	Technikons	Distance Education	Total
SA	25 687	9 105	1 392	36 184
SADC	157	5	2	164
Europe	798	26	8	832
Asia	248	10	0	258
USA	151	1	1	153
All other	450	30	4	484
Unknown	369	0	0	369
TOTAL	27 860	9 177	1 407	38 444

Source: DoE HEMIS, 2000

In conclusion, participation in the South African higher education system by foreign students has followed a marked upward trend, especially since 1999 and in contact programmes. Standing at 7%, levels cannot be pronounced unacceptable – as a benchmark, the United States system has 5% foreign enrolments.¹⁹ Such growth is also significant given that while the Ministry of Education has encouraged public HEIs to enrol SADC students, the recruitment of other foreign students has been left to the initiative of individual HEIs. Factors encouraging international students from African and other developing countries undoubtedly include price (South Africa is much cheaper than Europe or North America), and the international acceptability of South African qualifications.

In contrast, low proportions of foreign staff could be a consequence of resource factors – i.e. lower academic salaries and benefits than those on offer in countries in Australasia, Europe and North America. Ways and means by which student flows in SADC can be promoted need to be more fully explored and acted upon (e.g. identification of key student recruitment regions, key fields of concentration, and areas of study most likely to attract international students; encouraging the formalisation of exchange programmes; and establishing a regional admissions clearing house structure).

12.2.4 Promoting Internationalisation

Student and staff mobility, and the sharing of knowledge and ideas around internationalisation are promoted in this country by the International Education Association of South Africa (IEASA). Launched in 1997, IEASA's membership includes public, but not yet private, providers. The Association aims to take a proactive role in policy-making affecting international higher education and monitors the impact of government policy and procedure on international students and staff in this country. It creates and develops opportunities for student exchange and study abroad programmes and for international networking.



IEASA President
Dr Roshen Kishun

IEASA developed a strategy for promoting South African higher education in 2002, acknowledging that past isolation could only be overturned by conscious new strategies to make South African higher education more visible in international education. The strategy was presented to both SAUVCA and the Committee of Technikon Principals (CTP) in 2003, and on this basis the formation of student recruitment consortia by South African HEIs has been successfully developed.



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To take full effect the promotion initiative needs to be coordinated with other key constituencies – and an overarching national policy framework to facilitate this is still lacking. Major studies in Australia and the United Kingdom forecast the tripling of current levels of demand for international students in their respective countries over the next 20 years, meaning that international student mobility in the world would increase from two million currently to seven million by 2025. Thus there are substantial opportunities for attracting some of these students to South Africa. As it stands, international student numbers are expected to grow because of demand from SADC countries and the additional pressure for education and training from countries directly linked to NEPAD initiatives.²⁰

12.2.5 South African Students Abroad

The main target countries for South African students seeking to study abroad appear to be the United States (US), the United Kingdom (UK), Australia and Canada.

- In the 2001–2002 academic year, 2 232 South African students were enrolled at US universities and colleges, an increase of 6% on the preceding year (2 106 students in 2000–2001). Of these, 61% were enrolled in undergraduate degree programmes, and 34% in postgraduate degree programmes.
- In 2002, 688 South Africans were enrolled at universities in the UK, according to the student records of the British Higher Education Statistics Agency.
- In the 2001–2002 academic year, 97 South African students were enrolled at German universities (including universities of applied sciences); seven of these were doctoral students.²¹

12.2.6 Transnational Private Providers of Higher Education in South Africa

By mid-2004, the following foreign private providers had established campuses and offered qualifications in South Africa:

- Belgium Campus (Diploma in Information Technology), registration cancelled by DoE.
- Bond South Africa (Bachelor's qualifications in Information Systems, Information Technology, Communications and Commerce (Accounting, Finance, Management and Marketing); Master of Business Administration (MBA)).
- Business School of the Netherlands, South Africa (MBA).
- De Montfort South Africa (MBA).
- Henley Management College of South Africa (MBA).
- Monash South Africa (Bachelor's qualifications in Arts, Business and Commerce, Business Systems, Computing and Information Technology).

Of the four MBA programmes offered by these foreign providers, three were not re-accredited by the Higher Education Quality Committee (HEQC) at the close of its MBA re-accreditation exercise in May 2004 (Henley's programme was conditionally accredited). Two of those providers whose MBA programmes were not re-accredited (Bond and De Montfort) have subsequently announced that they will be withdrawing from South Africa.



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12.3 The Situation in 2004

12.3.1 GATS and South African Higher Education

A significant focus of attention with regard to the internationalisation of South African higher education has to do with the potential impact of the General Agreement on Trade in Services (GATS) of the World Trade Organisation (WTO). In this respect, the pattern of attention of both higher education policy-makers and the sector mirrors that of many other parts of the world, given that issues associated with GATS in higher education are universally complex, ambiguous and imperfectly understood.

There are three important dynamics to highlight at the outset of this discussion of GATS and higher education. First, there is as yet no agreement on how significant an issue this is for higher education – some would hold it to be a non-debate with no value for higher education; others disagree. Second, the intricacy of the issues renders discussion of them cautious and sometimes defensive in nature. It should nevertheless be remembered that South African higher education acknowledges the value in principle of international collaborations and partnerships, the mutual educational enrichment that flows from these, and their importance to the health of the higher education system. Third, while GATS in higher education has specific implications, many of the debates simply throw into relief issues that are already present as a function of the increased internationalisation of higher education around the world.

GATS is a WTO accord, signed in 1994, which promotes the liberalisation of trade in services. Specifically, it recognises education as a trade service sector, and higher education as one of five sub-sectors of service. GATS identifies four modes of supply for trade in services, which apply to higher education as to other trade service sectors (Figure 42). While GATS is a legally binding agreement, it is voluntary to the extent that countries can decide which sectors they will agree to cover under GATS rules (in their national schedules of trade commitments as well as in ‘request-offer’ negotiation rounds where requests for trade access in one sector may be bargained against offers of trade access in another sector). The built-in progressive liberalisation agenda of GATS is however in tension with apparent voluntarism, as its explicit purpose is to extend coverage to more service sectors and to reduce measures that serve as impediments to increased trade.



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Figure 42: GATS Modes of Supply²²

Modes of Supply	Explanation	Examples in higher education	Size/Potential of Market
1. Cross Border Supply	Provision of a service where the service crosses the border (does not require the physical movement of the consumer)	- Distance education - E-learning - Virtual universities	- Currently a relatively small market - Seen to have great potential through the use of new ICTs, especially the Internet
2. Consumption Abroad	Provision of a service involving the movement of the consumer to the country of the supplier	Students who go to another country to study	Currently represents the largest share of the global market for education services
3. Commercial Presence	The service provider establishes or has presence of commercial facilities in another country in order to render a service	- Local branch or satellite campuses - Twinning partnerships - Franchising arrangements with local institutions	- Growing interest and strong potential for future growth - Most controversial as it appears to set international rules on foreign investment
4. Presence of Natural Persons	Persons travelling to another country on a temporary basis to provide service	Professors, teachers, researchers working abroad	Potentially a strong market given the emphasis on mobility of professionals

Liberalisation of trade in higher education services has become an issue for trade negotiators, as is manifest in concrete forms in South Africa, the region, and the continent. The Democratic Republic of Congo, Lesotho and Sierra Leone have made full unconditional commitments to trade access in higher education.²³ South Africa has received three requests for access to higher education services (from New Zealand, Norway and Kenya), and the United States has issued a generic request to all member states of the WTO. In all cases, South Africa is asked to ensure that there are no limits on service providers from these countries wishing to operate within her borders, and that they be treated no less favourably than their South African counterparts.

South Africa has as yet neither responded to these requests nor made commitments of her own. However, the Ministry of Education has taken a strong stance against the commodification of higher education. In consultation with the Ministry of Trade and Industry, it has developed the view that the unintended consequences and costs of trade liberalisation in higher education could be great, and therefore South Africa should not make any commitments at this stage. Particular risks envisaged by the Ministry include:

- Potential undermining of government's efforts to transform higher education and in particular to strengthen the public sector so that it can participate effectively in a globalising environment.
- Homogenisation of academic approaches and corrosion of the collective knowledge base.

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- Undermining of institutional cultures and academic values.
- Erosion of the ‘public good’ agenda for higher education (‘the age-old notion that a university delivering education to a community must first and foremost address itself to the socio-economic needs of the community of which it forms a vital part’).
- Ethical and legal problems arising from trade that is not yet ‘mature’ and therefore may display inadequate preparation, short-term gains and under-investment on the part of transnational providers (in particular those that are not rooted in the national education systems of other countries).
- Proliferation of foreign providers of ‘dubious quality’ or whose strategies might have other negative impacts on the higher education system (e.g. recruitment strategies that target particular student segments would cut against the equity goals of policy).²⁴

GATS agreements with respect to higher education would entail an additional level of regulation, which would accordingly imply a loss of sovereignty and steerability of the national sector by the state and HEIs themselves.



Given that there is an existing regulatory framework governing foreign providers of higher education in South Africa, the Ministry of Education believes that the current focus should be on strengthening current activities designed to promote South Africa’s role in the global environment. As one such initiative, in February 2004, the Ministry issued as a discussion document a draft code of conduct for cross-border/transnational delivery of higher education programmes (i.e. covering such factors as branch campuses, distance learning programmes, franchising, international, offshore and ‘virtual’ providers, and ‘twinning’ programmes). The draft code advocates inter alia that cross-border delivery of higher education must be consistent with the mission of an institution and not a ‘short-term adventure’; that it must be sensitive to national contexts; that there must be full accountability for quality and standards of provision; that partnership arrangements and contracts should safeguard academic quality and the interests of students; that curricula should include content relevant to the needs of the student body; that award-

granting institutions must have full control over the conduct of assessment; and that the sovereignty of national departments of education must be respected.²⁵

The draft code thus addresses itself to issues that are of concern to all higher education systems facing the prospect of trade liberalisation in higher education. Within a broader frame, many of these issues, concerns and complexities are associated with increasing interconnectedness and internationalisation of higher education more generally. Issues include:

- Scope of GATS: GATS is deemed to apply to all measures affecting services except those ‘supplied in the exercise of governmental authority’ and so ‘not in competition’ with others. Yet under this formulation it is far from clear whether public higher education is covered or exempt. The situation is most complicated where the higher education system is mixed (public and private) – as in South Africa.
- Implications of negotiating across sectors: Bilateral and multilateral trade negotiations that allow countries to bargain service sectors for which access is sought against services for which requests are made, leaves higher education vulnerable to negotiating deals across sectors. In particular there is a risk that trade agendas will come to dominate the objectives and rationales of higher education itself.
- Policy interrelationships: Liberalisation of trade in higher education is likely to influence other key trends in the higher education sector, including the increasing use of ICT for programme delivery in ‘at home’ and



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cross-border contexts; the growing number of private for-profit providers in higher education around the world; and the need for public providers to seek alternate sources of funding. The nature and extent of interrelationships may be complex and may impact fundamentally on conceptions of higher education – e.g. traditional public good approaches.

- **Role of government:** Increased cross-border delivery by foreign providers raises questions about the role of government in such areas as the licensing and regulation of foreign providers; quality assurance and accreditation; recognition of qualifications and credit transfer; and funding protocols (subsidies, loans, grants, financial aid).
- **Student access:** Trade may commercialise higher education, escalate costs and therefore foreclose instead of widening access, or lead to the creation of two-tiered systems.
- **Funding:** The potential impacts of GATS are unclear. On the one hand, increased trade could provide alternate funding sources and relieve pressures on public funding; on the other, it could serve as a signal to governments that they can decrease public funding and so weaken public provision. Under one of the elements of GATS (the so-called ‘national treatment’ rule), equal treatment is required for local and foreign providers. In a mixed public and private system, such as South Africa’s, this means that foreign providers would have to be subsidised by the state. Alternatively, to avoid such a scenario, the system of financing of higher education would have to be restructured from one based on institutional funding, to one based on student funding (meaning that student choice would determine funding levels).
- **Recognition and transferability of credits:** Increased trade will add to the complexity of this already complex issue, and to the need for international approaches (along the lines of credit transfer systems that already exist in Europe and Asia Pacific).
- **Quality assurance (QA) and accreditation:** National quality assurance schemes will be increasingly challenged by the complexities of an internationalised higher education environment in which separate QA and accreditation approaches are not harmonised. Furthermore, any QA exercise must take into account the fact that basic infrastructure to support internationalisation is a *sine qua non* for any HEI wishing to ‘internationalise’: many HEIs do not have such support services in place. Another contentious issue is whether uniform application of QA processes to national and foreign providers is always appropriate (e.g. as already implemented in South Africa in the case of the re-accreditation of Master of Business Administration/MBA programmes).
- **Research and intellectual property:** Increased trade in the production of knowledge may serve to erode fundamental research in higher education and to commodify intellectual property at the expense of the knowledge base traditionally provided by HEIs.
- **Mobility of staff:** Increased mobility of professionals may disadvantage developing nations as their teachers and researchers move to countries with more favourable working conditions.
- **Culture:** Opinions diverge as to whether increased trade will serve to homogenise culture or to infuse a diversity of cultures into higher education.²⁶



This daunting menu of issues serves to indicate the extent of the implications of GATS and/or of developments with respect to higher education internationalisation with which South Africa has yet to grapple comprehensively. At present a range of initiatives is in progress to develop thinking, and includes:

- A CHE project on GATS in higher education which aims to deliver policy advice to the Minister in 2005, and to suggest a South African higher education response to GATS. Research to be published in early 2005 has focused on critical issues and key challenges of principle, strategy, policy and practice that GATS raises for South African higher education policy-makers, regulators – the Ministry and the Higher Education Quality

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Committee (HEQC) of the CHE, and HEIs; as well as the notion of the ‘opportunities’ GATS provides to higher education, the empirical dimensions of the four GATS ‘modes of supply’, and the nature of a potential internationalisation framework for higher education.

- An initiative by the Centre for Higher Education Transformation (CHET) which led to the presentation of a report on GATS and higher education in SADC at a UNESCO/World Bank/WTO Conference in Oslo in May 2003.²⁷
- A SAUVCA-led project to facilitate a special focus on sectoral perspectives on internationalisation and GATS. One output of this initiative has been a report on internationalisation and quality in South African universities.²⁸
- An Association of African Universities (AAU)/CHE/UNESCO workshop held in April 2004 in Accra, Ghana. This led to a declaration in which participants resolved to a) promote greater availability of information on GATS, and more debate and discussion among relevant stakeholders, in order to increase understanding of the potential dangers and/or opportunities arising from having cross-border higher education regulated by GATS; and b) promote further research on the nature and extent of cross-border provision in Africa and on the QA and accreditation systems appropriate for the development of higher education in Africa.²⁹ The AAU general conference to be held in Cape Town in early 2005 is to take GATS and cross-border supply as its theme.



In the specific context of GATS, two broad challenges can be identified for the road ahead. First, approaches developed for South African higher education in response to GATS need to take into account the perspectives of the full range of role-players. The kinds of initiatives already in train (as set out above) facilitate this. These initiatives will need to engage the present position of the Ministry of Education on GATS.

Second, South Africa's and South African higher education's response to GATS (as to other issues of internationalisation) cannot occur in isolation, but must be synchronised with and supportive of the roles and relationships South Africa has with the region (SADC) and the continent (AU, NEPAD, AAU). This is more easily said than done, given that the regional point of view could well be different from the national point of view. (At least five possibilities for SADC country responses to GATS have been identified.)³⁰

12.4 Critical Issues and Key Challenges Ahead

The vexed issue of GATS has – at least in recent months – turned the spotlight on the internationalisation of higher education in South Africa. However, as already indicated, the scope of internationalisation issues is much broader than GATS. These need to be explored and addressed, if appropriate responses are to be adopted both by South Africa itself and by the SADC region.

While transformative changes in policy have been influenced by international trends, there is scant reference to internationalisation in key higher education policy documents, meaning that the issue has not yet received optimal policy attention for the purposes of maximising the benefits of collaboration in an international frame. If international education is to contribute to development, then it should ideally be considered as an integral part of higher education planning, implementation and evaluation, with an appropriate policy framework in place. In addition, the global impact of trade liberalisation needs to be carefully monitored lest South Africa and other developing nations be overwhelmed by foreign providers of education.



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A national policy for the internationalisation of higher education – assuming that some kind of policy or policy framework is deemed necessary – would have to grapple with some specific issues. These include inter-ministerial policy integration; immigration regulations that will facilitate international students' studying in South Africa; state policy on the subsidisation of international student fees; the role of the National Higher Education Information and Applications Service (NHEIAS) for international students; a framework for credentials evaluation services to ensure the quality and consistency of these services across the system; and the QA dimensions of internationalisation activities. Policy development would also have to take into account complex issues having to do with 'brain drain', 'brain gain' and 'brain circulation': South Africa is vulnerable to the brain drain phenomenon as well as skills-raiding by other countries across the spectrum of professions – student mobility is one element in the dynamics of this. As pointed out in Section 9.2.1, South Africa must make strategic decisions as to the optimal balance between importing foreign skills and growing local skills. In addition, it will be critical to find a model for internationalisation that is principled and ethical in South Africa's own context. While international students and other activities may bring financial benefits to HEIs, and indeed the country, this should not be the chief reason for internationalisation, especially in so far as Southern African and other African countries are concerned. South Africa's history obliges it to contribute to higher education institution-building in other African countries, as well as to their research and high-level personpower needs.



Importantly, a suitable definition of 'international student' needs to be developed, and accurate data needs to be collected about international students and staff within South Africa, and the mobility of South African students and staff to other parts of the world. Education and training services cannot be ignored as valuable products to

share with SADC and the broader international community. Accordingly, South Africa should address the scope and size of education and training exports and provide government, policy-makers and other interested parties with reliable data.

Data also needs to be provided in ways that allow strategic analysis of trends. A weakness of the current DoE database, for example, is that it does not differentiate between nationality, target institution, and level of study related to subject area. Thus it is not possible to track the choice of programmes by disciplines, which could give insight into regional needs and deficiencies in programme delivery



Steps to support effective internationalisation should be taken at institutional level as well. These would include the development of institutional internationalisation policies, linked to all core higher education functions (teaching and learning, research

and community engagement) and with appropriate QA mechanisms in place. At institutional level, the internationalisation of curricula is one of the most important parameters to be addressed. While globalisation places pressure on curricula to support critical outcomes that can be applied in all contexts, 'internationalisation at home' may mean using the unique South African location to develop curricula that have a crucial social, as opposed to a purely commercial, relevance for students both local and international. Promoting the vision of the African renaissance 'requires that a way be found of casting the question of curriculum development and change in a framework that nurtures the democratic ideals of an African country, while stimulating the expertise needed to compete in the global context. How we do this will depend on the national leadership and the ability of the higher education sector to maximise the benefits of internationalisation while being sensitive to local cultures and needs'.³¹

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Chapter Notes and References

- ¹ Moja, T and Cloete, N (2002). 'Vanishing Borders and New Boundaries'. In Muller, J et al. (eds) (2001). *Challenges of Globalisation*. Cape Town: Maskew Miller Longman: 244-245. It should be noted that there is a range of arguments around these issues. For example, in the view of Peter Scott: 'Not only are internationalisation and globalisation different, they are actually opposed. Internationalisation reflects a world-order dominated by nation states ... in the context of internationalisation the inequalities between rich North and poor South remain prominent – whether the intention is to ameliorate these inequalities through aid or exploit them by trade ... Instead globalisation implies a radical re-ordering of this world-order as new regional blocs emerge, as old enemies become new allies (and vice versa); and as national boundaries are rendered obsolete by the transgressive tendencies of high technology and world culture.' Scott, P (2000). 'Globalisation and the University: Challenges for the Twenty-first Century'. In Centre for Higher Education Transformation. (2000). *Participant Responses in the Transformation Debates: Internationalisation and Globalisation: a New Era for Higher Education*. Pretoria: Centre for Higher Education Transformation (CHET).
- ² Knight, J (2003). 'Internationalisation: Meaning and Models'. In South African Universities Vice-Chancellors Association (November 2003). *Internationalisation and Quality in South African Universities*. Pretoria: South African Universities Vice-Chancellors Association (SAUVCA): Chapter 2.
- ³ The inaugural Global Leaders Forum on International Education (Melbourne, Australia, October 2003) acknowledged and discussed the general and widespread rise in discontent with the concepts and outcomes of globalisation. 'A significant outcome of the Forum discussion was the link between international education and sustainable development. There was an urgent need to refocus international education to be sensitive to the needs of developing nations. International education can actively contribute to a development-oriented global agenda.' Rouhani, S and Kishun R (eds). Special Edition. *Journal of Studies in International Education*. Vol 8 No 3, Fall 2004: 1-9. (Forthcoming.)
- ⁴ The nature of this dual challenge is set out in the Introduction of this report.
- ⁵ White Paper 1997: Section 1.7.
- ⁶ CHE 2000: Chapter 3.
- ⁷ MoE 2001: Section 2.5.
- ⁸ MoE 2001: Section 3.3.
- ⁹ MoE 2001: Section 4.6.
- ¹⁰ MoE 2001: Section 4.4. From 2002, funding was available for student places in new distance education programmes and new enrolments in existing distance education programmes, only if the programmes were approved as part of the HEI's three-year rolling plan, subject to such criteria as whether or not the programmes addressed agreed national and/or regional needs.
- ¹¹ Centre for Higher Education Transformation. (2003). *Internationalisation, GATS and Higher Education*. Report of a CHET Seminar Held at Spier Estate, Stellenbosch, 29 October 2003: 4.
- ¹² Kamper, GD (2002). 'Higher Education in the South African Development Community: a Vision.' *South African Journal of Higher Education* 16(1): 53-59.
- ¹³ Education Policy Unit (November 1999). *International Students [and] Staff at Higher Education Institutions in South Africa and Academic Linkages between Local Institutions and Higher Education and Research Institutions on the African Continent: Report Produced for the Department of Education*. Bellville: Education Policy Unit, University of the Western Cape.
- ¹⁴ EPU 1999: 23.
- ¹⁵ Hahn, K (2004). 'Towards a SADC Area of Higher Education?' In Namibian Economic Policy Research Unit (ed). *Monitoring Regional Integration in Southern Africa Yearbook 2004 (Volume 4)*. (In print.)

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- 16 CHET 2003: 5.
- 17 Information supplied by Dr R Kishun, President, International Education Association of South Africa (IEASA).
- 18 Bunting, I (2003). 'Foreign Students and Academic Staff in Public Higher Education in South Africa in 2001'. In Pillay, P, Maassen, P and Cloete, N. (2003). General Agreement on Trade in Services and Higher Education in the Southern African Development Community. Rondebosch: Centre for Higher Education Transformation (CHET): 23-37.
- 19 Information provided by Dr N Jooste, Director International Office and Programmes, University of Port Elizabeth.
- 20 Information in this section provided by Dr R Kishun and Dr N Jooste.
- 21 Information provided by Dr K Hahn, drawing on: Koh Chin, Hey-Kyung (2002). Open Doors: Report on International Educational Exchange. New York: Institute of International Education; and Hahn, K (2004). Frame Conditions for German-South African Academic Cooperation. Research Report for the German Academic Exchange Service. Available (in German) at <http://www.daad.de/hochschulen/de/5.2.2.7.html> (19 July 2004).
- 22 Knight, J (March 2002). 'Trade in Higher Education Services: the Implications of GATS'. In Council on Higher Education (Autumn 2003). The General Agreement on Trade in Services and South African Higher Education: What Should South Africa Do?. Pretoria, Council on Higher Education (CHE). (Kagisano CHE Higher Education Discussion Series, Issue No. 3.): 10.
- 23 These commitments were made during the establishment of GATS during 1994 (Uruguay Round.).
- 24 Ministry of Education. (March 2003). Presentation by the Minister of Education, Professor Kader Asmal, to the Portfolio Committee on Trade and Industry: Implications of the General Agreement on Trade in Services (GATS) on Higher Education. Parliament, Cape Town, 4 March 2003; Ministry of Education (February 2004c). Draft Code of Conduct for Cross-Border/Transnational Delivery of Higher Education Programmes: a Discussion Document.
- 25 MoE February 2004.
- 26 Knight 2002: 15-32; Pillay, P (2003). In Pillay, P, Maassen, P and Cloete, N. (2003). General Agreement on Trade in Services and Higher Education in the Southern African Development Community. Rondebosch: Centre for Higher Education Transformation (CHET): 11-22.
- 27 Pillay et al. 2003.
- 28 South African Universities Vice-Chancellors Association (November 2003). Internationalisation and Quality in South African Universities. Pretoria: South African Universities Vice-Chancellors Association (SAUVCA).
- 29 Association of African Universities. Accra Declaration on GATS and the Internationalisation of Higher Education in Africa, 29 April 2004, Accra, Ghana.
- 30 These five possibilities are: i) full protectionism, i.e. no commitments to GATS for an interim period while appropriate responses are developed; ii) full protectionism with concessions through other agreements, e.g. respecting student and staff mobility; iii) full liberalisation – this may be most appropriate for countries with poorly developed HE systems and few resources available in the foreseeable future; iv) partial liberalisation – this may be necessary if pressure is exerted by trade officials; v) partial liberalisation tied to concessions from exporting countries (e.g. study grants for SADC students). Pillay 2003: 21-22.
- 31 Kishun, R (1998). 'Internationalisation in South Africa'. In Scott, P (1998). The Globalisation of Higher Education. Buckingham: Society for Research in Higher Education and Open University Press: 58-69: 64, 66.

CHAPTER 13

SOUTH AFRICAN HIGHER EDUCATION: PAST, PRESENT AND FUTURE



This report has provided an overview of facets of South African higher education within a specific framework: the inheritance in 1994, developments over the past ten years to 2004, critical issues that remain to be addressed, and key challenges that lie ahead. This final chapter crystallises key observations and themes within this framework and identifies key challenges for South African higher education in the future.



13.1 *The Legacy of the Past*

A particular higher education system was inherited from apartheid: one that was deeply divided internally, and isolated from the international community of scholars. It was highly fragmented in structural and governance terms, and was far from being a coherent and coordinated system. It was inherently inequitable, differentiated along the lines of 'race' and ethnicity, and designed 'to reproduce ... white and male privilege and black and female subordination in all spheres of society'.¹ Accordingly, Africans, as the largest South African demographic group, had the lowest participation rate in higher education. While a number of higher education institutions (HEIs) demonstrated their own strengths and made effective educational contributions, the effectiveness of higher education could not be assessed as a whole but could only be related to the designated purposes of HEIs, whether defined by 'race' classification, or by separate institutional functions. Institutional purposes were linked neither to the needs of the broader society nor to consistent conceptions of quality. The efficiency of the higher education system was compromised by duplications, and its sustainability was declining, as public higher education funding struggled to keep pace with growing enrolments.

The effects of a disjointed system were intensely felt at institutional level. HEIs themselves became implicated – willingly or not – in perpetuating the apartheid system of privilege and penalty, of opportunity and stricture, of advantage and disadvantage. Their resources, and hence their capabilities, capacities and outcomes, were related to the social stratification of apartheid.

In sum, the legacy of the past was a fractured system and a set of HEIs bearing the scars of their origins. As South Africa entered a process of social, economic and political reconstruction in 1994, it was clear that mere reform of certain aspects of higher education would not suffice to meet the challenges of a democratic country aiming to take its place in the world. Rather, a comprehensive transformation of higher education was required, marking a fundamental departure from the socio-political foundations of the previous regime.

13.2 *The Dynamics of Policy Making, 1990 to the Present*

The past decade has seen an extensive range of activities and transformation-oriented initiatives in higher education: definition of the purposes and goals of higher education; policy research; policy formulation and adoption in the areas of institutional structure and provision, governance, funding, academic structure and programmes, and quality assurance (QA); the enactment of new laws and regulations and regular amendments of these; policy implementation on numerous fronts; and occasional policy review.

As South Africa celebrates its first decade of democracy, key questions must be: to what extent has the envisaged transformation of higher education in fact taken place? compelled by what vision? enabled by what means? and constrained by what limiting factors: inherited and historical constraints, constraints arising from changing national economic and social policies, changing political and social conditions, available human capacities, available financial resources, or errors of judgement?

In tracing developments in the transformation of South African higher education from 1990 to the present, a number of commentators have sought to analyse and periodise change through the lens of policy-making, its patterns and nature. A number of analyses are in agreement in defining three principal periods of higher education policy change: symbolic policy-making; framework development, and implementation. In addition, each analysis highlights, in often complementary rather than mutually exclusive ways, its own emphases and interpretation of the dynamics of these periods. A few writings are noted here as a means of providing a summary



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overlay on policy developments as chronicled in the chapters of this report. Key policy processes and initiatives, as commented on to a greater or lesser extent in earlier chapters, are summarised in Appendix 1: List of Policy Initiatives.

The **first period** of policy activity from 1990–1994 was associated principally with ‘**symbolic policy-making**’. In this period, from February 1990, when the National Party government’s unbanning of liberation organisations gave an overt signal of accelerated movement to democracy through a negotiated settlement, the higher education policy process suddenly opened up beyond the apartheid state. The period has been variously characterised as one in which:

- There was a ‘race for policy position’ as contending actors, including the ‘self-reforming apartheid state’, the broad democratic movement, and civil society sought to establish symbolic statements of intent for change in higher education.²
- New policy propositions were forged, as the anti-apartheid movement began preparing to govern. During this period discursive tensions were discernible between ‘popular democratic’ and ‘economic rationalist’ positions, but they were muted by the consensus-building dictates of the day.³
- Policy-making was symbolic, with the primary intention of declaring a break with the past, and signalling a new direction.⁴
- The predominant concerns were principles, values, visions and goals, unconstrained by issues of planning, resources and implementation. Attention focused on the role of the state in higher education transformation, and the relationship between the state and civil society in effecting transformation. Policy debate was characterised by the participation of mass movements and civil society. Outcomes included general agreement on the values and principles that should guide policy-making; and the formation of symbolic policies.⁵

The symbolic nature of developments prior to 1994 was perhaps only to be expected, given that a transfer of political power had yet to be effected and that the detailed conditions of governing higher education in a democratic environment could not yet be known. The inherent dangers of symbolism are however eloquently suggested in these analyses. The term ‘a race for policy position’ implies that the pressure of accelerated social change may have led to policy pronouncements without implications being fully comprehended. Likewise, reference to ‘consensus-building dictates’ hints at the possibility of contestations breaking out once such dictates were set aside. At several points in this report, the ‘symbolism’ alluded to in these analyses has been encountered. In considering the legal and policy context, for example, Chapter 2 noted that the African National Congress (ANC) pre-1994 education policy framework did not explicitly address policy trade-offs that might be needed, and did not yet broach concrete strategies for redress within the higher education system (Section 2.2.1). Chapter 5, in describing the development of policy around teaching and learning, noted that some of the radical ideas of ‘people’s education’ with respect to pedagogy and curriculum, and the ‘political’ formation of citizens and actors, were displaced by other discourses that emphasised skilling and training for the requirements of economic growth and globalisation (Section 5.2.1).



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Minister of Education
1994 - 1999



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A **second period** of policy making in 1994–1998 focused on **framework development**. This was a period in which it is claimed:

- There was a ‘race to establish an overarching legal and policy canopy’, still linked to policy of a symbolic nature.⁶
- Competing discourses were apparently ‘settled’ in the content of the *White Paper* and the *Higher Education Act*, while discursive tensions between equity and development were sustained in the debates of stakeholders. The ‘economic rationalist’ position was endorsed in a policy focus on the development of higher skills to meet the needs of economic development and global competitiveness. (Policy goals of planned expansion and greater responsiveness supported this.) The ‘popular democratic’ position was endorsed in the declared commitment to a programme of redress.⁷
- An ‘implementation vacuum’ followed on the heels of the legislative and policy framework. These broad directions went unsupported by specified policy instruments, and quickly prompted unanticipated consequences at institutional level. Reasons advanced by government for the vacuum (including the need to develop a consultative process, and capacity problems) were unconvincing. A more compelling reason appeared to be political reluctance to make necessary choices.⁸
- The overall framework for higher education transformation was elaborated in greater detail; and strategies, structures and instruments for the pursuit of policy goals began to be defined. The principal outcomes of this period were a defined policy and legislative framework; a number of substantive policies in concrete domains such as governance, financing and funding; and the establishment of an embryonic governmental infrastructure for further policy planning and development, and for policy implementation.⁹

Commentary on the second period suggests that framework policies continued to be largely symbolic, though some substance began to be added, in a sense seeking to integrate the three ‘E’s of policy: equity, effectiveness and efficiency. The Ministry of Education appeared to experience difficulty in confronting competing goals, paradoxes and tensions in policies, with their attendant political and social dilemmas, and in making unambiguous choices and decisions. At the same time, the idealism of symbolic policy had to confront the political limits and other structural constraints facing the new state. As one example, tight fiscal policies accompanying the shift from the Reconstruction and Development Programme (RDP) to the Macro-economic Strategy for Growth, Employment and Redistribution (GEAR), meant that higher education was unlikely to be allocated more financial resources than before. While the causes of the ‘implementation vacuum’ can be debated, the absence of unequivocal policy signals resulted in particular readings of the *White Paper* by HEIs, and various initiatives on their part, that would come to be considered by the Ministry as being in conflict with the intentions of the *White Paper*.

These issues were discussed in Chapter 2 of this report (Section 2.2.1.3), which refers to the four-year gap between the publication of the *White Paper* and the publication of the *National Plan*, and the unintended and unanticipated developments during this period that, if left unchecked, would threaten the achievement of a single, national, coordinated yet differentiated higher education system. The developments emanating from delays in implementing a new funding framework were discussed in Chapter 11 (Section 11.2.4). In this second period of policy-making (1994–1998), the complexity of achieving large-scale higher education transformation in the context of wider social and economic conditions and policies became fully apparent. Apart from representing political and social dilemmas, this complexity also constituted challenges to policy and strategy.



Prof. Kader Asmal
Minister of Education
1999 - 2004

SOUTH AFRICAN HIGHER EDUCATION: PAST, PRESENT & FUTURE

A **third period** of policy-making began in 1999, as attention turned to **implementation**. This has been a period in which, it is claimed:

- The focus has been on addressing a perceived crisis in delivery through a ‘race for policy implementation’. This has been accompanied by a centralising tendency and the dissolution of policy consensus.¹⁰
- Discursive tensions and political difficulties reached a high point (in 2000), resulting in policy doubt, retraction and reversal.¹¹
- The focus of policy has narrowed down to efficiency, labour market responsiveness and economic development goals, while equity and redress have become secondary.¹²
- A need has emerged for more targeted, differentiated, information-rich policy interaction between government, HEIs and society (given the unintended consequences of ‘unidirectional, comprehensive’ policy that developed in the second period).¹³
- An attempt has been made by the Ministry ‘to make decisive choices and take tough decisions in crucial areas that hitherto had not seen much progress through a relatively hands-off approach or inadequate governmental steering or by leaving it essentially to individual higher education institutions to take the lead’. Transcending the apartheid legacy in higher education by creating a national, integrated and coordinated yet differentiated system has remained the key policy objective.¹⁴

The first theme of these analyses of the third period is that there has been a significant shift in the mode of governance of higher education transformation as the Ministry of Education has opted for stronger state steering. This was noted in relation, for example, to patterns in the development of the legal and policy context (Section 2.2.1); in reactions to proposals for institutional restructuring (Section 3.2.1); and in the implications of the powers given to the Minister of Education through the new funding framework (Section 11.3.2.2). Most specifically, this issue was discussed in Chapter 10, which highlighted the need for a relationship between state and higher education sector that would be sufficiently bi-directional to ensure that the consequences of policy decisions can be negotiated to common benefit. Accordingly, Chapter 10 posed a set of questions to be addressed with respect to the practice of co-existing governance principles, namely: public accountability, institutional autonomy and academic freedom (Section 10.4).

The second theme is that policy implementation has been characterised by ‘policy doubt, retraction and reversal’ and a ‘secondary focus’ on equity and redress, while a focus on efficiency has moved to the fore. These analyses use institutional redress policy – or the lack of it – as a marker. Chapter 2 noted ‘equity versus efficiency’ concerns that surfaced in relation to the *National Plan*, and the absence of a dedicated redress policy (Section 2.2.2.2). Chapter 11 noted those elements of the new funding framework that support social and institutional redress (Sections 11.3.1 and 11.3.2.1), while Chapter 4 indicated the progress in the achievement of student equity and outcomes (summarised in Section 4.4). Certainly, institutional equity and redress have become strongly linked to institutional restructuring and the Programme and Qualifications Mix (PQM) exercise, resulting in limited financial allocations thus far for institutional redress. On the other hand, social equity and redress have been prioritised and here achievements have been greater. Regarding the emphasis on efficiency, it is not obvious that the goals of equity and efficiency are in inevitable competition with one another. Undoubtedly, fiscal constraints have made efficiency concerns more prominent and have played a part in decisions related to institutional restructuring and public funding of higher education. However, the evidence with respect to ‘policy retraction and reversal’ in the areas of equity and redress in general, is far from compelling.



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In summary, this analysis of higher education in the past decade of democracy concurs in part with other analyses of patterns of higher education policy change since 1990. Higher education transformation in South Africa is best characterised as highly complex, consisting of a set of still unfolding discourses of policy formulation, adoption, and implementation that are replete with paradoxes and tensions, contestations, and political and social dilemmas.

13.3 Achievements of the First Decade

Notwithstanding the considerable flux that has understandably characterised higher education as a result of a comprehensive transformation process and myriad policy initiatives, South African higher education in 2004 retains considerable strengths. It also displays many positive departures from the legacy system inherited in 1994, and these can be linked to the goals set out in the *White Paper* and *National Plan*.

It is to be hoped that these achievements will become enduring features of the higher education landscape, even as key actors will have to continue to address persistent and new challenges. In some cases there are initiatives and processes that are still unfolding. It is too early to declare their outcomes a success (or failure), and they will require careful monitoring.

- Foundations have been laid for a single, coordinated and differentiated system of higher education encompassing universities, universities of technology (technikons), comprehensive institutions, and various kinds of colleges. Progress has been effected through the development of a national higher education plan, benchmarks for higher education transformation, and the establishment of a planning dialogue between the Department of Education (DoE) and HEIs; through the implementation of restructuring strategies encompassing programme-level rationalisation and cooperation, especially at regional level, and the reconfiguration of the institutional landscape; and through the implementation of common governance arrangements across the public higher education system.

Progress has been limited by delays in the finalisation of a new academic policy and delays in decision-making following the review of the National Qualifications Framework (NQF). The impacts and outcomes of institutional restructuring, which could yield unanticipated and contrary effects, require close monitoring.

- Private higher education institutions have become a feature of the higher education landscape, subject to more or less the same governance, qualification and QA regulatory frameworks as public institutions. Largely effective controls have been put in place to prohibit 'fly-by-night' providers of higher education. An ongoing challenge is to build the capability of the private sector to make its distinctive contribution as part of a single coordinated higher education system, and also to uphold quality standards.



- Student enrolments have grown from 473 000 in 1993 to 675 128 in 2002. Although growth has not been as fast as anticipated, the participation rate is nearing 18% (compared to the medium-term *National Plan* target of 20%). The extent and pace of the de-racialisation of the student body and of many institutions must be a source of pride and should be celebrated as a considerable achievement. Whereas African students constituted 40% (191 000) of the student body in 1999, in 2002 they made up 60% (404 000) of overall enrolments. There has also been commendable progress in terms of gender equity. Whereas women students made up 43% (202 000 out of 473 000) of enrolments in 1993, by 2002 women constituted 54% (363 000 out of 675 000) of the student body. In relation to the benchmarks of the *National Plan*, there have also been positive shifts in enrolments by field of study and qualification level.

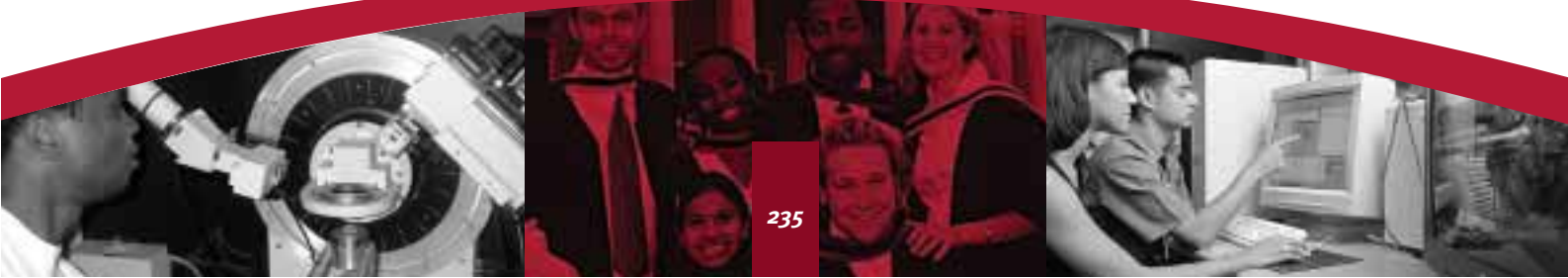
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The progress of women students, however, masks inequalities in their distribution across academic programmes and especially at higher levels of postgraduate training. Women students tend to be clustered in the humanities, and in teacher education programmes in particular. They remain seriously under-represented in science, engineering and technology (SET) and in business and management.

The rapid increase in African students again masks inequalities that are similar to those of women students. Large proportions of African students are enrolled in distance education programmes, most of which are humanities and teacher-upgrade programmes. The numbers and proportions of African students in programmes in SET, and in business and management, remain low. Postgraduate enrolments across most fields are also extremely low.

Finally, the improvement of overall higher education efficiency in terms of throughput and graduation rates, which have remained static over the past decade, remains a key challenge.

- There has been considerable progress in the deracialisation of the leadership of institutions. However, academic and administrative staff overall, at senior levels and especially at the historically white institutions, remains overwhelmingly white and male.
- In a number of areas of teaching and learning, institutions offer academic programmes that produce high quality graduates with knowledge, competencies and skills to engage in occupations and professions locally and anywhere in the world.
- Various areas of research are characterised by excellence and the generation of high quality fundamental and applied knowledge for scientific publishing in local and international publications, for economic and social development and innovation, and for public policy.
- In a variety of areas, there are also important and innovative community engagement initiatives that link academics and students and communities.
- A national QA infrastructure has been established and key policies and mechanisms with respect to institutional audit and programme accreditation are being implemented from 2004. These developments have significantly raised the profile of quality issues across the sector, and have linked notions of quality in delivery of teaching and learning, research and community engagement, to the goals and purposes of higher education transformation. There has also been a concomitant emerging institutionalisation of quality management within HEIs.
- To address changing economic and social and educational needs, there have been efforts on the part of various institutions to be more developmentally responsive and to build a greater outward focus, including a greater internationalisation of activities.
- System-level and institutional-level governance structures have been formally democratised – if not always substantively – through representative structures such as new councils (constituency representation) and institutional forums (stakeholder representation) at institutional level. Given the goals of higher education policy, democratisation of governance structures is an intrinsically positive development. Yet the absolute contribution of democratisation to effective governance is difficult to assess, given the difficulties that have arisen over the nature of participation. For example, at system level effective stakeholder participation has declined, and central steering has strengthened; and at institutional level difficulties have been encountered in rendering stakeholder participation effective through institutional forums.



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- New organisations at system level, such as the Higher Education Branch (HEB) of the DoE and the Council on Higher Education (CHE), as an advisory and QA body, have been institutionalised. A process is also under way to create a unified higher education association from the existing South African Universities Vice-Chancellors Association (SAUVCA) and Committee of Technikon Principals (CTP).
- The design and implementation from 2004 of a 'goal-oriented, performance-related' funding framework can be viewed as an achievement, given the complexity inherent in the task.

No further claims can be made for the framework until such time as its effects on the public higher education system and institutions are revealed. Much is likely to depend on the interpretations that are made respectively by state and sector, and the extent to which any required adjustments can be negotiated to the satisfaction of both.

- The National Student Financial Aid Scheme (NSFAS) has been successfully established and expanded as a means of effecting social redress for poor students. The number and average amount of NSFAS awards has increased steadily over the past decade, while NSFAS funding as a percentage of overall government appropriations for higher education has settled at around 6%. It is clear that the financial needs of students from working class and rural poor social backgrounds remain a pressing challenge and that effective social equity and redress will require the expansion of funding through the NSFAS.
- In the face of declining levels of public subsidies, some institutions have successfully embarked on a range of innovative activities to tap new sources of income for financial sustainability, while seeking to remain true to the fundamental purposes of higher education.
- There has been a welcome internationalisation of the higher education student body overall, and especially at some institutions. Foreign student enrolments increased from 14 124 in 1995 to 46 687 in 2002, constituting 7% of the total student body. Students from the Southern African Development Community (SADC) bloc increased from 7 497 in 1995 to 31 724 in 2002. Students from other African countries increased from 1 769 in 1995 to 6 317 in 2002.

Overall, to the extent that key actors face up to the critical issues and challenges that are discussed below, South African higher education holds great promise for contributing to social equity, economic growth, social development and democracy in South Africa, as well as to the economic and social development needs of the Southern African region and the African continent.

13.4 Critical Issues and Future Challenges

The concluding sections of each of the preceding chapters crystallised critical issues and key challenges for higher education in the years ahead. These are summarised in Figure 43.

"...South African higher education holds great promise for contributing to social equity, economic growth, social development and democracy in South Africa, as well as to the economic and social development needs of the Southern African region and the African continent."

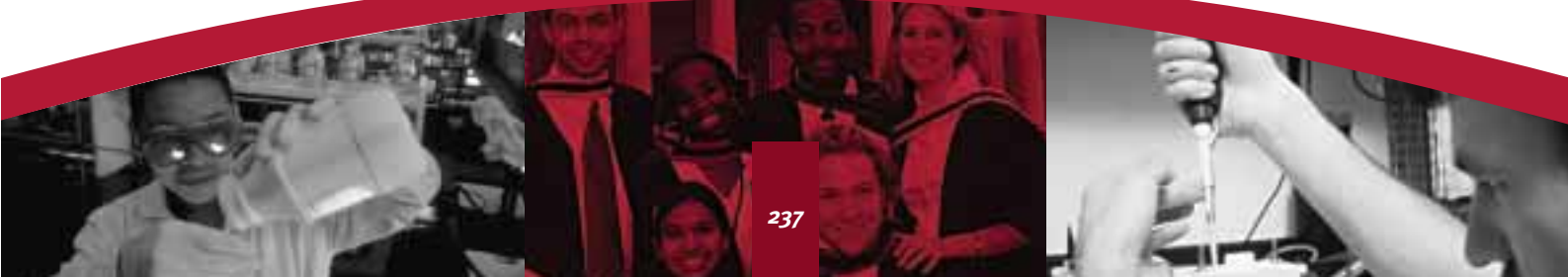


Mrs Naledi Pandor
Current
Minister of Education

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Figure 43: Summary of Critical Issues and Challenges Ahead, as Identified by Chapter

Chapter	Focus	Critical Issues and Challenges Ahead
2	Legal and Policy Context	- Ensuring sensitive processes of monitoring and evaluation provide early warning of unanticipated policy consequences, identify policy gaps, and so serve to condition interrelated policy elements - Re-examining core governance concepts and system-level governance dynamics to support outcomes achieved through an appropriate mix of centrally-driven measures, as well as 'softer' steerage mechanisms, incentives and opportunities for participative self-regulation by the higher education sector
3	Institutional Landscape	Evaluating the progress and impact of institutional restructuring, including with respect to: institutional cultures; cost-effectiveness; outcomes in terms of equity, effectiveness and efficiency; academic provision appropriate to institutional types; quality and responsiveness of core business; change management issues and unintended consequences
4	Equity	- Sustaining and consolidating progress made towards student equity in enrolments, opportunities and outcomes, while addressing significant weak points (e.g. overall efficiency, SET enrolments, postgraduate enrolments) - Transforming institutional and academic cultures as a means to achieving staff equity
5	Teaching and Learning	- Finalising a new academic policy and resolving the NQF review - Ensuring teaching and learning support policy goals such as student equity in throughput and success rates - Formulating guides for good teaching and learning practice
6	Research	- Locating higher education centrally in ongoing processes of research policy development and implementation - Exploring fully the impact of new funding drivers on higher education research and the sustainability of the system - Finding sustainable ways of reproducing the capacities and traditions of higher education research, while simultaneously transforming its equity profile - Effectively sustaining or developing research cultures in HEIs with demonstrable research capacity or potential
7	Community Engagement	- Finalising a policy framework which will facilitate community engagement on the part of HEIs - Utilising the knowledge and skills of those HEIs with experience in community engagement as a core function, to build the capacity of others - Stretching the traditional boundaries of the academy to support meaningful community engagement
8	Quality Assurance	- Effecting strategic and operational links between planning, funding and QA in the higher education system - Determining quality standards in a system in flux (e.g. new academic policy awaited, institutions still merging, emergence of universities of technology and comprehensive universities) - Guarding QA against 'checklist compliance' - Sustaining a proper balance between equity and quality - Engaging academics and students in the QA process - Institutionalising quality management and continuous improvement in HEIs
9	Responsiveness	- Identifying mechanisms for constructive collaboration between higher education and public and private sectors - Monitoring and addressing at institutional level the extent to which an HEI makes its economic, social, cultural and intellectual contribution to South African society - Guarding against reduction of HE responsiveness in all its dimensions to 'market responsiveness'



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Chapter	Focus	Critical Issues and Challenges Ahead
10	Governance	- Developing appropriate models of governance at institutional level (including in the process of merger) - Re-examining system-level governance dynamics, in particular the interrelationship of the principles of public accountability, institutional autonomy and academic freedom
11	Financing	- Monitoring closely the adequacy of public funding for higher education - Monitoring closely and critically the impacts of the new funding framework, in particular its effects on: institutional redress, institutional autonomy, institutional behaviours, enrolment patterns - Expanding funding through the NSFAS to deal with access and success for poor students
12	Internationalisation	- Discussing the need for and possibly developing national policy on internationalisation of higher education - Developing national policy on the application of the General Agreement on Trade in Services (GATS) to higher education - Collecting well-defined and accurate information about student and staff mobility in relation to South African higher education (incoming and outgoing) - Developing institutional-level internationalisation policies linked to core functions

Over and above the critical issues and challenges that are summarised in Figure 43, it is possible also to advance a number of propositions regarding critical issues and challenges related to the context of higher education transformation, the higher education transformation process and the values, principles, goals of South African higher education transformation.¹⁵

- *Context*

It is essential that there is an acute awareness of the contemporary and changing context within which South African higher education transformation takes place.

Three dimensions of the contemporary context are pertinent. First, globalisation – of communications, of trade, of production, of culture – is a defining feature of the epoch. Second, inequality, poverty and injustice remain rife in the world, and fault lines between the rich and powerful and the poor and powerless continue to deepen within and between countries. Third, higher education itself is increasingly subject to pressures of transnationalisation, marketisation and commodification, as those seeking new sources of profit see higher education as a multi-billion-dollar industry independent of sovereign national purposes.

In combination, these three dimensions of context will condition and shape policy and practice, as South African higher education struggles to transform in ways that meet the challenges of its own developing democracy, and the globalising knowledge society and economy.

It should also be noted that higher education and its institutions exist at the intersection of state, market and civil society, each with its specific, varied and different expectations and demands. A common experience of all institutions, therefore, is an exceptional ‘demand overload’ – that is to say, institutions must:

- Cope with a vast array of varied and differing national goals and imperatives, policy initiatives, market pressures, public expectations and institutional stakeholder demands.
- Do this without any significant increase in public finance, with limited scope for increased finance from student income, and with various difficulties raised by income from other sources.

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- Do this in the face of problems in securing and retaining specialist personpower, which is increasingly attracted to the public service and private sectors.
- Remain faithful to the 'public good' ideals of national policy and the social purposes that define an institution as a higher education institution.

As a result, higher education is in considerable flux, and an ambitious transformation agenda and different and conflicting imperatives, expectations and demands severely test the capabilities and capacities of national bodies and individual institutions and actors. Many factors – the implementation of government policies, the dissimilar historical development paths of institutions, their diverse institutional choices and decisions – are producing institutions with different orientations and cultures, different strengths and weaknesses, and different absorptive capacities and capabilities.

- *Purposes and Goals*

The defined purposes and goals of higher education, and of higher education change, should be continually examined to see whether they are appropriate to higher education and to the South African context. This means evaluating the extent to which they are substantive; how, if they are symbolic, they could be made more substantive; and what it will entail in terms of time, human and financial resources, and system and/or institutional endeavour, to achieve them.

As one important example, the notion of 'responsiveness' as a purpose and goal of higher education requires ongoing attention. It cannot be denied that higher education must contribute to the needs of the economy through the production of graduates and knowledge. However, the manner in which it must do so, and the appropriate modes for doing so, must be addressed. Higher education in South Africa as a developing country is part of the larger process of social and democratic reconstruction. The intellectual, knowledge and graduate production of higher education cannot be confined to economic goals alone, but must also address the needs of social, intellectual and cultural development.



- *Consensus*

Developing a national democratic consensus after 1994 on the fundamental values, purposes and goals of higher education was a challenging process. It may nevertheless have been relatively easier than achieving and maintaining consensus on the actual policies, strategies, instruments and procedures for transformation. Even if the goals are not at issue, the means and time frames for achieving these goals, or the application of agreed strategies, could be sources of contestation, conflict and even resistance.

It is clear that a national democratic consensus on higher education transformation is not a one-off activity, but one that has to be renewed periodically. Relationships between role players must be robust enough to allow for continuous review and revitalisation of approaches so as to ensure progress.

- *Paradoxes, Choices and Trade-offs*

The principles and goals of higher education, or their related policies and strategies, may sometimes stand in a relationship of intractable tension, especially where they are pursued simultaneously.



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As one example: if policy goals and challenges are formulated as both global competitiveness and redistributive national reconstruction and development, how is higher education as a whole to orient itself towards both these



imperatives? What does this mean for individual HEIs? Are all to be oriented towards both poles or is there to be functional differentiation and specialisation? Should these choices be left to HEIs themselves or must government steer choices? As another example, the pursuit of social equity and redress on the one hand and quality on the other creates political and social dilemmas, and raises the question of trade-offs between principles, goals and strategies.

In the face of paradoxes, 'simplifying manoeuvres' are possible. One would be to refuse to accept the existence of a dilemma. A second would be to elevate one goal over others, to help determine policies and choices. A third would be to rank values in advance. An alternate path is to accept that, for good political and social reasons, paradoxes exist and trade-offs will be inevitable as the attempt is made to balance competing goals and enable the pursuit of equally desirable goals.

For the foreseeable future, government and HEIs are likely to be impelled to pursue simultaneously goals and strategies that stand in severe tension with one another, and will need to negotiate and renegotiate the implications of doing so. Where trade-offs are made, they should not be hidden: rather, their overall impact on the achievement of goals should be confronted.

- **Priorities**

Priorities must be established with respect to goals, domains and levels of change. While the principle is easy to assert, the practice is less easily accomplished in the face of multiple priorities, or priorities in tension with each other. In South African higher education, prioritisation must therefore be matched to proper planning and a realistic pace of implementation. The establishment of ranked and ordered priorities seems imperative if government is to steer change effectively, and if institutions and other role players are to engage effectively around policy and implementation.

- **Principal Actors and Roles**

The roles of the actors in higher education – the state and government, HEIs, academics, students, business and other constituencies – need to be defined more clearly in relation, for example, to the phases of the policy and change process, and the arenas of higher education (e.g. governance, financing, teaching and learning, research). Such definition is shaped by history and tradition, by access to resources, by differing absorptive capacities and capabilities, and so forth. It is also shaped by notions of autonomy, academic freedom and accountability; by ideas about the appropriate balance in specific areas between institutional self-regulation and central state prescription and regulation; by the mechanisms and modes of debate, discussion and consensus-building; and by the determination of the pace and time frames of change.

- **'Pulleys and Levers'**

Successful higher education change requires bold, imaginative and innovative 'pulleys and levers'; i.e. policies, strategies, instruments and mechanisms (institutional restructuring, planning, funding, QA). All the same, there must be caution about elevating policies and policy instruments to the status of religious commandments. They are products of human agency and historical conjunctures, and the extent to which they remain relevant and appropriate must be constantly offset against concrete conditions (e.g. changes in the macro-economic and fiscal environment, the capacities of HEIs, available human and financial resources). There have been changes both in higher education and in the wider political and economic environment since policy was framed in the *White Paper*. This requires an interrogation of whether and how existing 'pulleys and levers' are adequate, or whether they need to be supplemented, modified or replaced.

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- *Teaching and Learning, and Research*

The core activities of higher education and HEIs – teaching and learning, research and community service, and innovation and renewal in these areas – cannot be sidelined in the clamour over changes to governance, financing and other areas. Focus must be sustained on ensuring that HEIs address their core function: fulfilling the needs of students and society.

The issues are complex and wide-ranging. Teaching and learning, and research programmes, need to be conceptualised, designed and planned for a diverse student body. Opportunities need to be presented so that students can develop and succeed as intellectuals, professionals and researchers; can think theoretically, can analyse with rigour, and can gather and process empirical data; and, finally, can do all this with a deep social conscience and sensitivity to the development challenges and needs of our society. Students also need learning environments and cultures that are safe, secure and respectful, intellectually nurturing, and engage them as partners. Finally, critical questions with respect to the transformation of teaching and learning and the curriculum, and the discourse of responsiveness prevailing in academic departments today, must be continuously posed and answered. The orientation of academic programmes, their outcomes, curricula, modes of teaching and learning, and assessment all require evaluation. Further, the question must be asked whether academic programmes are narrowly directed at technical mastery in a discipline or field, or whether they also address issues of critical citizenship, and the context and needs of a transforming society in which knowledge must be applied.



- *Quality*

A serious higher education transformation agenda must prioritise quality as a key policy driver. However, significant challenges associated with implementing the quality objectives of policy must be recognised.

One of these challenges is to manage the difficult balancing act between quality and equity: equity without quality is meaningless, while quality cannot be pursued in isolation from the goal of equity in higher education. A second challenge is to develop, in a differentiated system, a variety of standards appropriate to specified educational objectives and purposes. A third is to resist the tendency to see investment in QA as an expense that could be better utilised elsewhere.

While quality is ultimately the responsibility of the institution, it cannot be left to institutional endeavour alone. Going forward, a principled partnership will be required between HEIs, academics, students, other stakeholders and external QA agencies, to enable an optimal mix of self-regulation of quality by HEIs, and external validation.

- *Creative Change Leadership and Management*

Creative change leadership and management are critical for successful initiation, steering and management of higher education transformation. They are also crucial for ensuring that current strengths be maintained, so that new dysfunctions are not added to an already complex change landscape.

Conceptualising, managing, legislating, regulating, planning and implementing a comprehensive transformation agenda, is a demanding undertaking that requires sober, detailed and realistic planning at both system and institutional levels.



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One major test will be whether the Ministry of Education and other elements of government and the state can function in a genuinely developmental manner, not only within higher education but also at the *confluence* of higher education, the wider science and technology system, and economic and social sectors. A second test will be the simultaneous management by government (and HEIs, at institutional level) of system restructuring, system innovations and system maintenance. A third challenge will be the development at both system and institutional levels of consistent strength across the spectrum of areas.

- ***Reproducing and Transforming the Social Composition of a New Generation of Academics***

An issue that merits special attention is the reproduction and transformation of the social composition of the next generation of scholars and researchers.

From one angle – that of the current social composition of the South African academic labour force – there is a serious and immediate ‘crisis’ in employment equity. The roots of this crisis are well known. From another angle – a complex of factors including the age profile of the academic labour force; the remuneration of academics; the pull of the public (government, public enterprises and science councils) and private sectors, that offer considerably better remuneration; the opportunity costs for first-generation black graduates in terms of family expectations and deferred income; competition from knowledge-producing institutions; and the emigration of experienced and emerging scholars – the crisis is not immediate, but one that is looming. Over time it will become more pressing, unless action is taken in the near future.

The question can also be posed whether South Africa is nurturing future generations of critical scholars: the historians, sociologists, philosophers, educators and other scientists who are passionately committed both to justice and to honest, critical and independent scholarship; and who must be the critical voices and public intellectuals of our society. Unless higher education reproduces critical academics and researchers, its institutions will be impoverished, and South Africa will be poorer as a society.

- ***Monitoring and Evaluation***

Continuous and effective monitoring and evaluation of higher education is imperative both under conditions of intensive change and in ‘steady state’ conditions. Monitoring and evaluation should encompass the achievement of progress towards defined goals, the efficacy of instruments and mechanisms of change, and the processes of change themselves. A key challenge will be the buttressing of monitoring and evaluation processes by necessary investment in effective higher education management information systems for recording, analysing and presenting data on a variety of issues and areas of work.

- ***The Role of the State***

The successful transformation of higher education and HEIs cannot be left uniquely to the ‘market’ and ‘market forces’; nor will it be the result of individual and collective efforts of HEIs alone. The state has an indispensable role to play, while the mode of its involvement requires careful modulation.



The involvement and role of the state should be predicated on a fundamental commitment and respectful adherence to the principles of institutional autonomy and academic freedom as necessary conditions for optimising the contribution of higher education to economic and social development. This is so notwithstanding the concomitant necessity for public accountability on the part of HEIs. Optimally, the state’s role should constitute a mode of involvement that is thoughtful and supervisory, creating an enabling higher education policy framework that includes appropriate substantive policies, predictability of policy and adequate public funding.

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It is necessary to comprehend the limits of Ministry of Education action in higher education change and transformation, and that of other national agencies. This is particularly the case when it comes to far-reaching goals such as the creation of 'a single national coordinated system'. The market, civil society and social forces internal to higher education and HEIs (not to mention other state departments), also impact on higher education and HEIs. This is especially the case where public subsidies to HEIs may be declining and new sources of revenue have to be found, and where considerable and even competing claims may be made on HEIs by the market and civil society (and other state departments).

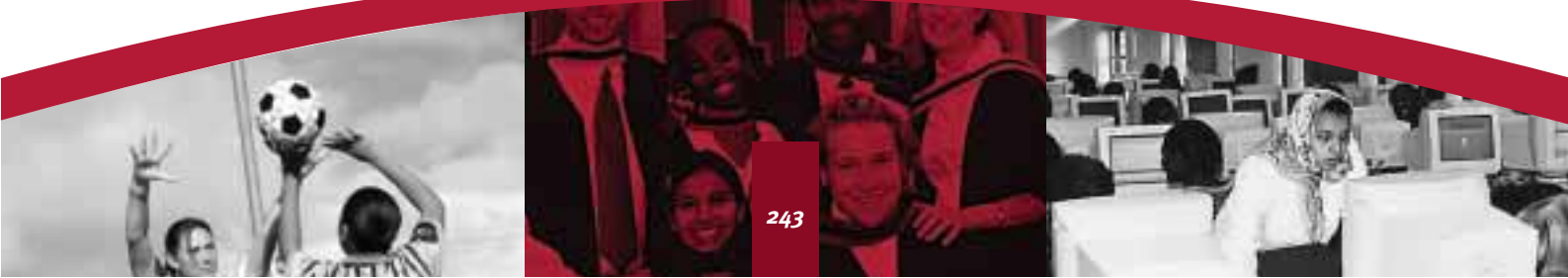
- **External Environment**

Notwithstanding political will, higher education cannot on its own transform society. Nor can it make an optimal contribution without an enabling external environment.

As a key example, internal changes in higher education will be limited, and the contribution of higher education to social equity and economic and social development reduced, if the fiscal environment is unduly constraining. The Ministry of Education's commitments to increasing enrolments, to a higher participation rate, and to access, equity and quality in higher education, will be handicapped if the state budget devoted to higher education is not adequate to achieve these goals. With the best will in the world, HEIs cannot become equitable, responsive and excellent in the quality of their teaching and learning, research and community engagement in the absence of the requisite resources and enabling environments.

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APPENDIX 1

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
1990 -1992	National Education Policy Investigation (NEPI)	African National Congress (ANC) - aligned mass movement National Education Co-ordinating Committee	Policy options and proposals framework	'Civil Society' initiative to explore options as part of the development of a policy framework for the new government	Framework Report and Post-Secondary Education Report feeds into ANC policy initiatives and policy statements	Considerable internal debate among contributors on key issues such as equity - development tension
1992	Policy proposals	The ANC and ANC-supporting formations: Union of Democratic University Staff Associations (UDUSA). Education Policy Unit (UWC) and other formations	Policy proposals	Further exploration of policy options towards the development of a policy framework for the new government	Various reports feed into ANC policy development	Considerable internal debate among contributors
1994	ANC Policy statement on higher education	Centre for Education Policy Development (CEPD) - ANC Policy Unit	Policy framework	Indication of ANC policy as part of its election manifesto	Establishes principles and values for new government policy and further policy development	Generally supportive
	Implementation Plan for Education and Training	CEPD	Implementation Plan	To provide new Minister with a plan of action and identification of priorities	First step in HE is the establishment of the National Commission on Higher Education (NCHE) to investigate all aspects of HE and make policy recommendations	Consensus on NCHE as first step

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Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
1995	NCHE Discussion Document	Consultative process of policy development, mainly expert-driven	Initial version of policy framework and statement of values and principles for the transformation of higher education	Development of comprehensive framework for higher education transformation	Wide debate among all stakeholders of key issues	Contestation around issues such as expert-stakeholder composition of higher education Council
1995	Establishment of the Higher Education Branch (HEB) of the Department of Education (DoE)	MoE	Structure	To provide the bureaucratic infrastructure for policy development and implementation	HEB undertakes a range of initial initiatives, including the incorporation of colleges; norms and standards for teacher education; the regulation of private providers; crisis management on troubled campuses; the development of pilot three-year rolling plans; and initial work on the new funding framework	Generally supportive
1996	NCHE Report: A Framework for Transformation		Final version of policy framework and statement of values and principles for the transformation of higher education		NCHE report feeds into Ministry of Education (MoE) policy and legislative development processes	Fairly wide consensus, through disagreement on key issues such as binary divide
1997	Government Green Paper	MoE, supported by experts, including at one time World Bank educationists	Government 'symbolic' position papers and legislation (not an implementation plan)	First government response of NCHE Report	<i>Green Paper</i> feeds into <i>White Paper</i>	Debate and contestation around differences between NCHE Report and <i>Green Paper</i>
	Education White Paper 3: A Programme for the Transformation of Higher Education			To establish broad consensus on policy framework and statement of values and principles for the transformation of higher education	<i>White Paper</i> provides broad reference point for transformation and feeds into the <i>Higher Education Act</i>	Considerable contestation around various versions of the <i>White Paper</i> but wide consensus on final version

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Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
1997	Higher Education Bill and subsequent <i>Higher Education Act</i>, No 101 of 1997			To establish legal framework for future policy implementation	New legal framework for higher education and <i>Akt</i> shapes Ministry regulations	Broad consensus
1997 onwards	Curriculum and programme restructuring	MoE, HEIs	Regulation	Requirement for higher education qualifications to be registered on National Qualifications Framework (NQF), and for programmes to be restructured in outcomes-based format	All HE qualifications “interim registered” on NQF and developed in outcomes-based format	Ongoing contestation around unit and whole qualification standards
1998	Establishment of the Council on Higher Education (CHE)	MoE involving public call for nominations	Structure: Secretariat of 35 persons	To advise (on request and proactively) the Minister on all matters related to higher education, to undertake quality assurance activities through the Higher Education Quality Committee (HEQC); to report annually to Parliament on the state of higher education, to monitor achievement of policy goals, to convene an annual consultative conference of national stakeholders; and to contribute to higher education development through publications and conferences	CHE undertakes an expanding range of activities related to its mandate	Generally supportive
1998 onwards	Institutional planning guidelines	DoE	Policy and planning guidelines	To develop procedures and practices for three-year rolling planning process	First round of pilot three-year institutional plans	Generally supportive, though DoE review reveals lack of planning capacity in some institutions

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Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
1998	Equalisation of 'c-values' in subsidy formula	MoE seeks advice from CHE	Policy advice	To remedy anomalies in the funding formula	CHE advises to equalise	Ministry accepts advice
1998 onwards	Draft regulations for registration of private higher education providers	Ministry and DoE	Regulation	To ensure the quality and sustainability of private provision and to align this with national higher education policy goals	Guidelines and manuals for registration of private higher education providers and registration of all private providers of higher education	Generally supportive though in some cases government regulation seen as unjustified incursion into the market, leading to acrimonious press debates
1998 onwards	Acceptance of programmes	Initially South African Qualifications Authority (SAQA) then the CHE-HEQC	Regulation interim frameworks, processes, criteria and structures: requirement that all new higher education programmes be accredited as condition of provision and public funding support	Part of implementation of quality assurance framework	Processing of and decision-making on new programmes; processing of decision-making on re-accreditation of conditionally registered programmes of private HEIs	
1998	Incorporation of education, agricultural and nursing colleges into universities and technikons	DoE Task Teams	Regulation: restructuring	To bring colleges (education, agricultural and nursing) into the national higher education system	Colleges of education incorporated into universities and technikons Reports on agriculture and nursing colleges produced - no final decisions on future	Generally accepted though some concerns about strong central steerage and consultative process
1999	National Students Financial Aid Scheme (NSFAS) Act of 1999	MoE	Legislation	To consolidate and extend student financial aid to needy students	Funds support about 200 000 needy undergraduate students	Generally supportive

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
1999	Higher Education Amendment Act	MoE	Legislation	To extend the period within which the CHE must submit a report to the Minister; to detail aspects of HEI governance; to empower the Minister to appoint an administrator for a public HEI where there is financial or other maladministration of a serious nature; to designate the Director-General as the registrar of private higher education institutions		
2000	‘Size and Shape’ Report: Towards a New Higher Education Landscape: Meeting the Equity, Quality and Social Development Imperatives of South Africa in the 21st Century	CHE on request for advice from MoE CHE	Initial Discussion Document Final Discussion Document	Restructuring institutional landscape of higher education to achieve efficiency, quality and equity goals	Extensive debate generated around proposals and restructuring	Strong contestation around proposals for differentiated institutional types
2000	Establishment of HEQC infrastructure and launch of HEQC	CHE	Regulation: Quality promotion and capacity building initiatives	Development of policy framework for quality assurance in higher education: new system, criteria, processes, guidelines and manuals for programme accreditation; system of self-evaluation and institutional audits	Release of draft and final policy <i>Founding Document</i> on quality assurance Frameworks and criteria for quality assurance of research	

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
2000	Higher Education Amendment Act	MoE	Legislation	To extend the power of the Minister of Education with regard to the determination of higher education policy; to provide that a public HEI may not without the approval of its council and, without the concurrence of the Minister, enter into a loan or overdraft agreement or develop infrastructure; to make further provision for the registration of private HEIs		
2001, February	National Plan for Higher Education (NPHE)	MoE	Implementation framework and plan	To provide framework and plan for implementation of <i>White Paper</i> goals	Sets various targets and goals, establishes timeframe and accountability reference points for Ministry's implementation plan; initiates mergers of some institutions and establishes a National Working Group (NWG) to advise on further restructuring	
2001	CHE Language Policy Advice Report Afrikaans language in higher education	CHE on request for advice from MoE Ministerial Task Team	Advisory report Task Team	To investigate an appropriate and inclusive language policy for higher education	Ministry releases Language Policy for Higher Education, based essentially on the CHE advice (November 2002)	
2001	Funding of Public Higher Education: A New Framework	MoE	Discussion Document	To replace South African Post-secondary Education (SAPSE) system and to provide the lever to steer higher education towards policy goals	Debate among stakeholders	General support but concern over details

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
2001	Review of NQF	MoE and Ministry of Labour (MoL) Study Team	Discussion Document	Ministries establish a Study Team to review the NQF in education	Study Team established	
2001	Higher Education Amendment Act	MoE	Legislation	To deem the HEQC an ETQA for higher education; to provide for the establishment of interim councils for new, declared or merged public HEIs; to provide for the dissolution of the council of a public HEI if 75% or more of the members resign; to provide for a seat of a public HEI; to provide for the conferring of degrees and honorary degrees by a public HEI; to provide for the repeal of the SERTEC Act and the universities' Private Acts	Greater powers vested in Minister	Some concern about the concentration of ministerial power
2002	A New Academic Policy for Programmes and Qualifications in Higher Education	CHE	Discussion Document	To develop new academic policy for structure, duration, nomenclature of qualifications and programmes	Public comment and steps towards finalisation of New Academic Policy in 2003	
2002, January (to Minister), released February, 2002	NWG Report: The Restructuring of the Higher Education System in South Africa	National Working Group	Discussion Document	Restructuring institutional landscape of higher education to achieve greater efficiency, effectiveness and equity	Proposes to reduce the 36 public institutions to 21 through mergers and incorporations, though with no reduction in number of sites of provision. New 'comprehensive' institution created through the merger of a university and technikon	Strong contestation of key issues, including key recommendation for mergers, use and reliability of data and consultative process

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
2002, May	Review of NQF	MoE and MoL Study Team	Release of Study Team Report	Recommending changes to NQF	Report with recommendations for alterations to NQF	DoE and DoL response awaited
2002, June	Restructuring of the institutional landscape	MoE	Discussion Document	Restructuring institutional landscape of higher education to achieve greater efficiency, effectiveness and equity	Ministry releases its own proposals on institutional restructuring which involve a few key departures from NWG recommendations and requests advice of CHE and public comments Ministry considers public submissions and CHE advice and submits revised proposals on institutional restructuring for Cabinet approval Cabinet approves new Ministry proposals followed by public statement and statutory three-month period for public comment	Strong contestation and threatened legal action among some institutions accompanied by support and acceptance by others
2002, December	Restructuring of the institutional landscape	MoE	Regulation	To finalise restructuring proposals	Final decision to reduce current 36 institutions to 22 through mergers with a few departures from June document	General acceptance
2002	Programme and Qualification Mix	MoE	Regulation	Ministry requests institutions to submit their proposed programme and qualification mixes and niche area	Ministry processes submissions and releases for comment its proposed qualification and programme mixes and niche areas of institutions	General acceptance with some concern regarding impact on HDIs

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
2002	Institutional Audit Framework & Criteria for Institutional Audits	HEQC	Discussion Document	To ensure quality in HE through operationalising the HEQC's quality assurance framework		
2002	Accreditation Framework	HEQC	Discussion Document	To ensure quality in HE through operationalising the HEQC's quality assurance framework		
2002	Implementation of quality assurance system	HEQC	Policy implementation	To ensure quality in HE through operationalising the HEQC's quality assurance framework	One-day visits to all public HE institutions and sample of private institutions Institution of pilot audits of 2 public and 1 private institution in late 2003-04 Formation of national HEQC Quality Assurance Managers Forum Training of audits chairs and panel members, of programme evaluators and HEQC staff Re-accreditation of private higher education programmes Launch of re-accreditation of about 50 MBA programmes at 24 institutions	General acceptance with some concern regarding impact on HDIs

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
2002	Review of co-operative governance in HE	CHE Task Team	Research and Policy Report	To investigate the state of co-operative governance in the light of various problems at numerous institutions	Research Report and Policy Report with some 20 recommendations for comment Amendment to <i>Higher Education Act</i> in 2002 to reduce the size of Councils of institutions CHE advice to the Ministry in 2003	
2002	Distance Education	CHE Task Team national and international specialists on request from Ministry for advice	Research and Policy Report	To investigate a range of issues relating to distance education	CHE advice to the Ministry in late 2003/2004	
2002	Research quality assurance	CHE-HEQC	Policy Report			
2002	Review of Master of Business Administration programmes	CHE-HEQC	Policy Report			
2002	Nomenclature of comprehensive institutions	CHE on request for service from Ministry	Advisory report	To gain clarity on the utilisation of names with regard to the new comprehensives	Ministry accepts advice that all comprehensive institutions should be provisionally be called universities and that final decisions should wait the results of the investigation	

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
2002	Criteria and conditions for institutions to use the term 'university', 'technikon', 'college' and to offer/award degrees and post graduate qualifications	CHE Size and Shape Standing Committee on request for advice from Ministry	Advisory report		CHE advice to the Ministry in late 2003	
2002	Amendment to the <i>Higher Education Act</i>	MoE	Legislation	To provide for labour and student matter arising out of declarations and mergers of public HEIs; to provide for changes in the size of councils and institutional forums; to provide for the appointment of an administrator to take over the functions of a council which is deemed to have resigned; to make new provision for the Minister's authority to make regulations		
2003	Review of NQF and higher education	MoE and MoL	Discussion Document	To provide joint Ministerial response to the Task Team report on the NQF review	Recommended modifications to the NQF	Some aspects supported but concern about the instrumentalist impact of framing the purpose of higher education within the human resource development (HRD) framework

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
2003	General Agreement on Trade and Services (GATS) and higher education	Ministry request to CHE for advice	Report and debate	CHE initiates debate on the claims made on South Africa by four countries through its journal, Kagisano, commissions work and convenes a national seminar	CHE advises the Ministry in mid-2003	
2003, April	New regulatory framework for private higher education	MoE	Regulation			
2003	Amendment to the <i>Higher Education Act</i>	MoE	Legislation	To allow for periodic, as opposed to annual reports of the CHE; to establish the Boards of National Institutes of Higher Education in Mpumalanga and Northern Cape; and to attain legal certainty around institutional incorporations regarding labour and student matters	Further Amendment to the <i>Act</i> to achieve the goals	General support
2003, December	New Funding Framework	MoE	Policy		Followed by statement on higher education funding and information respecting how government grants are allocated (February 2004)	
2004, February	Draft Code of Conduct for Cross-border /Transnational Delivery of higher education	MoE	Discussion Document	To facilitate collaboration in setting guidelines for enabling and monitoring cross-border/transnational delivery of services in higher education		

LIST OF POLICY INITIATIVES

Date	Initiative	Process - Actor/Agency	Type of Initiative	Goals	Outcome/s	Responses
2004, April	Development of Monitoring and Evaluation System	CHE	Policy monitoring framework	To monitor and evaluate higher education performance in relation to the achievement of national policy goals and developments in society, the economy and polity that impact on higher education	Framework published for public comment in early 2004	General support
2004, May	MBA Review	CHE-HEQC	Completion of review and accreditation decisions			
2004, June	Audit Framework Criteria	HEQC	Implementation framework and criteria	To guide institutional audits being implemented from 2004 (pilots conducted 2003)		
2004, July	<i>The Higher Education Qualifications Framework</i>	MoE	Discussion Document	To take forward the finalisation of a new academic policy		

APPENDIX 2

ADDITIONAL DATA

Table 35: Headcount Enrolments in Colleges of Nursing, 2001

	Students	Pupils	Pupil Nursing Auxiliary	Total
Women	8 063	4 503	3 334	15 900
Men	1 464	430	317	2 211
TOTAL	9 527	4 933	3 651	18 111

Source: SANC, Note: a) Student: leading to registration as a professional nurse (duration of training = 4 years); b) Pupil: leading to enrolment as a nurse (duration of training = 2 years); c) Pupil Bursing Auxiliary: enrolment as an auxiliary nurse (duration of training = 1 year)

Table 36: Headcount Enrolments in Colleges of Agriculture, 1999-2003

	1999		2000		2001		2002		2003	
	No.	%	No.	%	No.	%	No.	%	No.	%
Black										
Men	660	32%	608	33%	467	30%	485	32%	517	34%
Women	542	26%	472	25%	351	22%	304	20%	305	20%
TOTAL	1 202	59%	1 080	58%	818	52%	789	52%	822	55%
White										
Men	773	38%	701	38%	671	43%	672	44%	609	40%
Women	72	4%	84	5%	78	5%	63	4%	77	5%
TOTAL	845	41%	785	42%	749	48%	735	48%	686	45%
Men	1 433	70%	1 309	70%	1 138	73%	1 157	76%	1 126	75%
Women	614	30%	556	30%	429	27%	367	24%	382	25%
TOTAL	2 047	100%	1 865	100%	1 567	100%	1 524	100%	1 508	100%

Source: AvN Consulting. Note: 'black' enrolments refer to combined African, Indian and Coloured students.

ADDITIONAL DATA

Table 37: University and Technikon Headcount Enrolments in Agriculture, 1998–2002

	African		Coloured		Indian		White		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
University										
1998	1 218	48%	46	2%	12	0%	1 273	50%	2 549	100%
1999	1 359	52%	41	2%	13	0%	1 220	46%	2 633	100%
2000	1 555	50%	42	1%	32	1%	1 472	47%	3 100	100%
2001	2 699	64%	41	1%	37	1%	1 467	35%	4 244	100%
2002	2 556	61%	44	1%	40	1%	1 584	38%	4 223	100%
Technikon										
1998	2 485	52%	156	3%	30	1%	2 089	44%	4 760	100%
1999	1 904	55%	153	4%	31	1%	1 346	39%	3 434	100%
2000	2 993	57%	127	2%	46	1%	2 091	40%	5 258	100%
2001	3 908	62%	179	3%	43	1%	2 216	35%	6 346	100%
2002	3 735	61%	198	3%	71	1%	2 114	35%	6 118	100%
TOTAL										
1998	3 703	51%	202	3%	42	1%	3 362	46%	7 309	100%
1999	3 263	54%	194	3%	44	1%	2 566	42%	6 067	100%
2000	4 548	54%	169	2%	79	1%	3 563	43%	8 358	100%
2001	6 607	62%	221	2%	80	1%	3 683	35%	10 590	100%
2002	6 291	61%	242	2%	110	1%	3 699	36%	10 341	100%

Source: DoE HEMIS. Note: 1998 figures for the universities of Natal, North-West and Transkei, and for Technikon Natal are missing. 1999 figures for the universities of Natal, North-West, Rhodes, Transkei, UNISA, Western Cape and Zululand and for the technikons Eastern Cape, Free State, ML Sultan, Natal, Pretoria and Wits are missing. 2000 figures for the University of North-West are missing.

ADDITIONAL DATA

Table 38: Headcount Enrolments by individual University and 'Race', 1995

	African		Coloured		Indian		White		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Cape Town	3 494	23%	2 013	14%	827	6%	8 575	58%	14 909	100%
Durban-Westville	5 354	51%	169	2%	4 669	44%	304	3%	10 496	100%
Fort Hare	5 268	99%	8	0%	2	0%	18	0%	5 296	100%
Free State	1 920	19%	502	5%	22	0%	7 449	75%	9 893	100%
Medunsa	2 891	79%	36	1%	544	15%	169	5%	3 640	100%
Natal	4 992	31%	431	3%	4 467	27%	6 403	39%	16 293	100%
North	18 802	100%	28	0%	17	0%	17	0%	18 864	100%
Port Elizabeth	1 141	21%	720	13%	154	3%	3 422	63%	5 437	100%
Potchefstroom	2 205	21%	225	2%	58	1%	7 819	76%	10 306	100%
Pretoria	4 207	16%	238	1%	320	1%	21 043	82%	25 808	100%
Rand	8 165	40%	872	4%	641	3%	10 592	52%	20 270	100%
Rhodes	1 358	30%	150	3%	426	9%	2 613	57%	4 547	100%
South Africa	58 233	49%	4 490	4%	10 501	9%	45 536	38%	118 760	100%
Stellenbosch	363	2%	1 436	10%	86	1%	12 833	87%	14 719	100%
Transkei	7 531	100%	1	0%	6	0%	5	0%	7 543	100%
Venda	7 448	100%	1	0%	1	0%	7	0%	7 457	100%
Vista	33 402	98%	610	2%	72	0%	158	0%	34 242	100%
Western Cape	7 321	50%	6 509	44%	696	5%	208	1%	14 734	100%
Witwatersrand	4 627	26%	338	2%	2 247	13%	10 594	59%	17 806	100%
Zululand	7 819	98%	12	0%	62	1%	116	1%	8 009	100%
TOTAL	186 541	51%	18 789	5%	25 818	7%	137 881	37%	369 029	100%

Source: SAPSE, 1995. Note: No data were available for the University of North-West

ADDITIONAL DATA

Table 39: Headcount Enrolments by individual University and 'Race', 2002

	African		Coloured		Indian		White		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Cape Town	5 265	27%	2 767	14%	1 360	7%	10 131	52%	37	0%	19 560	100%
Durban-Westville	5 549	60%	118	1%	3 383	37%	200	2%	1	0%	9 251	100%
Fort Hare	7 310	99%	19	0%	2	0%	18	0%	0	0%	7 349	100%
Free State	8 586	49%	742	4%	347	2%	7 776	45%	0	0%	17 451	100%
Medunsa	3 480	86%	33	1%	357	9%	169	4%	0	0%	4 039	100%
Natal	13 910	48%	914	3%	8 447	29%	5 752	20%	5	0%	29 028	100%
North	8 348	99%	7	0%	14	0%	23	0%	2	0%	8 394	100%
North-West	7 591	99%	16	0%	27	0%	31	0%	0	0%	7 665	100%
Port Elizabeth	17 022	80%	947	4%	284	1%	3 082	14%	0	0%	21 335	100%
Potchefstroom	12 531	49%	775	3%	256	1%	10 269	40%	1 611	6%	25 442	100%
Pretoria	16 079	39%	559	1%	1 566	4%	22 569	55%	0	0%	40 773	100%
Rand	8 524	39%	660	3%	1 352	6%	11 598	52%	0	0%	22 134	100%
Rhodes	3 332	45%	341	5%	468	6%	3 284	44%	0	0%	7 425	100%
South Africa	68 210	48%	7 647	5%	17 193	12%	50 085	35%	0	0%	143 135	100%
Stellenbosch	3 277	15%	2 324	11%	433	2%	15 361	72%	0	0%	21 395	100%
Transkei	4 469	97%	16	0%	117	3%	20	0%	0	0%	4 622	100%
Venda	7 764	100%	1	0%	3	0%	15	0%	0	0%	7 783	100%
Vista	20 320	95%	422	2%	139	1%	487	2%	1	0%	21 369	100%
Western Cape	5 635	44%	5 826	46%	926	7%	278	2%	32	0%	12 697	100%
Witwatersrand	10 058	45%	530	2%	3 281	15%	8 309	37%	3	0%	22 181	100%
Zululand	6 993	95%	39	1%	102	1%	266	4%	0	0%	7 400	100%
TOTAL	244 253	53%	24 703	5%	40 057	9%	149 723	33%	1 692	0%	460 428	100%

Source: HEMIS, 2002. Note: High numbers of unknown 'race' enrolments at Potchefstroom are likely to be foreign nationals.

ADDITIONAL DATA

Table 40: Headcount Enrolments by individual University and Gender, 1995

	Men		Women		Total	
	No.	%	No.	%	No.	%
Cape Town	8 578	58%	6 331	42%	14 909	100%
Durban-Westville	4 867	46%	5 629	54%	10 496	100%
Fort Hare	2 380	45%	2 916	55%	5 296	100%
Free State	4 897	49%	4 996	51%	9 893	100%
Medunsa	2 190	60%	1 450	40%	3 640	100%
Natal	8 618	53%	7 675	47%	16 293	100%
North	8 872	47%	9 992	53%	18 864	100%
Port Elizabeth	2 704	50%	2 733	50%	5 437	100%
Potchefstroom	5 157	50%	5 150	50%	10 306	100%
Pretoria	13 577	53%	12 231	47%	25 808	100%
Rand	9 268	46%	11 002	54%	20 270	100%
Rhodes	2 162	48%	2 385	52%	4 547	100%
South Africa	54 293	46%	64 467	54%	118 760	100%
Stellenbosch	8 263	56%	6 456	44%	14 719	100%
Transkei	3 164	42%	4 379	58%	7 543	100%
Venda	3 958	53%	3 499	47%	7 457	100%
Vista	12 962	38%	21 280	62%	34 242	100%
Western Cape	6 915	47%	7 819	53%	14 734	100%
Witwatersrand	10 215	57%	7 591	43%	17 806	100%
Zululand	3 196	40%	4 813	60%	8 009	100%
TOTAL	176 235	48%	192 794	52%	369 029	100%

Source: SAPSE, 1995. Note: No data were available for the University of North-West.

ADDITIONAL DATA

Table 41: Headcount Enrolments by individual University and Gender, 2002

	Men		Women		Total	
	No.	%	No.	%	No.	%
Cape Town	10 044	51%	9 516	49%	19 560	100%
Durban-Westville	4 015	43%	5 236	57%	9 251	100%
Fort Hare	2 437	33%	4 912	67%	7 349	100%
Free State	7 956	46%	9 495	54%	17 451	100%
Medunsa	1 970	49%	2 069	51%	4 039	100%
Natal	12 788	44%	16 240	56%	29 028	100%
North	3 936	47%	4 458	53%	8 394	100%
North-West	2 987	39%	4 678	61%	7 665	100%
Port Elizabeth	7 868	37%	13 467	63%	21 335	100%
Potchefstroom	9 709	38%	15 733	62%	25 442	100%
Pretoria	17 499	43%	23 274	57%	40 773	100%
Rand	9 404	42%	12 730	58%	22 134	100%
Rhodes	3 030	41%	4 395	59%	7 425	100%
South Africa	63 046	44%	80 089	56%	143 135	100%
Stellenbosch	10 067	47%	11 328	53%	21 395	100%
Transkei	1 793	39%	2 829	61%	4 622	100%
Venda	4 279	55%	3 504	45%	7 783	100%
Vista	8 336	39%	13 033	61%	21 369	100%
Western Cape	5 413	43%	7 284	57%	12 697	100%
Witwatersrand	11 332	51%	10 849	49%	22 181	100%
Zululand	3 048	41%	4 352	59%	7 400	100%
TOTAL	200 957	44%	259 471	56%	460 428	100%

Source: HEMIS, 2002.

ADDITIONAL DATA

Table 42: Undergraduate & Postgraduate Headcount Enrolments by individual University, 1995

	Undergraduate		Postgraduate		Total	
	No.	%	No.	%	No.	%
Cape Town	10 382	70%	4 527	30%	14 909	100%
Durban-Westville	8 750	83%	1 746	17%	10 496	100%
Fort Hare	4 788	90%	508	10%	5 296	100%
Free State	7 072	71%	2 821	29%	9 893	100%
Medunsa	3 114	86%	526	14%	3 640	100%
Natal	12 164	75%	4 129	25%	16 293	100%
North	16 608	88%	2 256	12%	18 864	100%
Port Elizabeth	4 307	79%	1 130	21%	5 437	100%
Potchefstroom	7 060	69%	3 246	31%	10 306	100%
Pretoria	18 697	72%	7 111	28%	25 808	100%
Rand	15 337	76%	4 933	24%	20 270	100%
Rhodes	3 532	78%	1 015	22%	4 547	100%
South Africa	99 161	83%	19 599	17%	118 760	100%
Stellenbosch	10 306	70%	4 413	30%	14 719	100%
Transkei	6 377	85%	1 166	15%	7 543	100%
Venda	6 957	93%	500	7%	7 457	100%
Vista	32 686	95%	1 556	5%	34 242	100%
Western Cape	12 205	83%	2 529	17%	14 734	100%
Witwatersrand	12 000	67%	5 806	33%	17 806	100%
Zululand	7 155	89%	854	11%	8 009	100%
TOTAL	298 657	81%	70 372	19%	369 029	100%

Source: SAPSE, 1995. Note: No data were available for the University of North-West.

ADDITIONAL DATA

Table 43: Undergraduate & Postgraduate Headcount Enrolments by individual University, 2002

	Undergraduate		Postgraduate		Total	
	No.	%	No.	%	No.	%
Cape Town	14 125	72%	5 435	28%	19 560	100%
Durban-Westville	7 387	80%	1 864	20%	9 251	100%
Fort Hare	6 864	93%	485	7%	7 349	100%
Free State	10 061	58%	7 390	42%	17 451	100%
Medunsa	3 273	81%	766	19%	4 039	100%
Natal	19 670	68%	9 358	32%	29 028	100%
North	6 718	80%	1 676	20%	8 394	100%
North-West	6 452	84%	1 213	16%	7 665	100%
Port Elizabeth	17 692	83%	3 643	17%	21 335	100%
Potchefstroom	14 626	57%	10 816	43%	25 442	100%
Pretoria	29 919	73%	10 854	27%	40 773	100%
Rand	15 474	70%	6 660	30%	22 134	100%
Rhodes	6 123	82%	1 302	18%	7 425	100%
South Africa	124 201	87%	18 934	13%	143 135	100%
Stellenbosch	12 923	60%	8 472	40%	21 395	100%
Transkei	4 159	90%	463	10%	4 622	100%
Venda	6 878	88%	905	12%	7 783	100%
Vista	19 015	89%	2 354	11%	21 369	100%
Western Cape	10 061	79%	2 636	21%	12 697	100%
Witwatersrand	15 436	70%	6 745	30%	22 181	100%
Zululand	5 713	77%	1 687	23%	7 400	100%
TOTAL	356 770	77%	103 658	23%	460 428	100%

Source: HEMIS, 2002.

Table 44: Headcount Enrolments by individual Technikon and 'Race', 1995

	African		Coloured		Indian		White		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Cape	962	10%	1 874	19%	164	2%	6 749	69%	9 749	100%
Free State	2 158	36%	249	4%	8	0%	3 621	60%	6 036	100%
Mangosuthu	4 900	98%	4	0%	11	0%	76	2%	4 991	100%
ML Sultan	2 838	35%	168	2%	4 691	58%	426	5%	8 123	100%
North-West	1 987	100%	1	0%	-	0%	-	0%	1 988	100%
Northern Gauteng	7 437	98%	28	0%	27	0%	61	1%	7 553	100%
Port Elizabeth	3 383	39%	1 070	12%	102	1%	4 223	48%	8 778	100%
Pretoria	5 804	37%	211	1%	138	1%	9 589	61%	15 742	100%
South Africa	42 348	49%	6 293	7%	3 580	4%	33 515	39%	85 736	100%
Vaal Triangle	4 113	47%	150	2%	151	2%	4 269	49%	8 683	100%
Witwatersrand	4 467	40%	377	3%	538	5%	5 751	52%	11 133	100%
TOTAL	80 397	48%	10 425	6%	9 410	6%	68 280	41%	168 512	100%

Source: SAPSE, 1995. Note: No data for Technikons Natal, Peninsula, Border and Eastern Cape were available.

ADDITIONAL DATA

Table 45: Headcount Enrolments by individual Technikon and 'Race', 2002

	African		Coloured		Indian		White		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Border	4 770	98%	19	0%	5	0%	50	1%	0	0%	4 844	100%
Cape	4 296	31%	4 022	29%	272	2%	5 473	39%	0	0%	14 063	100%
Eastern Cape	7 292	100%	12	0%	3	0%	13	0%	0	0%	7 320	100%
Free State	5 173	66%	433	6%	31	0%	2 149	28%	0	0%	7 786	100%
Mangosuthu	7 011	100%	1	0%	4	0%	5	0%	2	0%	7 023	100%
ML Sultan	6 527	67%	116	1%	2 904	30%	127	1%	0	0%	9 674	100%
Natal	6 764	63%	288	3%	1 946	18%	1 705	16%	1	0%	10 704	100%
North-West	5 067	100%	2	0%	0	0%	0	0%	8	0%	5 077	100%
Northern Gauteng	11 010	100%	24	0%	4	0%	18	0%	0	0%	11 056	100%
Peninsula	5 745	63%	3 137	34%	42	0%	239	3%	0	0%	9 163	100%
Port Elizabeth	5 481	58%	1 227	13%	164	2%	2 621	28%	0	0%	9 493	100%
Pretoria	28 541	77%	494	1%	468	1%	7 548	20%	0	0%	37 051	100%
South Africa	36 529	70%	3 991	8%	2 183	4%	9 290	18%	109	0%	52 102	100%
Vaal Triangle	13 620	89%	204	1%	93	1%	1 423	9%	0	0%	15 340	100%
Witwatersrand	11 490	82%	295	2%	541	4%	1 668	12%	0	0%	13 994	100%
TOTAL	159 316	74%	14 265	7%	8 660	4%	32 329	15%	120	0%	214 690	100%

Source: HEMIS, 2002. Note: No data for Technikons Natal, Peninsula, Border and Eastern Cape were available.

Table 46: Headcount Enrolments by individual Technikon and Gender, 1995

	Men		Women		Total	
	No.	%	No.	%	No.	%
Cape	6 415	66%	3 334	34%	9 749	100%
Free State	3 348	55%	2 688	45%	6 036	100%
Mangosuthu	3 058	61%	1 933	39%	4 991	100%
ML Sultan	4 984	61%	3 139	39%	8 123	100%
Northern Gauteng	4 534	60%	3 019	40%	7 553	100%
North-West	677	34%	1 311	66%	1 988	100%
Port Elizabeth	5 922	67%	2 856	33%	8 778	100%
Pretoria	9 140	58%	6 602	42%	15 742	100%
South Africa	64 160	75%	21 576	25%	85 736	100%
Vaal Triangle	5 396	62%	3 287	38%	8 683	100%
Witwatersrand	7 171	64%	3 962	36%	11 133	100%
TOTAL	114 805	68%	53 707	32%	168 512	100%

Source: SAPSE, 1995. Note: No data for Technikons Natal, Peninsula, Border and Eastern Cape were available.

ADDITIONAL DATA

Table 47: Headcount Enrolments by individual Technikon and Gender, 2002

	Men		Women		Total	
	No.	%	No.	%	No.	%
Border	1 886	39%	2 958	61%	4 844	100%
Cape	7 136	51%	6 927	49%	14 063	100%
Easter Cape	2 857	39%	4 463	61%	7 320	100%
Free State	3 947	51%	3 839	49%	7 786	100%
Mangosuthu	3 629	52%	3 394	48%	7 023	100%
ML Sultan	4 813	50%	4 861	50%	9 674	100%
Natal	5 476	51%	5 228	49%	10 704	100%
Northern Gauteng	5 394	49%	5 662	51%	11 056	100%
North-West	1 803	36%	3 274	64%	5 077	100%
Peninsula	4 186	46%	4 977	54%	9 163	100%
Port Elizabeth	5 173	54%	4 320	46%	9 493	100%
Pretoria	18 638	50%	18 413	50%	37 051	100%
South Africa	30 383	58%	21 719	42%	52 102	100%
Vaal Triangle	8 010	52%	7 330	48%	15 340	100%
Witwatersrand	7 450	53%	6 544	47%	13 994	100%
TOTAL	110 781	52%	103 909	48%	214 690	100%

Source: HEMIS, 2002.

Table 48: Undergraduate & Postgraduate Headcount Enrolments by individual Technikon, 1995

	Undergraduate		Postgraduate		Total	
	No.	%	No.	%	No.	%
Cape	9 669	99%	80	1%	9 749	100%
Free State	5 996	99%	40	1%	6 036	100%
Mangosuthu	4 991	100%	–	0%	4 991	100%
ML Sultan	8 115	100%	8	0%	8 123	100%
Northern Gauteng	7 548	100%	5	0%	7 553	100%
North-West	1 988	100%	–	0%	1 988	100%
Port Elizabeth	8 689	99%	89	1%	8 778	100%
Pretoria	15 583	99%	159	1%	15 742	100%
South Africa	85 703	100%	33	0%	85 736	100%
Vaal Triangle	8 630	99%	53	1%	8 683	100%
Witwatersrand	11 008	99%	125	1%	11 133	100%
TOTAL	167 920	100%	592	0%	168 512	100%

Source: SAPSE, 1995. Note: No data for Technikons Natal, Peninsula, Border and Eastern Cape were available.

ADDITIONAL DATA

Table 49: Undergraduate & Postgraduate Headcount Enrolments by individual Technikon, 2002

	Undergraduate		Postgraduate		Total	
	No.	%	No.	%	No.	%
Border	4 844	100%	0	0%	4 844	100%
Cape	13 801	98%	262	2%	14 063	100%
Eastern Cape	7 320	100%	0	0%	7 320	100%
Free State	7 628	98%	158	2%	7 786	100%
Mangosuthu	7 023	100%	0	0%	7 023	100%
ML Sultan	9 573	99%	101	1%	9 674	100%
Natal	10 414	97%	290	3%	10 704	100%
Northern Gauteng	10 939	99%	117	1%	11 056	100%
North-West	5 075	100%	2	0%	5 077	100%
Peninsula	9 042	99%	121	1%	9 163	100%
Port Elizabeth	9 096	96%	397	4%	9 493	100%
Pretoria	35 681	96%	1 370	4%	37 051	100%
South Africa	51 884	100%	218	0%	52 102	100%
Vaal Triangle	15 260	99%	80	1%	15 340	100%
Witwatersrand	13 748	98%	246	2%	13 994	100%
TOTAL	211 328	98%	3 362	2%	214 690	100%

Source: HEMIS, 2002.

ADDITIONAL DATA

Table 50: Distribution of 2001 Headcount Enrolments by 'Race' by individual Technikon in the New Institutional Landscape

	African		Coloured		Indian		White		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Universities: Separate												
Cape Town	4 980	27%	2 608	14%	1 328	7%	9 685	52%	1	0%	18 602	100%
Fort Hare (UFH/Rhodes (E. London))	6 314	90%	90	1%	61	1%	517	7%	-	-	6 982	100%
Free State (UFS/Vista (Bloemfontein))	9 433	53%	591	3%	270	2%	7 447	42%	-	-	17 741	100%
Pretoria (Vista (Mamelodi))	21 129	47%	557	1%	1 391	3%	21 554	48%	12	0%	44 643	100%
Rhodes	1 668	34%	222	4%	459	9%	2 616	53%	-	-	4 965	100%
Stellenbosch	3 112	15%	2 128	10%	390	2%	14 927	73%	-	-	20 557	100%
Western Cape	5 165	49%	4 394	42%	661	6%	235	2%	44	0%	10 499	100%
Witwatersrand	8 611	42%	452	2%	2 890	14%	7 966	39%	420	2%	20 339	100%
TOTAL	60 412	42%	11 042	8%	7 450	5%	64 947	45%	477	0%	144 328	100%
Universities: Merged												
North-West (PUCHE, UNW/Vista (Sebokeng))	16 963	56%	643	2%	260	1%	10 530	35%	1 897	6%	30 293	100%
KwaZulu-Natal (UDW, Natal)	17 421	51%	815	2%	10 594	31%	5 377	16%	-	-	34 207	100%
Limpopo (UNIN/MEDUNSA)	9 609	94%	36	0%	416	4%	172	2%	-	-	10 233	100%
TOTAL	43 993	59%	1 494	2%	11 270	15%	16 079	22%	1 897	2%	74 733	100%
GRAND TOTAL	104405	48%	12 536	6%	18 720	9%	81 026	37%	2 374	1%	219 061	100%
Univ of Technology (Technikons): Separate												
Central Univ of Technology (TFS/Vista (Welkom))	6 066	69%	417	5%	21	0%	2 324	26%	-	-	8 828	100%
Vaal (Vaal Triangle Tech, Vista (Sebokeng))	13 938	87%	192	1%	102	1%	1 877	12%	1	0%	16 110	100%
TOTAL	20 004	80%	609	2%	123	0%	4 201	17%	1	0%	24 938	100%
Univ of Technology (Technikons): Merged												
Cape Peninsula (Cape Tech/Pentech)	9 068	43%	6 263	30%	283	1%	5 566	26%	-	-	21 180	100%
Durban Institute of Technology (DIT/Mangosuthu Tech)	18 862	72%	412	2%	4 663	18%	1 898	7%	207	1%	26 042	100%
Tshwane Univ of Tech (Pretoria Tech/TNG/Tech North-West)	43 531	83%	518	1%	664	1%	7 660	15%	-	-	52 373	100%
TOTAL	71 461	72%	7 193	7%	5 610	6%	15 124	15%	207	0%	99 595	100%
GRAND TOTAL	91 465	73%	7 802	6%	5 733	5%	19 325	16%	208	0%	124 533	100%

ADDITIONAL DATA

Table 50: Distribution of 2001 Headcount Enrolments by 'Race' individual Technikon in the New Institutional Landscape (continued)

	African		Coloured		Indian		White		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Comprehensives: Separate												
University of Venda	6 094	100%	1	0%	2	0%	4	0%	-	-	6 101	100%
University of Zululand	5 872	93%	41	1%	86	1%	321	5%	-	-	6 320	100%
TOTAL	11 966	96%	42	0%	88	1%	325	3%	-	-	12 421	100%
Comprehensives: Merged												
Univ of Johannesburg (RAU/TWR/Vista (E. Rand & Soweto))	21 247	59%	866	2%	1 622	4%	12 491	34%	-	-	36 226	100%
Nelson Mandela Univ of Technology (UPE/PET/Vista (Port Elizabeth))	27 015	76%	2 253	6%	491	1%	5 558	16%	-	-	35 317	100%
Walter Sisulu Univ of Technology & Science (Unitra/Border Tech/ Eastern Cape Tech)	14 880	98%	29	0%	133	1%	81	1%	-	-	15 123	100%
TOTAL	63 142	73%	3 148	4%	2 246	3%	18 130	21%	-	-	86 666	100%
Distance UNISA (UNISA/TSA/VUDEC)	123 172	59%	11 031	5%	17 674	8%	58 352	28%	46	0%	210 275	100%
TOTAL	198 280	64%	14 221	5%	20 008	6%	76 807	25%	46	0%	309 362	100%
GRAND TOTAL	394 150	60%	34 559	5%	44 461	7%	177 158	27%	2 628	0%	652 956	100%

ADDITIONAL DATA

Table 51: Distribution of 2001 Headcount Enrolments by Gender by individual Institution in the New Institutional Landscape

Institution	Male		Female		Total	
Universities						
Independent						
University of Cape Town	9 753	52%	8 849	48%	18 602	100%
University of Fort Hare (UFH/Rhodes University (E. London))	2 528	36%	4 454	64%	6 982	100%
University of the Free State (UFS/Vista (Bloemfontein))	8 425	47%	9 316	53%	17 741	100%
University of Pretoria (Vista (Mamelodi))	18 689	42%	25 954	58%	44 643	100%
Rhodes University	2 147	43%	2 818	57%	4 965	100%
University of Stellenbosch	9 795	48%	10 762	52%	20 557	100%
University of the Western Cape	4 502	43%	5 997	57%	10 499	100%
University of the Witwatersrand	10 476	52%	9 863	48%	20 339	100%
TOTAL	66 315	46%	78 013	54%	144 328	100%
Universities						
Merged						
North-West University (PUCHE/UNW/Vista (Sebokeng))	11 757	39%	18 536	61%	30 293	100%
University of KwaZulu-Natal (UDW/University of Natal)	15 012	44%	19 195	56%	34 207	100%
University of Limpopo (UNIN/MEDUNSA)	4 959	48%	5 274	52%	10 233	100%
TOTAL	31 728	42%	43 005	58%	74 733	100%
GRAND TOTAL	98 043	45%	121 018	55%	219 061	100%
University of Technology						
Independent						
Central University of Technology (TFS/Vista (Welkom))	4 464	51%	4 364	49%	8 828	100%
Vaal University of Technology (Vaal Triangle Tech/Vista (Sebokeng))	8 265	51%	7 845	49%	16 110	100%
TOTAL	12 729	50%	12 209	49%	24 938	100%

ADDITIONAL DATA

Table 51: Distribution of 2001 Headcount Enrolments by Gender by individual Institution in the New Institutional Landscape (continued)

Institution	Male		Female		Total	
University of Technology						
Merged						
Cape Peninsula University of Technology (Cape Tech/Pentech)	10 499	50%	10 681	50%	21 180	100%
Durban Institute of Technology (DIT/Mangosutho Tech)	13 117	50%	12 925	49%	26 042	100%
Tshwane University of Technology (Pretoria Tech/TNG/Tech North-West)	26 046	50%	26 327	50%	52 373	100%
TOTAL	49 662	50%	49 933	50%	99 595	100%
GRAND TOTAL	62 391	50%	62 142	50%	124 533	100%
Comprehensives						
Independent						
University of Venda	3 049	50%	3 052	50%	6 101	100%
University of Zululand	2 514	40%	3 806	60%	6 320	100%
TOTAL	5 563	45%	6 858	55%	12 421	100%
Comprehensives						
Merged						
University of Johannesburg (RAU/Tech/Vista (E. Rand & Soweto))	16 928	47%	19 298	53%	36 226	100%
Nelson Mandela University of Technology (UPE/PET/Vista (Port Elizabeth))	15 099	43%	20 218	57%	35 317	100%
Walter Sisulu University of Technology & Science (Unitra/Border Tech/Eastern Cape Tech)	5 979	40%	9 144	60%	15 123	100%
TOTAL	38 006	44%	48 660	56%	86 666	100%
Distance UNISA (UNISA/TSA/VUDEC)	99 910	48%	110 365	52%	210 275	100%
TOTAL	143 479	46%	165 883	54%	309 362	100%
GRAND TOTAL	303 913	47%	349 043	53%	652 956	100%

ADDITIONAL DATA

Table 52: Distribution of 2001 Headcount Enrolments by Field of Study by individual Institution in the New Institutional Landscape

Institution	Science, Engineering & Technology	Humanities & Social Sciences	Business, Commerce & Management Sciences	Education	TOTAL
Universities Independent					
University of Cape Town	7 459	5 817	4 735	592	18 602
University of Fort Hare (UFH/Rhodes University (E. London))	949	2 537	1 443	2 054	6 982
University of the Free State (UFS/Vista (Bloemfontein))	4 546	7 700	1 444	1 787	15 478
University of Pretoria (Vista (Mamelodi))	13 918	11 590	6 491	12 644	44 643
Rhodes University	1 232	1 883	1 252	598	4 965
University of Stellenbosch	7 550	7 687	2 754	2 566	20 557
University of the Western Cape	2 422	5 884	1 322	872	10 499
University of the Witwatersrand	11 897	4 170	2 174	2 098	20 339
TOTAL	49 974	47 269	21 614	23 210	142 067
Universities Merged					
North-West University (PUCHE/UNW/Vista (Sebokeng))	7 109	10 023	3 830	9 331	30 293
University of KwaZulu-Natal (UDW/University of Natal)	11 322	10 525	7 011	5 349	34 207
University of Limpopo (UNIN/MEDUNSA)	3 916	81	0	44	4 041
TOTAL	22 347	20 628	10 841	14 724	68 540
GRAND TOTAL	72 321	67 897	32 455	37 934	210 607

ADDITIONAL DATA

Table 52: Distribution of 2001 Headcount Enrolments by Field of Study by individual Institution in the New Institutional Landscape (continued)

Institution	Science, Engineering & Technology	Humanities & Social Sciences	Business, Commerce & Management Sciences	Education	TOTAL
Universities of Technology (Technikons)					
Independent					
Central University of Technology (TFS/Tech/Vista (Welkom))	3 284	2 262	3 068	214	8 828
Vaal University of Technology (Vaal Triangle Tech/Vista (Sebokeng))	6 407	2 496	7 171	35	16 110
TOTAL	9 691	4 758	10 240	249	24 938
100%	39%	19%	41%	1%	100%
Universities of Technology (Technikons)					
Merged					
Cape Peninsula University of Technology (Cape Tech/Pentech)	9 651	3 198	7 065	1 267	21 180
Durban Institute of Technology (DIT/Mangosuthu Tech)	12 968	4 096	8 883	96	26 042
Tshwane University of Technology (Tech Pretoria Tech/TNG/Tech North-West)	16 542	11 154	14 876	9 802	52 373
TOTAL	39 161	18 447	30 823	11 164	99 595
100%	39%	19%	31%	11%	100%
GRAND TOTAL	48 852	23 205	41 063	11 413	124 533
100%	39%	19%	33%	9%	100%

ADDITIONAL DATA

Table 52: Distribution of 2001 Headcount Enrolments by Field of Study by individual Institution in the New Institutional Landscape (continued)

Institution	Science, Engineering & Technology	Humanities & Social Sciences	Business, Commerce & Management Sciences	Education	TOTAL
Comprehensives Independent University of Venda University of Zululand TOTAL	1 574	3 220	967	340	6 101
	26%	53%	16%	6%	100%
	1 463	2 948	472	1 437	6 320
	23%	47%	7%	23%	100%
	3 037	6 169	1 439	1 777	12 421
	24%	50%	12%	14%	100%
Comprehensives Merged University of Johannesburg (RAU/TWR/Vista (E. Rand & Soweto)) Nelson Mandela University of Technology (UPE/PET/Vista (Port Elizabeth)) Walter Sisulu University of Technology & Science (Unitra/Border Tech/Eastern Cape Tech) TOTAL					
	9 288	8 914	12 441	5 583	36 226
	26%	25%	34%	15%	100%
	6 203	5 218	6 074	17 822	35 317
	18%	15%	17%	50%	100%
	4 845	4 196	4 881	1 201	15 123
	32%	28%	32%	8%	100%
	20 335	18 328	23 395	24 607	86 666
	23%	21%	27%	28%	100%
Distance UNISA (UNISA/TSA/VUDEC)	18 612	59 655	104 193	27 815	210 275
	9%	28%	50%	13%	100%
TOTAL	41 985	84 152	129 027	54 199	309 362
	14%	27%	42%	18%	100%
GRAND TOTAL	163 157	175 253	202 545	103 546	644 502
	25%	27%	31%	16%	100%

ADDITIONAL DATA

Table 53: Distribution of 2001 Undergraduate and Postgraduate Headcount Enrolments by individual Institution in the New Institutional Landscape

Institutional Type	Undergraduate		Postgraduate		TOTAL	
Universities						
Separate						
University of Cape Town	13 049	70%	5 553	30%	18 602	100%
University of Fort Hare (UFH/Rhodes University (E. London))	6 330	91%	652	9%	6 982	100%
University of the Free State (UFS/Vista (Bloemfontein))	10 792	61%	6 949	39%	17 741	100%
University of Pretoria (Vista (Mamelodi))	34 262	77%	10 381	23%	44 643	100%
Rhodes University	3 909	79%	1 056	21%	4 965	100%
University of Stellenbosch	12 299	60%	8 258	40%	20 557	100%
University of the Western Cape	8 026	76%	2 473	24%	10 499	100%
University of the Witwatersrand	14 032	69%	6 307	31%	20 339	100%
TOTAL	102 699	71%	41 629	29%	144 328	100%
Universities						
Merged						
North-West University (PUCHE/UNW/Vista (Sebokeng))	20 027	66%	10 266	34%	30 293	100%
University of KwaZulu-Natal (UDW/University of Natal)	23 828	70%	10 379	30%	34 207	100%
University of Limpopo (UNIN/MEDUNSA)	8 236	80%	1 997	20%	10 233	100%
TOTAL	52 091	70%	22 642	30%	74 733	100%
GRAND TOTAL	154 790	71%	64 271	29%	219 061	100%
Universities of Technology (Technikons)						
Independent						
Central University of Technology (TFS/Vista (Welkom))	8 560	97%	268	3%	8 828	100%
Vaal University of Technology (Vaal Triangle Tech/Vista (Sebokeng))	16 046	100%	64	0%	16 110	100%
TOTAL	24 606	99%	332	1%	24 938	100%
Universities of Technology (Technikons)						
Merged						
Cape Peninsula University of Technology (Cape Tech/Pentech)	20 952	99%	228	1%	21 180	100%
Durban Institute of Technology (DIT/Mangosuthu Tech)	25 647	98%	395	2%	26 042	100%
Tshwane University of Technology (Tech Pretoria Tech/TNG/Tech North-West)	51 316	98%	1 057	2%	52 373	100%
TOTAL	97 915	98%	1 680	2%	99 595	100%
GRAND TOTAL	122 521	98%	2 012	2%	124 533	100%

ADDITIONAL DATA

Table 53: Distribution of 2001 Undergraduate and Postgraduate Headcount Enrolments by individual Institution in the New Institutional Landscape (continued)

Institutional Type	Undergraduate		Postgraduate		TOTAL	
Comprehensives Separate						
University of Venda	5 665	93%	436	7%	6 101	100%
University of Zululand	4 649	74%	1 671	26%	6 320	100%
TOTAL	10 314	83%	2 107	17%	12 421	100%
Comprehensives Merged						
University of Johannesburg (RAU/TWR/Vista (E. Rand & Soweto))	29 439	81%	6 787	19%	36 226	100%
Nelson Mandela University of Technology (UPE/PET/Vista (Port Elizabeth))	31 474	89%	3 843	11%	35 317	100%
Walter Sisulu University of Technology & Science (Unitra/Border Tech/Eastern Cape Tech)	14 568	96%	555	4%	15 123	100%
TOTAL	75 481	87%	11 185	13%	86 666	100%
Distance UNISA (UNISA/TSA/VUDEC)	195 094	93%	15 181	7%	210 275	100%
TOTAL	280 889	91%	28 473	9%	309 362	100%
GRAND TOTAL	558 200	85%	94 756	15%	652 956	100%

ADDITIONAL DATA

Table 54: Distribution of 2001 Postgraduate Headcount Enrolments by individual Institution in the New Institutional Landscape

Institutional Type	Masters	Doctorate	Other	TOTAL
Universities Independent				
University of Cape Town	2 790	705	2 058	5 553
University of Fort Hare (UFH/Rhodes University (E. London))	178	19	455	652
University of the Free State (UFS/Vista (Bloemfontein))	2 299	460	4 190	6 949
University of Pretoria (Vista (Mamelodi))	4 969	1 289	4 114	10 381
Rhodes University	441	172	443	1 056
University of Stellenbosch	3 341	740	4 177	8 258
University of the Western Cape	1 074	198	1 201	2 473
University of the Witwatersrand	3 632	626	2 049	6 307
TOTAL	18 724	4 218	18 687	41 629
Universities Merged				
North-West University (PUCHE/UNIW/Vista (Sebokeng))	2 422	409	7 435	10 266
University of KwaZulu-Natal (UDW/University of Natal)	3 406	735	6 238	10 379
University of Limpopo (UNIN/MEDUNSA)	964	65	968	1 997
TOTAL	6 792	1 209	14 641	22 642
GRAND TOTAL	25 516	5 427	33 328	64 271
University of Technology (Technikons) Independent				
Central University of Technology (TFS/Tech/Vista (Welkom))	136	32	100	268
Vaal University of Technology (Vaal Triangle Tech/Vista (Sebokeng))	57	7	0	64
TOTAL	193	39	100	332

ADDITIONAL DATA

Table 54: Distribution of 2001 Postgraduate Headcount Enrolments by individual Institution in the New Institutional Landscape (continued)

University of Technology (Technikons) Merged Cape Peninsula University of Technology (Cape Tech/Pentech) Durban Institute of Technology (DIT/Mangosuthu Tech) Tshwane University of Technology (Pretoria Tech/TNG/Tech North-West)	210	92%	18	8%	0	0%	228	100%
	369	93%	26	7%	0	0%	395	100%
	988	93%	69	7%	0	0%	1 057	100%
	1 567	93%	113	7%	0	0%	1 680	100%
TOTAL								
GRAND TOTAL	1 760	87%	152	8%	100	5%	2 012	100%
Comprehensives Independent University of Venda University of Zululand	177	41%	19	4%	240	55%	436	100%
	326	20%	102	6%	1 243	74%	1 671	100%
	503	24%	121	6%	1 483	70%	2 107	100%
Comprehensives Merged University of Johannesburg (RAU/TWR/Vista (E. Rand & Soweto) Nelson Mandela University of Technology (UPE/PET/Vista (Port Elizabeth)) Walter Sisulu University of Technology & Science (Unitra/Border Tech/Eastern Cape Tech)	2 029	30%	457	7%	4 301	63%	6 787	100%
	1 137	30%	182	5%	2 524	66%	3 843	100%
	118	21%	3	1%	434	78%	555	100%
	3 284	29%	642	6%	7 259	65%	11 185	100%
TOTAL								
Distance UNISA (UNISA/TSA/VUDEC)	3 261	21%	113	1%	11 807	78%	15 181	100%
TOTAL	7 048	25%	876	3%	20 549	72%	28 473	100%
GRAND TOTAL	34 324	36%	6 455	7%	53 977	57%	94 756	100%

Source: HEMIS, 2001.

ADDITIONAL DATA

Table 55: Distribution of Staff by ‘Race’ and Individual Institution in the New Institutional Landscape

New Institutional Group	Institution	African	Coloured	Indian	White	Other	TOTAL				
Independent Universities	UCT	227	976	45	2%	1 275	50%	41	2%	2 564	100%
	Fort Hare	353	9	9	2%	70	16%	-	0%	441	100%
	Free State University	478	52	0	0%	1 050	66%	-	0%	1 580	100%
	Pretoria	766	24	30	1%	2 454	75%	-	0%	3 274	100%
	Rhodes	474	99	19	2%	603	50%	-	0%	1 195	100%
	Stellenbosch	54	663	6	0%	1 608	69%	1	0%	2 332	100%
	Western Cape	112	741	43	4%	205	19%	-	0%	1 101	100%
	Witwatersrand	1 010	77	153	6%	1 323	51%	23	1%	2 586	100%
TOTAL		3 474	2 641	305	2%	8 588	57%	65	0%	15 073	100%
Merged Universities	North/MEDUNSA	2 622	59	39	1%	455	14%	0	0%	3 175	100%
	Potchefstroom/North-West	886	27	21	1%	1 103	54%	-	0%	2 037	100%
	UDW/Natal	917	123	1 346	36%	1 305	35%	2	0%	3 693	100%
TOTAL		4 425	209	1 406	16%	2 863	32%	2	0%	8 905	100%
Independent Technikons (Universities of Technology)	Vaal Triangle Tech	514	11	27	3%	418	43	-	0%	970	100%
	Free State Tech	230	38	1	0%	348	56%	0	0%	617	100%
TOTAL		744	49	28	2%	766	48%	0	0%	1 587	100%

ADDITIONAL DATA

Table 55: Distribution of Staff by 'Race' and Individual Institution in the New Institutional Landscape (continued)

New Institutional Group	Institution	African	Coloured	Indian	White	Other	TOTAL						
Merged Technikons (Universities of Technology)	Cape & PenTech	118	8%	774	54%	11	1%	534	37%	5	0%	1 442	100%
	Durban Institute & Mangosutho	508	31%	40	2%	640	40%	421	26%	4	0%	1 613	100%
	Techs Pretoria/N. Gauteng/NW	1 321	52%	22	1%	46	2%	1 155	45%	0	0%	2 544	100%
	TOTAL	1 947	35%	836	15%	697	12%	2 110	38%	9	0%	5 599	100%
Independent Comprehensives	Venda	696	92%	2	0%	9	1%	49	6%	-	0%	756	100%
	Zululand	523	75%	2	0%	30	4%	142	20%	-	0%	697	100%
TOTAL		1 219	84%	4	0%	39	3%	191	13%	-	0%	1 453	100%
Merged Comprehensives	RAU/TWR	732	34%	80	4%	61	3%	1 299	60%	1	0%	2 173	100%
	Transkei/Border & EC Tech	1 205	83%	36	2%	41	3%	167	12%	0	0%	1 449	100%
	UNISA/TSA	1 396	33%	164	4%	112	3%	2 606	61%	0	0%	4 278	100%
	UPE/PE Tech	328	23%	168	12%	23	2%	907	64%	0	0%	1 426	100%
TOTAL		3 661	39%	448	5%	237	3%	4 979	53%	1	0%	9 326	100%
	Vista	727	53%	49	4%	29	2%	564	41%		0%	1 369	100%
TOTAL		16 197	37%	4 236	10%	2 741	6%	20 061	46%	77	0%	43 312	100%

Source: SAPSE, 1995, 1998; HEMIS, 2001. Note: 1) No 1995 data were available for the University of the North West, Border Technikon and Eastern Cape Technikon. Data from 1996 were used for these institutions instead. 2) No 1998 data were available for the University of the N. West. Data from 1997 were used instead. 3) No 2001 data were available for the University of the North and UCT. Data from 1999 were used for these institutions instead.

ADDITIONAL DATA

Table 56: SAPSE Research Output for Individual Universities and Technikon. 1995, 1998 & 2001

Universities				Technikon			
Institutions	1995	1998	2001	Institutions	1995	1998	2001
Cape Town	702.32	601.07	652.18	Border	0.00	0.00	0.00
Durban- Westville	126.67	124.47	106.53	Cape	14.91	17.18	12.61
Fort Hare	22.42	36.54	0.00	Eastern Cape	0.00	0.23	1.00
Free State	298.15	265.80	293.42	Free State	7.22	14.68	8.49
Medunsa	52.26	38.33	31.00	Mangosutho	0.23	0.00	1.00
Natal	555.33	510.82	499.89	ML Sultan	0.00	5.06	17.40
North	71.56	84.52	98.08	Natal	7.21	17.90	20.12
North-West	51.08	8.91	0.50	Northern Gauteng	0.00	3.00	6.00
Port Elizabeth	82.37	99.54	126.69	North-West	0.00	2.00	1.00
Potchefstroom	171.41	155.61	186.69	Peninsula	2.50	8.65	7.30
Pretoria	749.92	754.68	882.21	Port Elizabeth	6.92	17.99	21.54
R and Afrikaans	316.40	306.94	310.95	Pretoria	16.80	17.06	40.65
Rhodes	174.56	211.74	210.16	South Africa	4.83	10.55	0.00
South Africa	406.57	315.76	333.93	Vaal Triangle	0.00	3.00	8.94
Stellenbosch	589.20	528.82	589.58	Witwatersrand	1.00	15.17	7.40
Transkei	40.91	80.95	15.17				
Venda	0.00	0.00	11.43				
Vista	48.97	58.93	51.42				
Western Cape	144.21	133.77	157.98				
Witwatersrand	788.79	656.02	709.52				
Zululand	45.07	55.88	43.37				
TOTAL	5 438.17	5 029.10	5 310.70	TOTAL	61.62	132.47	153.45
Source: DoE, SAPSE Research Output				TOTAL HE	5 499.79	5 161.57	5 464.15

ADDITIONAL DATA

Table 57: SAPSE Research Output per Academic Staff at Universities and Technikons, 1995, 1998 & 2001

Universities							Technikons						
Institutions	Academic Staff			SAPSE Output per staff			Institutions	Academic Staff		SAPSE Output per staff			
	1995	1998	2001	1995	1998	2001		1995	1998	2001	1995	1998	2001
Cape Town	749	705	727	0.94	0.85	0.90	Border	129	105	152	0.00	0.00	0.00
Durban-Westville	421	412	367	0.30	0.30	0.29	Cape	259	303	314	0.06	0.06	0.04
Fort Hare	228	201	129	0.10	0.18	0.00	Eastern Cape	126	106	146	0.00	0.00	0.01
Free State	581	534	578	0.51	0.50	0.51	Free State	115	142	142	0.06	0.10	0.06
Medunsa	296	192	164	0.18	0.20	0.19	Mangosutho	96	111	57	0.00	0.00	0.02
Natal	816	832	925	0.68	0.61	0.54	ML Sultan	199	261	270	0.00	0.02	0.06
North	491	558	525	0.15	0.15	0.19	Natal	251	302	302	0.03	0.06	0.07
North-West	160	160	160	0.32	0.06	0.00	Northern Gauteng	154	240	210	0.00	0.01	0.03
Port Elizabeth	241	236	242	0.34	0.42	0.52	North-West	45	88	92	0.00	0.02	0.01
Potchefstroom	457	479	481	0.38	0.32	0.39	Peninsula	158	191	206	0.02	0.05	0.04
Pretoria	1 269	1 381	1 452	0.59	0.55	0.61	Port Elizabeth	232	249	267	0.03	0.07	0.08
Rand Afrikaans	294	314	348	1.08	0.98	0.89	Pretoria	434	433	496	0.04	0.04	0.08
Rhodes	267	304	330	0.65	0.70	0.64	South Africa	258	261	211	0.02	0.04	0.00
South Africa	1 225	1 231	1 066	0.33	0.26	0.31	Vaal Triangle	202	288	309	0.00	0.01	0.03
Stellenbosch	837	723	774	0.70	0.73	0.76	Witwatersrand	342	369	396	0.00	0.04	0.02
Transkei	213	220	226	0.19	0.37	0.07							
Venda	203	240	269	0.00	0.00	0.04							
Vista	596	659	622	0.08	0.09	0.08							
Western Cape	457	413	406	0.32	0.32	0.39							
Witwatersrand	993	947	1 000	0.79	0.69	0.71							
Zululand	271	294	252	0.17	0.19	0.17							
TOTAL	11 065	11 035	11 043	0.49	0.46	0.48	TOTAL	3 000	3 449	3 570	0.02	0.04	0.04
Source: DoE, SAPSE Research Output and HEMIS. Note: Staff figures in italics.							TOTAL HE	14 065	14 484	14 613	0.39	0.36	.037

ADDITIONAL DATA

Table 58: Innovation Survey Results: Mode of Communication of Research in Universities, Technikons and Science Councils, 2001

Mode of Communication	Science Councils (N=539)		Universities (N=1081)		Technikons (N=183)	
	Yes	%	Yes	%	Yes	%
Publications and documents						
Articles in refereed scientific journals	214	40%	715	66%	54	30%
Articles in refereed technical journals	54	10%	65	18%	10	17%
Articles in popular journals	158	29%	223	21%	19	10%
Contract reports	342	64%	319	30%	29	16%
Books/ monographs	43	8%	142	13%	19	10%
Chapters in books	63	12%	196	18%	15	8%
Published conference proceedings	265	49%	495	46%	83	45%
Written input to official policy documents	60	11%	91	8%	14	8%
Technical manuals	105	20%	81	8%	8	4%
Presentations						
Academic audiences	331	61%	837	77%	126	69%
Non-academic audiences	247	46%	343	32%	49	27%
Expert committees/ panels	191	35%	232	22%	29	16%
Public hearings	40	7%	64	6%	8	4%
Fairs/ exhibitions/ road shows	98	18%	88	8%	17	9%
Patents/ licenses						
Through patenting	33	6%	39	4%	6	3%
Through licensing	19	4%	12	1%	0	0%
Training and supervision						
Training through workshops	162	30%	283	26%	54	30%
Training through coursework	74	14%	275	25%	35	19%
Supervision of masters/ doctoral students	86	16%	468	43%	40	22%
Cooperative interactions/ informal meetings						
Consultations/ technical assistance to potential users	250	46%	300	28%	58	32%
Personnel exchanges/ secondments	142	26%	160	15%	27	15%
Informal meetings with potential users/ teams	281	52%	357	33%	75	41%
Organisational structures						
Through participation in consortia	112	21%	87	8.08%	13	7%
Through science parks	6	1%	13	1%	37	20%
Through spin-off companies	21	4%	30	3%	1	1%
Through technology transfer offices	36	7%	15	1%	1	1%
Through technology incubators	12	2%	9	1%	2	1%

Source: NACI (2003) Survey on Research Utilisation.

ADDITIONAL DATA

Table 59: Government Appropriations for Universities and Technikons (Rands Millions)

	1995/6		1996/7		1997/8		1998/9		1999/00		2000/01		2001/02		2002/03		2003/04	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Subsidy Funds																		
Universities	2 710	66	3 276	63	3 591	66	3 854	64	4 155	63	4 498	64	4 805	64	5 075	63	5 559	62
Technikons	856	21	1 120	22	1 296	24	1 455	24	1 648	25	1 706	24	1 815	24	1 910	24	2 259	25
Subtotal	3 566	87	4 396	85	4 887	90	5 309	88	5 803	88	6 204	88	6 620	88	6 985	87	7 818	88
Earmarked Funds																		
Universities	356	9	574	11	385	7	482	8	493	7	551	8	518	7	515	6	512	6
Technikons	150	4	236	4	160	3	208	4	248	4	281	4	286	4	286	4	305	3
Other																		
NSFAS			300	6	200	4	300	5	390	6	444	6	430	6	450	6	485	5
College Inc.													43	1				
Redress									60	<1	30	<1						
Subtotal	506	13	810	15	545	10	694	12	806	12	868	12	814	11	897	11	1 107	12
Total Allocations																		
Universities	3 066	75	3 851	74	3 976	73	4 337	72	4 648	70	5 050	71	5 399	72	5 708	71	6 071	68
Technikons	1 006	25	1 356	26	1 456	27	1 663	28	1 897	29	1 987	28	2 123	28	2 216	28	2 564	28
Other							4	<1	65	1	36	<1	73	1				
TOTAL	4 072	100	5 207	100	5 432	100	6 004	100	6 610	100	7 072	100	7 532	100	8 019	100	8 926	100

Source: DoE (2003). Notes: 1) These figures update those published in previously CHE Annual Reports. 2) Earmarked funds include redress funding, contractual interest and redemption on government approved loans, capital allocations of new buildings, property tax, purchases of land. 3) NSFAS includes administration only (not government contributions to the scheme itself). In FY2001/2, this includes additional R20m for teacher training.

ADDITIONAL DATA

Table 60: Headcount Enrolments by Nationality and Individual University, 2002

Institution	South African		Foreign		Total	
	No.	%	No.	%	No.	%
Cape Town	15 963	4%	3 597	9%	19 560	4%
Durban- Westville	8 970	2%	281	1%	9 251	2%
Fort Hare	6 625	2%	724	2%	7 349	2%
Free State	16 337	4%	1 114	3%	17 451	4%
Medunsa	3 591	1%	448	1%	4 039	1%
Natal	26 942	6%	2 086	5%	29 028	6%
North	8 389	2%	5	0%	8 394	2%
North-West	6 101	1%	1 573	4%	7 674	2%
Port Elizabeth	18 182	4%	3 153	8%	21 335	5%
Potchefstroom	23 291	6%	2 151	6%	25 442	6%
Pretoria	39 163	9%	1 610	4%	40 773	9%
Rand	21 613	5%	521	1%	22 134	5%
Rhodes	5 974	1%	1 451	4%	7 425	2%
South Africa	128 691	30%	14 445	38	143 136	31%
Stellenbosch	19 976	5%	1 419	4%	21 395	5%
Transkei	4 547	1%	75	0%	4 622	1%
Venda	7 780	2%	3	0%	7 783	2%
Vista	20 236	5%	1 133	3%	21 369	5%
Western Cape	11 930	3%	799	2%	12 729	3%
Witwatersrand	20 426	5%	1 755	5%	22 181	5%
Zululand	7 251	2%	149	0%	7 400	2%
TOTAL	421 978	100%	38 492	100%	460 470	100%

Source: HEMIS, 2002

ADDITIONAL DATA

Table 61: Headcount Enrolments by Nationality and Individual Technikon, 2002

Institution	South African		Foreign		Total	
	No.	%	No.	%	No.	%
Border	4 814	2%	30	0%	4 844	2%
Cape	13 183	6%	880	11%	14 063	7%
Eastern Cape	7 313	4%	7	0%	7 320	3%
Free State	7 274	4%	512	6%	7 786	4%
Mangosuthu	6 816	3%	207	3%	7 023	3%
ML Sultan	9 641	5%	33	0%	9 764	5%
Natal	10 161	5%	543	7%	10 704	5%
Northern Gauteng	10 864	5%	192	2%	11 056	5%
North-West	5 051	2%	26	0%	5 077	2%
Peninsula	8 962	4%	201	2%	9 163	4%
Port Elizabeth	8 915	4%	578	7%	9 493	4%
Pretoria	34 266	17%	2 785	34%	37 051	17%
South Africa	50 785	25%	1 317	16%	52 102	24%
Vaal Triangle	14 878	7%	462	6%	15 340	7%
Witwatersrand	13 572	7%	422	5%	13 994	7%
TOTAL	206 495	100%	8 195	100%	214 690	100%

Source: HEMIS, 2002

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