

CLASSIFIED

**DRAFT NATIONAL PLAN FOR HIGHER EDUCATION IN SOUTH
AFRICA**

MINISTRY OF EDUCATION

FEBRUARY 2001

CONTENTS

SECTION 1 INTRODUCTION

- 1.1 Challenges
- 1.2 Policy framework for the national plan
- 1.3 Planning and the market
- 1.4 Equity and redress
- 1.5 Status of the national plan

SECTION 2: PRODUCING THE GRADUATES NEEDED FOR SOCIAL AND ECONOMIC DEVELOPMENT IN SOUTH AFRICA

- 2.1 Context: Labour market and student enrolment trends
- 2.2 Outcome 1: Increased participation rate
- 2.3 Outcome 2: Increased graduate outputs
- 2.4 Outcome 3: Broadened social base of students
- 2.5 Outcome 4: Increased recruitment of students from SADC countries
- 2.6 Outcome 5: Enrolments by fields of study
- 2.7 Outcome 6: Enhanced cognitive skills of graduates
- 2.8 Strategies

SECTION 3 ACHIEVING EQUITY IN THE SOUTH AFRICAN HIGHER EDUCATION SYSTEM

- 3.1 Context: Inequities in the South Africa Higher Education system
- 3.2 Outcome 7: Increased equity in participation rates
- 3.3 Outcome 8: Improved staff equity
- 3.4 Strategies

SECTION 4 ACHIEVING DIVERSITY IN THE SOUTH AFRICAN HIGHER EDUCATION SYSTEM

- 4.1 Context: Institutional plans and diversity
- 4.3 Diversity and differentiation
- 4.3 Outcome 9: Differentiation by mission and programmes
- 4.4 Outcome 10: Regulation of distance programmes at residential institutions
- 4.5 Outcome 11: Establishment of a single dedicated distance education institution
- 4.6 Outcome 12: Regulation of private higher education
- 4.6 Strategies

SECTION 5 SUSTAINING AND PROMOTING RESEARCH

- 5.1 Context: Declining research outputs
- 5.2 Outcome 13: Research concentration and funding linked to outcomes

- 5.3 Outcome 14: Increasing graduate outputs at the masters and doctoral levels
- 5.4 Strategies

**SECTION 6 RESTRUCTURING THE INSTITUTIONAL LANDSCAPE
OF THE HIGHER EDUCATION SYSTEM**

- 6.1 Context: Institutional co-operation in South Africa
- 6.2 Collaboration and institutional identities
- 6.3 Outcome 15: Programme and infrastructural collaboration
- 6.4 Outcome 16: Reducing the number of higher education institutions and new institutional and organisational form
- 6.5 Strategies

SECTION 7 CONCLUSION

SECTION 1: INTRODUCTION

1.1 CHALLENGES

This National Plan for higher education gives effect to the vision for the transformation of the higher education system outlined in *Education White Paper 3 - A Programme for the Transformation of the Higher Education System* (DoE: July 1997). It provides an implementation framework and identifies the strategic interventions and levers necessary for the transformation of the higher education system. It provides an opportunity and challenge to chart a path that locates the higher education system as key engine driving and contributing to the reconstruction and development of South African society.

The key challenges facing the South African higher education system remain as outlined in the White Paper: “to redress past inequalities and to transform the higher education system to serve a new social order, to meet pressing national needs, and to respond to new realities and opportunities” (White Paper: 1.1). More specifically, as the White Paper indicates, the role of higher education in a knowledge-driven world is three-fold:

- “Human resource development: the mobilisation of human talent and potential through lifelong learning to contribute to the social, economic, cultural and intellectual life of a rapidly changing society.
- High-level skills training: the training and provision of personpower to strengthen this country's enterprises, services and infrastructure. This requires the development of professionals and knowledge workers with globally equivalent skills, but who are socially responsible and conscious of their role in contributing to the national development effort and social transformation.
- Production, acquisition and application of new knowledge: national growth and competitiveness is dependent on continuous technological improvement and innovation, driven by a well-organised, vibrant research and development system which integrates the research and training capacity of higher education with the needs of industry and of social reconstruction.” (White Paper: 1.12)

These challenges have to be understood in the context of the impact on higher education systems world-wide of the changes associated with the phenomenon of globalisation. The onset of the 21st century has brought in its wake changes in social, cultural and economic relations spawned by the revolution in information and communications technology. The impact of these changes on the way in which societies are organised is likely to be as far-reaching and fundamental as the changes wrought by the industrial revolution in the eighteenth century. At the centre of these changes is the notion that in the 21st century, knowledge and the processing of information will be the key driving forces for wealth creation and thus social and economic development.

The role of information and communications technology in advancing the reconstruction and development agenda has been recognised by the Government. President Mbeki in his State of the Nation Address at the opening of the 2001 Parliamentary session, indicated that the Government is prioritising the development of the telecommunications sector. In this regard, the President announced two important initiatives to assist and advise on how South Africa can “get onto and stay on the information super-highway”, viz. the establishment of a Presidential National Commission on Information Society and Development and the establishment of a Presidential International Task Force on Information Society and Development

Higher Education has a critical and central role to play in contributing to the development of an information society in South Africa both in terms of skills development and research. In fact, as Manuel Castells, the noted social theorist of the information revolution (and who has agreed to serve on the Presidential International Task Force) has argued, “if knowledge is the electricity of the new informational international economy, then institutions of higher education are the power sources on which a new development process must rely” (Castells: 1993).

Is the South African higher education system ready to meet these challenges? The foundations in terms of the enabling policies and legislation are in place. However, much remains to be done in terms of implementing the policies.

There are clear strengths in the system, in particular the calibre of research and teaching is in some cases comparable to international best practice and standards. The system is also beginning to respond to the changed social order as reflected, for example, in the changing demographic profile of student enrolments. However, the overall effectiveness and efficiency of the system is in doubt, as evidenced by a range of systemic problems. These include the overall quantity and quality of graduate and research outputs; management, leadership and governance failures; lack of representative staff profiles; institutional cultures that have not transcended the racial divides of the past; and the increased competition between institutions which threatens to fragment further the higher education system.

This National Plan provides a framework for ensuring the fitness of the higher education system to contribute to the challenges that face South Africa in the 21st century. Its primary purpose is to ensure that:

- the higher education system achieves the transformation objectives set out in the White Paper and is responsive to societal interests and needs;
- there is coherence with regard to the provision of higher education at the national level;
- limited resources are used efficiently and effectively and there is accountability for the expenditure of public funds;
- the quality of academic programmes, including teaching and research, is improved across the system.

The development of this National Plan has been informed by the institutional planning process which was started in 1998, the ongoing analyses of higher education trends by the Department of Education and by the report of the Council on Higher Education (CHE), *Towards a New Higher Education Landscape: Meeting the Equity, Quality and Social Development Imperatives of South Africa in the 21st Century*, which was released in June last year. (CHE: 2000).

The CHE’s report, which builds on the report of the National Commission on Higher Education (NCHE: 1996) and the White Paper, is a valuable contribution and has sharpened the debate on the need and basis for the restructuring of the higher education system. The Ministry would, in particular, like to commend the report for the convincing case that it makes for the role of higher education in social and economic development. As the report states:

“Higher education, and public higher education especially, has immense potential to contribute to the consolidation of democracy and social justice, and the growth and development of the economy.....These contributions are complementary. The enhancement

of democracy lays the basis for greater participation in economic and social life more generally. Higher levels of employment and work contribute to political and social stability and the capacity of citizens to exercise and enforce democratic rights and participate effectively in decision-making. The overall well-being of nations is vitally dependent on the contribution of higher education to the social, cultural, political and economic development of its citizens” (CHE 2000: 25-26).

1.2 POLICY FRAMEWORK OF THE NATIONAL PLAN

This National Plan is based on the policy framework and the goals, values and principles that underpin that framework, outlined in the White Paper. These are intended to develop a higher education system that will:

- “promote equity of access and fair chances of success to all who are seeking to realise their potential through higher education, while eradicating all forms of unfair discrimination and advancing redress for past inequalities;
- meet, through well-planned and co-ordinated teaching, learning and research programmes, national development needs, including the high-skilled employment needs presented by a growing economy operating in a global environment;
- support a democratic ethos and a culture of human rights through educational programmes and practices conducive to critical discourse and creative thinking, cultural tolerance, and a common commitment to a humane, non-racist and non-sexist social order;
- contribute to the advancement of all forms of knowledge and scholarship, and in particular address the diverse problems and demands of the local, national, southern African and African contexts, and uphold rigorous standards of academic quality” (White Paper 1997: 1.14).

The vision of the White Paper continues to remain compelling, as does the relevance of its central policy goal, viz. the development of a single, national, co-ordinated higher education system, which is diverse in terms of the mix of institutional missions and programmes. Its underlying assumptions have passed muster and continue to receive widespread support as reflected in the public responses to the Council on Higher Education report invited by the Minister. The goal, however, remains unachieved. This is largely due to the fact that the Ministry has adopted an incremental approach to the development and implementation of the key policy instruments necessary to enable the creation of a single, co-ordinated system. Thus, although the development of institutional three-year rolling plans began in 1998, these were developed in the context of the broad transformation agenda and policy goals signalled in the White Paper, rather than a clear set of implementation and funding guidelines linked to a national plan.

An incremental approach was adopted for three reasons. First, the lack of systemic capacity in terms of both person-power and technical skills, in particular statistical modelling and analytical skills, to implement the comprehensive and wide-ranging planning agenda outlined in the White Paper. Second, the absence of an adequate information base, in particular analyses and understanding of systemic and institutional trends. Third, the need to develop a consultative and interactive planning process through dialogue between the Department and higher education institutions to underpin the principle of co-operation and partnership.

It is arguable whether a more robust and timely implementation of key policy instruments would have been possible, given the capacity constraints at both the national and institutional levels. However, it is clear that the implementation vacuum has given rise to a number of significant

developments, including unintended and unanticipated consequences, which, if left unchecked, threaten the development of a single, national, co-ordinated, but diverse higher education system.

This National Plan addresses the implementation vacuum and is, therefore, a key instrument in moving towards the implementation of the vision and policy framework outlined in the White Paper.

1.3 PLANNING AND COMPETITION

The most important consequence of the absence of a national plan has been the development of a competitive climate between public higher education institutions. This competitive climate has, furthermore, been fuelled by the emergence of a market in higher education as a result of a growing private higher education sector. The increased competition between higher education institutions has further fragmented and exacerbated the inequalities within the higher education system.

The intensified competition between public higher education institutions is the product of two inter-related factors. First, a decline in student enrolments in the late 1990s. The average annual growth rate of 5%, which was a feature of the higher education system between 1993 and 1998 has not been sustained and there has been a 4% drop in enrolments between 1998 and 2000 (enrolment trends are discussed in Section 2, pp.14-15).

Second, financial constraints as a result of limited financial resources. Although government expenditure on higher education (excluding the National Student Financial Aid Scheme) as a percentage of Gross Domestic Product increased from 0.72% in 1996/96 to 0.77% in 1996/97, it remained steady at 0.77% until 2001/2002 when it dropped to 0.74%. This has impacted on institutional operational budgets and many institutions have attempted to respond by introducing efficiency measures and widening their income stream.

In this context, the increased competition between institutions is neither surprising nor unexpected. It is consistent with institutions as rational actors taking action to maximise their welfare. It also highlights the limits of linking funding narrowly to student enrolments. This is inherently competitive, except when enrolments are growing, and/or unless mitigated by other policy and planning mechanisms linked to national goals.

The implications of a competition-driven higher education system and its attendant dangers are clearly identified by the CHE Report, which argues that it results in

“lack of institutional focus and mission incoherence, rampant and even destructive competition in which historically advantaged institutions could reinforce their inherited privileges; unwarranted duplication of activities and programmes; exclusive focus on ‘only’ paying programmes; excessive marketisation and commodification with little attention to social and educational goals; and insufficient attention to quality” (CHE 2000: 17-18).

The competition-driven developments have essentially taken three forms to date: first, the rapid development of distance education programmes by traditionally contact institutions; second, the establishment of satellite campuses by contact institutions to facilitate the delivery of their distance education programmes and in some cases, to offer traditional face-to-face programmes; third, the rapid growth of the private higher education sector with its limited focus on the delivery of low cost, high demand programmes which are financially lucrative such as those in business, commerce and management.

The potentially damaging impact of these developments is increasingly becoming clear. They threaten the continued sustainability of both the dedicated distance education institutions, as well as the contact institutions in whose localities satellite campuses have been established. In the case of private institutions, the limited focus on profitable programmes results in unfair competition with public institutions. Furthermore, these developments have reinforced the inherited inequities of apartheid in the public sector, as it is the well-resourced institutions that have been best placed to take advantage of the competition-driven environment.

These developments are in direct contradiction to the policy framework of the White Paper, which aims to ensure a more systemic approach with greater coherence and responsiveness of higher education institutions to national needs. This is not to suggest that inefficient and ineffective public higher education institutions must be allowed to continue operating as they are. Neither is it to suggest that all forms of competition are detrimental to the well-being of the higher education system. On the contrary, the Ministry welcomes competition that promotes innovation and enhances quality. However, competition between institutions must be regulated within a national framework that promotes and facilitates the sustainability of the higher education system. The point to emphasise is that the long-term future of individual public institutions and their restructuring must be determined by national policy and needs and not by the vagaries of the market and competitive pressures.

Furthermore, the burgeoning private higher education sector requires more stringent regulation of to ensure that it complements the public sector and contributes to the overall human resource needs of the country.

1.4 EQUITY AND REDRESS

The increased competition between institutions has further fragmented and, in some cases, intensified the racial divides in the higher education system. The opening up of access to higher education for black students at all institutions after 1994 has adversely impacted on student enrolments at the historically black institutions and, in particular, the historically black universities. Between 1993 and 1999, African student enrolments decreased from 49% to 33% in the historically black institutions and increased from 13% to 39% in the historically white institutions (excluding UNISA and Technikon SA). The decline in enrolments, combined with a range of other factors such as growing student debt, governance and management failures and general instability, has resulted in the rapid erosion of the sustainability of a number of the historically black universities.

This brings to the fore the role of redress funding in addressing the legacy of the past and in establishing the sustainability of the historically black institutions. The principle of equity and redress is firmly entrenched in the White Paper, which states:

“The principle of equity requires fair opportunities both to enter higher education programmes and to succeed in them. Applying the principle of equity implies, on the one hand, a critical identification of existing inequalities which are the product of policies, structures and practices based on racial, gender, disability and other forms of discrimination or disadvantage, and on the other a programme of transformation with a view to redress. Such transformation involves not only abolishing all existing forms of unjust differentiation, but also measures of empowerment, including financial support to bring about equal opportunity for individuals and institutions” (White Paper: 1.18).

The White Paper makes a clear distinction between social (i.e. individual) redress and institutional redress. As the CHE Report argues, although the two are connected, “the former is not reducible to the latter” (CHE 2000: 14). This needs to be underscored as the changing demographic profile of

the student body suggests that the burden of teaching under-prepared students is no longer primarily confined to the historically black institutions. Thus, social redress, which includes both the provision of student financial aid for poor students and the provision of resources to institutions to deal with the learning needs of under-prepared students, cuts across the past divide between the historically black and historically white institutions.

The Ministry therefore agrees with the CHE report that:

“the categories of ‘historically advantaged’ and ‘historically disadvantaged’ are becoming less useful for social policy purposes --- (and that the) 36 public higher education institutions inherited from the past are all South African institutions. They must be embraced as such, must be transformed where necessary and must be put to work for and on behalf of all South Africans” (CHE 2000: 14).

This does not imply that institutional redress is no longer relevant. On the contrary, the continued role of the historically black institutions as integral components of a transformed higher education system requires that institutional redress be addressed. However, it suggests that the focus of institutional redress must shift from the current notions of redress, which are narrowly focused on the levelling of the playing fields between the historically black and historically white institutions.

The key question that needs to be asked is “redress for what?” The Ministry is of the view that the main purpose of redress must be to ensure the capacity of institutions to discharge their institutional mission within an agreed national framework. It also requires that institutions not only develop a clear mission and sense of purpose, but also that they ensure that the necessary management, administrative and academic structures to support the mission are in place.

The continued instability and permanent state of crisis that characterises a small number of the historically black institutions cannot be countenanced any longer. Although the origins and genesis of the historically black institutions as products of apartheid should not be ignored, the instability and crisis cannot be reduced only to the legacy of apartheid. This is clearly illustrated by the fact that it does not affect all the historically black institutions and that some of the affected institutions have been able to turn around and achieve stability.

The instability has also impacted on the allocation of redress funds in the past few years. Although funds have been limited because of funding constraints, the available funds have mainly been allocated to assist a few institutions that were experiencing severe financial difficulties. In the 1998/1999 financial year, R 27 million was available for institutional redress purposes and was allocated on the basis of the funding formula to all the historically black institutions. However, the R 57 million available for institutional redress in the 1999/2000 financial year, was allocated to assist three institutions in severe financial distress.

The Ministry agrees with the suggestion in the CHE report that attention must be paid to the identification of new missions, which would enable institutions that were disadvantaged to develop new directions and trajectories (CHE 2000: 52-53). The restructuring and rejuvenation of the historically black institutions requires that developmental strategies should be put in place to ensure that they are in a position to fulfil their agreed role within the transformed higher education system. This National Plan provides the basis for identifying such developmental strategies.

The allocation of redress funds to facilitate and underpin the developmental strategies must be based, as the White Paper states, on business plans with clearly identified needs linked to performance improvement and efficiency measures (White Paper: 4.38). It is in this context that institutional audits, which the Association of Vice-Chancellors of Historically Disadvantaged

Tertiary Institutions in South Africa (ASAHDI) have recently called for, have a potentially important role to play. As the White Paper indicates, institutional audits are necessary to assess needs and to rectify deficiencies within the historically disadvantaged institutions (White Paper: 4.37).

However, if institutional audits are to add value, they must be undertaken in the context of a clear and agreed delineation of the role of different institutions linked to the overall restructuring of the higher education system. It is precisely because of the absence of an overall framework for the restructuring of the higher education system that the Ministry has not, to date, initiated large-scale institutional audits, as suggested in the White Paper. There have however, been more limited audits of the administrative and management systems at some of the historically black universities that were experiencing governance and management problems and whose financial sustainability was at risk. These audits have proved valuable and have allowed the affected institutions to take the appropriate steps to ensure that the necessary administrative and management systems are in place to enable the smooth and effective functioning of the institution.

1.5 THE NATIONAL PLAN AND STEERING MECHANISMS

This National Plan outlines the implementation framework for achieving the vision and goals of the White Paper. In line with the White Paper, it establishes indicative targets for the size and shape of the higher education system, including overall growth and participation rates, institutional and programme mixes and equity and efficiency goals. It provides a framework and outlines the process for the restructuring of the institutional landscape of the higher education system. It also provides the signposts for the development of institutional plans.

Furthermore, it indicates the strategies and levers through which the framework and system-wide targets and goals established by this National Plan will be achieved. The planning process in conjunction with funding and an appropriate regulatory framework will be the main levers through which the Ministry will ensure that targets and goals of this National Plan are realised.

The Ministry will from 2003 directly link the funding of higher education institutions to the approval of institutional three-year “rolling” plans, rather than the current practice whereby funding is mechanically determined by past student enrolment trends. This means, in effect, that from 2003, the approved institutional plans will determine the level of funding of each higher education institution.

The Ministry will also use various earmarked funds to realise particular policy objectives such as, for example, research capacity-building and increased access of poor students and the disabled to higher education.

The effective use of funding as a steering lever requires the development of a new funding formula based on the funding principles and framework outlined in the White Paper. The Ministry is in the process of finalising the development of a new funding formula. A draft funding framework will be released for consultative purposes towards the end of March 2001. It is anticipated that a new funding formula will be phased in from 2003.

This combination of planning and funding levers to achieve policy objectives involves a model of implementation in which the Ministry will determine the overall goals for the higher education system and establish incentives and sanctions to steer the system towards those goals. The Ministry will not however, hesitate in certain limited circumstances to intervene directly in the higher education system in order to ensure that national policy goals are achieved. The intervention by the Ministry to bring stability to institutions in crisis through the appointment of administrators, for

example, is a case in point. Equally, the Ministry will intervene to facilitate the implementation of the transformation goals of the White Paper should this prove necessary.

1.5.1 Institutional autonomy

The Ministry anticipates that there are likely to be objections from some quarters on the grounds that this National Plan infringes institutional autonomy. Indeed, such an objection was raised by some constituencies in response to a draft discussion document released by the Council on Higher Education Task Team prior to the release of the final CHE report.

In terms of the Higher Education Act, 1997 (Act No 101 of 1997), higher education institutions are autonomous. However, the Act does not grant higher education institutions unfettered autonomy or independence. The preamble to the Act clearly spells out that autonomy must be coupled with accountability. As the preamble states: "...it is desirable for higher education institutions to enjoy freedom and autonomy in their relationship with the state within the context of public accountability and the national need for advanced skills and scientific knowledge...."

The Ministry is committed to institutional autonomy as is evident from the limited interventions that it has made in the day-to-day operations of higher education institutions. Indeed, it has often been criticised for not being interventionist enough in dealing with the crisis that has befallen a range of higher education institutions. The Ministry is acutely aware of the delicate balance that requires to be maintained between institutional autonomy and public accountability. It is committed to maintaining this balance. The Ministry believes that the solution to finding the appropriate balance must be determined in the context of our history and our future needs. The Ministry will not however, allow institutional autonomy to be used as a weapon to prevent change and transformation.

1.6 STATUS OF THE NATIONAL PLAN

The release of this National Plan brings to a close the consultative process that began with the Minister's request in July 1999 to the Council on Higher Education to advise him on the restructuring of the higher education system. This National Plan represents the Ministry's response to the proposals contained in the Council on Higher Education's report. The CHE's report and the responses to the report by higher education constituencies and other interested parties, at the invitation of the Minister, have helped to shape this National Plan.

The fundamental principles and framework outlined in this National Plan are not open for further consultation. This is not to suggest that there is no room for consultations on the details of implementation or on the outcomes of the further investigations that are indicated in this National Plan. However, the focus must now be firmly on implementation. As the White Paper states:

"...our democratically elected government has a mandate from its electorate and is responsible to Parliament for ensuring that the mandate is fulfilled. Ministers have a duty to provide leadership. When all the appropriate investigations and consultations have been completed, a minister must decide, and must take responsibility for the consequences of the decision" (White Paper: 3.5)

That time has now come. The consultative process, which has lasted some six years, must rank as one of the most wide-ranging and all encompassing that has taken place anywhere in the world on higher education. It began with the National Commission on Higher Education in 1995 and continued through the development of the White Paper in 1997 and the preparation of the Council on Higher Education report last year. It must be brought to a close.

The release of this National Plan also brings to a close the first or preparatory planning phase, which began in 1998 with the submission of the first set of institutional three-year rolling plans. It signals the start of the second phase in which, as indicated above, the planning process and funding framework are aligned, and in which, specifically, the allocation of funds will be linked to the approval of institutional plans. This does not imply that this National Plan addresses all the elements of the comprehensive planning framework outlined in the White Paper. Its focus is on the key elements necessary to achieve the central policy goals of the White Paper. The policy goals that are not addressed in this National Plan will be introduced over the next few years, with the intention that all the elements should be in place by 2003.

It is also important to underline the emphasis in the White Paper on the indicative and rolling nature of the planning process. Indicative and rolling plans facilitate the setting of objectives and implementation targets that can be adjusted, updated and revised annually in response to changing trends and developments in the internal and external environment. This suggests a dynamic and flexible approach to planning, instead of the rigidities associated with the now discredited top-down or centralised, including manpower, planning approaches (White Paper: 2.9). In short, it suggests that no plan can or should be cast rigidly as this would preclude introducing changes in the light of a rapidly changing regional and national context.

This National Plan will be reviewed annually and revised and adjusted in the light of the institutional plans and the ongoing analyses and monitoring of key trends and developments, as well as emerging regional and national needs. In this regard, it should be highlighted that this National Plan would have to be adjusted to take into account the concrete objectives and strategies that are likely to emerge from the Government's Human Resource Development strategy, which was adopted by Cabinet at its legotla in January 2001, as well as the Government's integrated rural development and urban renewal strategies.

1.6.1 Structure of the National Plan

This National Plan addresses five key policy goals and strategic objectives, which in the Ministry's view, are central to achieving the overall goal of the transformation of the higher education system. The goals and strategic objectives are:

- To provide access to higher education to all irrespective of race, gender, age, creed, class or disability and to produce graduates with the skills and competencies necessary to meet the human resource needs of the country.
- To promote equity of access and to redress past inequalities through ensuring that the staff and student profiles in higher education progressively reflect the demographic realities of South African society.
- To ensure diversity in the organisational form and institutional landscape of the higher education system through mission and programme differentiation, thus enabling the addressing of regional and national needs in social and economic development.
- To build high-level research capacity to address the research and knowledge need of South Africa.
- To build new institutional and organisational forms and new institutional identities through regional collaboration between institutions.

These goals and strategic objectives, including the desired outcomes and the strategies that would be used to attain them are discussed in detail in turn. In addition, the key activities that flow from these strategies and the timeframes for completing them are outlined in the concluding section of this National Plan.

SECTION 2: PRODUCING THE GRADUATES NEEDED FOR SOCIAL AND ECONOMIC DEVELOPMENT IN SOUTH AFRICA

<p>GOAL ONE :</p>	<p>“To provide a full spectrum of advanced educational opportunities for an expanding range of the population irrespective of race, gender, age, creed or class or other forms of discrimination” (White Paper 1997: 1.27)</p>
<p>STRATEGIC OBJECTIVE :</p>	<p>To produce graduates with the skills and competencies necessary to meet the human resource needs of the country</p>

PRIORITIES:

- **To increase the participation rate in higher education to meet the demand for high-level skills through a balanced production of graduates in different fields of study taking into account labour market trends.**
- **To increase the number of graduates through improving the efficiency of the higher education system.**
- **To link improvements in efficiency to improvements in quality.**
- **To broaden the social base of higher education by increasing access to higher education of workers and professionals in pursuit of multi-skilling and re-skilling, and of adult learners who were denied access in the past.**
- **To produce graduates with the skills and competencies required to participate in the modern world in the 21st century.**

2.1 CONTEXT: LABOUR MARKET AND STUDENT ENROLMENT TRENDS

2.1.1 Human resource development and labour market trends

The White Paper argues for the planned expansion of the higher education system given the increasing importance of high-level skills and human resources for social and economic development in a knowledge-driven world. The need to expand higher education is confirmed by studies of the structural changes in the South African economy and the associated changes in labour market trends in the past three decades (DBSA 1995, HSRC 1999a, HSRC 1999b, Borat, 1999). These studies indicate:

- A major structural shift has occurred over the past twenty-five years. The primary sectors of the economy have been in consistent decline over the period, while the services sector has

grown rapidly. In terms of GDP shares, the primary sector declined by about 4% and the services sector grew by about 6% between 1970 and 1995. These changes are reflected in employment data, which show that between 1970 and 1995 employment in the agricultural sector fell by 1.25 million (or 50%) and in the mining sector by 211 000 (or 31%).

- Significant shifts have occurred in employment distribution in all sectors of the economy. There has been a decline in unskilled and semi-skilled work and a rapid increase in skilled work, especially in professional, managerial and technical occupations. This is evident even in the agricultural and mining sectors, where the major job losses that occurred were in unskilled work. In all sectors, professional and technical employment grew by 1.1 million (or 312%) and managerial employment by 313 000 (or 272%) between 1970 and 1995.
- The proportion of unskilled and semi-skilled workers declined from 56.8% of total employment in 1965 to 38.8% in 1994, while that of professional and managerial occupations increased from 8.5% to 17.7%. Managerial occupations alone increased from 1.8% to 4.1%. Similarly, clerical, sales and service occupations increased from 28.9% to 38.3%, while artisans declined marginally from 5.8% to 5.2%. Significantly, high-level occupations continued to grow even during periods of low economic growth when total employment was declining.
- The changes in employment patterns were primarily a result of technological change, in particular rising capital intensity, as well as more general moves to computerisation in all sectors of the economy.
- There was a decline of 79% in the demand for the labour of workers with no education, and a drop of 24% in the demand for those with only primary schooling between 1970 and 1995. In contrast, the demand for workers with even an incomplete secondary education increased by 53% and for those with a matric certificate by just under 400%. In the case of workers with a tertiary qualification, the demand for labour increased by 2028%.
- There is an endemic shortage in South Africa of high-level professional and managerial skills. Particular shortages are in the science and economic-based fields, and especially in information technology, engineering, technological and technical occupations, economic and financial occupations and accountancy and related occupations. These are also the fields in which future demand is likely to be the greatest.

The studies further indicate that the shift in employment distribution in favour of professional and managerial occupations is likely to continue. It is projected that between 1998 and 2003:

- Total employment, that is, new jobs, is expected to grow by less than 1%. However, the growth rate for professional and managerial occupations is expected to be 9.5% and 6.2%, while artisan occupations are expected to grow by 3.9% and unskilled and semi-skilled work is expected to decline by 3.4%.
- The total demand, that is, both new and replacement jobs, for professionals, managers and artisans will be just under 275 000. Of these just under 235 000 jobs will be in professional and managerial occupations, with the professional occupations accounting for just under 80% of all jobs.

The studies on future needs must be read with caution as a background report on the labour market studies prepared for the CHE suggests. In part, they are based on employer forecasts of labour requirements, which, according to international experience, are not very reliable except in the short-

term. They are also regarded as conservative and likely to underestimate the overall future demand for high-level skilled labour. Although they are based on plausible economic growth assumptions, the assumptions on replacement needs may be under-estimated, as the impact of HIV-AIDS has not been factored in (CHE 2000a).

The potential underestimation of future demand is indicated by evidence that graduate unemployment is only 2.9%, which is conventionally regarded as full employment (HSRC, 1999). This suggests that the employment potential of graduates and therefore high-level skilled labour has not reached its peak.

However, given the caution expressed above regarding manpower planning, the accuracy of the projections of the demand for labour are less important than the indicative trends that they suggest. The projections and trends provide a framework within which to assess whether the higher education system is geared to the task of supplying the human resource requirements of the country.

2.1.2 Enrolment trends

The labour market trends highlighted above clearly indicate the need for the higher education system to produce more graduates. However, an assessment of enrolment trends suggests that both in terms of size (i.e. numbers of students enrolled) and shape (i.e. enrolments in different fields of study), the higher education system is not meeting this need.

The National Commission on Higher Education (NCHE) projected in 1996 that the higher education system would be transformed from an elite to a mass system by 2005, with the participation rate¹ increasing from 20%² in 1996 to some 30% in 2005.

In terms of head counts, the NCHE projected that enrolments (including private higher education enrolments) would double, from just under 600 000 in 1996 to nearly 1.5 million in 2005. This projected growth has, however, not been borne out in practice. The participation rate in public higher education has decreased from 17% in 1996 to 15% in 2000.

The optimism of the NCHE projections reflected the rapid enrolment growth in higher education in the early 1990s as well as anticipated changes to the education and training system in general after the election of a democratic government. For example, between 1993 and 1998, head count enrolments in higher education increased rapidly from 473 000 to 608 000, i.e. by 135 000 (or 29%). However, the rise in head counts began to level off between 1996 and 1998, growing only by 20 000 or 3% and subsequently declined by 22 000 (or 4%) between 1998 and 2000.

A significant feature of head count enrolments over the past seven years has been a rapid growth in the provision of distance education programmes by traditionally residential education institutions. Distance education head count enrolments in residential institutions grew by 492% between 1993 and 1999, i.e. from 14 000 to 69 000, and there are no signs that it is levelling off. The majority of these distance programmes are undergraduate programmes targeted, in the main, at employed teachers who are upgrading their qualifications for salary purposes.

¹ We use UNESCO's way of calculating the participation rate as the ratio of students enrolled in higher education to the total of 20-24 year olds in the country.

² The NCHE figure of 20% was based on the 1991 census data which was flawed, in particular, because it excluded the bantustans. In reality, the participation rate was 17%.

The decrease in the head count enrolments is the result of two factors. First, there has been a sharp decline in the number of school-leavers with matriculation exemption, which is a precondition for entry into universities and to a lesser extent into technikons. Between 1994 and 2000, the number of school-leavers obtaining a matriculation exemption decreased from 89 000 to 68 626, i.e. by 20 374 (or 23%). In comparison, the NCHE's enrolment projections were based on assumptions that the total of school-leavers with matriculation exemption would reach 143 000 by 1999.

The decline in the outputs from the school system has resulted in the higher education system's annual intake of first-time entering undergraduate students remaining constant at about 120 000 of which 80 000 are enrolled in the contact institutions and 40 000 in the dedicated distance institutions (UNISA and Technikon SA).

Second, there has been a significant fall in the retention rate in higher education, that is, the proportion of students in a given year who re-register in the following academic year. The evidence suggests that the retention rates in some sub-sectors of the higher education system have fallen by up to ten percent in the last two years compared to the years in which rapid growth occurred.

The reasons for the decline in retention rates are not clear and require investigation. However, it is likely to have been the result of a complex set of factors, including:

- Large numbers of students from the enrolment bulge of the mid-1990s completing their qualifications and moving out of the system.
- High drop-out rates, due to financial and/or academic exclusions and students in good academic and financial standing not remaining in the public higher education system.
- Fewer than normal numbers of students entering postgraduate studies immediately after completing their first qualifications.

In addition, there are number of factors of a more speculative nature which may also help explain the decrease in head count enrolments. These include the increased costs of higher education, which may be impacting on the ability of students from lower middle class backgrounds from entering higher education, as well as the perception that the value of higher education for employment purposes is declining. The latter is evident in the fact that there seems to be a growing demand for short courses linked to technical qualifications that are employment-oriented, especially in the information technology industry; these are usually offered in the private higher education sector.

There is no evidence to suggest either that the decline in retention rates will be reversed or that the annual intake of new undergraduates will increase in the short to medium-term. If graduation rates, retention rates and new intake rates remain at their present levels, then total head count student enrolments are likely, for the foreseeable future, to remain in the current range of around 600 000; at most 350 000 in contact programmes and 250 000 in distance programmes.

In terms of fields of study, the main change that has occurred between 1993 and 1999 has been a shift in enrolments from the humanities to business and commerce. This is consistent with the labour market signals indicating a shortage in the economic and financial spheres. However, enrolments in science, engineering and technology have remained constant. This is indicated by the fact that the proportion of enrolments between 1993 and 1999 changed from 57% to 49% in the humanities; 19% to 26% in business and commerce; and 24% to 25% in science, engineering and technology. It should be noted however, that the ratio in science, engineering and technology may be slightly understated because of definitional problems relating to a range of vocationally-oriented

applied technology programmes offered by the technikons, which are currently classified as humanities programmes.

It should also be noted that a major constraint on increasing enrolments in business and commerce and science, engineering and technology is the paucity of matriculants who have the required proficiency in mathematics. For example, in 1998 and 1999 only about 20 000 school-leavers obtained higher grade passes in mathematics.

2.1.3 Graduate outputs

The decline in enrolments is further compounded by the fact that the higher education system is characterised by major inefficiencies in relation to the outputs of the system. In this regard, three factors should be highlighted.

First, the average graduation rate (calculated on the basis of the number of graduates as a percentage of head count enrolments) remained at 15% between 1993 and 1998. It was 17% for universities and dropped from 11% in 1993 to 10% in 1998 for technikons. Thus in 1998, 89 000 students graduated out of a total head count enrolment of 608 000 students. The average graduation rate at the institutional level ranged from 6% at the low end to 24% at the high end in 1998. Preliminary data for 1999 indicate that the effective decrease in enrolments over the last few years has also now begun to reduce graduate outputs accordingly.

Second, the total growth in graduates has not kept pace with enrolment growth in higher education. Thus, between 1993 and 1998, the total number of graduates grew by 17 000 (or 24%) compared to a growth in head count enrolments of 135 000 (or 29%). Technikon graduates grew by 6 300 (or 41%), compared to a growth of 75 000 (or 56%) in head count enrolments, while university graduates grew by 11 000 (or 19%), compared to a growth in head count enrolments of 7 000 (or 17%).

Third, drop-out rates, that is, students not re-registering even though they have not completed the requirements for their qualifications, are high. On average, about 20% of all undergraduates and postgraduates drop out of the higher education system each year. The average for first-time entering students is 25%. This results in an annual loss to the system of at least 120 000 students who do not complete their studies.

These poor graduation and retention rates and high drop-out rates are unacceptable and represent a huge waste of resources, both financial and human. For example, a student drop-out rate of 20% implies that about R1.3 billion in government subsidies are spent each year on students who do not complete their study programmes. These funds would go a long way not only in financing the expansion of the higher education system, but also in providing the much-needed funds for redressing the inequities of the past. Moreover, the cost to those who drop-out, in terms of the moral and psychological damage associated with “failure”, is incalculable.

2.2 OUTCOME 1: INCREASED PARTICIPATION RATE

The analyses of enrolment trends and graduation rates suggest that the higher education system is not meeting the human resource needs of South Africa. The decline in enrolments coupled with inefficiencies in graduation rates are cause for concern, given the shifts that have occurred in employment distribution as well as the shortages of high-level skills in the labour market. This is likely to be a major impediment in achieving the economic development goals of the government. In this regard, the Ministry has taken particular note of the international evidence, which suggests that there is a correlation between economic development and the level of participation in higher

education. According to the UNESCO/World Bank Report on *Higher Education in Developing Countries: Perils and Promise* (World Bank, 2000), the average higher education gross participation rate is just over 40% for high income countries, just over 20% for middle income countries and 5% for low income countries. The participation rate in higher education in South Africa, which has decreased from 17% to 15%, is well below that of comparable middle income countries.

The Ministry therefore agrees with the recommendation of the CHE that:

“To ensure an adequate supply of high-level human resources for social and economic development, an increased participation rate of 20% of the age group 20-24 in public higher education should be the target over the next 10-15 years” (CHE 2000: 65-66).

The Ministry regards this relatively modest target to be achieved over the next ten to fifteen years as realistic, given current conditions and constraints. First, financial constraints and the claims on the fiscus to address a range of social priorities, make it unlikely that there will be significant additional resources available for higher education. This is especially so because public expenditure on higher education has been growing in the past few years - between 1995 and 1999 it increased by just under R1 billion. However, it has levelled off more recently, and is unlikely to increase much beyond its current share, which is 14% of the total government expenditure on education.

The Ministry believes that, given financial constraints, it is imperative to guard against rapid enrolment growth unless it is matched by additional resources. Increasing enrolments without new investment will be detrimental to the long-term stability and sustainability of the higher education system as well as to the quality of offerings. This is confirmed by the experience of the historically black institutions, which grew rapidly in the 1980s in response to the demand for access to higher education, which was integral to the struggle against apartheid. The growth however, was not matched by additional resources from the apartheid State, thus contributing, in part, to the instability and financial difficulties that currently bedevil some of these institutions.

Second, the decline in the outputs from the school system is unlikely to be reversed significantly in the short to medium-term to fuel an expansion of the higher education system. On current population figures, a participation rate of 20% would require a total head count enrolment of about 750 000 students in the higher education system. On the basis of current patterns, 188 000 school leavers would be required to enter the higher education system each year.³ The Department has modelled scenarios of throughputs from the school system to 2010 (with 1995 as the base year) based on varying assumptions of flow, candidacy and pass rates, including the impact of HIV/AIDS. The scenarios indicate that a continuation of the current output from secondary schools is unlikely to allow an increase in the participation rate. However, a 20% participation rate should be possible within a 10 to 15 year period if there is a significant improvement in the throughputs from the school system.

The arrest of the current decline and the improvement of the throughputs from the school system, both in numbers and quality, remain priorities of the Ministry, as outlined in the *Tirisano* implementation plan. However, although the school system is no longer under demographic pressure as a result of falling fertility rates and rising mortality rates, removing the dead weight of the apartheid legacy from the school system is proving more difficult than may have been anticipated. The Ministry is therefore pleased to note the modest improvement in the matriculation results for 2000. The 9% increase in the pass rate suggests that the strategic interventions based on the *Tirisano* implementation plan are beginning to take effect.

³ It is assumed that the first-time entering undergraduate intake would have to be 25% of the total enrolment in the system (an average based on current figures),

2.3 OUTCOME 2: INCREASED GRADUATE OUTPUTS

The Ministry believes that the long-term goal of increasing the overall participation rate must be complemented by strategies to increase graduate outputs in the short to medium-term in order to ensure that the current demand for high-level managerial and professional skills is satisfied. This requires that over the next five to ten years the priority must be to improve the efficiency of graduate outputs from the system. Indeed, it would be difficult to argue for additional resources to facilitate expansion unless the inefficiencies in graduate outputs are addressed satisfactorily.

The Ministry therefore intends taking steps at both the institutional and national levels to address the inefficiencies in the graduate outputs of the higher education system.

2.3.1 Institutional efficiency benchmarks

The Ministry expects all institutions to prioritise and focus their efforts in the next five years to improving the efficiency of the outputs from the system based on the following benchmarks for graduation rates:

Qualification-type	Graduation rate	
	Contact	Distance
Up to 3-years: undergraduate	25%	15%
4 years or more: undergraduate	20%	10%
Postgraduate: up to honours	60%	30%
Masters	33%	25%
Doctoral	20%	20%

The benchmarks have been calculated by reviewing student cohort models, involving a combination of retention rates, drop-out rates and graduation rates over a five-year period.⁴ They have been developed taking into account South African conditions, which include current performance and the fact that a large number of under-prepared students enter higher education. It is not possible for the Ministry to provide meaningful international comparisons given variations in international qualifications and practices.

Statistics on graduate outputs indicate that few institutions meet the proposed benchmarks. If the above benchmarks had been applied to enrolments over the past three years, the higher education system would have produced about 40 000 more graduates annually than is the case at present. Given the small numbers entering higher education, this is clearly a loss that the country can ill-afford.

There will be two major incentives for individual institutions to improve their graduation rates, and as a result, those of the higher education system as a whole. The first will be the inclusion of

⁴ As an example - in the case of three-year, full-time, undergraduate programmes, the ideal would be for 1/3 of the enrolment in any given year to be entering students, 1/3 students carrying on into a 2nd year and 1/3 students in their final year. If all those in the final year actually graduated, then the ratio of graduates to enrolments would be 33%.

graduate outputs as an integral component of the new funding framework, that is funding will be linked to the number of graduates produced. The second will be that institutional performance in the production of graduates will determine the programmes that institutions will be allowed to offer in the programme planning grid (outlined in section 4, p.55).

The Ministry recognises that it may be argued that including graduate outputs in the funding formula may be contrary to the White Paper, which states that:

“While there is a need to improve institutional efficiency and effectiveness, the inclusion of student completions is inappropriate at this time given the different apartheid legacies of existing institutions and the need to adopt a forward-looking approach. In view of the wide variations in need and capacity, as well as the policy objective of encouraging diversity and quality improvement within the system, the Ministry will base its negotiations with institutions on their academic development plans and on progress they are making towards achieving the performance improvement targets outlined in their strategic plans” (White Paper, 1997:4.29).

The focus of the White Paper, however, is on removing the success rates in individual courses, which are a key element in the current subsidy formula. The inclusion of graduate outputs does not therefore contradict the White Paper’s commitment to making student enrolments the primary driver in the funding formula.

The Ministry is of the view that the scale of the inefficiencies requires the inclusion of graduate outputs in the new funding framework. This does not mean that the need for a forward-looking approach is no longer relevant. On the contrary, efficiency improvements are dependent on the development of a range of appropriate strategies, including addressing the underlying factors that contribute to low graduate rates/ outputs, in particular limited academic development programmes and student financial aid. Issues around the National Student Financial Aid Scheme (NSFAS) are discussed in Section 4 below.

2.3.2 Academic development

An analysis of the second set of institutional plans submitted in 1999 suggests that in many institutions academic bridging and development programmes largely remain marginal or are not offered at all. This is indicated by the fact that, despite a specific request in the planning guidelines for information on academic development programmes, few institutions spelt out the programmes and strategies in place and their impact on throughput and graduation rates.

The Ministry is aware of the dissatisfaction expressed by institutions that the delay in the introduction of the new funding formula has impacted on the development of academic development programmes. The Ministry remains committed to the funding of academic development programmes as part of the new funding formula. However, it should be made clear that higher education institutions have a moral and educational responsibility to ensure that they have effective programmes in place to meet the teaching and learning needs of the students they admit. This requires that institutions should integrate academic development programmes into their overall academic and financial planning. In addition, institutions need to ensure that they do not recruit students who do not have the potential to pursue further study and that they do not retain students who have no chance of success.

In the interim, the Ministry has addressed the need for academic development programmes through the provision of earmarked funds. This was introduced in the 2000/2001 financial year. The earmarked funds were allocated to enable institutions to introduce, or continue to offer, extended

curricula in key subject areas, as a means of improving access and success rates for students from disadvantaged backgrounds. The focus on extended curricula was based on the recognition that curriculum-related approaches are critical to dealing with educational disadvantage, rather than reliance on supplementary support mechanisms, particularly in science, engineering and technology and other “numerate” subject areas.

However, an assessment of the proposals submitted by institutions to access the earmarked funds was worrying. Roughly half of the institutions submitted proposals which met the stipulated criteria, indicating an understanding of the role of academic development programmes, as well as the integration of existing programmes into the academic activities of the institutions concerned. It is a matter of concern, however, that almost half of the institutions submitted proposals that fell far short of meeting the key criteria, indicating a lack of understanding of the role of extended curricula in academic development. The following shortcomings in the proposals are worth highlighting:

- In many institutions the foundation or bridging programmes are not effectively integrated into the mainstream curricula. The add-on nature of many of the programmes is educationally unsound as best practice indicates that the success of academic development programmes is dependent on their integration into the structure of the overall curriculum.
- The emphasis in most institutions’ proposals is still predominantly on access, in the sense of providing places for students who do not meet standard admissions criteria, rather than on long-term student success and graduation. For example, very few institutions make provision for students who meet the normal admissions criteria to pursue extended curricula programmes. The fact that they meet the normal admissions criteria does not necessarily imply that they are not at risk, as is evident from the high failure and drop-out rates in general.
- There is little collaboration between institutions resulting in the development of foundation programmes in isolation and without the benefit of the substantial experience in academic development programmes that exists in various institutions
- Some institutions see information technology-related approaches as the central solution to the problems experienced by disadvantaged students. While the innovative use of technology is to be welcomed, there is a strong risk that approaches which focus only on improving delivery through information and communication technology, and which leave traditional curricular structures unchanged, will not provide a comprehensive solution.

The role of academic development programmes in improving the efficiency of the higher education system in terms of graduate outputs is critical. The Ministry therefore expects that institutions will give priority to rectifying the shortcomings in current academic development programmes, as well as introducing such programmes if they are not currently on offer. The Ministry will also encourage regional collaboration in the development and delivery of academic development programmes in order to ensure that experience and best practice in academic development benefits the higher education system as a whole.

2.3.3 Quality of graduate outputs

The focus on efficiency improvements cannot and must not be at the expense of the quality of academic outputs. The principle of quality, which the White Paper defines in terms of “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” (WP 1.21), must underpin any efficiency strategy. In fact, quality is central to redress and

equity. It is unacceptable for graduates in general and those from previously disadvantaged communities in particular, to be short-changed in terms of the quality of programme provision as it would not only impact on their ability to improve their own life chances, but it would also adversely impact on the broader agenda for social and economic development.

The Ministry is therefore pleased to note that the Higher Education Quality Committee (HEQC) of the Council on Higher Education, which has executive responsibility for quality assurance, has been established and has released a framework to guide its work in the development of a robust quality assurance system. This does not however, absolve higher education institutions from establishing and developing their own internal quality assurance mechanisms. In fact, both the HEQC and institutional quality assurance mechanisms are crucial components for the transformation of the higher education system.

2.3.4 National planning and efficiency improvements

In order to plan and measure the efficiency of the higher education system in terms of graduate outputs, the Ministry intends to establish national student planning targets as totals of graduates rather than as simply head count or full-time equivalent (FTE) enrolment totals. This will in turn generate the required head count and full-time equivalent (FTE) enrolment totals for the higher education system as a whole. The Ministry will, at the start of each three-year planning cycle draw up a planning table of expected graduate outputs of the kind illustrated below:

GRADUATE GRID FOR UNIVERSITIES AND TECHNIKONS: YEAR N

	Career-oriented: up to 3- years	Formative: 3-years	Career-oriented: 4-years & more	Honours degrees	Masters degrees	Doctors degrees	Total
(1) Natural & mathematical sciences	x	x	x	x	x	x	x
(2) Engineering and other applied sciences	x	x	x	x	x	x	x
(3) Health sciences	x	x	x	x	x	x	x
(4) Business/commerce	x	x	x	x	x	x	x
(5) Education	x	x	x	x	x	x	x
(6) Social sciences & applied humanities	x	x	x	x	x	x	x
(7) Humanities	x	x	x	x	x	x	x
TOTAL	x	x	x	x	x	x	x

The higher education system will be expected over the next five years to move significantly towards the achievement of the graduation rates benchmarks identified earlier.

The Ministry expects that at a minimum, over the next five years, the total number of graduates will increase by 10 000 per annum, i.e. from the current total of 90 000 to 100 000. The division of the targets between different fields of study will be the subject of further analysis by the Ministry.

However, it will be informed by the need to shift the balance in the shape of enrolments and outputs between the humanities, business and commerce and science, engineering and technology (discussed in more detail under Outcome 5 below).

The stress on the need for the system to move towards the achievement of graduation rate benchmarks is important. As stated earlier, the number of students entering higher education is not likely to increase substantially in the short term. However, with efficiency improvements the current output of graduates can be produced with a smaller number of head count enrolments. In this regard, the planning model shows that:

- If the current graduation rates were to persist then a head count enrolment total of 670 000 (compared to the actual 2000 total of 580 000) would be needed to produce a total of 100 000 graduates.
- If graduation rates were to improve by 10%, then a head count enrolment of 600 000 would be needed to produce 100 000 graduates.
- If the graduation rate benchmarks were achieved, then a head count enrolment of only 450 000 would be needed to achieve a target of 100 000 graduates.

In short, if the benchmarks were to be achieved, then the current head count enrolment of 580 000 in the system would generate nearly 130 000 graduates (an improvement of 33% on the current total).

2.4 OUTCOME 3: A BROADENED SOCIAL BASE OF STUDENTS

The Ministry believes that an important avenue for increasing the potential pool of recruits to higher education is to recruit non-traditional students, specifically workers, mature learners, and the disabled. This is an important policy goal, which was signalled in the White Paper and has been reaffirmed in the CHE Report, which suggests that “ ‘Recognition of Prior Learning’ initiatives should be promoted to increase the intake of adult learners” (CHE 2000: 66). It has, however, largely been ignored by institutions, despite requests that they indicate in their institutional plans the strategies and steps they intend taking to address this goal.

The main developments in this area have largely been limited to the introduction by some institutions of professional development programmes, which have primarily been targeted at teachers and delivered through distance education programmes in conjunction with private providers. The impact and implication of these programmes are discussed in Section 4. There has, however, been little or no move towards the development of programmes to attract workers and mature learners who were denied access to higher education in the past.

The provision of higher education to workers, mature learners and the disabled, aside from the equity and redress imperatives, could play a significant role in addressing the shortage of high-level skills in the short to medium-term, especially as there is a large potential pool of recruits. An analysis of the 1996 census suggests that there are about 1,6 million adults in the 25-39 age group with a matriculation certificate. Moreover, the establishment of the Sector Education and Training Authorities (SETAs) provides the opportunities and channel through which higher education institutions could develop programmes targeted at workers, mature learners and the disabled. The role of the SETAs, as the government’s HRD strategy indicates, would be to identify the skills gaps and shortages, which require to be addressed, provide bursaries to learners and to identify the appropriate higher education providers to develop and deliver the required programmes.

It should be emphasised that increasing the access of workers, mature learners and the disabled to higher education is an important policy goal in its own right and should be approached as such rather than as an attempt to shore up falling enrolments.

The Ministry therefore expects institutions to indicate in their institutional plans the strategies and steps they intend taking to increase the enrolment of these categories of learners, including clear targets and time-frames.

2.5 OUTCOME 4: INCREASED RECRUITMENT OF STUDENTS FROM THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY

There is increasing evidence to suggest that there is as yet untapped potential to recruit students from the Southern African Development Community (SADC) region, especially at the postgraduate level. This is indicated by the fact that, although there are currently about 14 000 students from the SADC region enrolled in public higher education institutions, a number of SADC countries are negotiating with private providers both in South Africa and elsewhere to increase access to higher education for their nationals.

The recruitment of students from the SADC region would be consistent with the Southern African Development Community protocol, which commits member states to targeting a maximum of 10% of their student places for students from other SADC countries. This is unlikely to impact adversely on access for South African students given the declining enrolments in the higher education system. It will also not adversely impact on the sustainability of enrolments in higher education institutions in the SADC countries, many of which have far fewer higher education institutions than South Africa.

The real significance of increasing the recruitment of students from the SADC region lies in the fact that it would contribute to the broader human resource development needs of the region, which is critical if SADC is to become a major social and economic development bloc. It will also enrich the educational experience of South African students and broaden their understanding of the social, cultural, economic and political ties that underpin the peoples and countries of SADC.

In line with the government's commitment to the Southern African Development Community protocol, the Ministry is in the process of finalising its policy on the subsidisation of foreign students, which will treat SADC students as equivalent to South African students for subsidy purposes. The new policy will come into effect from 2002.

The Ministry is, however, concerned that, although SADC students are regarded as home students, higher education institutions continue to have a differential fee structure for SADC students. The Ministry recognises that there may be additional administrative costs associated with the recruitment and servicing of non-South African students. However, the wide variation in the additional fees charged by different higher education institutions is unacceptable and has been questioned by the SADC member states. The Ministry would therefore like to encourage higher education institutions to agree collectively on whether an additional fee levy is necessary and if so, what an appropriate additional fee levy would be. The Ministry will request the South African Universities Vice-Chancellors Association (SAUVCA) and the Committee of Technikon Principals (CTP) to advise jointly on the appropriate fee levies, if any, for SADC students.

2.6 OUTCOME 5: CHANGED ENROLMENTS BY FIELDS OF STUDY

The Ministry will over the next five to ten years shift the balance in enrolments between the humanities, business and commerce and science, engineering and technology from the current ratio of 49%: 26%: 25% to a ratio of 40%: 30%: 30% respectively.

The Ministry does not believe that the ratio can be adjusted any further in the short-term in favour of business and commerce and science, engineering and technology as the school system is not at present able to produce large numbers of matriculants who have the required proficiency in mathematics. The Ministry, as part of its *Tirisano* programme, has developed strategies to intervene in the school system to improve the quality of teaching in, and to increase the number of students matriculating with, mathematics and science.

Furthermore, the desirability of adjusting the share of the humanities below the planned 40% is open to question. The humanities play an important role, as the White Paper states, in career-oriented training in a range of fields such as education, law, private and public sector management, social development and the arts (White Paper: 2.25). The humanities also play an important role in developing a critical civil society through enhancing our understanding of social and human development, including social transformation.

The Ministry recognises the current public concerns in general and within the historically black universities in particular, which have narrowly focused on the need to shift enrolments to business and commerce and science, engineering and technology. This is the result of two factors. First, there is a perception that a qualification in the social sciences and humanities has no value in the labour market. Second, there is the legacy of apartheid, which restricted the black institutions to producing graduates for the bantustan bureaucracies, thus leading to a preponderance of programmes and graduates in public administration. These concerns are not without foundation and merit attention. However, the Ministry is of the view that the concerns can be addressed without necessarily shifting enrolments away from the social sciences and humanities. Rather, as many institutions have done, the curricula should be restructured to provide the skills and qualities required for employment purposes.

The Ministry would like to sound a note of caution that although changing the balance of enrolments towards science, engineering and technology is a priority for the country as a whole, it does not follow that all institutions are necessarily required to contribute to addressing this goal. The role that different institutions play in addressing the goal would depend on their mission and programme mix (which is discussed in Section 4).

In the case of science, engineering and technology, the Ministry is particularly keen to increase enrolments in the broad field of information and communications technology, which has been identified by Cabinet as a key focus for skills development. The shift in the balance of enrolments in general and the specific focus on information and communications technology will be achieved through the steering of funded student places and through identifying the institutions that have the capacity and/or potential to respond to the government's HRD strategy.

The Ministry would also like to highlight two concerns in relation to the humanities. First, there has been a significant drop in enrolments in pre-service teacher training programmes, which has major implications for the human resource requirements of the education system. The Ministry is currently developing a national teacher education plan, which will identify the requirements in pre-service training, the upgrading of un- and under-qualified teachers, as well as in-service training in line with new curriculum and school improvement policies. This plan, which is scheduled for release for consultative purposes, in June 2001, will serve as the basis for determining the number

of student places that the Ministry will support in the broad field of education over the next five years.

Second, important fields of study which impact on the development of a common sense of nationhood and that could play an important role in contributing to the development of the African renaissance continue to be marginalised in higher education institutions. These include, in particular, fields of study such as African languages and culture, African literature (and not only in its English form) indigenous knowledge systems and more generally, the transformation of curricula to reflect the location of knowledge and curricula in the context of the African continent. The Ministry would like to encourage institutions to develop and enhance these fields and will monitor developments closely.

2.7 OUTCOME 6: ENHANCED COGNITIVE SKILLS OF GRADUATES

It is crucial to equip all graduates with the skills and qualities required for participation in as citizens in a democratic society and as workers and professionals in the economy. This should not be seen in a simplistic vocational sense as there is increasing evidence to suggest that narrowly technical skills are becoming less important than knowledge management and organisation skills. What evidence there is suggests that employers, in addition to technical skills, want graduates who can “demonstrate a strong array of analytical skills and a solid grounding in writing, communication, and presentation skills” (quoted in the UNESCO/World Bank report 2000: 85). The skills that all graduates will require in the 21st century have been aptly summarised by Michael Gibbons as computer literacy, knowledge reconfiguration skills, information management, problem-solving in the context of application, team building, networking, negotiation/mediation competencies and social sensitivity (Gibbons, 1998).

The issue, then, is not whether there should be more or fewer enrolments in business and commerce and science, engineering and technology as against the social sciences and humanities, but whether the higher education system is geared towards addressing the skills and competencies required of all graduates in the modern world.

The Ministry is aware that many institutions have embarked on a review of their academic programmes. This has often been in response to the need to define outcomes, or the academic objectives of programmes, for the National Qualifications Framework (NQF). It has also often been part of an attempt to improve the quality of qualifications by ensuring that all the parts of the curriculum form a coherent whole. This should be an ongoing process to ensure that the quality of qualifications is improved in line with best practice internationally, as well as to ensure that the nature of knowledge is updated continually. However, it is important to monitor the consequences of programme restructuring in order to guard against the development of rigid programme structures with little flexibility or opportunity for articulation between programmes offered at different institutions. This not only hinders student mobility but also acts as a potential barrier to institutional collaboration in programme development and delivery.

The Ministry therefore agrees with the Council on Higher Education that there is a need to review the current academic policy and qualifications structure to ensure that the qualifications framework is appropriate for our needs. In this regard, the Ministry supports the CHE’s proposal to investigate the “desirability and feasibility” of replacing the current three-year undergraduate degree with a four-year degree in the long-term. A four-year restructured undergraduate degree may provide the mechanism for addressing a range of objectives such as the academic skill needs of under-prepared students, the skills requirements of a changing labour market and enhanced access of workers, mature learners and the disabled to higher education.

The Ministry looks forward to receiving proposals from the Council on Higher Education based on the outcome of its investigation into an appropriate academic policy and qualifications framework for South Africa. It should be indicated that any proposals for restructuring the qualifications framework would have to be considered in the light of its implications for the sustainable financing of the higher education system.

2.8 STRATEGIES

2.8.1 Increased participation rate and graduate outputs

2.8.1.1 The Ministry will ensure efficiency improvements, including increasing and broadening enrolments through:

- Establishing planning targets as part of the three-year “rolling” plan process for graduate outputs, including head count and full-time equivalent (FTE) enrolment totals for the higher education system. The target will be to increase the total number of graduates by a minimum of 10%, i.e. 10 000 graduates over the next five years.
- Linking the funding of student places and FTE enrolments of institutions to the numbers of graduates produced.
- Funding academic development programmes as an integral component of the new funding formula for higher education.
- Facilitating, in conjunction with the Ministry of Home Affairs, the streamlining of the procedures for obtaining study permits by SADC students.
- Requesting the South African University Vice-Chancellors’ Association and the Committee of Technikon Principals jointly to advise on whether additional fee levies are necessary and if so what an appropriate additional fee levy would be.

2.8.1.2 Higher education institutions will have to indicate in their three-year rolling plans that they have developed:

- Strategies, including time-frames and targets, to improve throughput, success and graduation rates in line with the efficiency benchmarks set by the Ministry.
- Strategies, including time-frames, for reducing drop-out rates, especially of students who drop-out in good academic standing but not because of financial reasons.
- Minimum criteria for automatic admission into different academic programmes.
- Selection processes to determine the suitability of applicants who do not meet the minimum criteria for automatic admission.
- Minimum criteria for the readmission of students and a limit on the number of times that a student would be allowed to repeat a course or full year of study.
- Strategies, including time-frames and targets, to broaden their recruitment base, in relation to workers and mature learners.

- Strategies, including time-frames and targets, to increase the recruitment of students from the SADC region.

2.8.2 Changed enrolments by fields of study

2.8.2.1 The Ministry will over the next five to ten years, through various planning and funding incentives:

- Shift the balance in enrolments at the systemic level between the humanities, business and commerce and science, engineering and technology from the current ratio of 49%: 26%: 25% to 40%: 30%: 30% respectively.
- Increase enrolments in career-oriented programmes in all fields of study, with the emphasis on increasing enrolments information and communications technology.
- Increase enrolments in pre- and in-service teacher training, in particular, in mathematics, science and technology, based on a national teacher development plan.
- Encourage the development of programmes in marginalised fields of study such as African languages, as well as the more general restructuring of curricula to reflect an orientation towards the African continent.

2.8.2.2 Higher education institutions will have to indicate in their institutional three-year “rolling” plans:

- The institution’s shape profile in terms of the balance between the humanities, business and commerce and science, engineering and technology programmes in relation to the institution’s location, vision, mission and capacity and the government’s human resource development strategy.
- The strategies and steps that the institution is taking to restructure the curricula content and framework of all programmes to ensure that they develop the cognitive skills necessary for all graduates.

SECTION 3: ACHIEVING EQUITY IN THE SOUTH AFRICAN HIGHER EDUCATION SYSTEM

GOAL TWO:	To “promote equity of access and fair chances for success to all who are seeking to realise their potential through higher education, while eradicating all forms of unfair discrimination and advancing redress for past inequalities” (White Paper 1997: 1.14)
STRATEGIC OBJECTIVES:	<ul style="list-style-type: none">• To ensure that the student and staff profiles progressively reflect the demographic realities of South African society• To ensure that the race and gender profiles of graduates reflect the profile of student enrolments

PRIORITIES:

- **To increase the participation, success and graduation rates of black students in general and African students in particular.**
- **To increase the representation of blacks and women in academic and administrative positions, especially at senior levels.**

3.1 CONTEXT: INEQUITIES IN SOUTH AFRICAN HIGHER EDUCATION

3.1.1 The equity imperative

The achievement of equity in relation to the composition of the student and staff bodies in higher education is one of the White Paper’s central goals for the transformation of the higher education system. The goal of equity in the White Paper is linked to the imperative to address the inequalities of the past and to eradicate all forms of unfair discrimination in relation to access and equality of opportunity within higher education for historically and socially disadvantaged groups.

The case for the planned expansion of the higher education system in the White Paper is in part linked to the imperative for equity. As the CHE report states, the

“extent to which equity and access are actively promoted or frustrated will determine the nature and extent of social and class stratification and have a direct bearing on the nature of South Africa’s democracy, labour market and social stability” (CHE 2000: 27).

The importance of access to higher education in determining social and economic opportunity is demonstrated both by the fact, as indicated above, that graduate unemployment is low, but also that graduates with a bachelors degree earn 125% more than those with only a matric (HSRC 2000:c).

The race and gender impact of changes in the labour market and the link to educational qualifications is clearly indicated by the labour market studies discussed in Section 2 (pp. 15-16). The shift in employment distribution in favour of professional and managerial occupations between 1970 and 1995 has had a differential impact on the rate of employment of African and non-African labour based on educational qualifications. In this period, the employment of non-Africans increased by between 48% and 108%, while that of Africans remained constant. This difference is in part explained by the differing access of African and non-Africans to education in general and to higher education in particular.

Women on the other hand have benefited from the shift from the primary to the service sectors, in particular, as information technology is apparently gender-neutral. Thus between 1970 and 1995, the employment of women increased by 22% as against 16% for men.

The contribution of the higher education system to equity in the context of a changing labour market is assessed below.

3.1.2 Race equity: students

There has been significant movement in achieving the White Paper's goal of "ensuring that the composition of the student body progressively reflects the realities of the broader society" (White Paper 1997: 2.24). The change in the racial composition of student body has been striking. The enrolments of black students increased by 61% between 1993 and 1999, i.e. from 249 000 (or 53%) to 414 000 (or 71%) of the total head count enrolments. The change is even more dramatic in the case of African student enrolments. African student enrolments increased from 191 000 to 343 000 between 1993 and 1999, i.e. by 152 000 (or 80%). Thus in 1999, African students constituted 59% of the total head count enrolments in higher education.

The institutional distribution of African students has also changed. In 1993 49% of African students were enrolled in the historically black institutions, 13% in the historically white institutions, and 38% in the two distance education institutions. This had changed by 1999 to 23% in the historically black institutions, 41% in historically white institutions, and 27% in the distance education institutions. More specifically, between 1993 and 1999 African student enrolments:

- decreased by 7 000 (or 9%) in the historically black universities;
- increased by 22 000 (or 138%) in the historically black technikons;
- increased by 10 000 (or 100%) in the historically white English-medium universities;
- increased by 56 000 (or 1120%) in the historically Afrikaans-medium universities;
- increased by 49 000 (or 490%) in the historically white technikons;
- increased by 22 000 (or 31%) in the two dedicated distance education institutions.

The major growth of African students has clearly been in the historically white Afrikaans universities and the historically white technikons. The following factors help explain the shift in African students away from the historically black universities:

- The opening up of access to the historically white institutions in the early 1990s in the context of the transition to democracy.

- Instability at some of the historically black universities linked to contestations around leadership and governance.
- Student and parental perceptions of declining quality and standards at the historically black universities.
- Perceptions that technikon qualifications were more likely than university qualifications to increase employment prospects.
- Expansion of distance education and telematic programmes in the historically white Afrikaans universities.
- Increased competition from private higher education providers.

Two points should be highlighted in relation to the increased enrolment of black students in the historically white Afrikaans-medium universities. First, a large part of this growth has been in distance education programmes and in programmes offered at satellite campuses. The evidence suggests that far larger numbers and proportions of African students than white students gain access to higher education only through distance education. For example, in 1999 46% of all African students in higher education were registered through distance education programmes compared with 34% for white students. This in effect means that the main campuses of these institutions remain predominantly white.

Second, although the historically white Afrikaans-medium institutions are gradually moving towards the adoption of a combination of dual and parallel-medium language strategies, language continues to act as a barrier to access at these institutions. This is especially the case at the undergraduate level within the universities. Furthermore, even where a dual and parallel-medium language policy is in place, its implementation remains uneven with only some courses within a degree or diploma programme offered in dual and parallel-medium mode. This is unacceptable and cannot continue.

The Ministry has requested the Council on Higher Education to advise on the development of an appropriate language policy framework. The Council's recommendations, which are expected by mid-2001 will provide a basis for determining a language policy for higher education.

The change in the number and proportion of black students indicates that the higher education system is becoming more representative. However, there are four important considerations, which suggest that equity must remain high on the agenda for change in higher education.

First, the overall changes in the demographic profile of the student body do not necessarily translate into individual institutions becoming more representative. Thus, in the historically white institutions, excluding distance and part-time students, the proportion of black students enrolled ranges from about 16% of total contact head count enrolments at the low end to about 55% at the high end.

Second, the overall participation rate in higher education continues to be characterised by gross inequalities. Although the participation rate of African students has increased from 9% in 1993 to 12% in 1999, it still remains well below that of white students, which has decreased from 70% to 47% and Indian students, which has decreased from 40% to 39%.

Third, the spread of black students across different programme areas, in particular those which generate the highest levels of private benefits for graduates, is uneven. The available evidence

indicates that African students remain clustered in the humanities, with low enrolments in science, engineering and technology, business/commerce and in postgraduate programmes. This is illustrated by enrolment patterns in a selected group of six historically white universities, which indicate that:

- In two universities where the majority of students in 1998 was black, inequalities existed in the distribution of students across the various categories of intended majors. For example, in one of these institutions, only 5% of African students were registered for qualifications leading to majors in science, engineering and technology, and only 4% were registered for majors in business and commerce, compared to 24% for white students in both science, engineering and technology and business and commerce. However, 74% of African students – 74% was registered for majors in education. In the second institution, 24% of African students were registered for majors in science, engineering and technology and 4% for majors in business and commerce compared to 50% and 12% for white students. However, 48% was registered for majors in the broad field of the humanities.
- In two universities, where the majority of students in 1998 was white, inequalities in distributions across majors were significantly less evident. In one, 44% of African students were registered for qualifications leading to majors in science, engineering and technology and 21% for qualifications leading to majors in business/commerce, compared to proportions of 42% and 27% for white students. In the other, 15% of African students were registered for qualifications leading to majors in science, engineering and technology and 15% for qualifications leading to majors in business/commerce, compared to proportions of 22% and 14% for white students.

The probable reason for the differences in distribution between the institutions in which black students were in the majority and those in which white students were in the majority is that the latter are more selective and target the better qualified black applicants.

Fourth, there are wide disparities in the graduation rates of black and white students. The evidence suggests that the average graduation rate for white students tends to be more than double that of black students.

The growth in black student numbers has been accompanied by a decline in white student enrolments, which have fallen from 222 000 in 1993 to 164 000 in 1999 - a decline of 58 000 (or 26%). The reasons for the sharp decline in white student enrolments are not clear and require investigation. At an anecdotal level it has been suggested that white students, influenced by perceptions of increased instability and dropping standards, are either moving into private higher education institutions or are emigrating immediately after completing their schooling.

The Ministry would like to state emphatically that the achievement of equity will not be at the expense of white students. The Ministry is committed to ensuring that all students, black and white, have access to higher education and contribute to the social and economic development of South Africa.

3.1.3 Gender equity: students

The enrolments of women students in the higher education system increased from a head count total of 202 000 in 1993 to 291 000 in 1999; an increase of 89 000 (or 44%). In marked contrast, the head count total of male students grew by only 2 000 (or 1%) between 1993 and 1999. Male student enrolments have in fact begun to decline after reaching a peak of 307 000 in 1995. The main result of these different growth rates is that the proportion of female students in the higher

education system has risen from 43% in 1993 to 52% in 1999. This indicates that, in terms of total enrolments, gender equity has been achieved in the higher education system.

However, gender equity continues to remain a problem in the technikons, where the proportion of female enrolments increased from 32% in 1993 to 42% in 1999. Furthermore, as with black students, the spread of women students across different programme areas is uneven, with female students clustered in the humanities and under-represented in science, engineering and technology, business and commerce, and in postgraduate programmes.

It is worth noting that institutional plans place far less emphasis on gender equity than on race equity. This is evident from the fact that, while attempts are being made to develop strategies and interventions to address issues of race equity, there are few, if any, strategies or interventions in place to address issues of gender equity

3.1.4 Race and gender equity: staff

Changes in the demographic profile of the student body of the higher education system have generally not been accompanied by a similar change in the staff profile so that black people and women remain under-represented in academic and professional positions, especially at senior levels. This is illustrated below.

In universities, the proportion of white academic staff in permanent posts as a whole declined only slightly from 87% to 80% between 1993 and 1998, while the proportion of black staff increased from 13% to only 20%. In technikons, the proportion of permanent white academic staff declined from 88% to 72% between 1993 and 1998, while black staff increased from 12% to 29%.

In 1999, taking account of permanent as well as temporary appointments, the proportions of black academic and executive staff in the various sectors were:

Black staff as % of full-time staff: 1999

	Academic Professionals	Executive/support professionals
Historically white (Afrikaans) universities	5%	6%
Historically white (English) universities	21%	27%
Historically black universities	60%	65%
Historically white technikons	11%	17%
Historically black technikons	67%	79%
Unisa and Technikon SA	17%	35%

In 1999, taking account of permanent as well as temporary appointments, the proportions of female academic and executive staff in the various sectors were:

Female staff as % of full-time staff: 1999

	Academic Professionals	Executive/support professionals
Historically white (Afrikaans) universities	35%	44%
Historically white (English) universities	34%	57%
Historically black universities	38%	40%
Historically white technikons	38%	37%
Historically black technikons	38%	29%
Unisa and Technikon SA	48%	51%

There are, of course, greater disparities when the figures are broken down further into levels of appointment, with black and female appointments showing an unacceptable decline at the more senior levels.

3.1.5 Equity and disabled students

There is very little data available on the access of disabled students and the employment of disabled staff in higher education institutions as this data was not collected previously. Although the new higher education management information system, which came on stream last year, includes information on the disabled, this will not be available until later in the year.

However, the information submitted by institutions as part of their “rolling” plans indicates that in total there are about 1 000 disabled students in higher education. This is clearly unacceptable and institutions must prioritise access for disabled students. There is no information on staff but it can be safely assumed that there are not more than a handful of disabled staff in the employ of higher education institutions.

The Ministry recognises that it may not be possible for every institution to provide the full array of infrastructure needed to service the specific educational needs of disabled students. This provides an ideal opportunity for institutions within each region to develop regional strategies, which would ensure that disabled students are catered for within the region. However, at a minimum, all institutions should have the basic infrastructure to allow access to the campus for disabled parents and members of the community more generally.

3.2 OUTCOME 7: INCREASED EQUITY IN ACCESS AND SUCCESS RATES

The Ministry acknowledges that significant changes have occurred in both the race and the gender profile of the student body in the higher education system. However, these changes have not gone far enough. As the White Paper states, “equity of access must be complemented by a concern for equity of outcomes. Increased access must not lead to a ‘revolving door’ syndrome for students with high failure and drop-out rates” (White Paper 1997: 2.29). Neither must increased access through distance education programmes and satellite campuses, students who are “neither seen nor heard”, be allowed to parade as a commitment to equity of access. In this regard, the Ministry would like to state emphatically that it is unacceptable that the student profile of some institutions continues to remain predominantly white. This cannot continue.

The Ministry is also concerned that the selection practices and values of institutions may militate against increasing the access of black and women students to particular fields of study, especially in science, engineering and technology programmes. This can be illustrated by the fact that the

Government has found it necessary to send black students (over 200 to date) to Cuba to be trained as medical doctors. Why could they not have been placed in South African medical schools?

The answer may be found in the fact that the admissions requirements of most South African medical schools are targeted in the main, at the academically brightest applicants rather than at attracting those who have the potential, but have not had the opportunity to develop academically because of the poor state of schooling in black areas. Moreover, the evidence suggests that a large majority of the students currently receiving training in medical schools leave the country soon after graduating. This suggests that the values and practices of some medical schools may be at variance with the values and principles and the broader objectives that underpin the transformation agenda in higher education and the needs of the country.

The Ministry, therefore, agrees with the recommendation of the Council on Higher Education that increasing the participation rate from 15% to 20% within a ten to fifteen year time-frame must be driven primarily by equity concerns and that the “increase in the participation rate should be made up principally of African and Coloured students so that their current under-representation is eroded” (CHE 2000: 48). The Ministry would like to add that the increase in the participation rate must in addition target disabled students.

The Ministry will use the national planning requirements and the new funding framework as the primary mechanisms for ensuring that race and gender inequities are eradicated. The Ministry, following the White Paper, “will use indicative targets for distributing publicly subsidised places rather than firm quotas” (White Paper: 2.28). The Ministry is reluctant to introduce equity quotas, mainly because it recognises the difficulties involved in setting realistic targets, given the state of the school system and the low numbers of students matriculating with the necessary qualifications and skills to pursue higher education. However, if institutions do not develop their own race, gender and disability equity targets and put in place clear strategies for achieving them, the Ministry will have no hesitation in introducing quotas in the future.

The Ministry is of the view that the establishment of a National Higher Education Information and Applications Service, which was mooted in the White Paper (White Paper: 2.75) must be prioritised as it would facilitate race and gender access. Such a service will have a number of benefits, including:

- Providing institutions with information on the available pool of potential students with the appropriate qualifications for entry.
- Satisfying the information needs of applicants on available programmes, as well as providing careers guidance and information on labour market trends.
- Enabling the Ministry and institutions to monitor progress in achieving race and gender access.
- Providing the Government with information to assess the efficacy of its HRD strategies.

The establishment of a National Higher Education Information and Applications Service will be made easier by the fact that a regional Central Applications System has been in operation in KwaZulu/Natal in the last few years under the auspices of the regional consortium, the Eastern Seaboard Association of Tertiary Institutions (eSati).

The Ministry will commission an investigation into developing an appropriate model for establishing a National Higher Education Information and Applications Service. As a first step, the

investigation will evaluate the ZwaZulu/Natal Central Applications System as a basis for determining the framework and operating mechanisms for establishing a National Higher Education Information and Applications Service, which should be in operation by 2003.

Increased access however, is meaningless if students do not succeed in their studies. Although this is the primary responsibility of institutions, the Ministry is committed to ensuring that the underlying factors that hinder success are addressed. The Ministry's support will focus primarily on three areas, namely, the funding of academic development programmes, improving the quality of schooling (both of which are discussed in Section Two) and student financial aid. The Ministry also anticipates that the Higher Education Quality Committee will develop a rigorous framework for quality assurance to ensure that the quality of academic programmes is maintained and improved.

3.2.1 Student Financial Aid

The Ministry is committed to ensuring that academically able students who do not have the financial resources are not prevented from pursuing higher education studies. The importance attached to providing financial assistance is indicated by the fact that (i) the National Student Financial Aid Scheme (NSFAS), which was established in 1996 and administered by the tertiary Education Fund of South Africa (TEFSA) was converted into a statutory agency in 2000 and (ii) the Government has allocated just over R 2 billion to the NSFAS since 1994. If donor funding and re-injections i.e. recovered loans, are included then the total allocation is just under R 2,9 billion.

NSFAS CONTRIBUTIONS

YEAR	GOVERNMENT	DONORS	RECOVERED
1994	R10.3 m	R60.1 m	Not Applicable
1995	R57.1 m	R97.2 m	Not Applicable
1996	R283.8 m	R49.6 m	Not Applicable
1997	R197.7 m	R153.3 m	Not Applicable
1998	R296.5 m	R 98.0 m	Not Applicable
1999	R384.9 m	R56.3 m	Not Applicable
2000	R437.4 m	R33.5 m	R27.5 m
2001	R440.0 m	Not Available	R160.0 m
TOTAL	R2, 107.7 m	R548.0 m	R187.5

However, this remains inadequate to meet the needs of students from poor communities. This is indicated by the fact that, as the table below shows, just 20% of students benefit from the NSFAS.

Furthermore, although the government's contribution has been increasing annually, and in 2001/2002 including re-injections, it was just over R600 million, there has only been a marginal increase in the number of awards made, which is probably due to the impact of inflationary pressures on tuition and residential fees.

Number of Awards

YEAR	TOTAL
1996	72 788
1997	70 574
1998	75 764
1999	75 344
2000	81 609

The Ministry is concerned to assess the effectiveness of and to improve the NSFAS as a mechanism for addressing the access of poor students to higher education. This is important as the NSFAS has a critical role to play as part of the government's broader strategy to alleviate poverty.

The Ministry therefore agrees with the recommendation of the Council on Higher Education that the size and coverage of the NSFAS needs to be reviewed, as well as the income cut-off for eligibility. It seems that the income cut-off may be too high and that the NSFAS practice of not providing a loan to cover the full costs of study in order to enable the limited funds to be spread over a wider net of students, may be adversely impacting on students whose families are unable to make up the difference.

In addition, the Ministry would also like to review the suitability and likely impact, especially given limited resources, of targeting the NSFAS towards priority fields of study and/or institutions that can demonstrate the implementation of successful academic development programmes, especially in programmes in which black students are under-represented. In this regard, it is worth highlighting that this year the Ministry has specifically earmarked R20 million of the NSFAS allocation for teacher education.

The Ministry will request the National Student Financial Aid Scheme Board to undertake the review.

3.3 OUTCOME 8: IMPROVED STAFF EQUITY

The Ministry recognises the difficulties in changing the staff profile in higher education, and in particular, doing so rapidly. There are three inter-related reasons for this:

- Low numbers and proportions of black and women postgraduate students, leading to a limited potential pool from which academic staff can be recruited.
- Inadequate levels of financial support for postgraduate students.
- The inability of higher education institutions to compete in the labour market with the public and private sectors in terms of salaries.

However, notwithstanding these difficulties, employment equity remains an important national policy goal. The Ministry is therefore concerned that many higher education institutions have not yet developed employment equity plans and that only a few have set specific race, gender and disability targets. The Ministry believes that more urgent attention should be given to increasing and retaining the pool of qualified black and women staff, as well as to changing the disabled profile. In the case of women, the pool potential of staff is much larger and should be easier to address.

The Ministry acknowledges that institutions have indicated that they are in the process of developing employment equity plans to meet the requirements of the Employment Equity Act, and that many have identified potential strategies to underpin such plans. These include early voluntary retirement schemes, contract appointments, staff and management development programmes, staff postgraduate study opportunities both locally and abroad to enable staff to enhance their academic qualifications, the provision of scholarships to encourage postgraduate students to pursue academic careers, the establishment of development posts and the appointment of employment equity officers.

An important strategy that institutions have ignored is the need to change institutional cultures, in particular, in the historically white institutions. There is growing evidence to suggest that historically white institutions are unable to recruit or retain black staff because the institutional culture is alienating rather than accommodating. This needs to be addressed urgently as its importance goes beyond the recruiting and retaining of black staff. It also impacts on student success and performance, and is an important obstacle to attracting black students into postgraduate programmes, especially research programmes.

The Ministry is of the view that the potential strategies identified by institutions are critical for ensuring employment equity in the long-term. However, it is imperative that all higher education institutions develop short-term strategies, which could complement, and act as a spur to, the longer-term strategies of building the pool of postgraduates, which would supply the needs of the academic labour market.

In this regard, the Ministry would like to encourage institutions to recruit academics actively from the rest of the Continent. Although this should not divert attention from the importance of recruiting and retaining black South Africans, it could play an important role in contributing in the short-term to providing role models for black students and in helping to change institutional cultures. It would also contribute to the broader development of intellectual and research networks across the continent, thus contributing to the social and economic development of the continent as a whole.

The Ministry recognises that currently immigration and work permit procedures have made it difficult to recruit and keep staff from the Continent and other countries. The Ministry will, in conjunction with the Ministry of Home Affairs, prioritise the streamlining of the procedures for obtaining work permits. This is in line with the President's State of the Nation Address in which the President indicated that "Immigration laws and procedures will be reviewed urgently to enable us to attract skills into our country".

Furthermore, although higher education institutions are unlikely to be able to compete with the private and public sectors in terms of salary differentials, the Ministry would like to encourage institutions to identify the factors that make academic careers attractive so that these advantages can be built into the development of strategies for recruiting and retaining staff. In addition, institutions should develop strategies to improve salaries and to narrow the salary gap between higher education and the private and public sectors.

3.4 STRATEGIES

3.4.1 Increased equity in access and success rates

3.4.1.1 The Ministry will use various planning and funding levers to increase access and success of black and women students in higher education. It will:

- Allocate funded student places on the proposed planning grid (outlined in Section Four) taking into account past institutional performance in enrolling and graduating black and women students, as well as stated equity objectives and targets in the institutional three-year “rolling” plans.
- Reduce funded student places in institutions whose equity plans are not satisfactory or whose performance are at variance with its equity plans.
- Include funding for academic development as an integral component of the new funding framework, with priority given to programme areas in which black and women students are under-represented, and programme areas in which their success rates tend to be lower than those of white and male students.
- Request the National Student Financial Aid Scheme Board to review the role and evaluate the efficacy of the NSFAS in increasing access and participation rates, including the suitability of introducing a more targeted allocation of the NSFAS.
- Monitor the selection criteria and practices of institutions.
- Commission an investigation into developing an appropriate model for establishing a National Higher Education Information and Applications Service to facilitate and monitor race and gender access. As a first step, the investigation will evaluate the KwaZulu/Natal Central Applications System as a basis for determining the framework and operating mechanisms for establishing a National Higher Education Information and Applications Service to be in operation by 2003.

3.4.1.2 Higher education institutions will have to indicate in their three-year “rolling” plans the strategies, including time-frames they have put in place to:

- Increase the access of black and women students in general. In particular, institutions that currently have a total enrolment of fewer than 30% of black students or where the majority of black students are enrolled in distance education programmes and/or satellite campuses should indicate the plans that they have in place to redress the situation.
- Redress the imbalances in the enrolments of students in different programmes, fields of specialisation or qualifications, in particular, postgraduate programmes.
- Redress imbalances in the success and graduation rates of students in different programmes, fields of specialisation or qualifications.
- Ensure that teaching/learning processes are sensitive to the needs of different students.

3.4.2 Improved staff equity

3.4.2.1 The Ministry will:

- Consider providing postgraduate scholarships targeted at black, coloured and women students.
- Remove obstacles to recruiting academic staff from the continent by facilitating the streamlining of procedures for obtaining of work permits.

3.4.2.2 Higher education institution will have to indicate in their three-year “rolling” plans the strategies, including time-frames they have put in place for:

- The development and implementation of employment equity plans which conform to the guidelines required by the Department of Labour in terms of the Employment Equity Act.

SECTION 4: ACHIEVING DIVERSITY IN THE SOUTH AFRICAN HIGHER EDUCATION SYSTEM

GOAL THREE **“To diversify the system in terms of the mix of institutional missions and programmes that will be required to meet national and regional needs in social, cultural and economic development “ (White Paper 1997: 1.27).**

STRATEGIC OBJECTIVE: **To ensure diversity in the organisational form and institutional landscape of the higher education system through mission and programme differentiation.**

PRIORITIES:

- **To ensure the fitness of purpose of higher education institutions in terms of their mission and programme mix.**
- **To ensure mission and programme diversity.**
- **To ensure the coherent development of distance education programmes.**
- **To regulate private higher education, including agreements between public and higher education institutions and private providers.**

4.1 CONTEXT: INSTITUTIONAL PLANS AND DIVERSITY

The White Paper makes it clear that the overarching policy goal of establishing a single national co-ordinated higher education system does not mean a uniform system. On the contrary, as the White Paper states: “An important task in planning and managing a single national co-ordinated system is to ensure diversity in its organisational form and in the institutional landscape, and offset pressures for homogenisation” (White Paper 1997: 2.37). It goes on to argue that the potential pressures for uniformity resulting from a programme-based definition of higher education can be avoided by:

- “recognising the broad function and mission of universities, technikons and colleges as three types of institutions offering higher education programmes;
- insisting on a rigorous planning and screening process for the approval of publicly-funded programmes, which must serve the mission and goals of the system;

- rigorous quality control of providers”(White Paper: 2.39-2.41).

The emphasis on diversity in the White Paper is based on the implicit recognition that it is a precondition for achieving the two key policy goals for the transformation of the higher education system; viz (i) increased and broadened participation to “accommodate a larger and more diverse student population”; and (ii) responsiveness to societal interests and needs in terms of knowledge and human resource development (White Paper 1997: 1.13).

However, despite the strong signals in the White Paper of the need for diversity, the tendency towards uniformity is evident in the plans, which institutions have submitted to the Ministry. There has been little or no attempt made by institutions to identify institutional strengths and niche areas, either existing or potential, which could serve as the basis for determining the vision and mission of the institution within the broader higher education landscape. In fact, other than the broad distinction between universities and technikons in terms of the career-oriented and technological focus of the latter, there is little else to distinguish between and within the aspirations of the university and technikon sectors. It would not be an exaggeration to suggest that many institutions aspire to a common “gold” standard as represented by the major research institutions, both nationally and internationally.

The current tendency to uniformity is worrying, especially as the Department’s planning guidelines requested institutions to locate their plans within a strategic framework informed by the institution’s location and context and its strengths and weaknesses. In this regard, the planning guidelines indicated that:

“The ‘rolling’ plans must, at a minimum, outline the institution’s vision and mission, its values and goals and its academic and research direction on the basis of an analysis of its social, economic, political, intellectual and cultural context. This must, in addition, be linked to and include an analysis of supply-side factors such as institutional capacity in terms of staff, infrastructure, financial resources, etc, and demand-led factors such as the (regional/national) flow of students with the requisite matriculation qualifications, access to student financial aid, labour market needs and conditions, etc.” (Department of Education, 1999: 4)

Few institutions have adhered to the guidelines. The effect of this, aside from the tendency towards uniformity, was that institutional responses to national policy priorities tended to be mechanically “read-off”, and fairly literally and narrowly, from the White Paper, with little or no bearing on their current capacities. This is evident, for example, in the emphasis in the institutional plans on shifting enrolments towards science, engineering and technology, without either assessing the capacity of the institution to make such a shift or taking into account the fact that attempts to increase enrolments in science, engineering and technology are constrained by the low throughputs of students with mathematics and science from the school system. The emphasis on science, engineering and technology seems to be based on the mistaken interpretation that the focus in the White Paper on correcting the imbalances in science, engineering and technology would in effect lead to a decline in funding for the social sciences and humanities. There is nothing in the White paper to suggest such an interpretation. On the contrary (as indicated in 3.6 above) the White Paper emphasises the important role of the humanities and the social sciences

There are three inter-related factors that provide a likely explanation for the tendency to uniformity in the institutional plans:

First, there is a serious lack of planning capacity in some institutions, in particular, appropriate data analysis and modelling skills, and strategic planning skills more generally. In this regard, it is cause

for concern that, although the Ministry indicated that it would provide technical support for institutions requiring assistance in developing their plans, only two institutions requested such assistance. There has also been little sharing of skills and expertise between institutions. In the absence of the necessary skills, the approach many institutions seem to have adopted is to attempt to imitate what other, and supposedly more prestigious, institutions are doing.

Second, there is growing international evidence to suggest that imitative behaviour and lack of diversity are common in the absence of regulatory and policy frameworks designed to ensure diversity in the higher education system (CHEPS: 2000; Higher Education Policy: 2000). Thus, a common legal, funding and quality assurance framework is likely to encourage academic drift as all institutions are assessed by the same performance benchmarks and compete for financial rewards from the same pool of (often limited) resources. This is evident in South Africa, for example, in the push by a number of technikons to be called universities of technology given the policy framework for a single co-ordinated higher education system. The reason for this, aside from the desire for prestige and status, is that the existing subsidy formula for higher education is weighted in favour of universities, in particular, in relation to research funding.

Third, the emergence of a market-led planning environment in which institutions are competing for students reinforces imitative behaviour, as international trends confirm. This is compounded in South Africa at present because of declining enrolments and the rise of the private higher education sector. The form and impact of these developments, as indicated in Section One, threaten the continued sustainability of the dedicated distance education institutions (UNISA and Technikon SA) whose traditional student markets are being eroded, as well as those public institutions, which are unable to take advantage of the market-driven environment.

The tendency towards uniformity, which is implicit in the institutional plans, does not imply that the higher education system as it is currently configured is in fact uniform. On the contrary, the tendency to uniformity represents institutional aspirations, which, if not checked, will lead to the erosion of the diversity that is currently a feature of the higher education system. The extent of current institutional diversity and contribution to meeting the goals of the White Paper is not insignificant. The key features of diversity in the higher education system in its current configuration include the following:

- Technikons, in contrast to universities, play an important role in providing career-oriented programmes at the diploma level, in particular, in science, engineering and technology.
- The dedicated distance education institutions play an important role in providing access to learners who are in full-time employment or who live in areas that are not in close proximity to residential institutions.
- The different entry requirements of technikons and universities have broadened access to higher education. The minimum entrance requirement for a large number of technikon programmes is a school-leaving certificate, whereas for universities it is a school-leaving certificate with matriculation exemption. Similarly, universities that have limited postgraduate and research profiles tend to have lower entrance requirements than the major research institutions.
- Academic and residential fees have an important impact on access. These tend to be lower in the technikons and the universities with limited postgraduate and research profiles.

The fact that the current system is diverse is not surprising. There are elements of diversity in all higher education systems linked to the historical origins, location, and mission of institutions.

However, what makes diversity in South Africa unique is the racial fragmentation of the higher education system and the associated inequities in terms of student and staff access and opportunity and institutional facilities and capacities.

4.2 DIVERSITY AND DIFFERENTIATION

The Council on Higher Education argues that a differentiated and diverse higher education system is essential if the transformation goals of the White Paper are to be met, as it will contribute to:

- Establishing a more rational landscape than the incoherent, wasteful and unco-ordinated higher education system inherited from the past.
- Distributing the goals and objectives of higher education, thus enabling a more appropriate allocation of resources.
- Concentrating the attention, energy and resources of individual higher education institutions on a limited range of purposes and outcomes.
- Establishing flexible admissions criteria, thus facilitating greater access to school-leavers, workers and mature learners.
- Providing a focused framework for knowledge production, application and innovation.
- Encouraging different modes of teaching, learning and assessment.
- Providing a framework for competition as well as collaboration within the public sector, as well as between the public and private higher education providers (CHE 2000: 35-36).

4.2.1 Council on Higher Education and Differentiation by Institutional Type

The CHE recommends that:

- (i) The higher education system should be “reconfigured as a differentiated and diverse⁵ system so that there can be effective responses from institutions to the varied social needs of the country” (CHE 2000: 64);
- (ii) In a reconfigured system “institutions should have a range of mandates (principle orientations and core foci) and pursue coherent and more explicitly defined educational and social purposes with respect to the production of knowledge and successful graduates” (CHE 2000: 64). The institutional mandates would provide the framework within which “specific institutional missions and strategies” would be developed to ensure diversity (CHE 2000: 34).

The CHE further recommends that differentiated institutional mandates should be established by a regulatory framework linked to a set of criteria, including size (in terms of FTEs, both undergraduate and postgraduate), shape (in terms of fields of study), staff qualifications and research outputs. These criteria, which are based on a distinction between teaching and research

⁵ ‘Differentiation is used to refer to the social and educational mandates of institutions. The mandates orient institutions to meet social and economic goals by focusing on programmes at particular levels of the qualification structure and on particular kinds of research and community service. ‘Diversity’ is used with reference to the specific missions of individual institutions (CHE 2000:34).

institutions, results in the CHE proposing the establishment of five institutional types linked to different mandates, namely, (i) bedrock institutions, which would not be allowed to offer research masters and doctoral programmes; (ii) comprehensive postgraduate and research institutions; (iii) extensive masters and selective doctoral institutions; (iv) distance education institutions; and (v) private institutions (CHE 2000: 8-9).

The Ministry agrees with the CHE that a differentiated and diverse higher education system is essential to meet the transformation goals of the White Paper. It also agrees that if diversity is to be achieved a clear regulatory and planning framework is required.

The Ministry does not, however, support the CHE's proposal that differentiation and diversity should be achieved through the setting up of a rigid structural distinction between different institutional types. This is not because it contradicts the White Paper's approach to diversity based on programme differentiation, as suggested by the responses of higher education constituencies to the CHE report. It would be perfectly consistent with a programme-based approach for an institution to determine its mission and programme mix in line, for example, with the characteristics of a bedrock institution as defined by the CHE.

The Ministry believes, however, that it would not be consistent with a programme-based approach if the mission and programme mix of institutions is defined by a predetermined regulatory framework based on structural differentiation between different institutional types.

The danger with structural differentiation is that it introduces an element of rigidity, which will preclude institutions from building on their strengths and responding to social and economic needs, including labour market needs, in a rapidly changing regional, national and global context. At the same time, the Ministry does not favour an open-ended institutional framework, which leads to academic and mission drift and uniformity based on the values, priorities and practices of the major research universities.

4.3 OUTCOME 9: DIFFERENTIATION BY MISSION AND PROGRAMMES

The Ministry, therefore, proposes to ensure institutional diversity through mission and programme differentiation based on the type and range of qualifications offered. This is consistent with the White Paper, which defines higher education programmes as comprising "all learning programmes leading to qualifications higher than the proposed Further Education and Training Certificate or the current standard 10 certificate" (White Paper 1997: 2.4).

The balance between the broad fields of study and the qualification types linked to institutional mission will determine the precise mix of programmes offered at particular institutions. This would enable institutions to define their missions based on their capacity and future potential without locking any institution into a predetermined institutional structure. The advantage of this approach, unlike the CHE model, is that it provides the opportunity for all institutions with demonstrated capacity, however limited, to build on their existing strengths, including research and postgraduate training strengths, without detracting from the overall need to concentrate research resources.

The potential weakness with the mission differentiation approach is that, by allowing research and postgraduate training beyond the taught masters level in all institutions in principle, it might perpetuate the tendency to uniformity and lead to mission drift. The Ministry believes that this can be avoided by establishing clear parameters and criteria for determining an institution's programme mix and linking it to the funding of student places. This will be determined, as the White Paper indicates, on the basis of the "fit between the institution's proposed programme mix and regional

and national needs, as well as an assessment of current institutional missions and capacities. Such an assessment will include assessing the need for an institution to develop or elaborate its mission, and the need for capacity-building strategies to redress imbalances and distortions inherited from apartheid” (White Paper 1997:2.41).

4.3.1 Programme grid

The Ministry has developed the following programme planning grid, which is based on seven broad fields of study⁶ and six qualification types and indicates the current spread of programmes and qualifications offered by higher education institutions.

**PROGRAMMES AVAILABLE IN UNIVERSITIES AND TECHNIKONS IN SA:
SUMMARY BY QUALIFICATION-TYPES AND MAJORS**

	Career-oriented: up to 3-years		Formative: 3-years		Career-oriented: 4-years & above		Honours		Masters		Doctorates	
	Univ	Tech	Univ	Tech	Univ	Tech	Univ	Tech	Univ	Tech	Univ	Tech
<i>(1) Natural & mathematical Sciences</i>												
Computer science	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	No	Yes	Yes
Life & physical science	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Mathematical sciences	No	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<i>(2) Engineering & other applied sciences</i>												
Agriculture												
Architecture & planning	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	No
Engineering	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	No
Industrial arts	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
	No	Yes	No	No	No	No	No	No	No	No	No	No
<i>(3) Health sciences</i>												
Health sciences	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No
<i>(4) Business/commerce</i>												
Business/commerce	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No
<i>(5) Education</i>												
Education	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	No
<i>(6) Social sciences & applied humanities</i>												
Home economics												
Law	No	Yes	No	No	Yes	Yes	No	No	No	No	Yes	No
Librarianship	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	No
Physical education	Yes	Yes	No	No	Yes	No	Yes	No	Yes	No	Yes	No
Psychology	No	Yes	No	No	No	No	Yes	No	Yes	No	Yes	No
Public admin/social services	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Social sciences	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	No
	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes	No
<i>(7) Humanities</i>												
Visual & performing arts	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Communication	Yes	Yes	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No
Languages, literature	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Philosophy, theology	No	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

Note: Grids contain 'yes' if the following conditions are met:

- (1) Career oriented up to 3 years: sector generated in 1998 at least 50 graduates
- (2) Formative: sector generated in 1998 at least 50 graduates
- (3) Career oriented 4 years or more: sector generated in 1998 at least 50 graduates
- (4) Honours: sector generated in 1998 at least 50 graduates
- (5) Masters: sector generated in 1998 at least 50 graduates
- (6) Doctors: sector generated in 1998 at least 50 graduates

The Ministry, in developing this programme grid, has examined the latest available data, i.e. for 1998, on the student outputs of the higher education system. The data highlights the following:

⁶ The seven field of study are based on grouping the 22 classifications of educational subject matter (CESMs) - in the higher education management information system.

- Technikons produced a total of 21 500 graduates. Of these, 17 400 (or 81%) obtained 3-year career-oriented qualifications, 4000 (or 18%) 4-year or more career-oriented qualifications, and about 100 (or less than 1%) masters and doctors level qualifications.
- Universities produced a total of 67 500 graduates. These were spread more widely than was the case with technikons across the 6 qualification groupings: 18 000 (or 27%) obtained 3-year career-oriented qualifications, 19 500 (or 28%) obtained 4-year or more career-oriented qualifications, 16 900 (or 25%) obtained general formative degrees, 7 900 (or 12%) obtained honours degrees and 5 200 (or 8%) obtained masters or doctors degrees.
- Nearly 80% of technikon graduates obtained qualifications in applied fields: 31% in business, commerce and management; 24% in the social sciences and applied humanities; and 22% in engineering and the applied sciences.
- The graduates from the universities covered a wider spread of majors than those of technikons. About 45% of university graduates obtained qualifications in applied fields, i.e. in business, commerce and management, social sciences and applied humanities and in engineering and the applied sciences. The breakdown of the remaining 55% of university graduates included: 25% in education; 13% in the humanities; 9% in the health sciences; and 8% in the natural and mathematical sciences.

4.3.2 Horizontal differentiation: the binary divide between universities and technikons

The differences in the graduate outputs of universities and technikons are signals of important differences in the programme profiles of universities and technikons. Prior to the Higher Education Act of 1997 (Act No 101 of 1997), technikons and universities were formally regulated and funded as separate sectors, that is, the higher education system was divided along binary lines. The technikons were limited to offering diploma and degree programmes in career-focused fields and were not allocated research funding. In fact, prior to 1993, technikons were not allowed to offer degree programmes and had to concentrate on offering sub-degree programmes at the diploma level. Although they continue to be funded separately, pending the introduction of a new common funding formula, the programme distinction between technikons and universities has been eroded in line with the White Paper's suggestion of a "loosening of boundaries" between different institutional types.

The impact of removing both the programme distinction and the cap on degree-granting rights has resulted in a slow, but sure, move towards uniformity, with technikons increasing their degree offerings both at the undergraduate and postgraduate levels. This has in turn led to a number of technikons requesting a change in status as universities of technology.

Ironically, the pressure for uniformity comes at a time when technikons are contributing significantly to reversing the "inverted pyramid" of enrolments which was skewed in favour of universities, and which the National Commission on Higher Education suggested needed to be addressed in terms of the overall human resource needs of the country. This is indicated by the fact that between 1993 and 1999, technikon head count enrolments have grown faster than university enrolments, from 133 000 to 192 000, i.e. by 59 000 or 44%. In the same period, university enrolments increased from 340 000 to 372 000, i.e. by 32 000 or only 9%.

The growth in head count enrolments in technikons is significant, as it suggests that the policy goal of increasing enrolments in career-oriented programmes at the diploma level, in line with the continued need for technical/technician skills, is being achieved. The reason for this may have less

to do with the outcomes of policy than with changes in the external environment, in particular, (i) the opening up of the labour market, with the removal of the job reservation system, which restricted technological occupations to whites, and (ii) the fact that matriculation exemption is not a prerequisite for entry into a large number of technikon programmes.

The Ministry is concerned that the rapid erosion of the binary divide between universities and technikons would be detrimental to institutional diversity. It would also be detrimental to the capacity of the higher education system to meet the access goals and human resource development priorities of the White Paper, especially the goal of expanding “career-oriented programmes at all levels, in particular, shorter cycle (one and two year) programmes at certificate and diploma levels, and in science, engineering and technology” (White Paper 1997: 2.24).

The Ministry therefore proposes to retain the binary divide in the short-term. This is consistent with the suggestion in the White Paper that the broad function and mission of universities and technikons as two types of institutions offering different kinds of higher education programmes should continue to be recognised in the planning process. Thus, in planning for at least the next five years, the Ministry will continue to regard:

- Technikons as institutions whose primary function is to provide career-oriented programmes, in particular, at undergraduate diploma levels.
- Universities as institutions which offer a mix of programmes, including career-oriented degree and professional programmes, general formative programmes and research masters and doctoral programmes.

The retaining of the binary divide does not however imply that there will be no “loosening of the boundaries” between technikons and universities as suggested in the White Paper. The two types of institutions will be allowed to offer programmes outside their traditional functions if this is necessary to address regional or national needs and/or if the proposed programme is consistent with the institution’s niche and capacity and provided there is no unnecessary duplication or overlap with other institutional offerings.

4.3.3 Institutional programme mixes

The Ministry will determine the programme mix at particular institutions for the next five years on the basis of their current programme profile and their demonstrated capacity and potential to add additional programmes to the profile. This means that institutions will not necessarily be allowed to offer all the programmes that are contained in the programme grid. The process for determining the programme mix of institutions will be based on an interactive and consultative process between the Ministry and individual institutions linked to the submission of institutional rolling plans.

The approval of institutional three-year “rolling” will determine the funding of higher education institutions from 2003. The approved institutional plans will determine for each public higher education institution:

- Its niche in terms of its mission and programme profile.
- The total number of students by field and level of study that will be funded by the government.
- The total number of non-State funded students by field and level of study that the institution will be able to enrol.

- The student and staff equity requirements that the institution would have to meet.
- The performance measures against which its future activities will be assessed.

The approved institutional plans will determine the level of funding of each higher education institution. This implies, for example, that institutions will not in future be able to expand their subsidy or non-subsidy generating enrolments in any field or level of study without obtaining prior planning approval.

In assessing the mission and programme mix of institutions, the Ministry will pay particular attention to the location of the institution's mission and programme profile within the regional and national context, including its responsiveness and its capacity to respond, to regional and national priorities, including Government's HRD strategy. In terms of the latter, for example, the Ministry is especially interested, as indicated in 2.6 (pp. 29-30), in identifying existing and potential capacity to increase enrolments in information and communications technology.

The Ministry recognises that determining institutional programme mixes on the basis of current profiles is open to criticisms similar to that levelled against the CHE, viz. that (i) it is based on a snapshot of the current profile of institutions and therefore static; and (ii) it reproduces the inequalities of the past.

The crucial difference in the Ministry's approach is that unlike the CHE proposals, institutions would have the opportunity to make a case for additions to their programme profile prior to the finalisation of the profile for the following 5 years. In this regard, the Ministry agrees with the CHE that the "capacities and capabilities of institutions are not fixed" and that in the case of historically disadvantaged institutions and technikons, which were previously restricted from providing postgraduate programmes, "developmental trajectories" should be identified to enable these institutions to move beyond their current profiles (CHE 2000: 53).

Furthermore, the agreed programme profile will only remain in place for a defined time period, i.e. five years. At the end of the five-year period, the institution's profile could be adjusted if the conditions attached to the profile have been satisfactorily addressed, if regional and/or national needs change and if resources allow.

The key point to emphasise is that the rationale for restructuring the higher education system is to ensure the fitness of purpose both of the system and of the individual institutions. The fact is the higher education system is currently not operating efficiently in terms of its core mandate, i.e. the production of knowledge and graduates. In this context, the starting point for restructuring the higher education system must be to ensure that higher education institutions in their current configuration and profiles, if they are appropriate, become more efficient and effective, before embarking on new roles and functions. This requires both that institutions which are performing well are maintained and supported and that those which are not are provided with the opportunity to improve their performance, including redressing the inequities of the past. Redress must however, be linked to enabling institutions to discharge their agreed mandates.

4.4 OUTCOME 10: REGULATION OF DISTANCE EDUCATION PROGRAMMES

The role and function of distance education in higher education is rapidly changing and the traditional distinction between contact and distance institutions and modes of delivery is becoming increasingly blurred. Higher education programmes, as the Council on Higher Education report

suggests, increasingly exist on a continuum spanning distance programmes on one end and face-to-face programmes on the other (CHE 2000: 44). The changing role of distance education provision is evident in the proliferation of distance education programmes offered by traditionally residential institutions as indicated in 2.1.2 (p.17).

Developments in distance education have also been accompanied by a change in approach, which recognises that the traditional correspondence model of distance education has become outmoded. It is being replaced with a model that incorporates the provision of learner support through a variety of mechanisms, including learning centres with audio-visual and computer-assisted support. In addition, contact institutions are beginning to introduce resource-based learning approaches using multi-media delivery modes as part of their traditional contact programmes.

The rapid expansion of distance education programmes across the system has been influenced by four factors. First, changes in information and communications technology, which facilitate the development of new and different modes of delivery. Second, the need for greater cost-efficiency, which is made possible as distance education and resource-based learning enable institutions to increase enrolments without increasing staff levels and associated physical infrastructure. Third, increased competition from private higher education providers, both local and international. Fourth, the signalling in the White Paper that distance education and resource-based learning has a “crucial role to play in meeting the challenge to expand access, diversify the body of learners, and enhance quality, in a context of resource constraint” (White Paper: 2.57).

The Ministry welcomes these developments in distance education as they indicate the growing responsiveness of institutions both to changes in learning and teaching technology but also to the needs of learners who are in employment or who need to work in order to meet study costs. However, it is important to guard against the uncritical introduction and adoption of distance education as a panacea for the challenges that confront higher education in South Africa. Nor must we be blinded by the suggestions that in the context of globalisation and the development of virtual universities, especially by multinational telecommunications companies, distance education is the beginning and the end of higher education. The notion of the virtual university and the role of distance education must be interrogated to assess both its promise and peril for higher education in South Africa and the continent as a whole.

In this regard, one of the greatest challenges that faces higher education in South Africa is to ensure that it educates and nurtures the next generation of intellectuals and leaders, especially black intellectuals, including professionals and researchers. It is unlikely that this role can be played either by higher education institutions that are narrowly driven by market imperatives or by “virtual” universities. They cannot replace the traditional contact higher education institutions where scholarship, research, teaching and service are valued in equal measure and where the focus is on the full range and breadth of disciplines. And more importantly, where knowledge generation and intellectual development are themselves the product of social interaction and engagement.

This does not imply a retreat into the ivory tower or a refusal to come to terms with new developments in information and communications technology. On the contrary, it requires embracing the new technologies, new partnerships and new approaches, but not at the expense of the social values and moral purpose that is the defining characteristic of human endeavour.

It should also be emphasised that in the absence of a clear policy framework, the proliferation of distance education programmes in contact institutions has resulted in unanticipated consequences, which have impacted on the coherence of the higher education system.

There are two issues that should be highlighted in this respect. First, no account has been taken of the potential impact of the developments in distance education at contact institutions on the sustainability of the dedicated distance education institutions. Second, these developments have not addressed the emphasis in the White Paper that the transformation of distance education provision requires focusing on improving the quality of programmes and learner support services, as well as cost-efficiency and effectiveness. In this regard, the White Paper proposed the “development of a national network of centres of innovation in course design and development, as this would enable the development and franchising of well-designed, quality and cost-effective learning resources and courses, building on the expertise and experience of top quality scholars and educators in different parts of the country” (White Paper 1997: 2.60-2.61).

The current developments have, if anything, intensified concerns about quality and efficiency. As the CHE states, “some institutions appear to have embarked on large-scale distance programmes primarily for financial gain. This has generated concern about the quality of provision” and that these “programmes do not appear to relate to the social or educational goals of the country” (CHE 2000: 44).

The narrow focus on financial gain is confirmed by an investigation by the Ministry into the nature of the agreements between public higher education institutions and private providers, who have been the main mechanism for the provision of distance education programmes by contact institutions. The investigation has indicated that:

- Although the public institution registers the students and provides the course materials, the private providers provide the tuition and administrative support with little or no quality control by the public institution.
- The public institution receives a State subsidy for the enrolled students. However, the rights and claims of the students on the public institution are often limited. Thus, for example, in some cases, the students do not have access to the facilities, including libraries and laboratories, of the public institution.
- The public institution is often absolved of any financial obligations for the students it registers. Thus in some instances, the private provider determines the fee structure for the students and also provides loans through subsidiary financial institutions.
- There appears to be very little protection afforded to students in the event that the partnership agreement is terminated or revoked.
- The staff of the public institutions often has a personal financial interest in the private provider or act as advisors or even work for the private provider.
- The state subsidy is either shared with the private provider or, in some cases, accrues to the public institution, with additional royalties payable by the private provider based on turnover. In such cases, therefore, it would appear that the public institution claims a subsidy when essentially all it does is to register students and issue certificates.

In addition, the concerns relating to the quality and relevance of distance education programmes offered by contact institutions are confirmed by research into Educator and Development Support programmes conducted by the President's Education Initiative and by other investigations undertaken by the Ministry. This suggests that:

- These programmes are often based on poorly designed materials and rely on a single medium of delivery that is inappropriate for the student.
- A number of programmes have been developed for use on the internet that are no more than e-mail versions of poorly written correspondence texts. In the main, the emphasis has been on minimising costs rather than developing quality programmes.
- There is little evidence of creative use of multi-media modes of delivery or innovative research based approaches to curriculum design, development and delivery.
- The quality of the programmes is undermined by a lack of research into the needs and contexts of students, appropriate modes of delivery and new methods of assessment.
- The relevance of programmes is open to question. In most cases, a small range of programmes are on offer and are largely chosen for their profitability rather than because they meet the needs of the students and develop the knowledge and skills required by employers. Thus, for example, a large number of currently registered students are in education management programmes. While there is a clear need to develop management skills in the schooling system, this is limited to management and senior staff rather than teachers as a whole. Further, the programmes tend to be theoretical rather than focusing on developing the practical skills in education management that are so sorely needed.

4.4.1 Future provision of distance education programmes in contact institutions

The CHE Report recommends that the Ministry lift the current moratorium on the introduction of new distance education programmes in contact institutions, which was imposed by the Minister in February 2000, on the grounds that it has “created uncertainty and made institutional planning difficult”. Furthermore, it recommends that the “lifting of the moratorium should be linked to the development of a clear policy directive, including conditions and criteria, for the continued provision of large-scale distance education programmes by traditionally contact institutions” and that the Higher Education Quality Committee (HEQC) should prioritise the quality assurance of such programmes (CHE 2000: 44-45).

The Ministry agrees that the moratorium should be lifted. However, the Ministry will not fund new student places in current and new distance education programmes in contact institutions from 2002 unless the programmes have been approved as part of the institution’s three-year rolling plans. Institutions will also have to seek approval for the introduction of distance education programmes for which state subsidies are not required. The approval of distance education programmes will depend on the fit between the programme and the institution’s mission, including institutional capacity and whether it addresses national and/or regional needs.

4.5 OUTCOME 11: ESTABLISHMENT OF A SINGLE DEDICATED DISTANCE EDUCATION INSTITUTION

The Ministry agrees with the Council on Higher Education’s recommendation that:

“a single predominantly dedicated distance education institution that provides innovative and quality programmes, especially at the undergraduate level, is required for the country. The opportunities that the present distance education institutions have created for students in Africa and other parts of the world must be maintained and expanded” (CHE 2000: 45).

The establishment of a single dedicated distance education institution would have many advantages for the development of the higher education system. These include:

- Developing a clear focus and strategy for the role of distance education in contributing to national and regional goals.
- Developing a national network of centres of innovation, which would enable the development of courses and learning materials for use nationally, thus enhancing quality within the higher education system.
- Developing a national network of learning centres, which would facilitate access and co-ordinate learner support systems.
- Enhancing access and contributing to human resource development within the SADC region in particular and the continent as a whole.
- Enabling economies of scale, in particular, ensuring that advantage is taken of the rapid changes in information and communications technology, which are expensive and where the additional investment is unlikely to be within the capacity of any one institution.

The Ministry therefore proposes to merge the two dedicated distance education institutions, that is, UNISA and Technikon South Africa and the distance education division of Vista University. Such a merger would allow for some rationalisation of resources, but still make available a formidable infrastructure and array of technical expertise. This proposal is not inconsistent with the Ministry's proposal to retain the binary divide in the short-term. An assessment of the current programmes and qualifications offered by UNISA, Vista and Technikon SA suggests that the three institutions have very similar profiles. and that, in this respect, the profile of the Technikon SA differs from those of other technikons in South Africa.

The Ministry will establish a Working Group to facilitate the implementation of the merger, including advising on the operational requirements and the role of a single distance education institution in South Africa, in particular, the role the latter could play, as the White Paper suggests, in the development of a "national network of centres of innovation in course design and development, as this would enable the development and franchising of well-designed, quality and cost-effective learning resources and courses, building on the expertise and experience of top quality scholars and educators in different parts of the country" (White Paper: 2.61).

The Working Group will also be asked to investigate the broader role of distance education in higher education in the light of current and future international trends and the changes in information and communication technology. This would ensure that distance education is well placed to contribute to the development and transformation of the higher education system and its role in social and economic development.

4.6 OUTCOME 12: REGULATION OF THE PROVISION OF PRIVATE HIGHER EDUCATION

The Council on Higher Education states that:

"There has been a tremendous increase in private higher education institutions. These mainly take the form of small single-purpose providers. They include local institutions that operate independently or in partnership with local public or overseas public and private institutions, and a number of overseas public and private institutions.....Private institutions

that contribute to the diversification of the higher education system could be sources of innovation. However, they are presently inadequately regulated in terms of registration, accreditation and quality assurance. This raises concerns around quality, the effective protection of learners and possible adverse effects on the public higher education system” (CHE: 20-21).

The CHE further recommends that private providers that want to function as multi-purpose institutions should be “required to meet the set criteria for these institutions and also fulfil their social purposes, roles and goals. It is important that any measures applied to public institutions to ensure achievements of overall social and educational goals do not disadvantage public institutions vis-à-vis private institutions” (CHE 2000: 45-46)

The CHE’s view that private higher education has a role to play in complementing public provision is accepted. The Ministry also agrees that private higher education institutions are presently inadequately regulated and that, where appropriate, they should be subject to the same requirements as public higher education institutions. This is in line with the White Paper, which suggests that the key challenge in expanding the role of private institutions is to “create an environment which neither suffocates educationally sound and sustainable private institutions with state over-regulation, nor allows a plethora of poor quality, unsustainable ‘fly by night’ operations into the higher education market”.

The Higher Education Act (1997) lays the basis for the regulation of private higher education. It provides a framework for the registration of private higher education institutions linked to three central factors; (i) the financial viability of institutions; (ii) the quality of programme offerings; and (iii) whether the provision is in the public interest.

In line with the requirements of the Higher Education Act, the Department has developed guidelines to facilitate the registration process. The implementation of the registration process has however, posed numerous challenges for both government and private providers. This is not unexpected as the regulation and registration of private providers is a new and uncharted terrain. Furthermore, as the Council on Higher Education points out, the registration process has, in particular, taxed the relatively new public bodies - the Higher Education Quality Committee and the South African Qualifications Authority (SAQA), charged with the responsibility for accreditation and registration (CHE, 2000).

Although the registration process has given the Department a better appreciation of the nature of the private sector in higher education, the size and institutional landscape of the sector is still not fully mapped. At present eighty-eight private higher education institutions are registered with the Department. Of these seventy three offer five or less higher education programmes. However, there are no accurate figures of the student enrolments by headcount and full time equivalents or by fields and levels of study. A study to determine the size and scope of operations of the private higher education sector is currently underway.

An initial assessment of the data at hand suggests that the private higher education may not be as large as is commonly thought. Apart from the fact that there is duplication in the enrolment data as many of the students are in practice enrolled formally with public institutions as part of public-private agreements, it also appears that in many cases private providers who purport to be offering higher education programmes are, in effect, providing further education and training programmes or a mix of higher and further education programmes.

The data confirms the CHE’s view that private higher education consists of large numbers of small single-purpose providers specialising in programmes with high economic returns such as

information technology, business and commerce, beauty therapy, and hospitality. These are provided primarily at the pre-higher education level, i.e. either at the grade 12 or first year-diploma levels.

It is also worth highlighting that unlike in the schooling sector or in many other countries, there is no tradition of “not for profit” private higher education in this country, except for institutions linked to religious denominations.

The Ministry agrees with the CHE that the current registration and accreditation process are inadequate and need to be strengthened. The Ministry is in the process of converting the existing guidelines for registration into regulations, which would be promulgated by the middle of 2001. These regulations would be complemented by regulations relating to programme accreditation and quality assurance, which are being developed by the Higher Education Quality Committee (HEQC).

The Ministry also agrees with the CHE that, where appropriate, but especially in the case private higher education institutions that wish to establish themselves as universities, such institutions must comply with and be subject to the same requirements as public higher education institutions.

The Ministry intends to carefully monitor enrolments to ensure that there is a balanced provision of programmes in private institution. The Ministry will not hesitate in capping enrolments should the current concentration of programmes within a narrow range have a detrimental effect on the sustainability of the higher education system as a whole

There has also been a growing interest from overseas universities (mainly from the United Kingdom and Australia) wishing to operate in South Africa. To date, four private foreign higher education institutions have been registered. In the main, the foreign institutions, like the local private providers, are focused on the offering of a relatively narrow range of programmes that are economically lucrative. The Ministry is concerned 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.

The Ministry will also intensify its efforts to act against unregistered providers.

4.6.1 Public-Private Partnerships

In recent years there has been a proliferation of public-private partnerships, the majority of which are in the provision of distance education programmes. The Ministry, as indicated in 4.4 (pp.62-63), has serious concerns about such arrangements, in particular, in relation to the quality and relevance of programmes, as well as the fact that they appear to limit the rights and claims of students on the public institutions.

The Ministry will therefore in future only fund programmes that are offered as part of public-private partnerships, irrespective of whether it is a contact or distance programme, if the criteria outlined in 4.4.1 (p.63) are met if the public institution concerned takes full academic responsibility for the programme and students enjoy all the benefits that come with registration at the public higher education institution.

4.7 STRATEGIES

4.7.1 Differentiation by mission and programmes

The Ministry will:

- Require institutions as a first step to submit by the end of July 2001 an overall framework indicating their proposed mission and programme mix for the next five years. The submissions will serve as the basis for consultations between each institution and Ministry on the programme profile and the number of student places that will be funded for the institution for the next five years. The programme profile and number of funded student places will be finalised by the Minister, after consultation with the Council on Higher Education, at the end of February 2002. As a second step, institutions will be requested to submit three-year “rolling” plans for 2003-2005 by the end of July 2002. The programme profile and the number of funded student places will be subject to annual review and the availability of resources. The annual review will be based on the submission of an updated “rolling” plan, which could indicate adjustments to the programme profile on the basis of changed conditions and/or new demand.
- In the case of new undergraduate programmes that are in addition to the current profile of programmes on offer, require institutions to demonstrate that:
 - there is a fit between the new programme and the institution’s mission;
 - they have the capacity in terms of qualified staff and the appropriate infrastructure to offer the new programmes;
 - the proposed new programme will not lead to unnecessary duplication and overlap, in relation to the programme offerings of other institutions;
 - the new programme is consistent with regional and/or national needs.
- In the case of new postgraduate programmes that are in addition to, or an expansion of, the current profile of programmes on offer, require institutions to demonstrate that:
 - they meet the efficiency benchmarks for graduation rates outlined in Section 3 (p. 22), unless the Minister approves these increased enrolments as part of their re-engineered mission. In this case, the institution will be given a defined number of years to establish the area and meet efficiency benchmarks.
 - they have the capacity in terms of qualified staff and appropriate infrastructure to offer the new or expanded programmes;
 - there is a fit between the new programme and the institution’s mission;
 - the proposed new programme will not lead to unnecessary duplication and overlap, in relation to the programme offerings of other institutions;
 - in the case of small programmes, there is collaboration with other institutions regionally or nationally;
 - the new programme is consistent with regional and/or national needs.

- Request the Higher Education Quality Committee to prioritise the review of the quality of postgraduate programmes.

4.7.2 Regulation of distance education programmes

The Ministry will fund student places in new distance education programmes and new enrolments in existing distance education programmes in contact institutions from 2002 only if the programmes have been approved as part of the institution's three-year "rolling" plans and if the programmes:

- address agreed national and/or regional needs;
- do not duplicate or overlap with programmes offered by the dedicated distance education institutions;
- meet the quality assurance criteria required by the Higher Education Quality Committee;
- there is a fit between the proposed new programme, existing programmes and the institution's mission;
- the institution has the capacity to offer the proposed new programme, particularly in terms of qualified staff and the appropriate infrastructure.

4.7.3 Establishment of a single dedicated distance education institution

The Ministry will establish a Working Group to facilitate the development of an implementation plan for the merger of UNISA, Technikon SA and distance education division of Vista University. The Working Group will also advise on:

- The role of a single dedicated distance education institution.
- The broader role of distance education in higher education in the light of current and future international trends and the changes in information and communication technology.

4.7.4 Regulation of the provision of private higher education

4.7.4.1 The Ministry will replace the existing guidelines for registration of private higher education institutions with regulations, which will be gazetted in July 2001.

4.7.4.2 The Ministry will fund student places in new programmes and new enrolments in current programmes offered as part of public-private partnerships from 2002 only if the programmes have been approved as part of the institutions' three-year "rolling" plans and if the programmes:

- address agreed national and/or regional needs;
- do not duplicate or overlap with programmes offered by the dedicated distance education institutions;
- meet the quality assurance criteria required by the Higher Education Quality Committee;
- provide for a fit between the proposed new programme, existing programmes and the institution's mission;

- ensure that the institution has the capacity to offer the proposed new programme, particularly in terms of qualified staff and the appropriate infrastructure;
- provide students with all the the benefits that come with registration at the public higher education institution and the public institution concerned takes full academic responsibility for the programme.

SECTION 5: SUSTAINING AND PROMOTING RESEARCH

GOAL FOUR: “To secure and advance high-level research capacity which can ensure both the continuation of self-initiated, open-ended intellectual inquiry, and the sustained application of research activities to technological improvement and social development” (White Paper 1997: 1.27[7])

STRATEGIC OBJECTIVE: To sustain current research strengths and to promote the kinds of research and other knowledge outputs required to meet national development needs, and which will enable the country to become competitive in a new global context.

Priorities:

- To increase outputs of postgraduates, particularly masters and doctoral graduates.
- To increase research outputs.
- To sustain existing research capacity and strengths, and to create new centres of excellence and niche areas in institutions where there is demonstrable research capacity or potential.
- To facilitate collaboration and partnerships, especially at the regional level, in research and postgraduate training
- To promote articulation between the different elements of the research system with a view to developing a national research strategy.

5.1 CONTEXT : DECLINING RESEARCH OUTPUTS

The White Paper recognises that research plays a key role in the production, advancement and dissemination of knowledge and the development of high-level human resources. It argues that “research is the principal tool for creating new knowledge” and that the “dissemination of knowledge through teaching and collaboration in research tasks are the principal tools for developing academic and research staff through postgraduate study and training” (White Paper 1997: 2.82). The emphasis on research in the White Paper is based on the recognition that national growth and competitiveness in the context of the emergence of a knowledge society is dependent on continuous technological improvement and innovation, driven by a well organised, vibrant research and development system which integrates the research and training capacity of higher education with the needs of industry and of social reconstruction” (White Paper 1997: 1.12).

The development and sustainability of the national research system is also dependent on its ability to respond to the opportunities and challenges provided by the global transformation in knowledge production and dissemination. This transformation has been driven by vastly increased (and increasing) global information and communication technologies, by the changing ways in which knowledge is produced, mediated and used, and by the development of multiple sites of research and knowledge production which are partly or wholly separate from higher education. In this context, the role of the national research system is not simply to respond to local imperatives, but also to develop the capacity to take advantage of the new opportunities that globalisation has engendered.

The value and importance of research cannot be over-emphasised. Research, in all its forms and functions, is perhaps the most powerful vehicle that we have to deepen our democracy. Research engenders the values of inquiry, critical thinking, creativity and open-mindedness, which are fundamental to building a strong, democratic ethos in society. It creates communities of scholars, who build collegiality and networks across geographic and disciplinary boundaries. It makes possible the growth of an innovation culture in which new ideas, approaches and applications increase the adaptive and responsive capacity of our society, thereby enhancing both our industrial competitiveness and our ability to solve our most pressing social challenges. It contributes to the global accumulation of knowledge and places our nation amongst those nations, who have active programmes of knowledge generation.

The challenge that faces the higher education system is to ensure that the national research system generates benefits of the kind identified above. However, despite the strong emphasis the White Paper placed on the need to develop research capacity and output, the current capacity, distribution and outcomes of the higher education research system remain a cause for concern.

First, with regard to research outputs, the available data suggest a decline in total published outputs in recent years. The average output for 1999 was around 10% less than that for 1997. Similarly, it is estimated that our share of world output has declined from approximately 0.7% in 1994 to approximately 0.51% in 1998 (as measured by the Institute for Scientific Information). The reasons for the decline in research outputs are not clear and require investigation. However, one likely explanation is the shift in research focus towards strategic and applied research, with the emphasis on socio-economic and industry-related issues, and a concomitant decline in basic research. This is confirmed by data from the South African Knowledgebase, which indicate a shift over the past ten years towards more health and applied natural science research and a shift from general humanities research to more applied social science research.

The shift in focus to strategic and applied research has clearly been influenced by the increased availability of resources for contract research both from Government and the private sector. This research is often not published in accredited journals or in other formally recognised output measures.

Whatever the reason, it is clear that the decline in research outputs calls into question the ability of the higher education system to meet the research and development agenda of the country. The decline in traditional or basic research, including research in the humanities, is worrying. This is in direct contradiction to the policy framework of the White Paper, which prioritises the need for both basic as well as applied research and for knowledge generation across the full spectrum of disciplinary inquiry. As the White Paper states, basic research 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” (White Paper 1997: 2.89). The challenge, therefore, is to increase strategic

or problem solving research, while maintaining and, if possible, strengthening the system's core knowledge base in basic science.

The Ministry is mindful of the concerns raised by higher education institutions and researchers about the weaknesses and limitations of the current policies and procedures to measure research outputs. These include: the lack of recognition given to certain types of publication outputs such as technical reports and policy reports; insufficient acknowledgement of the distinctive character of research at technikons; bias against certain disciplines in the arts and the humanities in that the system does not recognise all forms of creative output, such as music, drama etc.; an outdated list of accredited journals; and lack of response to the development of new knowledge systems and new modes of knowledge production.

The Ministry has initiated a review of the policies and procedures on the measurement of research outputs with a view to revising the present system and addressing its weaknesses and limitations. The review will be completed towards the second half of this year and it is anticipated that the new system will be phased in from the 2002/2003 financial year.

The second area of concern relates to the inefficiencies in the utilisation of the existing resources for research. This can be illustrated by the fact that, although research funding is an integral component of the subsidy for universities (but not for technikons), comprising 15% of the subsidy, 65% of the research outputs, which are recognised for subsidy purposes are produced by only six universities. Furthermore, the six universities are also responsible for producing about 70% of all masters and doctoral graduates.

The concentration of research outputs in a few institutions, leaving aside historical inequities and the fact that technikons were until recently precluded from undertaking research and offering postgraduate programmes, is not surprising. The reason for this is simple: research requires a critical mass of human and other resources, in particular, appropriately qualified staff (the doctorate serves as an indicator of the capacity to undertake and to supervise research), availability of postgraduate students who form an integral component of institutional research activities, and the appropriate research infrastructure in terms of library holdings and laboratories.

The building of research capacity and infrastructure is cumulative and occurs in a long timeframe. It is dependent not only on the availability of resources, but also, and more critically, on the development of an academic environment and culture that is conducive to, and actively promotes, research. This goes a long way to explain the continuing low research capacity in the historically black institutions, despite concerted efforts since 1994 by the Government to develop such capacity. The redress measures to build research capacity, which have largely been driven through the science councils, have included: special block grants to the historically black universities, special initiatives for women in research, and increasing grant allocations to black postgraduate students. In 2001 this amounts to a total of R79 million.

However, despite these initiatives, less than 10% of all research outputs are produced by the historically black institutions, with just two institutions - the University of Durban-Westville and the University of the Western Cape - accounting for most. Furthermore, the involvement of the historically black institutions in Government's competitiveness improvement research project THRIP (Technology and Human Resource for Industry Programme), which has almost doubled its budget from R40 million in 1997/98 to R76 million in 1998/99, remains disappointingly low.

A third area of concern is the low enrolments in masters and doctoral programmes. Between 1995 and 1999, masters and doctoral enrolments as a proportion of total head count enrolments increased from 5% to 5.7%, i.e. from 28 700 to 32 600. There was an increase from 4.7% to 5.5%, i.e. from

27 000 to 31 300 in the universities and a marginal decrease in the technikons from 0.3% to 0.2%, i.e. from 1 700 to 1 300.

Although the reasons for the decline in the technikons is not clear, the overall difference between the universities and technikons is due to the fact that until 1993 technikons were legally barred from offering masters and doctoral programmes.

In terms of equity, black students constitute about 30% of all masters and doctoral enrolments in higher education. However, they only constitute about 20% of the postgraduate enrolments of the historically white universities. In the case of women, they constitute about 40% of all postgraduates.

Masters and doctoral graduates accounted for approximately only 6% of all university and technikon graduates in 1998. This amounted to 5 200 from universities (7.7% of the total number of graduates from universities) and 100 from technikons (0.5% of the total number of graduates from technikons).

According to higher education institutions, there are two reasons for the low overall enrolments in postgraduate programmes; first, the lack of a postgraduate student scholarships and declining financial support from other sources; second, the lack of incentives for postgraduate study, given labour market competition from both the public and private sectors.

The low enrolments in postgraduate programmes need to be addressed urgently. It is clear that unless strategies are developed at system-wide and institutional levels to make postgraduate study and academic careers more attractive options, the future sustainability of the national research system and of the higher education system is under threat. Both are dependent on the production of postgraduates for the replenishment of academic and research ranks.

The decline in research outputs and capacity and the low postgraduate enrolments are a symptom of a broader problem that plagues the national research system, that is, its continued fragmentation and lack of co-ordination. This is evident, for example, in the fact that there is no nationally integrated information database for research. Furthermore, research funding is fragmented with little or no attempt to co-ordinate funding to ensure that it adds value to research priorities. Indeed, it could be argued that in the absence of a national research plan, there are no clearly defined research priorities.

This clearly suggests that there is an urgent need to develop appropriate co-ordination mechanisms involving the different actors in the research system, including the relevant State departments and the science councils, in particular, the National Research Foundation.

5.2 OUTCOME 13: RESEARCH CONCENTRATION AND FUNDING LINKED TO OUTPUTS

The Council on Higher Education makes two recommendations in relation to research and postgraduate training. First, that that research resources cannot be dispersed across the full range of institutions if the research and postgraduate training needs of the country are to be successfully addressed. As the CHE Report argues,

“No country can institutionalise postgraduate teaching and high-level research in a comprehensive way in every one of its higher education institutions. The constraints of

available human and financial resources preclude this and permit the development of only a limited number of institutions with such a mandate” (CHE 2000:41).

Second, that “there should no longer be a ‘blind’ research funding component but that research should be funded through earmarked funding” (CHE 2000:56). The “blind” component refers to the 15% allocated in the current funding formula for research infrastructure, which is only available to the universities and not to the technikons.

The Ministry accepts the case made by the Council on Higher Education for concentrating research resources. This is consistent with the policy framework for research advocated in the White Paper, which states:

“In view of the national strategic importance of research, and in order to ensure that the relatively scarce funds available for the development of research capability are well targeted, public funds for participation in research, whether basic or applied, should not be spread across all faculties or schools in all institutions, but should rather be concentrated in those areas where there is demonstrable research capacity or potential, in both HDIs and HWIs” (White Paper 1997: 4.54).

The Ministry does not however, support, as indicated in Section 4 (pp.53-54), the CHE’s proposals that research resources should be concentrated in a limited number of institutions, specifically the institutions identified as comprehensive research and post-graduate training institutions by the CHE. The Ministry does not support the Council on Higher Education’s approach as it would legitimise and institutionalise the inherited apartheid legacy in which the historically white institutions continue to dominate and monopolise the production and dissemination of knowledge. And more crucially, it would destroy the pockets of research excellence, limited as this may be in the historically black universities and the technikons more generally.

At the same time the Ministry does not favour a “blanket” approach to the allocation of research resources, regardless of the research profile and capacity, including potential, of institutions. The Ministry therefore proposes, in line with the mission and programme differentiation approach outlined in Section 4, to concentrate research resources in institutions where there is demonstrated capacity or potential based on approved mission and programme profiles.

The Ministry also agrees with the recommendation of the CHE that the “blind” component for research funding should be separated as it has resulted in the inefficient utilisation of resources as not all institutions use the allocated funds to support research.

The Ministry does not however, agree that the “blind” component should be replaced with the funding of research on the basis of earmarked funds. This would require the production and evaluation of competitive bids linked to business plans, which would be onerous both for institutions and for the Department of Education.

The Ministry is therefore of the view that, given both systemic and institutional capacity constraints, research funds should be disbursed as a separate component of the new funding formula based on research and graduate outputs.

The separation of the “blind” component would have to be phased-in over a period of time to ensure that it does not negatively impact on the financial sustainability of institutions whose research profile is limited and which may therefore receive allocations for research that are below the normal 15% of the existing subsidy.

5.4 STRATEGIES

5.4.1 Research funding

The Ministry will introduce the following mechanisms to fund research:

- A separate research component within the new funding formula, which will be based on research and graduate outputs.
- Earmarked funds to build research capacity, which will be awarded on the basis of a research development plan that is approved as part of an institution's three-year "rolling" plan. The plan should demonstrate the institution's capacity and potential in terms of qualified staff and appropriate infrastructure, as well as staff development and infrastructure development plans.
- Earmarked funds to facilitate research collaboration, i.e. inter-institutional collaboration both regionally and nationally, with specific emphasis on collaboration that enhances research capacity in historically black institutions and technikons.

5.4.2 Enhanced research output and quality

The Ministry will attempt to enhance research output and quality through:

- Revising the current policies and procedures on the measurement of research outputs at universities and technikons. This will be finalised in July 2001.
- Requesting the Higher Education Quality Committee to review the quality of postgraduate programmes as a priority.
- Facilitating the establishment of processes and mechanisms to ensure greater co-ordination in the determination of national research priorities and funding between different State departments, the science councils, in particular, the National Research Foundation, and other key role players, including the establishment of a national and integrated information database for research.

5.4.3 Increased postgraduate enrolments and graduates

5.4.3.1 The Ministry will use various funding and planning levers to increase postgraduate enrolments. It will:

- Fund postgraduate student places on the proposed planning grid (outlined in Section 4) taking into account past institutional performance in enrolling and graduating black and women students, as well the stated equity objectives and targets in the institutional three-year "rolling" plans.
- Reduce funded postgraduate student places at institutions whose equity plans are not satisfactory or whose performance is at variance with its equity plans.
- Consider providing scholarships for postgraduate students.

- Support the intake of foreign students at the postgraduate level by facilitating the streamlining of the procedures for the obtaining of study permits.

5.4.3.2 Higher Education Institutions which have been allocated postgraduate student places will have to indicate in their three-year rolling plans the strategies, including time-frames they have put in place to:

- Improve their graduate outputs.
- Redress imbalances in black and female enrolments in postgraduate programmes, in particular, in business and commerce and science, engineering and technology.

SECTION 6: RESTRUCTURING THE INSTITUTIONAL LANDSCAPE OF THE HIGHER EDUCATION SYSTEM

GOAL FIVE: To build new institutional and organisational forms and new institutional identities and cultures as integral components of a single co-ordinated national higher education system (White Paper: 2.42-2.45)

STRATEGIC OBJECTIVE: To promote and foster collaboration between institutions at a regional level

PRIORITIES:

- To reduce duplication and overlap in programme and service provision.
- To promote the joint development and delivery of programmes.
- To enhance responsiveness to regional and national needs for academic programmes, research and community service.
- To help build academic and administrative capacity.
- To refocus and reshape the institutional culture and missions of institutions as South African institutions.

6.1 CONTEXT: INSTITUTIONAL COLLABORATION

The White Paper emphasises the importance of institutional collaboration and partnerships as a means to achieve a range of social, educational/academic, economic and political goals. These include:

- Overcoming the apartheid-induced fragmentation of the higher education system. This is especially important, not only to give effect to the White Paper's vision of a non-racial higher education system, but also because the establishment and location of higher education institutions, in the perverse logic of apartheid planning, bore little or no relation to the knowledge, human resource and social needs of the country.
- Ensuring the effective and efficient distribution of programmes through reducing programme overlap and duplication. This would result in:
 - (i) economies of scale through reducing unit costs and ensuring the continued provision of expensive and under-subscribed programmes, but which are necessary for social, cultural, intellectual economic development;

(ii) economies of scope, that is, broadening the range of courses on offer, thus ensuring diversity through increasing student choice and enabling greater programme responsiveness to rapidly changing labour market requirements.

- Enhancing governance, administrative, management and leadership structures.

The higher education system has singularly failed to make progress towards achieving these goals. This is not to suggest that there has been no collaboration between institutions. However, this has by and large been limited to infrastructural projects, electronic library systems, and the purchasing and sharing, in some cases, of expensive teaching and research equipment. The success of institutional collaboration in infrastructural projects has been linked to two factors, (i) the availability of donor funds for such projects, with the added proviso that donor agencies have made institutional collaboration a precondition for accessing such funds; and (ii) the recognition by institutions that collaboration in these areas allows for economies of scale without threatening institutional autonomy.

There has, however, been little or no collaboration in relation to broader policy goals such as reducing programme duplication and overlap, building academic and administrative capacity, enhancing responsiveness to regional and national needs and, more importantly, laying the basis for new institutional and organisational types. In fact, programme collaboration is still rare, with one or two exceptions, most notably the recently launched postgraduate programme in public health, which has been developed jointly by the five higher education institutions in KwaZulu/Natal. The fact that some joint programmes have been launched suggests that the administrative difficulties, which have been identified within the sector as obstacles to the development of joint programmes, are not insurmountable.

In general, however, programme collaboration remains uncharted territory. If anything, unmitigated competition seems to be exacerbating, instead of reducing, programme overlap and duplication. This is evident from the fact that institutions have submitted to the CHE for accreditation and to the Ministry for funding approval a number of proposed programmes, which are in direct competition with existing and long-established programmes at neighbouring institutions. Furthermore, institutions have been unable to collaborate in ways which would ensure that costly programmes remain sustainable in a regional context. This is illustrated in the case of music in KwaZulu/Natal where, despite the affected institutions themselves recognising the need for regional collaboration to sustain music, they have been unable to develop a viable regional plan.

The lack of institutional collaboration seems to be fuelled by fear and mistrust linked to deeply rooted institutional identities and interests. The historical divides inherited from apartheid, which feed suspicion and resentment of the motives and intentions of strong and well-endowed institutions in collaborative endeavours, further compound this. Current competition for declining student numbers has also played a part.

Further evidence of competition is seen in the unregulated establishment of satellite campuses, often on the doorsteps of local institutions. Satellite campuses are often established by stronger institutions and have, in some cases, exacerbated difficulties of institutions in the immediate locality. There may well be a need to establish satellite campuses utilising a range of delivery modes, in particular, distance education, given the need to increase and broaden access. However, the establishment of satellite campuses should not destabilise local institutions by poaching their potential students. Furthermore, there is no evidence of institutional collaboration in the establishment of satellite campuses in terms of sharing infrastructure, teaching resources or developing joint programmes.

Nevertheless, despite all the evidence to the contrary, institutions continue to claim to support the principle of institutional collaboration. In this regard, as the Overview Report on the first set of three-year rolling plans suggested, the “villain in the script is always the institution down the road or across the fence whose commitment to inter-institutional collaboration is in doubt or questionable” (DoE 1999: 18). This suggests, as institutions indicated to departmental officials during the visits to discuss the first set of institutional plans, that institutional collaboration will not make any real headway unless there is direct intervention and stronger signals from government.

6.2 COLLABORATION AND INSTITUTIONAL IDENTITIES

The Ministry believes that institutional co-operation remains an important tool for addressing the broader social, educational/academic, economic and political goals of the higher education system. The goal of building new institutional identities and cultures in particular, as integral components of a single national co-ordinated higher education system arguably provides the single most compelling reason for encouraging institutional co-operation.

The end goal of a transformed higher education system must surely be the creation of higher education institutions whose identity and cultural orientation is neither black nor white, English or Afrikaans-speaking, but unabashedly and unashamedly South African. This is not to suggest that the cost benefits linked to efficiency and effectiveness are unimportant. However, in the context of human and financial resource constraints, efficiency measures, while important in leveraging additional resources, are unlikely to make serious inroads in eradicating the inequities and divides of the past. The Ministry is, therefore, convinced that institutional collaboration remains the only viable option through which to ensure the effective implementation of redress measures in a manner consistent with maintaining the existing centres of excellence in teaching and research which largely reside in a small number of historically white universities.

The importance of institutional collaboration for the transformation of the higher education system suggests that it cannot be left to a voluntary framework dependent on institutional decisions for implementation. In this regard, it is worth recalling the White Paper’s warning that “narrow self-interest cannot be allowed to preclude planning which may lead to institutional mergers and closures, and the development of new institutional forms where these are necessary” (White Paper 1997: 2.45).

The Ministry is of the view that the resort to institutional identity as a defence against institutional collaboration represents the protection of existing privilege at the one end of the higher education system and a fear of the unknown at the other. The invocation of institutional identities that owe their existence to the colonial and apartheid past is not a legitimate defence in the context of a democratic dispensation and the ethos of the Constitution. This is not to imply that institutional identities, real or imagined, can be wished away. On the contrary, they need to be sensitively engaged.

6.3 OUTCOME 15: PROGRAMME AND INFRASTRUCTURAL COLLABORATION

6.3.1 Programme Collaboration

The Ministry believes that programme and infrastructural collaboration between institutions, which contributes to the efficient use of facilities and resources for learning, teaching and research at a regional level has an important role to play in the transformation of the higher education system. Institutional collaboration would facilitate the development of a coherent, affordable and

sustainable higher education system, which is responsive to regional and national needs. More specifically, regional collaboration in programme development, delivery and rationalisation would facilitate:

- The balanced and diverse provision of higher education programmes both regionally and nationally. The Ministry is particularly concerned to ensure that small and costly programmes that are under-subscribed, but which are critical to the social, cultural, intellectual and economic development of society, are not closed down because they are not financially sustainable within an individual institutional context. While a large number of such programmes cannot be sustained, it is important to ensure that they are available within the higher education system as a whole, both regionally and nationally.
- The effective utilisation of academic expertise and human resources, especially in specialised fields at the postgraduate level.
- The provision of higher education programmes in those areas and provinces such as Mpumalanga and the Northern Cape, which do not have higher education institutions, but where there have been a proliferation of satellite campuses established by existing higher education institutions.

The Ministry believes that, in principle, programme collaboration should be developed co-operatively and voluntarily between higher education institutions. However, in the absence of movement towards such voluntary developments, the Ministry intends to pursue vigorously regional collaboration in programme development, delivery and rationalisation through the use of sanctions and incentives linked to planning and funding.

In this regard, the Ministry would like to indicate that it intends to stop the unplanned proliferation of satellite campuses by higher education institutions in locations outside their traditional domain of operation. The Ministry will not fund student places at satellite campuses from 2002 unless the establishment and operation of these campuses have been approved as part of the institutions plans. The Ministry would therefore like to caution institutions against embarking on capital expansion projects at the satellite campuses. The future role of the satellite campuses would have to be considered as part of the regional restructuring of the institutional landscape of the higher education system, which is discussed below.

6.3.2 Infrastructural Collaboration

The Ministry welcomes the progress that has been made in infrastructural co-operation and would like to encourage institutions to continue to build on existing programmes and to develop new areas of collaboration. The Ministry is especially keen to support the following:

- The development of a national central applications system.
- The joint development of resource-based course materials;
- Library consortia with a common cataloguing system, inter-library loan system and rationalising journals/book holdings;
- Joint purchasing and sharing of expensive equipment.

6.3.3 Regional Collaboration Mechanisms

The Ministry recognises the valuable role that the regional consortia, which have been established by higher education institutions, have played in facilitating and promoting regional collaboration. The Ministry is also aware of the limitations of the regional consortia given their voluntary nature. This limits their scope as their ability to effectively promote regional collaboration is dependent on the commitment of their member institutions to collaboration.

The Ministry is however, reluctant to introduce a further formal tier of governance and administration into the higher education system and will not, therefore, seek to formalise the role of the regional consortia. This reluctance is informed by an assessment of the existing capacity constraints - financial, administrative and human - which characterise the higher education system.

This does not mean, however, that regional consortia cannot continue to play a valuable role in facilitating and promoting regional collaboration and in the broader processes for the restructuring of the higher education system. The Ministry would like to encourage higher education institutions to consider building on the strengths of the regional consortia and to use them to build capacity and to facilitate the implementation of policy. The functions that the regional consortia might usefully fulfil could include:

- Co-ordinating the development of capacity-building initiatives, especially in relation to planning issues and processes.
- Acting as a regional clearinghouse for programme accreditation given the need to reduce programme duplication and overlap.
- Co-ordinating and facilitating the development of regional projects in programme development and delivery, as well as infrastructure development.
- Facilitating dialogue and building relationships between higher education institutions and other organs of civil society, including business and labour, thereby ensuring greater responsiveness to changing social and economic needs.

However, it must be emphasised that whether the regional consortia perform the functions outlined above or have any other roles to play must ultimately be determined by their member institutions. It is not for the Ministry to indicate how and through what structures higher education institutions respond to the policy imperatives of government.

6.3.4 Provision of higher education in Mpumalanga and the Northern Cape

The Ministry is of the view that regional programme collaboration between institutions could play an important role in addressing the claims for higher education provision in the two provinces that currently do not have higher education institutions, viz. Mpumalanga and the Northern Cape. This is a consequence of apartheid, which as the CHE report states, “generated a historical geography of higher education that resulted in an excessive concentration of institutions and provision in certain areas of the country and an absence of readily accessible contact provision in other areas” (CHE 2000: 46).

The Ministry does not believe that the establishment of fully-fledged autonomous higher education institutions in Mpumalanga and the Northern Cape would be in the best interests of the higher education system under current conditions. Aside from efficiency and sustainability considerations, the Ministry is convinced that the role of higher education as a national system must be jealously guarded against any claims that are based on and promote a narrow provincialism. The latter would go against the important role that the higher education system can play in contributing to the building of a national culture linked to the development of a common nationhood.

The Ministry acknowledges the constructive suggestions that have been put forward by the provincial governments of both Mpumalanga and the Northern Cape, indicating that the current college infrastructure in the two provinces could serve as the focal point for the development of a coherent provision of higher education programmes linked to regional social, economic and labour market needs by a consortium of public higher education institutions in co-operation with the provincial governments. This would build on the existing programmes that are offered in the two provinces by a number of higher education institutions. These are, however, uncoordinated, characterised by unhealthy competition, including overlap and duplication and often with little relevance to provincial needs.

The development of the coherent provision of higher education programmes through collaboration between the institutions currently operating in Mpumalanga and the Northern Cape provides a challenge and opportunity to develop new models for provision, thus laying the basis for the new institutional and organisational forms.

The Ministry therefore intends establishing National Institutes for Higher Education in Mpumalanga and the Northern Cape, which will serve as the administrative and governance hub for ensuring the coherent provision of higher education programmes through programme collaboration between the higher education institutions currently operating in the two provinces.

The Ministry will establish Working Groups to develop a framework and implementation plan for the establishment of National Institutes for Higher Education in Mpumalanga and the Northern Cape. The Working Groups will consist of representatives of the Ministry, provincial governments, and the affected higher education institutions.

The Ministry would like to make it clear that the continued operations of higher education institutions in the two provinces is conditional on their agreement to collaborate and participate in the establishment of the National Institutes for Higher Education. Institutions that are not willing to collaborate or participate in the process will not be allowed to continue providing programmes in the two provinces.

6.4 OUTCOME 16: RESTRUCTURING THE INSTITUTIONAL LANDSCAPE OF HIGHER EDUCATION

The Council on Higher Education advises that the restructuring of the higher education system to ensure its sustainability, including in particular, the efficient and effective use of resources, requires a reduction in the “present number of institutions through combining institutions” (CHE 2000: 56-57). This recommendation is based on the argument that the “current landscape and institutional configuration of higher education has its roots in an apartheid past, 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. Senior and middle-level leadership, management and administrative capacities are absent or lacking in parts of the system. New patterns in student enrolments mean that a number of institutions are at risk. Some institutions also do not satisfy the specifications.....to continue as independent institutions” (CHE 2000: .51).

The Ministry agrees with the Council on Higher Education that the sustainability and transformation of the higher education system requires a reduction in the number of institutions. The CHEs notion of combination may however, as institutional and other responses to the CHE report have suggested, be conceived too narrowly to refer specifically to mergers of institutions. The Ministry’s view is that the notion of combination must be broadened to include a variety of arrangements, including not only mergers but also programme and infrastructural collaboration as discussed above.

The Ministry does not however, agree with suggestions from the higher education sector that combination processes should be essentially self-driven, although within a stronger policy framework. As was indicated above, voluntarism has failed to encourage institutional collaboration. And while planning and funding mechanisms will play an important role in steering programme and infrastructural collaboration, they are insufficient on their own to alter the institutional landscape of higher education.

The Ministry firmly believes that if the institutional landscape of higher education is to be restructured, the Minister will have to exercise the full regulatory powers at his disposal in terms of the Higher Education Act (Act No 101 of 1997), that is, the power to merge two or more public higher education into a single institution. The Ministry will not shy away from this responsibility.

The Ministry's agreement with the Council on Higher Education's recommendation to reduce the number of institutions is informed by a preliminary analysis of the current state of the higher education system based on data and material drawn from the three-year rolling plans submitted by higher education institutions, as well as from the national higher education management information system.

The analysis of the data available shows, for example, that:

- Student enrolments in three provinces have declined over the past four years; by a total of 9000 (or 9%) in 2000 compared to 1997. Their inflows of new (or first-time entering) undergraduates have also fallen during this period to levels, which suggest that they will not be able to sustain even their 2000 enrolment total.
- The total intake of new undergraduates into the residential institutions (i.e. excluding Unisa and Technikon SA) in the three provinces averages only 2300 per annum. Enrolment intakes at this low level are sufficient to sustain a residential system with an average full-time equivalent enrolment of only 9000 per institution. This is a low average when account is taken of the need for public institutions to spread their enrolments across a wide range of fields of academic study.
- In another three provinces, the average full-time equivalent enrolment per contact institution had by 2000 fallen to levels considerably below the national average. In one province the average full-time equivalent enrolment per institution was only 5000 in 2000, and in 2 others it was below 7000. The small size of institutions in these three provinces has had serious effects on their financial efficiency. For example, their average unit cost to government per FTE enrolled student in 2000 ranged from 25% to 45% more than the national average of government subsidy per FTE student. Their average costs to government per graduate produced were also as much as 30% higher than the national average.
- Two provinces had proportions of black students and one a proportion of female students, which were considerably lower than the national averages. The proportions of enrolled black students were 54% and 56% compared to a national average of 72%. In another province, the proportion of female students was only 43% compared to a national average of 50%. These are indicators that inequities of access exist in these provinces.
- Three provinces had average output ratios well below national averages and the proposed national benchmarks outlined in 3.3.1 above. The performance of

institutions in these provinces is a consequence of their patterns of both staff and student recruitment and retention. They have not been able to recruit and to retain sufficient numbers of staff members to introduce research programmes, nor have not been able to recruit students into postgraduate programmes.

The full picture presented by this preliminary analysis suggests that through processes of merger and of other forms of institutional reorganisation, the number of public higher education institutions in South Africa could and should be reduced. However, reducing the number of institutions does not imply that some institutions would be closed and discontinue offering higher education programmes.

On the contrary, the Ministry firmly believes that the processes of institutional restructuring and merger must be premised on the principle that higher education programmes would continue to be offered at all the current geographical sites, but within new institutional and organisational forms and structures. The importance of this cannot be over-emphasised. The Ministry is in no doubt that its commitment to increasing the participation rate, as well as equity, requires the retaining of the current physical and human resources stock of the higher education system.

The Ministry is mindful of the costs associated with mergers and of the fact that substantial savings flowing from economies of scale are not likely in the short to medium-term. However, the Ministry is less convinced by the claims made that international experience suggests that there are few financial benefits associated with mergers or that mergers of higher education institutions in other countries have not been successful. Although cognisance should be taken of the international experience, it is important to assess the financial impact of mergers in a context in which apartheid planning often flew in the face of financial rationality.

Furthermore, the argument that mergers are not successful is usually based on the evidence of mergers in industry. However, a study conducted in the United Kingdom showed that higher education mergers enjoy a considerably higher success rate than mergers in industry. The findings indicated that the failure rate for higher education mergers was only 10% compared to a 50% to 80% failure rate for mergers in industry (Fielden and Markham: 1999).

It should also be noted that the merging of higher education institutions is a global phenomenon driven by governments to enhance quality and to strengthen national higher education systems in the context of declining resources. The international experience also indicates that the successful mergers in higher education are dependent on a variety of factors, not the least of which is the will, commitment and dedication of all parties to change.

The Ministry accepts that facilitating and managing mergers is demanding and time-consuming and will stretch the already limited capacity at systemic and institutional levels. The Ministry however firmly believes that financial and capacity constraints must not be allowed to stand in the way of setting a vigorous national agenda involving both mergers and other forms of co-operation. The Ministry is confident that financial and capacity constraints can be addressed through mobilising the necessary support and expertise from local as well as international agencies.

6.4.1 Regional feasibility studies into mergers and new institutional and organisational forms

The Ministry is of the view that there is no single factor that underpins the case for mergers or for new institutional and organisational forms. Instead, there are a range of factors linked to the specific context of different groups of institutions. For example, the rationale for merging an historically white and an historically black institution may well differ from that for merging two small

institutions. In the one case, the purpose may be that of overcoming the racial fragmentation of the higher education system. In the other, it may be that of achieving economies of scale and/or scope. In yet other cases, the rationale may be that of streamlining governance and management structures, and improving administrative systems. Or it may be a combination of all of these factors. It may also be linked to improving the quality of provision and strengthening the sustainability of the national higher education system against the background of increasing competition from foreign and multinational institutions which are looking for new educational markets in response to economic and financial pressures within their own countries.

The Ministry's view is that potential mergers must be assessed in terms of the role they could play in contributing to the broader social, educational, economic and political goals for the transformation of the higher education system. This is especially important given the fragmentation and inherited inequities that continue to characterise the higher education system.

The Ministry therefore believes that to successfully reduce the number of institutions, all the possibilities of institutional combinations must be assessed, that is, as the CHE argues, "no public institution should believe that it is exempted from combination, from the need to change fundamentally and from contributing to achieving a new higher education landscape" (CHE, p.60).

What is clear, and on this there can be no disagreement, is that the current institutional landscape is not suitable to meet the human resource and knowledge needs of South Africa. The Ministry believes that the restructuring of the institutional landscape cannot be delayed. It is long overdue. It has not occurred earlier because of the reluctance of all concerned to confront the difficult realities inherited from the apartheid past. This cannot continue. We must grasp the nettle and chart a new direction for the higher education system if it is to contribute to the reconstruction and development agenda.

The Ministry therefore proposes to investigate the feasibility of reducing the number of institutions and establishing new institutional and organisational forms through undertaking regional studies. It is important to emphasise that the focus of the feasibility studies would not be on whether the number of institutions can or should be reduced, but how they can be reduced and the form that restructured institutions should take.

The feasibility studies would take as their starting point the principles for the transformation of higher education as outlined in the White Paper. They would, in addition, have to ensure that their recommendations address and promote the following goals within each region, which were identified by the Council on Higher Education as the basis for assessing combination of institutions:

- Social and educational goals, in particular, the contribution of higher education to social and economic development, both regionally and nationally.
- Access and equity goals in relation to both student and staff equity, as well as institutional redress.
- Quality and efficiency goals in terms of economies of scale and scope, both programme and infrastructural, as well as the spread and quality of programmes and graduation and retention rates.
- Institutional sustainability and viability goals in terms of student numbers, income and expenditure patterns and management and governance capacities.

- Institutional identity and culture goals in terms of overcoming the legacy of apartheid (CHE, pp.58-59).

The Ministry is aware of the potential concerns relating to the demarcation of regions. However, for the purposes of the regional studies, the Ministry has decided to use the existing regional demarcations which have informed the establishment of the regional consortia by higher education institutions, namely:

- Eastern Cape.
- Free State.
- KwaZulu/Natal.
- Northern Metropolis, i.e. Gauteng, Northern Province and North West.
- Western Cape.

In the case of the Northern Metropolis, given its size and spread, the Ministry will consider an appropriate sub-regional division.

The feasibility studies will be conducted by a National Working Group appointed by and reporting to the Minister. The Working Group will be expected to submit its recommendation to the Minister within six months of its establishment and no later than December 2001.

6.4.2 Institutional mergers not linked to regional studies

There are some mergers which are either already underway or which because of the nature and location of the institutions are not likely to be materially affected by the regional studies. The Ministry believes that these should go ahead. These include:

- **Merger of Natal Technikon and ML Sultan Technikon**

The Councils of Natal Technikon and ML Sultan Technikon have agreed in principle to merge and have completed a feasibility study into the modalities of the merger. This merger should therefore go ahead and its implications for the KwaZulu/Natal region considered as part of the regional studies.

- **The incorporation of the Qwa-Qwa branch of the University of the North into the University of the Free State**

The Council of the University of the North decided in 1998 that its Qwa-Qwa branch should be delinked as the linkage was not administratively sustainable given the location of the Qwa Qwa branch, which is some 500 km away in the Free State. The then Minister of Education agreed to the request of the University of the North Council and indicated that as the Ministry did not support the establishment of a new autonomous institution, the Qwa Qwa branch would be incorporated into the University of the Free State. Although initial discussions around the incorporation were initiated in 1998, these were not taken forward because of governance and administrative difficulties at the University of the North. The Ministry sees no reason to review the decision made in 1998 and will therefore initiate the process for the incorporation the Qwa Qwa branch of the University of the North into the University of the Free State.

- **The unbundling of Vista University**

Vista University is a complex institution consisting of a distance education division and seven satellite campuses in three provinces: Gauteng, Free State and the Eastern Cape. It was established as a teacher education institution and although its programme profile has broadened, it continues to focus primarily on teacher education programmes. Given the recent incorporation of teacher education colleges into higher education, which has resulted in the consolidation of teacher education programmes, the Ministry is of the view that Vista University should be unbundled and its constituent parts incorporated into the appropriate institutions within each region. This would clearly have to await the outcome of the feasibility studies. However, the distance education section of Vista University would be incorporated as part of the merger of UNISA and TSA, which was discussed in section 5.

- The merger of UNISA, Technikon SA and the distance education section of Vista, the rationale for which was discussed in 4.5 (pp. 64-65).

6.6 STRATEGIES

6.6.1 Programme and infrastructural co-operation

6.6.1.1 In order to improve and promote co-operation, the Ministry will:

- From the 2003/2004 financial year fund student places in small and costly programmes, where unit costs are above average, only on the basis of a regional framework for the rationalisation of such programmes. The framework could either involve the joint offering of the programmes or agreement that the programmes would only be offered by a particular institution/s.
- From the 2003/2004 financial year fund student places in specialised postgraduate programmes on the basis of a common regional teaching platform. It will not fund student places for new programmes that overlap with or duplicate existing programmes offered in the region, unless there is clear and unambiguous motivation for the provision of the programmes.
- Establish Working Groups to develop a framework and implementation plan for the establishment of National Institutes for Higher Education in Mpumalanga and the Northern Cape based on the provision of higher education programmes through collaboration between higher education institutions currently operating in the two provinces.
- Facilitate the funding of regional infrastructural projects through leveraging donor funds.
- From the 2002/2003 financial year only fund student places at satellite campuses if this has been approved as part of the institutions plans. Approval will not normally be granted unless there is demonstrated regional or national need for specialist or niche offerings and clear strategies to collaborate with institutions in the region or with the dedicated distance education institutions.
- The Ministry will not support requests for loan facilities to fund capital projects at satellite campuses prior to the finalisation of the regional feasibility studies.

6.6.1.2 In order to facilitate collaboration, higher education institutions will be required from 2001 to:

- Submit all proposed new programmes for regional clearance to avoid overlap and duplication, prior to the submission of the programmes to the Department of Education for funding approval and to the Council on Higher Education for accreditation. This will require that institutions establish a regional programme clearing mechanism, which will include criteria for assessing programme overlap and duplication.
- Inform the Ministry of their intention to close down particular programmes at least one year before the intended closing date. The Ministry must also be informed of the reasons for the closing down of the programme and provided with an assessment of the impact on regional and national need and availability of such programmes.

6.6.2 New institutional and organisational forms

The Ministry in order to facilitate mergers and the development of new institutional and organisation forms will:

- Establish a National Working Group to undertake regional feasibility studies to advise the Minister on the appropriate institutional structures to meet regional and national needs for higher education, including mergers and/or other forms of combination.
- Establish a Working Group to facilitate the development of an implementation plan for establishing a single dedicated distance education institution. The Working Group will also be asked to advise on the role of a dedicated distance education institution and to investigate the broader role of distance education in higher education in the light of current and future international trends and the changes in information and communication technology.
- Initiate the process, including the development of an implementation plan, for the incorporation of the Qwa-Qwa branch of the University of the North into the University of the Free State.
- Request the Councils of the Natal Technikon and ML Sultan Technikon to complete plans for the merger of the two institutions.

SECTION 6: CONCLUSION

This National Plan provides a framework, maps the signposts and signals the strategies necessary for the restructuring of the higher education. Its restructuring proposals are far-reaching and wide-ranging in scope. It attempts to do in the space of a few short years what many other countries with more stable higher education systems have taken decades. However, time is of the essence. If the higher education system is to become a key engine for reconstruction and development, it is imperative that it is restructured to enable it to fulfil this critical role. This requires a single-minded sense of purpose and mission by all the constituencies in higher education, as well as the key constituencies outside higher education.

The challenge of restructuring opens new possibilities and horizons for creativity and innovation. However, it is also daunting in its ambition and scope as the range of activities outlined in the implementation table below indicates. Its successful implementation requires the full weight of the human and financial resources at our disposal.

The Ministry recognises that one of the main obstacles to implementation is the lack of capacity, both systemic and institutional. The Ministry acknowledges that the capacity of the Department would have to be substantially increased. The Higher Education Branch, which was established in late 1996, remains small and under-resourced. This is not for want of trying. The Ministry intends pursuing a two-pronged strategy to address its human resource needs. The first prong will focus on recruiting staff on secondment and short contracts to overcome the critical lack of staff with the requisite experience and understanding of the higher education sector. This will include recruiting experts from other countries where appropriate. The second prong will focus on recruiting junior staff who could be mentored and trained to develop and hone their skills and understanding of higher education.

The Ministry is equally concerned to encourage higher education institutions to build institutional capacity, especially in strategic planning and information management. The paucity of such skills was indicated in the shortcomings highlighted in the institutional three-year “rolling” plans that were submitted in 1998 and 1999. It is further confirmed by the continued difficulties that most, if not all higher education institutions have in submitting the data required, both as part of the SAPSE information system, as well as the new higher education management system which came into operation in April 2000.

The Ministry also recognises that the successful implementation of this National Plan is dependent on securing adequate funding both for the various investigations required, as well as for institutional restructuring and re-engineering, in particular, for redress purposes. In this regard, the Ministry is concerned that the higher education expenditure as a percentage of GDP has dropped in the last few years, as indicated Section 1 (p.9). The Ministry acknowledges that detailed cost analyses of the financial implications of the implementation of this National Plan are necessary as a basis for supporting the securing of additional resources. The necessary investigations will be undertaken as the restructuring process unfolds.

The Ministry is committed to ensuring that the necessary resources, both financial and human, are mobilised in support of this National Plan.

The challenge now is to secure the commitment of all the constituencies in higher education and the community more generally in support of this National Plan and to ensure calm and stability on our campuses, which is a precondition for the successful implementation of this National Plan.

TABLE: IMPLEMENTATION STRATEGY

ACTIVITY	RESPONSIBILITY	TIME FRAMES
PLANNING		
1. Release of consultative document on the new funding framework for higher education	Ministry of Education	31 March 2001
2. Regional Presentations by Department of Education on the National Plan	Ministry of Education	April 2001
3. Distribution of guidelines for institutional submissions indicating proposed teaching and research niche areas and programme mix for the next five years	Ministry of Education	31 March 2001
4. Institutions to submit proposed teaching and research niche areas and programme mix for next five years	Higher Education Institutions	30 July 2001
5. Analysis of institutional submissions	Ministry of Education	August 2001
6. Institutional visits to discuss proposed programme mix and teaching/research niche areas	Ministry of Education	September - October 2001
7. Minister receives advice from Council on Higher Education on institutional programme mix and teaching/research niche areas	Ministry of Education	February 2002
8. Publication of institutional programme mix and		February 2002

teaching/research niche areas	Ministry of Education	
9. Distribution of national guidelines for development of three-year rolling plans (2003-2005)	Ministry of Education	March 2002
10. Submission of three-year rolling plans (2003-2005)	Higher Education Institutions	30 July 2002
INSTITUTIONAL RESTRUCTURING		
11. Develop a framework and implementation plan for the establishment of National Institutes for Higher Education in Mpumalanga and the Northern Cape	Working Group established by the Ministry of Education	December 2001
12. Gazette regulations for Private Higher Education Providers	Ministry of Education	July 2001
13. Incorporate the Qwa-Qwa branch of the University of the North into the University of the Free State	Working Group established by the Ministry of Education	December 2001
14. Finalise merger of Natal Technikon and M L Sultan Technikon	Technikon Councils	December 2001
15. Investigate and make recommendations for an appropriate institutional landscape to meet regional and national higher education needs	Ministry of Education	December 2001
16. Facilitate the establishment of a single dedicated distance education institution	Working Group established by the Ministry of Education	June 2002

RESEARCH		
17. Request the Higher Education Quality Council (HEQC) to give priority to the accreditation of postgraduate programmes	HEQC	To be discussed with the HEQC
18. Finalise review of research outputs	Ministry of Education	June 2001
19. Facilitate co-ordination of research activities	Ministry of Education and Ministry of Arts, Culture, Science and Technology	December 2001
GENERAL		
20. Recommend a standard fee levy for SADC students	SAUVCA and CTP	August 2001
21. Review the size and coverage of the National Student Financial Aid Scheme (NSFAS), including the (income) cut-off for eligibility	NSFAS Board	September 2001
22. Finalise National Teacher Education Plan	Ministry of Education	September 2001
23. Streamline procedures for obtaining study and work permits	Ministry of Education and Ministry of Home Affairs	December 2001

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