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GENERAL NOTICE

NOTICE 11 OF 2012

DEPARTMENT OF HIGHER EDUCATION AND TRAINING

CALL FOR COMMENTS ON THE GREEN PAPER FOR POST-SCHOOL EDUCATION AND TRAINING

I, Bonginkosi Emmanuel Nzimande, Minister of Higher Education and Training invite all interested persons and organizations to comment on the attached Green Paper for Post-School Education and Training.

Written responses should reach the Department at the address below not later than **30 April 2012**. The Department of Higher Education and Training will also be engaged in a series of bilateral and multilateral consultations with stakeholders from January to the end of April 2012.

Copies of the Green Paper can be accessed from the Department's website: www.dhet.gov.za

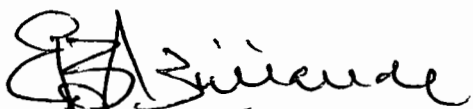
Written comments on the Green Paper for Post-School Education and Training should **preferably be emailed** to Mr Zakhele Hlongwane at the following address: hlongwane.z@dhet.gov.za

Those with no access to email may send hard copies to:

Mr Zakhele Hlongwane
Director: Office of the Director General
The Department of Higher Education and Training
Private Bag X174
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Fax to: 012 3230291
For the attention of Mr Zakhele Hlongwane
Director: Office of the Director General
The Department of Higher Education and Training



DR B E NZIMANDE, MP
MINISTER OF HIGHER EDUCATION AND TRAINING
DATE: 09/01/12

GREEN PAPER FOR POST-SCHOOL EDUCATION AND TRAINING



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

INVITATION TO RESPOND TO THE GREEN PAPER FOR POST-SCHOOL EDUCATION AND TRAINING

The public is kindly invited to respond to the Green Paper for Post-School Education and Training. Written responses should reach the Department at the address below not later than **30 April 2012**. The Department of Higher Education and Training will also be engaged in a series of bilateral and multilateral consultations with stakeholders from January to the end of April 2012. Copies of the Green Paper can be accessed on the Department's website: www.dhet.gov.za

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ACRONYMS

ABET	Adult Basic Education and Training
AIDS	Acquired Immune Deficiency Syndrome
ASSAf	Academy of Sciences of South Africa
ATR	Annual Training Report
BRICS	Brazil, Russia, India, China and South Africa
CBO	Community-based organisation
CEO	Chief Executive Officer
CETC	Community Education and Training Centre
CHE	Council on Higher Education
CHET	Centre for Higher Education Transformation
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DST	Department of Science and Technology
DTI	Department of Trade and Industry
EPWP	Extended Public Works Programme
ETQC	Education and Training Quality Assurance body
FET	Further Education and Training
FETI	Further Education and Training Institute
FETMIS	Further Education and Training Management Information System
FTE	Full-time equivalent
GET	General Education and Training
GETC	General Education and Training Certificate
GFETQF	General and Further Education and Training Qualifications Framework
HEMIS	Higher Education Management Information System
HEQC	Higher Education Quality Committee
HEQCIS	Higher Education Quality Committee Information System
HEQF	Higher Education Qualifications Framework
HIV	Human Immunodeficiency Virus
HPCSA	Health Professions Council of South Africa
IT	Information Technology
MTSF	Medium Term Strategic Framework
NAMB	National Artisan Moderating Body
NASCA	National Senior Certificate for Adults
NCV	National Certificate (Vocational)
NEDLAC	National Economic Development and Labour Council
NGO	Non-governmental organisation
NLRD	National Learner Records Database
NQF	National Qualifications Framework
NRF	National Research Foundation
NSA	National Skills Authority
NSC	National Senior Certificate
NSDS	National Skills Development Strategy
NSF	National Skills Fund
NSFAS	National Student Financial Aid Scheme
OFO	Organising Framework for Occupations
OQF	Occupational Qualifications Framework
PALC	Public Adult Learning Centre
PFMA	Public Finance Management Act

PSETA	Public Services Education and Training Authority
QCTO	Quality Council for Trades and Occupations
RPL	Recognition of prior learning
SADC	Southern African Development Community
SAQA	South African Qualifications Authority
SARS	South African Revenue Service
SARUA	Southern African Regional Universities Association
SDLA	Skills Development Levies Act
SET	Science, Engineering and Technology
SETA	Sector Education and Training Authority
TEFSA	Tertiary Education Fund of South Africa
UK	United Kingdom
UNISA	University of South Africa
USA	United States of America
WSP	Workplace Skills Plan

MINISTER'S PREFACE

I am pleased to release for public consultation this policy framework for the country's post-school education and training system. It is an important phase of a process that started with the creation of the Ministry of Higher Education and Training which brought together the main pillars of the post-school system. These are the colleges (especially the Further Education and Training colleges), the universities, the National Financial Aid Scheme (NSFAS) and the levy grant institutions – i.e. the Sector Education and Training Authorities and the National Skills Fund – together with the related quality assurance, advisory and regulatory institutions.

The government of South Africa has resolved to make reducing employment its priority concern, and to ensure that every Ministry and Department takes whatever action is possible to expand job opportunities and build sustainable livelihoods, and enable all South Africans to contribute to, participate in, and benefit from, that expansion. This must include interventions to ensure redress of the injustices of the apartheid past and the progressive introduction of free education for the poor up to undergraduate level. The Medium Term Planning Framework, the New Growth Path and the Industrial Policy Action Plan set out the government's economic and industrial strategy, and make clear the importance of education and training within the strategy. This poses an enormous challenge, one that my Ministry and Department are resolved to address across the post school system.

The Department of Higher Education and Training, along with the institutions that it is responsible for, is located at the nexus between the formal education system and the workplace. It is our responsibility to ensure that those entering the labour market are qualified and competent to take up the employment and income generating opportunities that exist, and that will exist as the economy grows and changes in the future. This is not an easy task, but there can be no doubt that if we analyse the current situation properly, discuss rationally and in an informed manner the changes needed, and then work collectively to implement agreed strategies, we can do a lot more to give people a sound start to their working lives, and to address their ongoing education and training needs during their careers. Whilst we need an education and training system that will cater for the needs of all South Africans, particular attention will have to be paid to the education and training needs of the overwhelming majority of our people, the workers and the poor.

It is important to emphasise that the focus on employment is not to the exclusion of all other development and transformational goals; quite the contrary - unemployment can only be reduced if the transformation agenda is taken forward with renewed vigour. Opening the doors of learning is as important today as it was when the Freedom Charter was written. Today, the barriers to post school education are not formalised or legalised through the colour of one's skin and racial designation. However, the legacy of apartheid lives on in a host of problems related to the poor quality education in many parts of the country, and the socio-economic conditions that young people have to grapple with as they pursue their education and work careers. It is important to analyse these problems, identify the reasons for their persistence and to put in place measures to overcome them.

The intention of this Green Paper is to create a policy framework that enables the Department to shape its strategies and plans for the three main pillars of our post school system. The vision is for an FET system that has colleges located throughout the country which are rooted in and serving the needs of their communities; it is to provide a high quality university education for increasing numbers of South Africans, and for all graduates to be empowered to address the needs of the economy and the country; it is to ensure that those emerging from colleges and universities as well as those already employed, are provided with the skills they need to be productive, flexible, innovative and able to earn sustainable livelihoods in a fast changing economy. The levy-grant institutions must be more closely integrated into a coherent, overall system to advance national education and training objectives.

Equally important is for our universities to be creative and prolific creators of knowledge. They need to continue to improve the quality and quantity of research – both blue-sky and applied research. South Africa needs to be at the forefront of knowledge creation to enhance the economic, social and cultural life of all our citizens. This process will not only create new knowledge but produce capable post-graduate students many of whom will become academics and researchers and thus help renew and advance innovation and the academic profession.

Public engagement is important to the policy development process. Comment on this Green Paper is invited from all the formal stakeholders within the education and training sector as well as from organised business and organised labour. Non-governmental organisations and individual citizens are also important stakeholders and I invite them to submit their comments. I hope and expect that the parliamentary Portfolio Committee on Higher Education and Training, as well as NEDLAC, will assist us in this consultative process. Once public views have been received and assessed, the next stage will be a White Paper. Then my Department will make whatever legislative, regulatory and organisational changes are necessary to ensure that our policy is in line with our vision. However, the important aspect of this process is not the formal regulatory changes, but achieving a level of consensus on the analysis of the current state of the system, and the vision and objectives that will guide the development of the post schooling system in the coming period.

I would like to thank all the education and training stakeholders who have contributed to this Green Paper. They have come to this process with their divergent views and concerns that have been formed over the period since 1994, if not before. Naturally, they did not all have the same analysis of the current problems, nor did they share a common view on the solutions. What they shared was a concern for our education and training system and a determination to work together to help build a shared vision for the future. Their work has been important and enables a presentation of the issues that can facilitate the debate that we set out to encourage.

Dr B.E. Nzimande, MP
Minister of Higher Education and Training
January 2012

EXECUTIVE SUMMARY

The Department of Higher Education and Training (DHET) was formed in May 2009 as a new department, bringing together all post-school education and training institutions: all higher education institutions, colleges and adult education institutions, formerly with the Department of Education; and the skills levy institutions, formerly under the Department of Labour. This Green Paper aims to conceptualise the nature of the Department and to set out its priorities. Stakeholders and the general public are invited to contribute their views, which will be considered when the White Paper on the post-school system is drafted.

There are many challenges facing post-school education in South Africa. Despite the many advances and gains made since 1994, the system continues to produce and reproduce gender, class, racial and other inequalities with regard to access to educational opportunities and success. One of the greatest challenges facing the system is the large number of young people who face a very bleak future if major changes are not introduced. Equally important, the post-school system is not meeting the needs of the economy and society as a whole. This Green Paper aims to align the post-school education and training system with South Africa's overall development agenda, with links to various development strategies such as the New Growth Path, the Industrial Policy Action Plan 2, the Human Resource Development Strategy for South Africa 2010-2030, and South Africa's Ten-Year Innovation Plan. This will allow it to contribute more effectively to the goal of inclusive economic growth and development, and to contribute to fundamentally reducing unemployment and poverty.

The Green Paper provides a vision for a single, coherent, differentiated and highly articulated post-school education and training system. This system will contribute to overcoming the structural challenges facing our society by expanding access to education and training opportunities and increasing equity, as well as achieving high levels of excellence and innovation. Key problem areas which prevent the system from playing its potential role are outlined, and solutions are proposed. In some cases options are presented for discussion.

Although progress in transforming the post-school institutions has been made since 1994, the system still bears the marks of apartheid. This manifests itself in inequalities, poor quality of education in former black institutions and lingering discrimination.

A major problem in the system as a whole is that provision of post-school education and training is inadequate in quantity, diversity and, in many but not all instances, quality. Approximately three million young people between the ages of 18 and 24 are not accommodated in either the education and training system or the labour market. This is an appalling waste of human potential, and a potential source of serious social instability.

By 2030, South Africa ought to have a post-school system that provides a range of accessible alternatives for young people. By 2030, we aim to raise university enrolments to 1 500 000 (a projected participation rate of 23%) as opposed to the 2011 enrolments of 899 120 (a 16% participation rate). In addition we aim for 4 000 000 enrolments (approximately a 60% participation rate) in colleges or other post-school institutions

such as the proposed community education and training centres discussed below. The DHET must build, resource and support this expanded system.

The key area of focus for expansion must be the public further education and training (FET) college sector. Strengthening and then expanding the colleges will play a central role in building a larger and more vibrant college sector. The first step in expanding the FET colleges will be to focus growth in institutions which are already strong while we focus on improving the quality of the weaker ones. This will be followed by phased and more rapid expansion and diversification throughout the sector. Expansion will be undertaken with care, ensuring that institutions are not overwhelmed by new enrolments. Improved quality – particularly through more effective training of college managers and academic staff and improved student support – will, in any case, improve throughput rates and expand the numbers of qualified people entering the workforce.

Improving the quality of the FET colleges will entail the development of appropriate programmes; upgrading lecturer qualifications; capacity building for management and governance; improved learner support; utilising appropriate information technology systems for both learning and management; and building strong partnerships between colleges and employers in both the public and private sectors. Private further and higher education institutions are disparate in terms of quality, and our quality assurance system is not yet able to regulate them all effectively. This will need to be remedied.

In terms of quality, the universities are the strongest and most stable component of the post-school system. However, even some of these institutions are beset by serious problems and are unable to fulfil our peoples' expectations. They require special interventions. Even in the university system as a whole, many problems remain with regard to access, staffing, curriculum, management, student funding, other forms of student support, and other areas. The Green Paper outlines key areas for intervention in each area.

Key to strengthening the system is the principle of institutional differentiation, which has long been recognised in policy but has not always been supported through funding. A specific focus is on solving another major problem area identified in the Green Paper – inadequate and insufficient levels of research and innovation. Economic development depends both on innovation and on technology absorption. Solving social and economic problems needs high-level research and development. The Department of Science and Technology's (DST) Ten-Year Innovation Plan states that the level of economic growth envisaged by our country requires continual advances in technological innovation and the production of new knowledge. The DHET will work with the DST to ensure increased support for postgraduate study and for senior researchers, as well as a more stable funding model for all educational institutions that conduct research. Improving research capacity will be a major focus for universities.

Public and private provision of adult education is very weak. Most public adult learning centres do not have their own premises or full-time staff, and enrolments are low. Workplace-based training is diverse, with excellent training opportunities in some places, but, in general, few opportunities for workplace experience.

The DHET is looking into the establishment of a new institutional type, provisionally called Community Education and Training Centres (CETCs), to address the needs of out-of-school youth and adults. The existing public adult learning centres will be absorbed into this category of institution.

The college sector also includes other public colleges, such as nursing, agricultural, police and other colleges. The DHET will engage other government departments with a view to finding ways to build these colleges into a coherent and accessible system which

is well-aligned both internally and with other post-school institutions. Options for how to ensure better coordination with regard to these colleges are outlined in the Green Paper.

An important initiative proposed by the Green Paper is the establishment of a South African Institute for Vocational and Continuing Education and Training (SAIVCET) as a key part of a long-term strategy to build institutional capacity. It is noted that a study will be done soon to further conceptualise and make specific recommendations for the Institute. The Institute's main function should be to strengthen the vocational and continuing education sector by playing a supporting role to existing institutions, especially the FET colleges and the Sector Education and Training Authorities (SETAs).

A central problem which this Green Paper addresses is the lack of coherence within the post-school system as a whole, between basic education and the post-school system, and between the post-school system and the labour market. There is inadequate information about labour market needs and future growth possibilities, and this makes planning and targeting of provision difficult. The levy-grant institutions – the (SETAs) and the National Skills Fund (NSF) – are poorly coordinated with public provision, and very little of the skills-levy funding has been used to pay for education in the public universities and colleges.

Our educational institutions must work more closely together and support each other. Levy-grant institutions must fund and support provision in public FET colleges and universities, especially universities of technology. SETAs must also play a crucial role in building relationships between education and the labour market. Improving relationships between education institutions and employers is a priority. The DHET will work to strengthen collaboration between the private and public sectors where appropriate, and between the three spheres of government. It will improve co-ordination between itself and other government departments that are critical to delivering improved post-school education. These include the Departments of Basic Education, Labour, Science and Technology, Trade and Industry, Economic Development and the Treasury.

The foundation of any planning process is the existence of comprehensive, accurate, integrated and effectively analysed data. We need improved planning at sectoral and national levels to ensure that information exists to inform future investment in skills and human resources. The DHET faces a number of challenges in this respect. The existing data on educational institutions is not always accurate, is not comprehensive and was not organised as part of an integrated system. The Department has now embarked on establishing an integrated system of data management among all institutions in the higher education and training system, including data from universities, colleges and adult education facilities, levy-grant institutions, the Quality Councils, the South African Qualifications Authority (SAQA), and the National Student Financial Aid Scheme. In addition, systems for analysing and using this data on an ongoing basis must be developed and put into effect.

In order to establish a credible national institutional mechanism for skills planning, the integrated DHET data system needs to be further integrated with data from other government departments, such as the Departments of Labour, Home Affairs, Trade and Industry, Science and Technology, Basic Education, Public Service and Administration, Rural Development and Economic Development, as well as Statistics SA, through a specialist information system. This is a major undertaking, and a model for comprehensive skills planning on a national basis is currently being developed by the DHET and a consortium of research institutions.

A truly integrated education system implies that institutional growth paths are aligned to South Africa's overall development agenda with direct links to various development

strategies such as the New Growth Path, the Industrial Policy Action Plan 2, the Human Resource Development Strategy for South Africa 2010-2030, and South Africa's Ten-Year Innovation Plan.

Another problem area addressed by this Green Paper is the existing regulatory system which is complex and difficult to understand. The regulation of post-school education in South Africa is governed by an array of legislation and statutory bodies. There is duplication, overlap and, at times, incoherence and inconsistency in the functioning of parts of our system. We must overcome these challenges and the Green Paper outlines key proposals and options in this regard. An important starting point is simplifying the National Qualifications Framework; clear options are outlined.

Our qualifications and quality assurance framework is complex, with overlapping directives and ongoing contestation between different quality assurance bodies in various areas of operation. The primary bodies with a direct role in quality assurance are the three Quality Councils – the Council on Higher Education, Umalusi, and the Quality Council for Trades and Occupations. Options are proposed for clarifying their respective areas of jurisdiction.

Proposals are made for strengthening these bodies, including their roles in standards, quality assurance of assessment, and certification where applicable. Some quality assurance bodies have adopted overly complex systems with little to show in terms of safeguarding quality. In some instances there has been a tendency towards 'contractualisation' leading to short-term thinking and a tendency towards a 'contract compliance' culture which reinforces the focus on *quantity and throughput* rather than on *learning and impact*. The regulatory system must be streamlined, to ensure that accreditation and quality assurance requirements strengthen educational institutions, without becoming barriers for them. Non-formal educational provision targeted at specific community needs, as well as on-going professional development, need not always lead to qualifications or be provided through accredited providers.

Proposals are also made to strengthen the levy-grant institutions to make them more effective and, as mentioned above, improve their articulation with the post-school system as a whole. These proposals largely build on the ideas of the National Skills Development Strategy III, which are currently being implemented. Clarification of the mandate of the SETAs is a key priority. Options are presented for improving the use of the levy-grant system and for ensuring that that the work of the NSF complements that of the SETAs.

Addressing these key problem areas will enable us to address ongoing inequalities with regard to socio-economic status, race, gender, geographical location, age, disability, and HIV status. This would also ensure that the post-school system contributes to changing the economy to one that relies more on the value-adding skills of its people than on easily replaceable and cheap unskilled labour.

1. TERMINOLOGY IN THIS GREEN PAPER

Debates and policies in education and training are made complex by confusion – and sometimes contestation – over terminology. In some cases there appears to be no generally accepted national or international usage of the key terms that are essential in a discussion of the subject matter considered in this Green Paper. In order to have some clarity about what is meant, in this section the Green Paper explains key terms. We recognise, however, that it is likely that debate and disagreements about use and interpretation of terms will continue.

The term *post-school* is used to refer to all education for people who have left school as well as for those adults who have never been to school but require education opportunities.

Higher education is used to refer to the education that normally takes place in universities and other higher education institutions, both public and private, which offer qualifications on the Higher Education Qualifications Framework (HEQF).

Further education refers to education offered in Further Education and Training (FET) colleges and similar programmes in other vocational colleges. The Department of Higher Education and Training (DHET) is considering renaming the FET colleges Vocational Education and Training Colleges, but since no final decision has been taken in this regard, the existing name is used in this Green Paper.

Vocational education refers to a middle level of education which provides knowledge and skills to enter the economy through a general, broad orientation in vocational areas, as well as general learning in essential areas such as Language and Maths.

Occupational education refers to educational programmes that are focused on preparation for specific occupations, as well as ongoing professional development and training in the workplace.

Professional education refers to educational programmes that lead to professional registration.

Adult education and *continuing education* are used to refer to all other forms of education for adults.

There are no clear dividing lines between general, vocational, occupational and professional education. They represent points on a continuum, with considerable overlap at times. Nonetheless, there are differences between these types of education, all of which add value to a diverse education system.

Skills development is sometimes used in a narrow way, to refer only to occupational qualifications and workplace-based training, and sometimes in a broad way, to refer to education at all levels which is primarily focused on preparation for the world of work. This can include professional, occupational and vocational education offered through colleges and universities and programmes based at workplaces, including programmes which are funded by the levy-grant institutions. As these are both in popular usage in South Africa, they are both used in this Green Paper, with an indication from context as to whether the narrow or expanded definition is in use.

The term **tertiary education** has been avoided in this Green Paper as it has not been in general use in South African education policy documents, even though it is used in Schedule 4 of the Constitution.

We recognise that more than one level or type of education can be offered in any institution.

2. MAIN PURPOSE OF THE GREEN PAPER: A VISION FOR THE POST-SCHOOL SYSTEM

This Green Paper provides a vision for the post-school system in South Africa. It does not go into detail in specific areas, but sets the basis for building a coherent system as a whole.

The Department of Higher Education and Training was formed in May 2009 as a new department, bringing together all post-school education and training institutions. It is now responsible for the following areas, which constitute the post-school system:

- institutions which provide formal education and training:
 - public universities, national institutes of higher education and other (private) higher education institutions;
 - public FET colleges and private FET institutions;
 - adult education centres and all other adult education initiatives with the exception of the Khari Gude programme of basic literacy and numeracy which is the responsibility of the Department of Basic Education (DBE).
- the levy-grant institutions: the Sector Education and Training Authorities (SETAs) and the National Skills Fund (NSF).
- regulatory and other institutions:
 - a range of regulatory institutions and other organisations, systems and frameworks: the National Qualifications Framework, the South African Qualifications Authority (SAQA), the three Quality Councils and the National Skills Authority (NSA), and the National Student Financial Aid Scheme (NSFAS).

In addition, the Human Resources Development Strategy for South Africa, whose Council is chaired by the Deputy President, is administered by the DHET.

All these areas of work have now been assembled into the DHET, with some areas of cooperation with the Department of Basic Education and Provincial Education Departments. Umalusi, the Quality Council for Further Education and Training, falls under the DBE but reports to the DHET with regard to adult education centres and FET colleges. FET colleges and adult education centres are shared functions between the DHET and Provincial Education Departments. A constitutional amendment bill that seeks to make school education the only educational function shared between the national and provincial levels is currently before Parliament. Once this bill becomes law, FET colleges and adult education will become a sole function of the national government and fall under the DHET.

The establishment of the DHET created the opportunity to build and sustain a single, coherent, differentiated and highly articulated post-school education and training system. This Green Paper provides a vision for such a system. Education and training are crucial elements for the transformation of South African society. They are essential for the building of a united, non-racial and non-sexist society with a strong economy capable of catering for the needs of all its' people.

The post-school education and training system envisaged by the DHET must be equitable, accessible and affordable to all sections of the population, including free education and training for the poor. This requires the redress of past and present injustices, including overcoming barriers to progress based on social class, race, gender, geographical location, age, disability and HIV/AIDS status.

The post-school system aims to contribute appreciably to overcoming the structural challenges facing our society. One of the greatest of these is the large number of young people who appear to face a very bleak future if major changes are not introduced. A study of post-school youth conducted by the Centre for Higher Education Transformation (CHET) and the Further Education and Training Institute (FETI)¹ has shown clearly the nature of the problem – although it understates it since it excludes young people over the age of 24. Table A, taken from the report of this study, shows that in 2007 there were 2.8 million people between the ages of 18 and 24 who were not employed, not in some form of education or training, and not severely disabled. With the subsequent economic slowdown it is likely that this number has increased substantially. This is a problem that represents not only a bleak future for millions of young people, but threatens the social stability of South Africa's society.

Table A. 2007: Number of persons not employed, not in education, not severely disabled, 18-24 age cohort

EDUCATION LEVEL	AGE							TOTAL
	18	19	20	21	22	23	24	
Unspecified	2 595	2 475	3 786	4 762	4 998	4 054	4 699	27 351
Primary or less	61 056	64 285	70 496	78 564	73 575	75 261	77 425	500 662
Secondary education less than Grade 10	51 192	59 643	73 194	79 050	83 367	81 502	80 649	508 597
Grade 10 or higher but less than Grade 12	65 228	94 608	132 158	164 596	176 733	174 325	183 146	990 794
Gr 12/NTC 3 (no exemption)	47 447	65 190	89 292	99 797	100 711	96 139	100 080	598 657
Grade 12 (with exemption)	10 226	13 526	14 778	14 259	16 910	13 869	14 766	98 335
Certificate with Grade 12	2 732	4 025	6 299	8 157	9 672	8 340	7 811	47 035
Diploma with Grade 12	388	1 151	2 464	3 461	6 103	5 733	5 995	25 294
Bachelors degree	188	322	430	1 774	1 460	2 831	2 347	9 352
B Tech	6	126	192	312	78	654	414	1 780
Post Graduate diploma			244	405	400	581	867	2 498
Honours degree			60	220	383	694	337	1695
Masters/Doctorate			48	77	110	135	50	421
Total	241 056	305 333	393 441	455 434	474 501	464 119	478 587	2 812 471

Source: Cloete, N. (ed.). 2009. *Responding to the Educational Needs of Post School Youth*. Cape Town: CHET.

¹ Cloete, N. (ed.). 2009. *Responding to the Educational Needs of Post School Youth*. Cape Town: Centre for Higher Education Transformation.

One of the first challenges for the post-school system is therefore to expand access to education and training over the next twenty years. This is essential not only to take account of the needs of the youth who complete school but also for those who do not complete their schooling and for adults who need further education and training to allow them to live fuller and more productive lives as both workers and citizens.

By 2030, South Africa ought to have a post-school system that provides a range of accessible alternatives for young people. Providing a more diversified mix of programmes will significantly benefit the poor, since it is largely poor learners who struggle to complete their schooling, who drop out of college, who do not achieve university entrance, and whose poor skills base make it difficult for them to obtain employment. By 2030, we want to see university headcount enrolments of 1 500 000, a projected participation rate of 23%, and 4 000 000 headcount enrolments (approximately 60%) in colleges or other post-school institutions such as the proposed community education and training centres discussed below. An important element of this must be to "raise the base" by expanding foundation (or enabling) programmes for those young people and adults who have not attained the qualifications necessary for college or university entrance. Rural areas which currently suffer deprivation in terms of post-school provision must be given particular attention as we expand the system. By 2030 there will be at least one institution offering FET programmes in every district in the country. Some of these will be in multi-purpose education centres. Free post-school provision for the poor will be phased in over the next several years, building on the progress already made in expanding financial aid through NSFAS.

The DHET must build, support and resource this expanded system. In particular, it must prioritise building the public college sector, while creating an enabling environment for private provision. The public college sector currently includes both FET colleges and a range of other state-run colleges under the control of various government departments. Save for a nominal compliance with the NQF, there is little coherence in the college sector as a whole. The DHET must take a lead in engaging other government departments with a view to finding ways to build the colleges into a coherent and accessible system which is well aligned both internally and with other post-school institutions.

As part of the expansion of the post-school education and training system, the DHET is also looking into the establishment of Community Education and Training Centres (CETCs), which will include existing public adult learning centres, as an alternative institutional form to address the needs of out-of-school youth and adults.

As we expand the system we must be mindful of the need to ensure quality in all education and training. This requires a well-functioning quality assurance system, but more importantly it requires well-functioning institutions and support systems. It is difficult to ensure growth in the system while maintaining – and indeed improving – quality of provision. Thus we need to expand with care at first, ensuring that institutions are not overwhelmed by new enrolments. Furthermore, it is essential that new institutions have the necessary infrastructure and human resource capacity. Stepping up the training of college managers and academic staff is particularly important in this regard.

Building institutional capacity is essential in order to achieve our vision of a coherent but diverse system that meets the needs of individuals and society. There are a number of aspects to this. The first is building the capacity of public providers. A key priority of this Green Paper is developing a vision for a substantially strengthened and expanded public college sector. The second is developing the capacity of DHET statutory bodies

that are part of the post-school system (the levy-grant institutions, SAQA, the Quality Councils, NSFAS), and creating an enabling environment for private providers and workplace-based education. Thirdly, building a single post-school system entails ensuring that there are appropriate mechanisms and systems to encourage and support co-ordination and collaboration between its different institutions so that they support one another in order to build a well-articulated and effective system. Qualification systems and curricula must facilitate progression of students, and there should be no qualifications which lead nowhere and do not assist people to further their studies. In this respect it is essential to develop systems for the recognition of prior learning, both for permitting access to programmes and institutions and for attaining qualifications based on knowledge gained outside of formal settings.

The levy-grant institutions have an important role to play in working together with employers, government and educational institutions to develop strong links between education and training on the one hand and the labour market on the other. In particular they can assist in providing labour market information to educational institutions and to government; help to promote partnerships to enable the training of young apprentices, learners and interns; and channel resources from the levy-grant institutions to training for full occupational qualifications rather than to short courses. The latter can be supported by employers as specific needs in the workplace arise.

A central function of the post-school system, and particularly the universities, is to conduct research and develop strong links between education and training on the one hand and research on the other. Much of South Africa's research is conducted in the universities and thus falls under the Department of Higher Education and Training, although research is often funded by the Department of Science and Technology (DST). Increasingly university-based research is also funded by public and private corporations and agencies in partnership with universities. This research is crucial not only to the creation of new knowledge and the deepening of our understanding of our society and our environment, but also to the innovation of new products and processes with economic benefits for our country.

This Green Paper signals broad intent, as the basis for public discussion, the development of new policies, and the consolidation of existing policies. In some instances, this Green Paper goes beyond the provisions of existing legislation and regulations, which were developed in an institutional environment which was more fragmented.

3. CHALLENGES IN POST-SCHOOL EDUCATION AND TRAINING

3.1 HISTORICAL BURDENS

There are many challenges facing post-school education in South Africa. Our priorities are to achieve access and equity, as well as high-level excellence and innovation. We have to work towards achieving both. The DHET must uplift formerly black and poor institutions as part of building a quality post-school education and training system. At the same time, it is important to strengthen centres of excellence and transform them to serve all South Africans, especially those from poor backgrounds.

The apartheid education system denied access to educational opportunities to black South Africans. Despite the progress made since the onset of democracy, the legacy of apartheid and colonialism continues to bedevil the education and training system. Deeply rooted and intractable historical inequalities still determine patterns of poverty and wealth in our society. They also determine the patterns in which formal education is distributed, and therefore the patterns in which families reproduce educational achievement. The system continues to produce and reproduce gender, class, racial and other inequalities of access to educational opportunities and success.

These deep historical inequalities need to be addressed if the post-school system is to provide equitable and quality education and training for the majority of the population. Despite seventeen years of democracy, the education system continues to replicate the divisions of the past. Even the institutional landscape is reminiscent of apartheid, with the disadvantaged institutions, especially those in rural areas of the former bantustans, still disadvantaged in terms of infrastructure, teaching facilities and staffing. The "opening up" of the former whites-only institutions – schools, colleges and universities – has been essential to providing opportunities to at least some from among the previously disadvantaged to gain a relatively good quality of education. Even here, though, black students have often been victims of racism and discrimination, and poorer students have found themselves having to fit in with a system which was designed for students from relatively privileged backgrounds. In any case, these privileged parts of the system were initially designed to cater largely for the white minority, and so did not have the capacity to serve the majority of the black population – the working class and the poor. To do this, the quality of all educational institutions needs to improve.

At the same time, solving social and economic problems needs high-level research and development. Cabinet plans have targeted a specific economic growth path as the engine for reducing unemployment and poverty. Both the New Growth Path and the Industrial Policy Action Plan 2 identify a number of priorities for industrial policy, and this has implications for the education and training system and the need for the development of high-tech capacity. To cater for these demands, the Department of Science and Technology has targeted a five-fold increase in PhDs over the next ten years. This is a complex issue. On one hand, since the bulk of new research and development capacity is likely to come from the historically white campuses, providing resources so that they can increase their levels of PhD and research production could be seen as further advantaging them at the expense of the historically black campuses. On the other hand, without dramatically increasing the country's research and development capacity, development and growth targets will be severely compromised. The production of PhDs among black students provides the solution to both improving the demographic profile of academic staff at the historically white institutions and providing the human resources needed to improve the quality of the historically black institutions.

3.2 INEQUALITIES AND DISCRIMINATION

Eliminating all forms of discrimination and inequality and developing a general culture of human rights and democracy are among the key priorities of the DHET. Progress has been made since 1994 in addressing discriminatory practices, for example in redressing racial and gender imbalances in student populations. However discrimination on the basis of gender, race, social class and disability remains pervasive in our institutions.

Gender and racial inequalities are evident in patterns of university enrolment. While the numbers of black and female students enrolling at universities have increased

dramatically over the 16 years, blacks and women students continue to be under-represented in science, engineering and technology as well as in business and commerce programmes. Major racial disparities also exist in completion rates in undergraduate programmes, together with the particularly high attrition rates of black students across the board. With regard to post-graduate graduates, figures for blacks and women continue to be lower than that of whites. In 2008, for example, 45% of doctoral graduates were black and only 41% were women, meaning that they are considerably under-represented at this level. The academic staff at most universities remains largely white and male despite progress since 1994. In 2006, for example, 62% of academic staff were white, and 42% were female. These patterns of inequality require decisive action by the state to expand opportunities for women and blacks.

The majority of disabled students continue to experience discrimination in the post-school education and training sector. In addition to discrimination against the disabled with regard to access to institutions, institutional practices have also largely failed to consider the learning needs of disabled students, or their support needs as part of the broader teaching and learning support processes. The (varied) needs of disabled students need to be responded to by individual institutions and the system as a whole. This will require the allocation of additional resources.

The study by CHET and FETI cited above (see Table A) makes it clear that young people are particularly vulnerable to the structure of the economy and the post-school system which leaves so many of them without employment or any kind of education or training to equip them for the labour market. For this reason the needs of the youth must remain the central concern of the DHET. The education obtained by most people aged between 18 and 24 are crucial to their future well-being and social contribution.

Young people and others in rural areas have particular challenges. These relate to the uneven distribution of post-school institutions which leaves large swathes of the rural areas with little provision. In addition, the provision which exists is generally of lower quality in terms of infrastructure and standards of education offered. Making inroads into these backlogs, and thereby expanding opportunities for post school education and training opportunities for rural youth and adults, is a major challenge facing the DHET.

The HIV and AIDS pandemic continues to ravage South Africa, and post-school education is no exception. A recent HIV prevalence and related factors study in the university sector revealed prevalence rates of 3.4% amongst students. Prevalence amongst academic staff was at 1.5%, administrative staff at 4.4% and service staff at 12%. There were variations in prevalence rates by province and geography. For example, with regard to service staff, KZN was highest at 20%. Eastern Cape had 6% prevalence amongst students. The study found that support to students, especially first years, was only during orientation period. Students indicated the need for more guidance and consistent support over their first few months at the institution. The study also revealed a perception by staff and students that management and leadership did not take HIV and AIDS seriously, and that HIV and AIDS was not seen as a strong priority in most campuses. Both the DHET and all the education and training institutions need to ensure that they develop and implement comprehensive responses to the challenges of HIV and AIDS.

To ensure that the post-school system contributes to the development of our society as well as to meeting the developmental needs of individuals, four areas stand out as requiring attention:

- provision which is inadequate in quantity, diversity and, in many but not all instances, quality;

- inadequate and insufficient levels of research and innovation;
- lack of coherence within the post-school system as a whole, as well as between basic education and the post-school system, and between the post-school system and the labour market;
- a regulatory system which is complex and problematic.

This Green Paper is focused on providing policy direction in these four areas.

3.3 INADEQUATE QUALITY, QUANTITY AND DIVERSITY OF PROVISION

One of the main problems of the post-school sector is its lack of diversity and the weaknesses of many of its institutions. Inadequate quality, quantity and diversity of provision characterise the post-school education sector as a whole. There are very few educational opportunities available to adults and young people who have left school in the early stages, or failed to obtain a National Senior Certificate, or who do not meet admission and selection criteria for higher education. There is little accessible provision to assist people to catch up on the learning they have missed out on. There are few alternatives for those who seek a vocational or occupational qualification. There are inadequate financial resources to allow most school leavers, including matriculants, to successfully enter post-school provision. Currently, approximately three times as many students enter universities each year as do colleges. This "inverted pyramid" is a major problem for our system and results in a workforce with serious shortages of artisanal and other mid-level skills.

Higher, further and adult education institutions all face capacity constraints although the scale and type of such constraints may differ. Constraints within the post-school education system include its inability to absorb increasing numbers of students, low throughput rates, sometimes unclear institutional identities, poor human and infrastructural resourcing, inadequate financial resourcing, insufficient financial aid for students, and inappropriate funding modalities. Access for students with disabilities is particularly constrained, and support for them once they have been admitted is very limited.

All post-school institutions must cater for a large proportion of students who finish school not fully prepared for further studies. The poor quality of most of our schools is well known and is being tackled by the Department of Basic Education and the provincial education departments. The process of improving the schooling system is, however, a mid- to long-term process and we must recognise this. Meanwhile, we must find ways to help the students that come to post-school institutions to make the transition to post-school education successfully so that they can cope.

3.3.1 Colleges

The college sector is small and weak. In 2010, total headcount enrolment was 326 970 students, enrolled in the National Certificate (Vocational) (NCV), the Report 191 programmes (or N courses) and non-DHET (i.e. SETA-accredited) programmes. For the 2011 academic year, the projected headcount enrolment was 359 000 students. This figure is just a little over one-third of the total university student enrolment. FET colleges are varied and diverse but, with some notable exceptions, they are mainly weak

institutions. With their present capacity, colleges can neither absorb significantly larger numbers of students nor achieve acceptable levels of throughput. General vocational programmes have not had time to mature and to be tested in the labour market. Training of artisans has declined, and is only now beginning to grow again. Colleges are playing their traditional role in offering the theoretical component of apprenticeship programmes, but the curricula of these programmes have not yet been sufficiently updated and improved, although the Department has now started a process to do this.

Decentralisation of various functions previously held by government to college councils was instituted in an attempt to increase responsiveness and flexibility, but many of our institutions were not ready for it. While decentralisation has worked in a few stronger colleges, it was inappropriate in the weaker ones which require more support. There are significant resource inequalities between colleges, evident in inadequate infrastructure, student financial aid and calibre of staff, exacerbated by problems of poor governance, administration and intra-institutional relations. The recapitalisation process of 2006 to 2009 contributed towards the improvement and expansion of infrastructure resources in many colleges. However, it was designed as a once-off intervention. Infrastructure development needs to be considered as an integral part of the college financing system.

One of the biggest dangers for these institutions is the expectation that the FET colleges should be all things to all possible learners, because there are so few alternatives. These FET colleges are constantly loaded with more and more expectations. Ironically, if they are forced to expand at a faster rate than they can reasonably handle, this may reduce the likelihood that they will succeed at all.

3.3.2 Adult education

In 2011, 312 077 students were enrolled in public adult education centres – comparable to the enrolments of FET colleges. The throughput rate, however, is much lower – very few adults acquire the full General Education and Training Certificate (GETC); most collect only a few unit certificates. This means there is almost no progression to further learning. However, the learners are all part-time and the centres are particularly weak. This is partly the result of several policy interventions and plans that have been under-resourced and sporadically initiated. In many instances the centres have little or no clear institutional identity or capacity. They have no full-time staff and are staffed through short-term contracts. They function in the evenings in the premises of other institutions such as schools, community centres or workplaces. There are many problems with the curriculum and qualifications available.

3.3.3 Workplace-based training

Workplace-based training remains very diverse, with excellent training opportunities in some places. In general, few employers have been willing to take on apprentices and give students opportunities for work experience. A wide array of providers, often based in or contracted by workplaces, offers a range of programmes aimed at professional and community development. Many of these providers offer dynamic and responsive programmes. However, there are also unscrupulous providers who take advantage of peoples' thirst for education. The regulatory environment has not always been supportive of the former, and has frequently failed to root out the latter.

The policy environment has caused confusion in the area of workplace learning, with uncertainty about the long-term status of apprenticeships and their relationship to learnerships, as well as problems with the qualifications leading to learnerships.

We have missed out on significant opportunities for skills training on major infrastructure programmes such as the Gautrain and the World Cup infrastructure projects. Policies to encourage workplace-based training have been inadequate.

3.3.4 Universities

A diverse university system steeped in inequality is the product of apartheid education policies, and that reality still confronts us today. While our leading universities are internationally respected, our historically black universities continue to face severe financial, human, infrastructure and other resource constraints. Universities of Technology are in some instances experiencing mission drift, losing focus on their mission of producing technicians, technologists and other mid-level skills at undergraduate level. This problem is also evident in the comprehensive universities.

Our universities are in general characterised by low success rates and therefore low throughput rates. The number of overall postgraduate qualifications obtained, particularly PhD graduates, is too low. Many universities do not see student support services as part of their core role. Many forms of discrimination remain part of the experience of students after they have been accepted by universities, and this inhibits their academic progress. While the enrolment patterns indicate that social exclusion on the basis of race and gender is decreasing, class exclusion clearly still remains an issue, along with access to students with disabilities or from rural areas. The academic profession is aging and requires renewal if our universities are to expand or compete on the knowledge production front. There is a shortage of academics, especially in scarce skill areas and at particular universities.

3.3.5 Funding

Current funding modalities present multiple challenges across the post-school education system.

For the university sector, the funding model has made some attempts to bring about greater equity between historically black universities and those which were more advantaged in the past, but has not succeeded in doing so. While even our most affluent universities face funding challenges, these are of a different order to those faced by the poorer universities, especially those in the rural, former bantustan areas. In the latter, resource shortages contribute centrally to inhibiting the institutions from properly fulfilling their prime function – providing good undergraduate degrees to poor, rural students. Historically black universities suffer serious infrastructural challenges, including inadequate libraries and laboratories, and insufficient and poor-quality student accommodation. These issues have not yet been adequately tackled by either the institutions or by government. The existing funding formula is biased towards research output at the expense of teaching, and this disadvantages institutions which are less research-intensive and have greater teaching challenges.

For public FET colleges and adult education centres, funding is based largely on student enrolment. This makes it difficult to plan and build institutional capacity. FET colleges face significant challenges with regard to student accommodation and other infrastructure needs. While colleges have had insufficient resources to meet the country's needs for mid-level technical and vocational skills, very little funding from the levy-grant institutions has been directed to training youth and adults in the colleges. The

levy-grant institutions have spent most of their resources on short unit-standards based courses, some of which have been of little value in improving the skills of the workforce. This is a problem that the National Skills Development Strategy III (NSDS III), released in January 2011, tries to address by requiring SETAs to spend more on substantive courses leading to occupational, vocational and professional qualifications at public colleges and universities, particularly universities of technology.

At the same time, the design of our qualifications framework and quality assurance system has in some instances made it difficult for providers to offer non-formal programmes, as the emphasis has been on formal qualifications and unit standards. In some parts of the system this may have led to a reduction in the already small amount of educational provision, and contributed to the general collapse of not-for-profit and community-based provision, and youth development organisations. For many providers offering short programmes aimed at professional, organisational or community development, it is difficult to fit the training that they do into unit standards, let alone find accredited assessors to assess it, and moderators and verifiers to moderate and verify it. Such organisations have struggled to get funding, as both international donors and our own government have assumed that anyone providing any kind of training must fit into the quality assurance system.

Demand for financial aid is outstripping the amounts available through the National Student Financial Aid Scheme (NSFAS). Research indicates that more than 25% of the total student undergraduate population at universities is on financial aid, and the demand is still unfulfilled and is rising. There are pressures to increase the number of students on financial aid, as well to increase amounts of financial aid for existing recipients in the university system. Substantial increases in the resources available to students in both universities and FET colleges have been made in the past two years, but much more needs to be done to reach the goal of free education up to undergraduate level. There is an ongoing problem with the status and lack of funding of the B.Tech. degree, as currently students enrolled for this qualification do not qualify for assistance from NSFAS.

3.4 INADEQUATE AND INSUFFICIENT LEVELS OF RESEARCH AND INNOVATION

Economic development depends both on innovation (the creation of new knowledge within the country) and technology absorption (the ability to exploit knowledge developed elsewhere). A shortage of high-level skills has been a hindrance for both innovation and technology absorption in South Africa. Investment in knowledge generation has substantially increased since 1994, to levels three times higher in real terms than they were in the mid-1990s (including investment from government and business). However, there has not been an equally rapid increase in research personnel. From 1992 to 2006, the total number of (full-time equivalent) researchers increased only by 33%.

Skills shortages have an impact on the capacity to undertake research and development as well as on the capacity of high-technology and skill-demanding firms to compete in global markets. South Africa has managed to maintain its leading position in mining technology, but performance in other sectors has been less remarkable. The number of PhDs being produced is far too low to meet the country's needs for research and innovation.

The Department of Science and Technology's *Ten-Year Innovation Plan* states that the level of economic growth envisaged by our country requires continual advances in technological innovation and the production of new knowledge. The research outputs of universities play a pivotal role in this. The purpose of the DST's plan is to help drive South Africa's transformation towards a knowledge-based economy, in which the production and dissemination of knowledge leads to economic benefits and enriches all fields of human endeavour. Universities, research councils and other research agencies are the main producers of new knowledge.

The past decade has seen a significant increase in research output in our universities. Total research output (including publications, masters and doctoral research outputs) have increased by 64% between 2000 and 2009. Nevertheless, it is vital that our university system become yet more productive. Postgraduate studies must also be expanded to deliver more highly skilled individuals, especially at masters and doctoral level. According to the *Ten-Year Innovation Plan*, South Africa's PhD production must grow dramatically, with a five-fold increase in PhDs in Science, Engineering and Technology. Increased masters and doctoral graduates are essential in producing the next generation of academics and researchers and ensuring that the qualifications of academics are upgraded where necessary. But poverty is a significant constraint on the ability of many students to obtain masters and PhDs, as poor students are under enormous pressure to leave university and get a job as soon as possible.

3.5 LACK OF COHERENCE AND ARTICULATION IN THE POST-SCHOOL SYSTEM

Post-school education does not function as a single co-ordinated system in South Africa. Provision of post-school education – through higher education institutions, FET and other vocational colleges, adult learning centres, organisations which provide professional development, and organisations which focus on youth development – has been fragmented. There is as yet little integration across different types and sites of provision. It is still difficult for students to move between colleges and universities, between different universities, between schools and post-school institutions, and between educational provision and the world of work.

The NQF was introduced into the South African education and training system with, among other objectives, the hope that it could create a coherent education and training system, by creating a set of levels (now ranging from Level 1 to Level 10) on which all qualifications would be placed. This has not fully succeeded.

There is considerable scope for universities to support the strengthening of the college system. Until recently, there were virtually no programmes for training and upgrading potential or existing college lecturers in university faculties of education, except for a few funded by foreign donors. More systematic programme offerings have now begun and a framework for lecturer development is currently being developed by the DHET. This approach bodes well for the future, but there is still a lot of work to do in this respect. Quality programmes need to be developed for college managers and potential managers. Universities also have great scope to conduct in-depth research into the colleges, adult education institutions and the work of the levy-grant institutions, to the benefit of all these institutions as well as of the DHET and the various regulatory and advisory bodies.

There is inadequate information about labour market needs and future growth possibilities. This makes planning and targeting of provision difficult. Articulation with the labour market has two elements. Firstly, it is about matching the supply of and demand for skills in this market. Secondly, it is about developing better links between education institutions and industry to create further opportunities for apprenticeships, learnerships, work experience and training. At present, statistical information on labour market demand remains thin and lacks uniformity across the different SETAs responsible for gathering this information. Central co-ordination of such data is also inadequate.

One reason why the resources available to the post-school system have been in short supply is that very little of the skills levy funding has been used to pay for education in the public universities and colleges. The SETAs have yet to start using public education institutions extensively as providers of occupational education or to feed labour market information to the education institutions to assist in coherent planning of education. SETAs and colleges were, until recently, constrained from working with each other by the 80/20 rule which required colleges to use 80% of their state funding on the NCV or N programmes. The new *National Skills Development Strategy III*, as well as new regulations and pending legislation affecting the SETAs and the National Skills Fund are now attempting to reverse this trend. With their close contacts with employers and the labour market, the SETAs and the NSF have the potential to expand their support to universities and colleges in various ways. This could ensure a closer coherence between the needs of the labour market and the identification of areas of focus for education institutions.

While useful partnerships between employers and colleges or universities do exist at some educational institutions, at others they are virtually non-existent. There is a serious shortage of places for students to gain workplace experience. This severely restricts the development of skills for the economy. Students at FET colleges and universities of technology who have completed their academic training but have no practical workplace experience do not meet the requirements to obtain professional registration. There appear to be tens of thousands of students in this position. SETAs can play a central role in promoting the growth of partnerships between educational institutions and various private and public employers. In addition to the training benefits of greater collaboration between enterprises and education institutions, such collaboration can lead to useful joint research and development projects that can help to expand innovation and development in the economy. Some such partnerships already exist, but could be greatly expanded.

Many different structures work to ensure that post-school education meets the needs of the economy. They include the National Economic Development and Labour Council (NEDLAC), the Human Resources Development Council for South Africa and the National Skills Authority. One of the responsibilities of the Economic Sectors and Employment Cluster in government is to track global labour market trends and provide analyses of the needs of the South African economy. The Department of Home Affairs plays an important role as they utilise the critical skills lists as a basis for determining work permits for skilled workers from abroad. However, there is a lack of clarity among institutions as to who is supposed to be doing what and how. There are too many different places where employers report on training. There is also inadequate integration between skills development and policies and programmes to systematically finance, support and incubate small businesses.

3.6 CHALLENGES WITH REGARD TO THE REGULATORY SYSTEM

The regulatory environment is a complex one, with the state attempting to drive human development through a set of structures that are operating within a framework of accountability that makes diverse and sometimes contradictory demands.

3.6.1 Qualifications and the NQF

Our system has created a proliferation of qualifications and unit standards, but there has been no corresponding proliferation of learning or of educational provision. Strong occupational qualifications which enable the training, assessment and certification of artisans have still not been developed, and there is great confusion about the difference between learnerships, apprenticeships and N courses, some of which have been reintroduced after being phased out by the Department of Labour. Some new learnerships and other new qualifications have gained credibility with employers, but often, unless a person was qualified under the old pre-1994 apprenticeship system, employers feel uncertain of the competence of a qualified artisan.

In various countries, a key justification for structures like the NQF is that they are designed to establish equivalence as an aid to credit recognition and learner progression. Placing individual qualifications on levels on a framework was part of an attempt to create and demonstrate equivalence between qualifications in different areas. However, this notion of equivalence is difficult to put into practice, and there is little evidence that the NQF has in fact facilitated judgements about equivalence. In some instances attempts to create equivalence between different qualifications have added complexity to the regulatory system, as well as leading to undesirable consequences. One is that it has discouraged horizontal progression – learners feel that they are not progressing by learning a new skill or knowledge area, unless they are “moving up” the NQF ladder. Our well-meaning attempts to pretend that different types of education and training are equivalent may in some instances have misled learners into believing they are more qualified and competent than they actually are. For example, learners who complete an occupational qualification that is officially registered at level 4 on the NQF believe they have the equivalent of a National Senior Certificate (NSC), and in some cases have requested that they be awarded an NSC.

Research conducted for this Green Paper as well as for the Ministerial Task Team on SETA performance suggests that many one-year qualifications have been developed, as well as qualifications with exit points after each year, even when this is strongly counter to the training needs of a specific sectoral occupation. For example, most trainee artisans are generally unable to achieve any recognised level of competence in twelve months, and yet in many instances occupational qualifications have been developed at each of the lower levels of the NQF. Coupled with funding systems which were incentivised to give funding to greater numbers of learners, this has led to a situation where many learners have been obtaining qualifications that in fact do not qualify them to do anything.

Many occupationally-directed qualifications assume a certain level of foundational learning to be in place when often it is not. Qualifications have been designed (with fundamental, core and elective components) with the intention of recognising the learning already in place (through the recognition of prior learning [RPL]) and rectifying gaps in learning that many workers would have experienced as a result of Bantu

Education and apartheid employment practices. However, while many providers have been able to address the occupational component of qualifications, they have had serious problems with foundational learning. This has led to the introduction of qualification requirements to enter programmes. For example, many apprenticeships on NQF levels 2 to 4 now require learners to have achieved either Matric or the NCV before starting the programme. While this may make sense for those offering these qualifications, it does nothing to assist people who have not mastered foundational learning.

Through the NQF, we have tried to improve our ability to award certificates to individuals in order to recognise their skills, abilities and knowledge. In doing so, we have developed formal qualifications in a wide range of areas that were previously seen as non-formal or informal education. In some instances, the formalisation of provision may have been counter-productive, particularly for small, niche-based programmes, providers who develop customised training for employers, and providers who work with specific community needs. There will always be a tension between responsiveness and formalisation of educational provision. Our good intentions have led to a system where there is inadequate support for provision which does not lead to certificates, and at times a distortion of provision as providers attempt to meet the requirements of the system. Research commissioned in the process of writing this Green Paper suggests that unit standards in particular may have made it very difficult for providers to be responsive to employers and communities, as courses have to be developed against them, and cannot be customised for the specific requirements of the workplace or community in question. International and South African research has demonstrated that unit standards tend to fragment knowledge and militate against the coherence necessary to address the mastery requirements of specific professions.

3.6.2 Quality assurance

Our qualifications and quality assurance framework is complex, with overlapping directives, and ongoing confusion and contestation between different quality assurance bodies over "turf". Many new structures have been created. These include SAQA, Umalusi, the Higher Education Quality Committee (HEQC), 21 SETA Education and Training Quality Assurance bodies (ETQAs) and, more recently, the Quality Council for Trades and Occupations (QCTO). With the exception of Umalusi, which was built on the previous South African Certification Council, these new bodies had no institutional history. Shortly after their formation, they were required to make complex judgements about educational quality. We may have expected too much of new institutions, such as SETAs, and in particular the ETQAs, which had to establish themselves, find appropriate staff and develop new systems for a new function. Some of them have now started to build capacity, but others remain weak.

The NQF introduced a decentralised approach to assessment and quality assurance, based on the idea that nationally prescribed learning outcomes should be the basis for course design, assessment and quality assurance. In such a model, the role of quality assurance bodies is manifold: to accredit providers to offer programmes against specified qualifications or unit standards; to approve learning programmes based on whether or not they are likely to lead to the specified outcomes; to register assessors to conduct assessment against the specified outcomes; to register moderators to moderate assessors' judgements about learner performance against the specified outcomes; and to send verifiers to verify the judgements of moderators about assessors' judgements about learner performance against the specified outcomes, or, to verify that appropriate assessment and moderation systems are in place in order to validate the judgements of moderators.

SETA quality assurance models have mainly operated according to this type of logic. SETA ETQAs register individuals as “constituent” assessors and moderators (although there is variation across ETQAs as to whether assessors are registered to assess against particular unit standards or against an entire qualification). SETAs then ‘verify’ learner achievement. In practice the verification of decentralised assessment has very seldom involved substantial judgements on the quality of learning or of learner performance in assessment, simply because of the sheer numbers of judgements that have to be made. In some instances, SETAs issue certificates, and in some instances providers issue certificates directly. This approach to quality assurance has proved to be complex and, in many instances, of questionable value. Preliminary research suggests that the regulatory environment – that was introduced with the best possible intentions, to protect learners from unscrupulous providers – has in some instances made it difficult for dedicated providers to offer educational programmes. At the same time, the system has not provided much information about educational quality. The NQF Act (No. 67 of 2008) repealed the SAQA Act (No. 58 of 1995), including the regulations under which SETAs were accredited to conduct quality assurance. At issue here, though, are the different models of quality assurance which have been attempted since 1994. As quality assurance bodies are consolidated in the coming years, this is a key issue which will have to be addressed.

3.6.3 Contractualisation

SETAs and the National Skills Fund distribute significant resources directly to training providers. Often the most important regulatory concern in this is the Public Finance Management Act (PFMA, No. 1 of 1999) and the supply chain regulations governing procurement. Needs are assessed, demands are quantified, terms of reference are developed and tenders are advertised. Providers bid for these tenders on the basis that they are accredited by the relevant ETQA and have experience in a particular area of provision. Contracts are awarded and managed by the SETA or the funding agency, which could be the NSF or any government department, municipality or state entity. More and more, the management of provision is the responsibility not of education managers, but of supply chain managers. Contracts are managed and monitored not so much on the basis of the success of the training provided, but more in terms of contract conditions. In other words, there is a tendency towards a “contract compliance” culture which reinforces the focus on *quantity and throughput* rather than on *learning and impact*.

Increased contractualisation for the provision of education and training has had a number of other unintended consequences, particularly a focus on short-term deliverables, by both private and public providers. For example, the PFMA is often interpreted as discouraging the type of partnerships needed for the development of long-term capacity. Contracts tend to be for the period of time required to train a set number of learners in a particular programme. The next batch of learners is subject to a further tendering process and so there is unlikely to be continuity, relationship building or improvements based on evaluation of the previously delivered training. This approach has not supported sustained capacity building in rural or remote areas. A provider who has been contracted to deliver training in Upington for twelve months, for example, will probably not open an office or establish a permanent presence there. On the other hand, if the commitment was for three to five years, building capacity locally could well be a part of that commitment.

These consequences were not envisaged either by those responsible for the skills development (planning) or NQF (quality assurance) nor by public finance management regulators.

4. A STRENGTHENED, EXPANDED AND DIVERSIFIED COLLEGE SECTOR

4.1 THE CHALLENGE FACING THE COLLEGE SECTOR

We need more provision. However, there is considerable danger that, as in many other countries, post-school education may be seen as a way of postponing the problem of high unemployment rates. We need to be clear that there is a sound educational, developmental, social and economic rationale for our post-school system. We have not yet fully developed a clear national vision for what types of providers there should be, and how gaps in the current system can be filled.

The biggest problem facing the post-school system as a whole is the weakness and small size of the college sector. This Green Paper argues that by 2030 we must have a substantially expanded college system. But expansion without realistic opportunities for success benefits no one, least of all disadvantaged learners. Expansion should not be driven by an unrealistic desire to create an immediate and short-term lowering of youth unemployment levels, important as this may be. Expansion must be based on a realistic assessment of current capacity and an analysis of what types of provision are likely to benefit learners. Expansion of provision must be targeted, focused and carefully planned if it is not going to undermine what we already have.

The first step will be strengthening existing institutions, ensuring that the regulatory framework supports both emerging and established institutions and diversifying and increasing institutions where necessary. Ensuring substantial improvements in throughput will already expand the pool of qualified people leaving the post-school system. The next step will be phased expansion and diversification.

Private provision of education at all levels of the post-school system will play a complementary role in ensuring an expanded and diversified system. The regulatory system must be streamlined, to ensure that accreditation and quality assurance requirements strengthen educational institutions, without becoming barriers for them.

Improving the co-ordination of funding is also key to building and expanding the college sector. There are three main sources of funding for the post-school system. The first is money which is transferred to institutions directly from the fiscus. The second is money which is provided through the levy-grant system. The third is student fees, assisted in many instances by the National Student Financial Aid Scheme. Currently the systems and approaches for disbursement of funds from the first two sources have not complemented each other well. Funding must be allocated in such a way as to ensure that the available mechanisms are used to support provision that has been identified as both national and sectoral priorities. This does not suggest that other provision will not take place but rather that the combination of funding from the fiscus and the levy-grant scheme will focus on steering priorities. It is anticipated that other programmes (such as

short courses) which may meet immediate needs but are not consistent with the priorities identified nationally (economy-wide or sectoral) will be privately funded.

Strengthening and then expanding the FET colleges will be a central part of building a larger and more vibrant college sector, and this is elaborated below, followed by a discussion on strengthening other public colleges, developing new institutions by strengthening public adult learning centres, and supporting private colleges. Finally, a new Institute for Vocational and Continuing Adult Education is discussed, as a key part of a long-term strategy to build institutional capacity in the college sector.

4.2 STRENGTHENING AND EXPANDING THE FET COLLEGES

4.2.1 An overview of the colleges

The FET colleges have evolved from technical colleges that primarily supported the apprenticeship system. They used to teach the formal education component of qualifications for artisans in the major industries in the country, including mining, construction, telecommunications, railways and electric power. Enrolment in these colleges was restricted to whites until the last decade of apartheid. The colleges represented a route through which those who did not complete their secondary education could gain an alternative qualification. Colleges also presented an opportunity for post-matriculation studies with the Report 191 N4-N6 certificates, which could, after 2 000 hours of work experience, result in the awarding of the National N Diploma. Over time, these colleges attracted students who had completed the Senior Certificate, either because they did not qualify for university or did not have the resources necessary to study at university. Restructuring of the college sector started in 2000. It resulted, by 2009, in the establishment of 50 multi-campus FET colleges, from a merger of 152 technical colleges.

There are high expectations of this sector as a central component of South Africa's skills development system. FET colleges must become institutions of choice for young school leavers, offering general vocational training as well as providing academic and theoretical education for apprentices. They must articulate with universities so that those who choose a vocational training route can later continue their studies at university level if they choose to do so. They must develop close ties to workplaces in the public and private sectors, becoming responsive to the needs of the employers in their surrounding communities, and offering tailor-made programmes where possible in addition to their core programmes. In line with NSDS III, colleges must develop close ties to SETAs, which will play an increasingly important role in linking colleges with employers.

And yet, as discussed above, most of our colleges are weak institutions. The DHET intends to put considerable effort into improving and strengthening them in order to be able to expand the sector in the coming years.

A key first step in strengthening our colleges is to differentiate between the stronger and weaker institutions, in order to provide appropriate support and leadership to both. Autonomy for institutions may not achieve the desired goals if institutions do not have sufficient capacity to manage themselves. The DHET intends to create a formally differentiated system, with some college councils being given greater functions than others. Those colleges which have the capacity to govern themselves will be encouraged to do so, and their councils will have greater powers. Weaker colleges will

be steered and supported centrally to a greater extent and their councils will have more limited powers until the colleges develop the necessary capacities and systems. Norms and standards will be created for key areas, which will apply to all colleges.

Key short-term steps to improve throughput rates will include lecturer training, particularly in subject expertise, and allowing colleges to select the students most likely to be successful while strengthening their ability to do so. In the long term, centrally designed admission tests may be an important tool to ensure that only students with a reasonably good chance of success are admitted, and that bridging programmes are designed to assist where necessary.

General management capacity development, including in areas of planning and budgeting, has already started and will continue to ensure that management can provide appropriate leadership for colleges. Within three years, specific programmes to train existing and new college managers also have to be developed.

Colleges must develop integrated operational and strategic plans in order to be in a position to effectively utilise funding coming from the fiscus, the SETAs, employers and other sources. Where necessary, the DHET will assist those colleges which need assistance in developing the necessary skill and systems. Important here are conditions of employment: uniform employment conditions for college management personnel will be developed following the completion of the transfer of colleges to DHET. The DHET will ensure that there is sufficient up-to-date equipment and that it is budgeted for and procured on an ongoing basis. Planning must be college-wide, and workshop facilities must be available for all programmes.

In order to provide a framework for this work, further detail is provided below on the role of FET colleges, improving teaching and learning, student support, relationships with employers, and information management. This is followed by a discussion on the expansion of the FET colleges, followed by a section on funding.

4.2.2 Role of FET colleges: programmes and qualifications

One factor which has played a role in preventing the strengthening of the college sector has been regular changes in their mandate. We hope that the role defined for them below is broad enough to prevent this, but narrow enough to enable them to be built and supported as focused institutions with a clear purpose.

Our vision for the public FET colleges is one of vibrant institutions that offer vocational and occupational qualifications, mainly to young people (16 to 24 years old). They will be the primary sites for vocational skills development for artisans and other occupations at a similar level in areas such as engineering, construction, tourism and hospitality, business administration, early childhood education. Our vision is for colleges to primarily offer two types of qualifications:

- general vocational qualifications (the NCV); and
- more focused occupational programmes in which they will primarily offer the theory components of both trade and non-trade programmes, (including apprenticeships and learnerships) as well as where necessary the practical training component of the particular qualification or award.

The two main types of qualifications currently offered in the college are the National Certificate (Vocational) and the Report 191 programmes and qualifications, also known

as the N courses. The latter are the theoretical component of apprenticeships (although many students enrol for these courses without being able to get an apprenticeship contract with an employer). The NCV was introduced in 2007 and is offered at NQF levels 2, 3 and 4 in public FET colleges and some private FET colleges. It was introduced around the time that the N courses were being phased out of the colleges, with the introduction of learnerships, and the intention of the then Department of Labour to abolish the old apprenticeship system, of which the 'N' courses were part. The intention of the Department of Labour at that time was for the new learnerships, based on unit standards-based qualifications, to replace the apprenticeship system which included the N courses as an integral component. The Department of Education then introduced the NCV as a general vocational qualification. It was composed of: three fundamental subjects (Language, Mathematics or Mathematical Literacy, and Life Skills), three core vocational subjects within one of 14 sub-fields, and one vocational elective offered at NQF levels 2, 3 and 4.

Success on the NCV is generally poor, as demonstrated by the 4% throughput rate of the 2007 cohort which completed the qualification in 2009. The drop-out rate in colleges is estimated to range between 13% and 25% per annum, the highest levels being evidenced in Level 2 of the NCV. The net certification rate of the N courses has, over the years, remained consistently poor at around 12%.²

The NCV was introduced to offer learners who had completed Grade 9 an alternative pathway to intermediate occupations. However, preliminary research suggests that the NCV attracts a large proportion of school leavers who have completed Grade 12, as did the N programmes. It is estimated that more than 50% of students who enrolled in FET colleges in 2009 had completed Grade 12. The NCV thus seems to have a dual role – as a parallel (vocationally oriented) qualification to the NSC, taking students predominantly after they exit school at Grade 9, and as a post-secondary qualification. There are various problems with this. Particularly problematic is that lecturers are teaching two very different cohorts of students in the same classrooms: those who have done Grade 12 and those who left school as early as Grade 9.

The NCV curriculum is currently under review, with a view to strengthening it as the main route for general vocational education. The DHET is committed to the NCV. The value in general vocational learning is that it strengthens young people's broad educational capacities – the ability to communicate well, to learn through the medium of a chosen language, and to use basic mathematical skills – while allowing access to learning in a hands-on way about areas identifiably related to some aspect of the working world. A successful review will need a clearer sense of the purpose and target group of this qualification.

There are three potential options here:

- **Option one:** The NCV should be aimed primarily at students who have completed Grade 9. The curriculum may need to be simplified.
- **Option two:** The NCV should be aimed primarily at students who have completed Grade 12, with additional entrance requirements for specific programmes. The curriculum could be strengthened in certain areas.

² The net certification rate refers to the number of candidates who meet all the requirements for the award of the qualification as a proportion of all the candidates who wrote the examinations for the qualification.

- **Option three:** Two types of NCV programmes should be developed, an extended one aimed at Grade 9 learners, and a shorter one for those who already have a Matric qualification.

The second and third options seem to make more sense than the first, given the very high failure rates at present, and given the limited opportunities available for learners who have a Matric but who do not qualify for university entrance. The second option does not address the needs of Grade 9 learners who leave school. One solution may be to direct these learners to technical high schools, where they can finish their Matric, or even possibly undertake the three-year NCV. Clearly, technical high schools must complement FET colleges, regardless of the options agreed on; however, they are beyond the scope of the DHET, and hence this Green Paper. Another possibility, particularly for young people over the age of 18, could be through the National Independent Certificate, and the National Senior Certificate for Adults (NASCA) – which could be offered in FET colleges and/or public and private adult learning centres.

Attention also needs to be given to additional programmes beyond the NCV 4, in areas which require higher levels of specialised knowledge. Although Umalusi's statutory responsibility currently stops at NQF level 4, it has proposed that the NCV 5 (for which no curriculum has yet been developed) become part of the General and Further Education and Training Qualifications Framework. This important qualification must be developed in the coming years. It could be the case that the revised N4-6 courses play this role, or that two level 5 qualifications could be developed.

A serious problem facing students who have completed the NCV is that universities do not normally admit NCV graduates, even if their marks are good, unless there is a specific agreement between a particular university and the FET college where the student completed their NCV. This is another matter that the review of the NCV must consider as it is unacceptable for any qualification to be a dead end which cannot lead to further qualifications.

As discussed above, until recently it was expected that the N courses would be phased out by 2012 and replaced by NCV programmes. However, the new DHET has extended the life of these programmes until the N courses are reviewed, as the apprenticeship system has continued in parallel to the learnership system. It seems clear, as a result of a Skills Accord between government, business, labour and community representatives – brokered through NEDLAC – that there will continue to be a need for the colleges to offer programmes which constitute the theoretical component of apprenticeships that are being revived and strengthened. However, while some work has been done to improve the N1-N3 courses, considerably more will be required in order for the colleges to continue to support apprenticeships. This should be considered within the context of the development of the occupational qualifications as it may be that the theoretical component of these new qualifications will replace the N programmes. In this case, the FET colleges will have to offer these new theoretical programmes, as well as some of the practical components of the occupational qualifications. This suggests that Umalusi, which quality assures the N1-N3 qualifications, will have to work with the National Artisan Moderating Body and the QCTO to ensure that either the revised N courses or their replacements fit into the Trade Test system. There is also an urgent need to review and replace or improve the N4-N6 programmes and the National N Diploma, which is currently not quality assured by any of the Quality Councils.

Colleges also offer other NQF qualifications, skills programmes and short courses, in conjunction with SETAs or simply as programmes where learners pay fees. Where employers want colleges to offer short courses and are prepared to fund them, colleges should continue to offer them if there is sufficient capacity, and where this does not

detract from the core work of the college. In fact, such arrangements should be encouraged. Colleges with strong capacity will continue to include flagship local and regional programmes as core offerings, as well as additional programmes the colleges wish to offer, in line with the infrastructure, equipment and resources available. Colleges with the capacity could also offer adult basic education and training, as well as the National Senior Certificate for Adults.

Where colleges have relationships with universities and universities of technology, these should be supported, encouraged and systematised. As they grow their capacity, colleges can become sites of delivery of Higher Certificates, under the auspices of universities. Working with the universities, colleges could also offer bridging or foundational programmes to students who wish to enter university but who require upgrading in particular subjects, especially Maths, Science and Language.

Finally, in addition to youth training, FET colleges must also provide further education and training for adults. This means that these colleges must be able to operate for longer hours, and be open more days in the week.

4.2.3 Strengthening colleges: lecturers

The single greatest challenge in improving and expanding the colleges is the capacity of lecturers, particularly their subject-matter expertise.

College lecturers in technical fields have, through the years, been recruited from industry. They usually possess technical qualifications as well as workplace experience and knowledge, but little pedagogical training. Many lecturers in academic subjects like Language, Mathematics or Science entered colleges with school teaching qualifications but little industry experience. Many lecturers are also college graduates who have completed their N6 courses, or graduates from universities of technology who have completed a National Diploma. Many of these lecturers have limited subject content knowledge and little if any workplace experience.

Teaching needs to be taken very seriously and a great deal of effort needs to go into improving its quality and supporting teachers at all levels of the post-school system. The DHET's funding strategies will support this. Over the past fifteen years there have been various interventions and capacity-building strategies aimed at the colleges, many of which have included lecturer development. However, a coherent strategy is only now emerging to address the development of college personnel, through the Teacher Development Chief Directorate. While universities have now started to accommodate the needs of colleges for qualified lecturers, these initiatives are still at an early stage.

In the short term, working with all relevant stakeholders, particularly universities, SETAs and industry, the DHET will ensure that existing lecturers are supported and, where necessary, obtain further training, and that the development of large numbers of additional lecturers is fast-tracked. This could include, as an interim measure, importing experts from other countries to train lecturers in subject expertise, in cases where our universities and universities of technology do not have the requisite expertise.

The DHET has started discussions with universities and other role players to discuss long-term training of college lecturers. This will include commissioning research to understand the achievements and failures of previous lecturer training initiatives, and research into what subject knowledge and pedagogical knowledge lecturers need. In the long run, colleges themselves should play a considerable role in lecturer development through mentoring programmes, in much the same way that universities develop their

academic staff. Also, once it is established, the South African Institute for Vocational and Continuing Education and Training discussed below, will play an important role in this regard.

Another aspect of lecturer development requiring urgent attention is keeping college lecturing staff in touch with workplace environments. Towards this end the DHET and the SETAs will encourage and assist colleges to establish partnerships and linkages with employers to ensure that all lecturing staff are given adequate and ongoing workplace experience.

Equally important, the DHET will also revisit conditions of employment for lecturers to ensure that working in colleges is an attractive and stable career. The FET Colleges Act (No. 16 of 2006) stipulated that educators at FET colleges are employed by the colleges and not by the provincial departments of education. The principals and deputy principals continue to be appointed by the provinces in terms of the Public Service Act (No. 103 of 1994). The intention behind this move was to enable flexibility in deployment of staff, allowing colleges to be responsive to a variety of needs. However, it has had many unintended consequences. One was that the change of employer from the state to the College Councils caused an exodus of around 12% of college lecturers who did not have confidence in their council as an employer and preferred to stay in the employment of the state. Another is a tendency for college staff to be hired on short-term contracts, linked to learner enrolment for specific short-term programmes. This is clearly contrary to any notion of long-term professional development for lecturers. On the other hand, we do not want to revert to a system where college lecturers are employed as, and treated as, teachers. Colleges must be able to deploy lecturers when and where they are required, including for evening and weekend work, for teaching on both NCV and N courses, and for particular courses to meet the specific needs of employers and communities. Thus, assisting colleges to find appropriate ways of employing lecturers will be a key focus of the DHET in the coming years.

4.2.4 Strengthening colleges: learner support

Learner support can take various forms. A number of these are discussed below.

Foundational and bridging programmes: Working with senior college staff and other experts, the DHET will develop the curriculum for foundational learning programmes for students who cannot meet the demands of college programmes. These could be linked to the National Senior Certificate for Adults, but the details need to be explored further. Bridging programmes will also be developed in key areas, to assist students to move into areas where there is high demand for skills in the economy, and into higher education where appropriate.

Student support services: Although there have been improvements over the last few years, there is currently still insufficient focus on providing support services for students in colleges. This must be addressed and funded. Services must include academic support, social support, vocational guidance, assistance for students to obtain workplace placements for practical experience during the course of their studies, and job placements on conclusion to allow an easier transition from college to the workplace.

Financial support: In the main, colleges serve the most disadvantaged students. Further, given the national imperatives with regard to increasing artisanal and other mid-level skills, financial support for students is vital. The NSFAS has recently been extended to students in FET colleges for the first time. The DHET will enable students to

enrol in these institutions without having to pay large fees, and has already taken steps in this direction with the abolition of fees for those students who qualify for assistance from the NSFAS. As funding becomes available, the DHET will progressively remove fees for all students in NCV programmes. As of 2011, the NSFAS allocation for FET colleges has been increased from just under R400 million to approximately R1.2 billion. This means that every student who qualifies under the NSFAS means test is eligible for a bursary if doing NCV or N programmes.

Flexible delivery: Over time the FET colleges will endeavour to become user-friendly by utilising a variety of delivery mechanisms. These should include components of distance education, mixed-mode provision, block-release provision, and evening and weekend classes to make access easier for students in a wide variety of circumstances.

4.2.5 Improving relationships with employers

Relationships between colleges and industries are, with some exceptions, weak. It is estimated that approximately 65% of students at colleges are unable to find workplace experience, which is required to complete N diplomas but valuable for all students. Most colleges have almost no formal linkages with industry, except where they are offering apprenticeships, learnerships or other skills programmes that have inherent practical workplace requirements. Unfortunately there is little interaction between the staff offering such programmes and the staff offering the main college qualifications. There is, however, evidence that SETA-sponsored partnerships between colleges and employers have been increasing since the adoption of NSDS III. This will be encouraged and strengthened, and built into the overall post-school system.

FET colleges will be encouraged to build partnerships with private providers to offer certain programmes where this is felt necessary. These partnerships, however, must use the strengths of both public and private partners and should help to build the capacity of the public colleges. Under no circumstances should SETAs accede to a situation where public colleges are reduced to mere agents in an arrangement where the actual training is provided by the private partner while the public college only earns a fee as a middle-man.

4.2.6 Improving information management

Central to strengthening the colleges as institutions is improved information to support management decision making. In order to provide this, the DHET will substantially improve data collection and management at both national and college levels, especially in the following areas:

- lecturer qualifications and competencies;
- financial status of colleges;
- student registration and assessment results;
- infrastructure and equipment, to determine capacity to deliver programmes and sub-system growth;
- student needs and support requirements;
- employer demand for vocational and occupational programmes.

The DHET has started to address urgent needs in a number of areas, including analysis of the following: progression and success in the sector in order to establish baselines (differentiated across subject areas and localities); performance in specific subjects nationally and across colleges; cohort progression, including the numbers of courses

that learners are "carrying"; the quality of passes; relative performance of students across different colleges and campuses; overall passes from year to year; and extent of repetition. In the light of the extensive nature of the data and information requirements and their related management processes, it is important that the DHET establishes a single information management system with a single information standard for all FET colleges and campuses. Data on private colleges should be collected and analysed in the same system. This information should be available at both college and departmental levels, and should be integrated into a comprehensive post-school information system which is discussed further below.

4.2.7 Increasing enrolments

The DHET's vision is that over the next twenty years we will dramatically increase the number of students enrolling in the FET colleges, to address the acute skills shortages of the economy and the learning needs of individuals. This includes students enrolled in the general vocational programmes (resulting in an NCV), in apprenticeship programmes, and in other occupational programmes. Some of these students will be full-time while others will be apprentices attending college for a few months a year or studying part-time on various short courses.

One option for expansion in the short term would be to expand provision of relevant short courses. Another would be to allow colleges to offer general programmes for adults, like the National Senior Certificate for Adults, and even adult basic education and training.

Most colleges may not be in a position to massively increase their enrolments immediately. Colleges with more capacity will increase enrolments in the short to medium term. It is estimated that 20% of colleges are reasonably able to meaningfully increase enrolments immediately. Those that cannot do so need to be supported and plans developed to ensure that they can also increase enrolments over time. This will include infrastructure development, strong mentoring and coaching for management and teaching staff, and development of management's financial and planning capacity.

The DHET is currently undertaking an audit of infrastructure, equipment and staff of all public FET institutions to establish which colleges can immediately increase their enrolments and those that will grow over time. This, together with more detailed labour market information, including local-level information, will lead by the end of 2012 to a broad indicative plan for a twenty-year expansion of FET college enrolments. This will include the establishment of new FET colleges and campuses, located in the areas of the greatest need for both students and employers.

Central to this planned expansion will be, over the next five years, a massive expansion of lecturer development for the colleges, as discussed above.

DHET strategies must always keep in mind that the rapid expansion of an education system carries with it dangers that quality will be compromised in the process. It is not enough to expand enrolments in the college system without simultaneously ensuring that the quality of the education and training that is offered is up to date and of a high quality. This will ensure that throughput rates – and therefore the output of qualified students – is maximised and that wastage of valuable resources is minimised.

4.2.8 Funding

Strengthening and expanding our FET colleges must happen through efficient use of allocations from the fiscus, through sensible use of the levy-grant institutions' budgets, and through creative partnerships with the private sector. Funding modalities should be focused on building strong institutions to enable responsiveness, quality and long-term sustainability.

Funding for FET colleges from the fiscus is regulated through funding norms. Funding has been based on a post-provisioning model which distributes lecturers to each province on the basis of weighted full-time-equivalent (FTE) students, in which the weight depends on the type of programme. Non-personnel costs are allocated on the basis of simple FTE-based formulas which vary from province to province.

There are other problems in the current system. In the past funding has been allocated by the provinces, although the function will soon be shifted to the DHET. There have been various teething problems with the current systems. Firstly, there is insufficient capacity to monitor closely whether the provincial education departments spend appropriately the allocations that they receive for the FET colleges in the form of conditional grants. Secondly, pressure is created by unfunded enrolments which result from colleges getting permission to enrol 15% more than their budgets where there is high demand for a programme.

Another problem has been funding for the NCV versus the N courses. From 2008 programme-based funding was geared to the NCV, and not the N courses. Based on the intention of the Department of Labour to completely phase out apprenticeships, N programmes were in the process of being phased out, and by 2010 they were no longer on the list of ministerially approved programmes and therefore could not be funded. Colleges with a relatively large number of N courses were thus disadvantaged by the new arrangements and had to run those courses with funding from student fees or from employers who wanted the courses for their apprentices or learners. With the new recognition that the apprenticeship system will remain, this has now changed, and all N programmes (N1-N6) are fully funded to allow colleges to continue offering the theoretical component of apprenticeships.

A difference in the financial years between colleges and the fiscus poses another challenge. Colleges enrol students at the beginning of the calendar year which they fund from the allocations that were based on the previous year's enrolments. If a college suddenly gets a large increase in enrolments, the funds for operational activities become inadequate in the first three months of the calendar year, before the allocations are adjusted. Some colleges are operating at a deficit. In most colleges, personnel commitments exceed their programme funding allocations, and some have staff complements far in excess of the values required by the funding norms.

A major problem is a lack of relationship between money from the fiscus and money from the levy-grant system. The learnerships and skills programmes (short courses funded by SETAs or employers) offered at FET colleges are also not catered for in the funding norms. Many colleges operate what is in effect a dual system, with some staff paid for by the fiscus via the funding norms, and others employed through funds obtained from the SETAs. These staff members teach entirely different programmes, and have no relationship with each other. This means that many of the programmes offered as part of a partnership programme with industry have little impact on the capacity of a college to offer its core programmes. Or worse still, it impacts adversely

where students attending programmes paid for privately have greater access to resources, and therefore practical training, than those undertaking the NCV.

Finally, the notions of cost recovery that underpin the current funding model need to be balanced against the need to dramatically increase enrolments in the coming two decades, especially in view of the fact that the target market consists largely of unemployed and disadvantaged learners.

In order to stabilise and strengthen colleges, the DHET must do the following:

First, the problems with wrong allocations and under-allocations must be resolved immediately.

Second, the funding approach for colleges must be revised to allow for some core funding. Basing funding only, or mainly, on the basis of learner enrolments is inappropriate, especially in weak institutions which are still expected to grow and diversify. Core funding is essential if colleges are going to be strengthened and stabilised, and if we are going to enable them to become responsive and dynamic educational institutions. This should include funding for staff, infrastructure and student support services. How this will be balanced relative to funding based on learner enrolment must be investigated by the DHET. A key principle to guide this process is that colleges must have a substantial core of their staff on long-term contracts.

Third, revised funding norms and standards must take into account money directly from the fiscus as well as money from the levy-grant system. Our funding model must allow for the same staff to teach across programmes, and SETAs must fund programmes at full cost. SETA-college partnerships must be developed mainly on the basis of training leading to occupational qualifications or legitimate upgrading for skilled or semi-skilled workers, and not on the basis of short courses which do not lead to qualifications. Too much focus on short-term contracts has the potential to turn college managements' attention away from their substantive educational work and into chasing tenders.

Fourth, funding for bridging programmes must be provided by the state.

4.3 OTHER PUBLIC COLLEGES

Many government departments have direct responsibility for post-school education and training through colleges, academies and other institutions training public service workers. These include: institutions under the national Departments of International Relations and Cooperation, Correctional Services, Defence, Police, Water Affairs, the Intelligence Services, and others. The Public Administration, Leadership and Management Academy (PALAMA) provides training across the public service. In addition, training institutions are operated by provincial governments and municipalities.

Government colleges also offer training in the fields of nursing and agriculture, some, but not all, of whose graduates go on to work in the public sector. However, some public colleges have been closed over the past fifteen years, and many others remain weak. These colleges are all currently controlled by their respective departments, but also have to comply with quality assurance institutions and the NQF, which has not always been straightforward.

Relationships between these various colleges and other public institutions are very weak. The DHET intends to build more coherent relationships with public colleges under other government departments. The first step will be a close engagement with the departments in question, specifically to explore the type of relationship between them and the DHET with regard to their colleges. This is especially relevant to the recognition of qualifications, quality assurance and staff qualifications. The DHET will suggest two possible options for strengthening these colleges, and rebuilding or reopening colleges, as part of a coherent post-school system.

Option one: Improving co-ordination between the DHET and other departments responsible for colleges. This would include working to ensure possibilities for these colleges offering general education programmes like the NASCA or a specially tailored NCV, and ensuring that quality assurance arrangements meet the needs of the different departments.

Option two: Shifting responsibility for some or all of these colleges to the DHET, but retaining a close relationship with their former departments, particularly regarding curriculum. The advantage of this option is that it would allow more coherence in the post-school system as a whole. For example, it would enable these institutions to, for example, offer the NASCA or other programmes, as part of a more vibrant college sector. This may enable a more rational use of resources – for example, where there is only one post-school institution in a particular geographical area, it could offer more than one type of programme.

Whichever option is adopted, the priority is developing a coherent framework that allows these colleges to fit into the post-school system to ensure greater coherence and articulation possibilities. It also allows us as a country to assess the participation rate in the post-school system as well as to gauge how these can be linked to the human resource development needs of the country.

4.4 COMMUNITY EDUCATION AND TRAINING CENTRES

4.4.1 Overview

South Africa has a long history of finding innovative ways to provide adults with opportunities to learn. These range from the first workers' night schools started in 1919, to myriad popular education programmes that were a key feature of the liberation struggle and sectoral organisations. These initiatives provided adults and young people with literacy, numeracy and communication skills, and developed their capabilities as individuals, sectors and communities to contribute towards social change and social justice.

Building on these experiences, the post-1994 education and training framework embraced the concept of lifelong learning, recognising that learning takes place throughout a person's life and in many forms. With regard to adult learning, this approach has taken the form of efforts to eradicate adult illiteracy through various campaigns. More specifically, since 2007 there has been the *Kha ri Gude* campaign as well as the provision of adult basic education in Public Adult Learning Centres (PALCs). Adult and youth learning also takes place through a variety of non-formal community and popular education initiatives and projects, run by community-based organisations (CBOs), trade unions, social movements and government departments.

Public Adult Learning Centres are the only directly funded institutions that offer general education to adults. Currently there are over 3 000 centres across the country, which serve about 265 000 learners – a tiny fraction of the adults who have need of education and training. These centres may operate from public schools, community centres or other institutions. They are focused on offering adult basic education and training (ABET) qualifications, including the General Education and Training Certificate for adults, a qualification issued by Umalusi and assessed by the DHET. There is no core curriculum and there is insufficient standardisation of assessment across provinces.

Many learners who study at adult learning centres are enrolled for secondary schooling, and write the Senior Certificate examinations, although these numbers have declined significantly since the National Senior Certificate replaced the old Senior Certificate. This suggests that very few adults move up from ABET level 4 (equivalent to NQF level 1) to the next level, and that most learners enrolled for Grade 12 are school drop-outs or people who want to rewrite the Matric examinations. Public Adult Learning Centres are currently the only state provision for this purpose. Very few of them have the capacity to offer the newly developed NASCA, and this capacity needs to be built as the NASCA is more suitable for adults who are not just repeating a recently written NSC.

There are also private adult learning centres. This is a difficult group to categorise, as many providers have a diverse range of offerings which may include (consistently or inconsistently) formal provision towards the ABET GETC at NQF level 1. The DHET lists as private adult education centres those that function similarly to the public centres, including non-governmental organisations (NGOs) and community-based organisations. However, there is currently no national register for private adult education and training centres and this needs to be developed.

The majority of teachers in public and private adult learning centres are part-time contract workers without tenure, leaving the sector without a hub of permanent professionals. This severely affects long-term planning. It also has serious career development implications for educators, and affects the learning paths of learners. Most learners in the sector study part-time, a relatively slow learning process which requires long-term management and planning.

4.4.2 A vision for community education and training

The current system of provision for adult learners and young people who dropped out of school before completing is inadequate. Firstly, the exclusive focus in the current ABET approach on general education often means that programmes fail to attract large numbers of adults and young people interested not only in completing their schooling but also in gaining labour market and sustainable livelihoods skills, as well as those interested in learning for general self-improvement or cultural and community development. In addition, it does not acknowledge or harness the vast potential for development and social cohesion that exists in the various community and popular education initiatives.

The community education and training approach to adult learning internationally seeks to facilitate a cycle of lifelong learning in communities, and offers routes to enable the development of skills, (including literacy and numeracy skills) to enhance personal, social, family and employment experiences. It further seeks to assist community organisations, local government and individuals to work together to develop and enhance their communities, by building on their existing knowledge and skills.

The DHET intends to absorb the Public Adult Learning Centres into a category of institutions provisionally named Community Education and Training Centres, which can cater for the provision of second-chance learning opportunities for out-of-school youth and adults. These CETCs will build on the current offerings of the existing PALCs, which offer general education programmes and could also offer knowledge and skills leading to sustainable livelihoods outside of the formal sector. They will be a diverse set of institutions, including public, private and community-owned establishments. A key issue to address will be the articulation and partnerships between these institutions and others in the post-school sector. These institutions will help create an expanded and strengthened post-school system which is integrated but diverse.

To assist in this process, a Task Team has been established to look into alternative institutional forms to address the needs of out-of-school youth and adults. Among other things, it is considering the scope and the policy and legislative implications of new institutions. It will investigate and eventually recommend relevant programmes that could be offered by CETCs. It will also explore funding modalities and governance mechanisms which will feed into the policy development and planning activities of the DHET.

The first step in this process is to identify the strongest PALCs, colleges under other departments, and FET colleges which could play some role in offering general adult education programmes as well as training and orientation for sustainable livelihoods. The second step towards building these institutions would be creating an institutional identity, providing core funding, and employing at least a core of educators on long-term contracts. These institutions would initially offer ABET and the National Senior Certificate for Adults, but would gradually increase to other offerings, such as skills and other programmes meeting local needs.

4.4.3 Funding

Public Adult Learning Centres are currently funded on a model based on learner enrolment. New Norms and Standards for Public Adult Learning Centres were published in December 2007, have been subjected to public comments, and were implemented in January 2011, although unevenly across provinces. As is the case for the colleges, the funding norms for Public Adult Learning Centres make provision for programme funding. One problem with this is that PALCs do not offer programmes but learning areas. Another is that in very weak institutions funding based on learner enrolment does not allow for the building of institutional capacity. Changing this funding model to ensure some core funding, supplemented by programme-based funding, will be an important first step in the process of building PALCs into Community Education and Training Centres.

4.5 PRIVATE COLLEGES AND OTHER PROVIDERS

Despite problems with the data, as discussed below, it is clear that the private post-school system is substantial and is expanding. A variety of organisations and institutions offer education and training outside of the formal post-school system in South Africa. This includes community-based institutions, non-governmental organisations, training entities located in companies, faith-based organisations, and for-profit private providers. These institutions provide an array of certified and non-certified training. Some of this is of a general nature, some leads towards national qualifications, and some is focused on

specific community, employment or self-employment-related needs. It includes full-time study, part-time study, ongoing professional development, short focused courses, courses contracted by employers, and less formal provision.

The most popular type of formal qualification offered by private FET institutions are "occupational" (SETA-accredited) qualifications, followed by the Report 191 N courses and NCV programmes. The most popular field of learning for private FET institutions offering the N courses is Business, Commerce and Management Studies. The most popular occupational (SETA) qualifications offered by private FET institutions appear to be in Physical, Mathematical, Computer and Life Sciences (especially Computer Science), and Business, Commerce and Management Studies. The highest enrolment at private FET colleges is from African students, but a comprehensive demography of the student population at private FET colleges needs further investigation.

Some providers offer adult education. For example, there are long-established NGOs at national level, as well as many regional and community-based ones, that have championed literacy and developed various approaches. Some of them have partnerships with adult education units in universities. Some provide language courses. Some provide courses meeting the needs of specific workplaces. Many providers do not have a consistent set of learning programmes that they offer. This could be because they design customised courses on a needs basis, or because their provision is determined by demand from clients. Providers who develop very specific fit-for-purpose courses, whether for community needs or for employment needs, have frequently found the unit-standards-based programmes inappropriate for their needs. Some niche providers with regular course offerings leading to their own certificates have experienced similar problems.

These institutions and organisations are funded from a variety of sources including government grants, client contracts, tenders, donor funds and learner fees. Institutions which are formal providers make use of different types of formal, legal registration including the following: company for profit, company not for profit, trust, close corporation. Many of these organisations are not primarily education and training organisations. For example, youth development organisations may include education and training as one component of the work that they do with youth.

This diversity of institutional configurations does not lend itself to easy accountability systems, and our current quality assurance regime has not done justice to these providers. Those institutions which have fitted in most easily to quality assurance systems generally offer similar qualifications to those offered in public institutions. They tend to be large, in most cases for-profit institutions, which offer formal qualifications or courses aligned to unit standards. However, the multipurpose nature of many of these institutions has sometimes meant that they are subject to complex accreditation requirements from different quality assurance bodies. For example, a provider can be "accredited" by one SETA ETQA and have some of its programmes "approved" by another ETQA. It can also deliver training that is quality assured by Umalusi or the HEQC. Some providers have found the quality assurance systems difficult to comply with because of implicit or explicit expectations from quality assurance bodies that courses should lead to unit standards or qualifications registered on the NQF.

While the levy-grant system has in some instances increased the possible resources available for providers, this has usually been at the cost of fitting into the qualifications framework and quality assurance system, even where this is manifestly inappropriate. Choosing not to apply for accreditation with a quality assurance body, failing to obtain accreditation, or giving up during the process of attempting to obtain accreditation has led to financial difficulties for many providers, as lack of accreditation makes it difficult for

them to apply for government and even international donor grants. In some instances employers who contract specific courses struggle to get their rebates back from the SETAs if the providers are not accredited. This poses particular challenges to institutions and organisations that must be non-formal and/or responsive to specific community, learner or employer needs, in a context in which there has been a steady loss of donor funding for educational and other non-governmental organisations.

The NSDS III allows SETAs and the National Skills Fund to support institutions that offer programmes and courses that are aligned to their aims including those that support workplace-based training. The NSF may also support the provision of professional development which does not necessarily lead to formal qualifications where such courses play a useful role in line with the NSDS III. Not all education has to be on the NQF, and not all quality education has to lead to qualifications.

Data on private providers is dispersed in various institutions and locations, making it difficult to build a coherent picture of provision, to eliminate duplications and overlaps, and to verify information across sectors. Furthermore, authorities (including the Quality Councils, quality assurance bodies, the DHET, and SAQA's National Learners' Records Database) conduct little regular analysis of the data they obtain from institutions, and do not have data easily or readily available for analysis. Data management in general appears to be weak. The DHET's Management Information Support Unit is starting to address this problem. While SAQA's data is arguably the most reliable, there are major gaps in respect of the datasets available for uploading. The DHET's Further Education and Training Management Information System (FETMIS), for example, is completely excluded from SAQA's current data, as is Umalusi's data. Problems with data collection and management of providers require urgent attention. Further studies must be undertaken in order to fully utilise the capability of the private post-school sector to contribute to the needs of out-of-school youth and adults.

4.6 SOUTH AFRICAN INSTITUTE FOR VOCATIONAL AND CONTINUING EDUCATION AND TRAINING

The Minister of Higher Education and Training intends to establish an Institute for Vocational and Continuing Education and Training. There is clearly a need for an institution to support the FET colleges and the development of the skills system, as well as the provision of general education to adults. A number of countries have such institutes which function very effectively to the benefit of vocational training. The DHET will examine these before developing a model for South Africa.

The types of activities the proposed institute could engage in include the following:

- Develop curriculum for FET colleges and adult education colleges, and ensure that curriculum development is institutionalised with long-term capacity. This would include continuously updating and improving the quality of FET programmes.
- Become a centre of excellence for research and innovation in the FET sector and possibly the levy-grant institutions.
- Undertake and promote research in the areas of teaching and learning in vocational and occupational programmes.
- Undertake and promote cutting-edge research for the progressive development of vocational and continuing education as a whole.
- Advise the Minister on vocational and continuing education at national level.
- Develop materials for college programmes.

- Develop materials for career guidance.
- Develop capacity and upgrade teaching staff skills in vocational and continuing education.
- Provide management training to the vocational and continuing education sector.
- Provide management training at all levels for SETAs.
- Promote dialogue between colleges and between colleges, employers and SETAs.
- Interact with professional councils and promote dialogue between them and education and training institutions, the levy-grant institutions and the DHET
- Conduct and promote labour market research.

A thorough feasibility study will be carried out soon in order to provide a clearer conceptualisation of and plans for the Institute. The identified functions may need to be phased in over time as the Institute grows and gains capacity.

5. WORKPLACE-BASED LEARNING

Most successful vocational or occupational learning takes place as a result of an integration of theoretical learning, workshop-based practical learning, and learning in the workplace. Thus, the DHET will place significant emphasis on workplace-based learning as well as on the promotion of work-integrated learning.

Employers need to take responsibility for developing their employees, both existing and potential, and the SETAs must play a role in facilitating and funding this wherever appropriate. There must be much better collaboration between organisations. The system must encourage employers to do more internally but also to collaborate. The government is now working through NEDLAC, other government departments, state-owned enterprises and other channels to re-establish and extend the central role that employers play in providing on-the-job training for skills development, especially through apprenticeships, learnerships and internships. The state-owned enterprises are particularly important in this respect, given the central role they played in training artisans in the past. Rebuilding the training capacity of the state-owned enterprises must be a priority for South Africa.

It is evident that state-owned enterprises, workshops of the Department of Public Works, government departments and state programmes such as the Extended Public Works Programme and all public infrastructure projects must play a more direct role in expanding workplace-based training. The public service should be a training space. It has the potential to absorb large numbers of young people for internships, learnerships and apprenticeships, as well as providing work experience for FET and university graduates. This should be assisted by government departments' payment of the skills levy and the strengthening of the Public Services SETA (PSETA). In addition, it is essential that the private sector also play a key role in providing workplace-based learning, with the assistance of the SETAs where necessary.

Unnecessary requirements for accreditation for government departments offering professional development must stop, as discussed in the section on quality assurance below. Only providers offering national qualifications or awards should have to be registered. Government departments must also be made aware that alignment with unit standards is not a requirement for training, as this appears to be a common misconception.

6. UNIVERSITIES

6.1 OVERVIEW

The last decade has seen numerous changes to the university landscape. Firstly, there has been the development of new institutional types as the result of a series of mergers and incorporations. South Africa now has 23 public universities. These comprise eleven universities (in the traditional sense), six universities of technology (what used to be known as technikons) and six comprehensive universities (that combine the functions of traditional universities and universities of technology). The eleven traditional universities offer various formative and professional Bachelor degrees as well as a small number of diplomas and certificates at undergraduate level. Postgraduate provision consists of honours, masters and doctoral degrees as well as a limited number of postgraduate diplomas and certificates. The universities of technology offer a number of undergraduate diplomas that are vocationally oriented, as well as a Bachelor of Technology degree. Postgraduate provision at universities of technology is limited to a relatively small number of masters and doctoral programmes. Comprehensive universities offer a combination of traditional university and university of technology programmes.

Over and above the 23 public universities are the two institutions in Northern Cape and Mpumalanga which serve as administrative hubs co-ordinating higher education provision through partnerships with universities elsewhere. A decision has been made that these institutes will become universities. Two task teams have been appointed to assess what is needed for this to be achieved.

The 2011 preliminary student head count for the 23 universities was 899 120, which includes both full-time and part-time enrolments for contact and distance study. (The figure for 1994 was 495 356. This represents an increase of almost 82% since the advent of democracy.) Nearly two-thirds – 62% – of students are undergoing contact-based study, with the remainder enrolled in distance education. Of the distance education students, 83% are at the University of South Africa (UNISA). For 2009, 82% of the total head count enrolment was at undergraduate level, while 5% were masters students and 1% were PhD students.

Redress policies seeking better access for blacks and women have clearly worked (see Table 2). In 1994, 55% of students at public universities were black (African, coloured and Indian), 43% were African and 55% were male. By 2010 these figures were 80% black, 67% African and 43% male. While the number of Africans has increased substantially, the level is still smaller than the proportion of Africans in the population. The proportion of males however, has decreased dramatically and must be a cause of some concern if the trend continues. Note that only 60% of graduates were African, although Africans constituted 67% of all students. This higher drop-out rate and poorer academic performance is due, at least in part, to a lower quality of schooling in townships and predominantly African rural areas.

The Soudien Committee, which investigated the transformation and social cohesion and the elimination of discrimination in universities, found that discrimination, in particular with regard to racism and sexism, is pervasive in our institutions. The recommendation of that Committee for the creation of transformation compacts between universities and the DHET should be adopted. Such compacts should be based on the general commitments to the development of a culture of human rights that are made in the

Constitution and should ensure clear targets on problem areas identified by all important stakeholder groupings in the institution. The Minister is planning to establish a permanent oversight committee to monitor the transformation of university education. This committee should submit an annual report to the Minister, who should make the report available for public discussion.

Table B. Headcount enrolment and growth by race 2000-2010

	Actual enrolment											Average annual increase
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
African	317,998	353,327	377,072	408,235	453,621	446,945	451,107	476,680	515,058	547,686	595,963	6.5%
Coloured	30,106	32,900	37,906	42,390	46,091	46,302	48,538	49,001	51,647	55,101	58,219	6.8%
Indian	39,558	43,436	47,567	51,611	54,326	54,611	54,859	52,579	52,401	53,629	54,537	3.3%
White	163,004	173,397	178,871	184,964	188,714	185,847	184,667	180,435	178,140	179,232	178,346	0.9%

Headcount enrolments for the field of Science, Engineering and Technology (SET) has grown by 4.4% per annum between 2000 and 2009, and graduation rates in these areas have grown by 5.5% per annum, indicating improving throughput rates (see Table C). In fact, every year since 2002, the number of graduates in SET has exceeded the number of graduates in Education or the Humanities. Despite these achievements, South Africa is still not producing enough SET graduates to meet its economic development objectives.

Table C. Graduate output and growth by major field of study 2000-2010

	Actual graduates											Average annual
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Science, engineering, technology	24,136	24,995	26,630	29,546	31,443	33,499	35,555	36,429	38,820	40,973	41,156	5.5%
Business/management	19,912	22,590	24,217	26,954	29,327	28,144	30,108	31,062	31,871	33,788	40,751	7.4%
Education	15,568	18,737	21,487	24,242	29,253	29,054	28,554	28,337	29,636	35,532	37,665	9.2%
Other humanities	28,581	25,236	24,955	24,988	27,060	29,355	30,404	30,788	32,844	34,517	30,015	0.5%

Excludes 3098 grads with unknown fields of study

In contrast to SET, Humanities graduates have only grown by 0.5% per annum. Two recent reports on the Humanities have highlighted a deep malaise in the Humanities in South African universities. One of the reports, by the Academy of Sciences of South Africa (ASSAf), calls it a crisis while the other, commissioned by the Minister of Higher Education and Training, states that the humanities and social sciences 'could and should be a lot stronger in order to play the role it could be playing in the development of our society, our economy and our intellectual life.' After public comments on the latter report and discussions the Minister will be having with the Minister of Science and Technology, the government will act on these reports to ensure that these important branches of scholarship are strengthened.

6.2 DIFFERENTIATION

The need for a differentiated system of university education has long been recognised. Not all institutions can or should fulfil the same role. This has been reflected in the *White Paper on Higher Education* (1997) and the discussion document of the Council on

Higher Education (CHE) on the *Size and Shape of Higher Education* (2000), among other documents. The reasons include, among others: to enable institutions to find their niches in a way that enhances their ability to meet national needs; to provide a diversity of programme offerings to learners; to provide for flexibility and innovation throughout the system; and to increase overall participation rates in higher education in South Africa.

Although the university sector is very diverse, current education policy – particularly as it is reflected in the funding formula – has not successfully accommodated a differentiated system of universities. Our universities have diverse histories and this accounts, in part, for inequities in the system as well as the challenges that institutions face. The historical factors are related to both the pre-1994 period and the restructuring of the university system between 2000 and 2005. The differences within each category of institution (universities, universities of technology and comprehensive universities) are often greater than those between categories. This is largely the result of the legacy of apartheid which has resulted in the historically black universities and technikons – particularly those in the former bantustans – still suffering from multiple forms of disadvantage. The mergers further complicated the picture, creating single institutions with marked inequalities between campuses. In this post-merger period, structural and systemic challenges still need to be addressed.

Post-1994, government policy has attempted to strengthen higher education provision, working with the reality of the existing differentiated system. However, a number of institutions, particularly the historically black universities, remain underfunded and under-resourced. Infrastructure and materials provision remain inadequate. Research output levels remain poor. Staff tend to be less qualified than the average in the university sector, and staff numbers are insufficient for the needs of the institutions. In addition, the students that historically black, especially rural, universities attract are often the poorest students, and so fees are low and the rate of non-payment is high. These students are generally also the academically least prepared for university studies. Management and governance structures in some institutions are weak. Mismanagement and in some cases corruption continue to plague certain institutions.

The development of a differentiated system for university education must take cognisance of both historical inequalities between institutions and in some cases between campuses within institutions, as well as existing institutional types. Central to this process is the need to ensure a meaningful and sustainable role for the historically black institutions which takes into account their history, the particular academic and developmental needs of their regions, and their institutional ambitions for development.

At the other end of the spectrum, a few relatively research-intensive universities are responsible for most of the postgraduates in the system, and are engaged in cutting edge research and innovation. They are clearly a valuable national asset and must continue to develop their capacities. They could play a crucial role in terms of improving the weaker universities (by improving the national cadre of Masters and PhD graduates), as well as contributing to the economy and to society. However, their needs must not be allowed to divert attention from the need for all universities – and particularly the poorer ones – to have sufficient resources such as adequate libraries, laboratories and lecture rooms, and sufficient staff to fulfil their allotted functions as effective institutions in a differentiated system.

Despite differentiation, collaboration between universities on research projects as well as teaching and curriculum development initiatives, can be mutually beneficial to all and should be encouraged.

The following principles should be adhered to in creating rational and suitable differentiation among universities that is responsive to contextual realities, including history, policy, infrastructure and material conditions:

- Further categorisation of institutions should be avoided. The current categories are relatively new, are useful, and should remain. It would be unacceptable and cause unnecessary conflict to create further categories on the basis of the levels of teaching and research specialisation.
- A variety of institutions are required in order to ensure that the sector serves national interests. Important for any institution is to have a clearly defined mandate and to carry it out well. Undergraduate and postgraduate programmes as well as academic and professional or vocational programmes are equally important to the country. The knowledge hierarchy that they represent should not be interpreted to represent a hierarchy of importance. The university sector should comprise a continuum of institutions, ranging from specialised, research-intensive universities to largely undergraduate institutions, with various levels of research focus and various postgraduate niches at masters and/or doctoral level.
- The mix and level of programmes offered at any institution should not be fixed, but should be capable of being developed over time to take in more or fewer postgraduate programmes or new disciplines.
- Whatever else they do, all universities in South Africa must offer a high-quality undergraduate education. This should be the first step in overcoming historical injustices inherited from apartheid and should also lay the indispensable academic foundations for students who wish to go on to postgraduate studies. Universities should be supported in offering and mainstreaming four-year undergraduate degree programmes where necessary.
- The university system must become an integral part of the post-school system, interfacing with FET and other vocational colleges, SETAs, employers, labour and other stakeholders. Such co-operation should be taken into account in the development of an institution's programme mix and planning.
- Differentiation needs to be accompanied by a funding regime that does justice to current individual institutional realities, and accepts the need for redress funding in the poorly resourced institutions, particularly for infrastructure, the establishment of effective administrative systems and the upgrading of staff qualifications. Subject to the resources available to government, adequate funding must be provided to each institution to meet the expectations for quality teaching and research, according to its agreed-upon outputs. Funding must be planned in the medium to long term so as to meet each institution's growth along a development trajectory agreed to between the institution and the DHET.

The process through which these principles will be realised must include both the universities and the DHET, working together to define the mission and role of each institution. In the near future, the DHET will initiate such a process.

6.3 STUDENT ACCESS

South African universities are characterised by relatively low success rates: 74% in 2010, compared to a desired national norm of 80%. This results in a graduation rate of

15% – well below the national norm of 25% for students in three-year degree programmes in contact education.³ In contact universities, well under a third of students complete their courses in regulation time and one in three graduates within four years. This represents a distressing blow to the ambitions of tens of thousands of drop-outs each year and as well as a waste of the resources of both parents and the state. Improvement of throughput rates must be the top strategic priority of university education. Among other things, this will allow us to increase the number of graduates disproportional to the increase in the relatively modest projected expansion of university enrolments.

Although Postgraduate enrolments in both masters and doctoral programmes remain low, they *have* been improving over the last fifteen years (see Table D). The proportion of black doctoral graduates has also been increasing. In 1995, South Africa produced 679 doctoral graduates and this had grown to 967 in 2000, 1 188 in 2005 and 1 420 graduates by 2010 (or 26 doctorates per million of the country's total population). In 2010, 48% of the doctoral graduates were white (compared to 87% in 1995), 38% were African (6% in 1995), 7% were Indian (3% in 1995) and 6% were coloured (4% in 1995). The number of Africans has likely been boosted somewhat by the increased numbers of foreign students from other African countries.

Approximately six out of ten doctoral graduates were male, indicating a need to increase the number of females studying for doctorates. In 2010, approximately equal numbers of doctoral graduates were produced in the human sciences (including Social Sciences, Humanities, Education and Business Studies) and in the natural sciences (including Pure Sciences, Engineering Sciences, Materials and Technologies), reflecting a slight swing towards the latter.

Table D. Postgraduate enrolment and growth by qualification type 2000-2010

	Actual enrndment											Average annual increase
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Postgraduate to masters level	49,971	53,506	58,081	61,815	69,320	61,436	58,510	59,185	66,915	74,495	80,321	4.9%
Masters	31,666	34,865	39,189	43,431	45,327	44,315	42,899	41,164	41,711	43,723	46,699	4.0%
Doctors	6,419	6,996	7,716	8,315	9,104	9,434	9,828	10,048	9,994	10,529	11,590	6.1%
Total postgraduate	88,056	95,367	104,986	113,561	123,751	115,185	111,237	110,397	118,620	128,747	138,610	4.6%

Despite the obvious progress with regards to the numbers of doctoral graduates, with 26 doctorates per million of the country's total population South Africa lags far behind countries such as Portugal (569 PhDs per million), the United Kingdom (288 per million), Australia (264 per million), the United States of America (201 per million), Korea (187 per million) and Brazil (48 per million).

³ Student success rates are determined as: FTE degree credits divided by FTE enrolments. These calculations, for a programme or for an institution as a whole, produce weighted average success rates for a group of courses. Graduation rates are calculated by dividing the graduates of a given academic year by the head count enrolments of that year. These graduation rates function as indicators of what the throughput rates of cohorts of students are likely to be.

Barriers to increasing the productivity of PhD programmes at South African universities include financial constraints, the quality of incoming students, blockages in the graduate and postgraduate pipeline, and limited supervisory capacity. The DHET recognises that the provision of overall postgraduate provision deserves attention and that we need to drastically increase the number and quality of both the masters and the PhD degrees obtained. This includes providing assistance to some of those wishing to do postgraduate studies abroad as suggested by ASSAf. Improvement of undergraduate throughput rates must be a key strategy for increasing graduate outputs, for increasing the skills available to the economy, and providing larger numbers of students available for postgraduate study.

This strategy must be based on a good understanding of why undergraduate throughput remains so low. Inadequate student preparedness for university education is probably the main factor contributing to low success rates. Various approaches have been attempted by different universities to compensate for this problem. Unfortunately, there is no clear evidence of what the most successful routes are. Clearly, though, universities will have to continue to assist underprepared students to make the transition to a successful university career. This could involve foundation programmes, intensifying tutorial-driven models which enable small-group interaction, or increasing the duration of degrees. The funding system must support such initiatives. Universities and programmes differ in their student intakes, and each must tailor their support offerings to fit their needs. The university funding review will be required to make recommendations on the provision of resources and funding strategies to strengthen teaching in universities without in any way reducing the importance of research. The recommendations of the Soudien Committee with regard to student support must be implemented.

The calibre and workload of academic staff is obviously one of the most important factors influencing throughput, and this is discussed separately under Staff, below.

There are other problems which aggravate low throughput. University funding has not kept pace with enrolment growth. Anecdotal evidence indicates that the financial problems facing many students may be a contributing factor to high drop-out rates. A detailed research study to verify this is yet to be undertaken. In addition, there are resource constraints in many of the historically black universities. Many of them do not have adequately resourced libraries and laboratories, and have oversized classes.

Success rates are negatively influenced by poor living conditions due to the poor quality of residences both on and off campus. Student support services are often not well-integrated across the academic and administrative function. The improvement of existing student accommodation and the provision of additional accommodation have been prioritised by the DHET. Furthermore, the DHET has commissioned a task team to look into the condition of student accommodation facilities, and their findings will soon be released. Additional concerns relate to the poor nutritional value of the meals provided and the fact that, in many cases, the provision of a food allowance to students is not always appropriate as it is often spent on goods other than food. Anecdotal evidence of hunger among poorer students abounds. The recommendations of the Soudien Committee with regard to accommodation must be implemented.

We must address these problems. The expansion and improvement of student accommodation will become a priority for the DHET and will become a feature of the government's infrastructure development programme (in both universities and FET colleges). Student support at undergraduate level must be taken seriously as a vital and strategic activity of all universities.

In order to ensure that quality education is an important part of our drive to create high-quality universities, our institutions must be given essential academic infrastructure, including laboratories, information technology (IT) systems, accommodation, classrooms and lecture theatres, libraries and other facilities. Though the last five years have seen a large financial injection into the sector, it has not adequately addressed the backlogs. The DHET will develop standards for equitable infrastructure to ensure that teaching and learning environments are broadly equivalent across the country, with due regard to each university's needs. Once such standards have been set and approved, the DHET will develop a plan of how to achieve this. Priority at this stage will be given to upgrading infrastructure and facilities at poorer universities so as to get them up to agreed standards. In particular there is a need to strengthen Internet access and ensure that sufficient connectivity is available at our more disadvantaged institutions.

The Ministry has allocated considerable funds for infrastructure projects at universities. The model of funding used is a partnership between the institution and the DHET in terms of contributions. The DHET will consider the development of an Education Investment Fund which would have a pool of funds available to deal with the growing need for upgrading and refurbishment. Priority will be given to partnerships with public finance institutions and where necessary the private sector as well.

The DHET must work in close co-operation with the National Research Foundation (NRF) and with universities to address the rising costs of provision of journals and other library material. It is recognised that knowledge resources have to be acquired equitably for all universities and that a shared cost model will alleviate pressure on funds. The cost-saving potential of central procurement of electronic journals for all institutions will be investigated. In addition the DHET must explore ways and means for the establishment of a state-led publishing house in order to address the need for more affordable and efficient production of learning materials.

6.4 RESEARCH AND INNOVATION

The DHET strategic plan identifies the following outputs needed to address the relevant Medium Term Strategic Framework (MTSF) priority:

Increase research, development and innovation in human capital for a growing knowledge economy, with a particular focus on post-graduate degrees, deepening industry and university partnerships, as well as increased investment into research development and innovation, especially in the areas of science, engineering and technology.

The DHET's strategic plan understands that certain outputs are necessary if this priority is to be achieved. Central to our strategy is the objective of ensuring that the country is committed to sustaining and strengthening long-term research that is transformational, generates new knowledge and can work towards strengthening society and the economy. This will require working closely with primary partners like the Department of Science and Technology and the Department of Trade and Industry (DTI) to ensure that there is coherence and synergy in the distribution of funds.

The DHET will work with the DST to ensure increased support for postgraduate study and for senior researchers, as well as a more stable funding model for all educational institutions that conduct research. This is critical as it will ensure the development of potential new academics to service the envisaged growth of enrolments at the undergraduate level as well as the need for high-end research production. One of the

government's aims, as reflected in the DST's *Ten-Year Innovation Plan* is to increase the number of patents and products developed by our universities and other research institutions. This will assist the realisation of the aims of the *New Growth Plan* and the *Industrial Policy Action II*, both of which identify research and technological innovation as important for job creation and for making South African industries more competitive globally.

There is a need to ensure greater coherence in an overall policy framework that governs such research and innovation activities, recognising that the prime source of funding for these activities is the DST. However, the core funding for the operation of universities and determination of the mission and strategic direction of the higher education system resides with the DHET. The strategy of establishing differentiation in the university sector must take into account the need for high-end scientific research in our system without losing sight of the priority objective of ensuring that *all* universities have the means to meet the expectations for quality teaching and research, according to its agreed-upon outputs.

The current policy and regulatory environment assumes that all universities should aim to have comparable research outcomes and performance should be comparable to that of the top performing institutions. This is unrealistic, given their differential capacities and histories, something that is recognised by the funding formula, which provides for research development funds to assist those institutions that do not meet the common benchmark. However, the underlying assumption remains, and does not sit comfortably with the aim of a differentiated institutional landscape. Research-intensive universities have a strong embedded research and development culture which includes harnessing and accessing funds, attracting researchers, supporting postgraduate students, and the availability of high-tech equipment and experienced researchers. This culture takes years to develop, is expensive and not necessary for all institutions. If our universities are differentiated in terms of mission, then the research and development policy for the DHET can be aligned accordingly. Universities with a relatively weak research culture and record should be assisted and funded to develop their research capacity in particular areas of specialisation so that their research culture can be built gradually over time. South Africa is not unique in having universities whose main focus is teaching and learning, and this is a legitimate mission for a university in a differentiated system.

6.5 ACCESS AND EXPANSION

The aim is to raise the participation rate in universities to 23% by 2030 from the current 16%. This expansion will be relatively modest as attention goes towards increasing throughput, as well as towards a large expansion of alternative study opportunities through the college system and other post-school opportunities. Growth predictions for the immediate future in the university sector are based largely on current institutional arrangements. However, there are some other areas that will contribute to the expansion of the system. These are:

- The National Institutes in Mpumalanga and Northern Cape have fairly small student populations. In the next three years, with the establishment of the new universities, a moderate growth is predicted.
- The establishment of a health care training facility at the present Polokwane campus of the University of Limpopo will allow some managed expansion as both facilities and infrastructure are developed over the next few years.

- The proposed developments to the Medunsa campus of the University of Limpopo include expansion of current offerings in the domain of health sciences and complementary fields. This development will require additional funds for infrastructure and increased enrolments.
- The Teacher Development Plan signals exploration of new sites of delivery for teacher education and this will impact on student enrolments.

6.6 STAFF

The revitalisation of the academic profession is an ongoing but very pressing problem. Academics are both teachers and researchers, and their sustained contribution to knowledge creation, innovation and skills development at both individual and country-wide levels is critical. The total instruction and research staff complement for the 23 universities was 16 320 in 2009. Of this, 44% are women. However, at the higher end of the academic ranks, there are four times as many male professors as female professors. The age breakdown of instruction and research staff at these institutions is worrying. In 2009, almost 50% of staff were 45 years old or above. This shows that we have an aging academic population. Moreover, almost 55% of all permanent, professional staff at universities are white, while Africans make up less than 30%. Furthermore, the rapid expansion of the university sector in terms of enrolment has not been accompanied by an equivalent expansion in the number of academics. This means that academic staff experience rising workload pressures due to increased teaching loads. Although academic salaries in South Africa are comparable to salaries elsewhere, as demonstrated by a recent Commonwealth study of academic remuneration, they are below what similarly qualified people can earn in the private sector or government. Renewal of the academic profession is vital for the long-term sustainability of high-quality public higher education. The following factors and/or initiatives must be considered and ways found to pursue them:

- Academics should be incentivised by improving conditions of employment, to ensure that growth in student numbers is accompanied by growth in academic staff numbers. At the same time, there must be recognition of the fact that teaching is only one aspect of the work of the academic, and that research opportunities and funds must be made available to young academics.
- The DHET will work closely with universities to explore ways of ensuring a greater enrolment and through-flow of postgraduate students from whose ranks academics must come.
- A medium-term to long-term plan for renewing the academic profession must be developed. In this plan, reference will be made to: increasing the number of young academics; addressing racial and gender imbalances by increasing the number of black and women academics and researchers; addressing staffing shortages at universities; upgrading academics into masters and doctoral programmes locally and abroad; upgrading the teaching qualifications of academics; and improving the overall quality of academics.
- The extension upwards of the retirement age of academics and the greater use of retired academics in teaching and supervision on a part-time basis.

- The recommendations of the Soudien Committee with regard to staff and post-graduate student support and development should be implemented.

Management problems continue to exist in some institutions. A number of universities have been subjected to some form of investigation or independent assessment in recent times. The viability of some of our institutions has been threatened by weak leadership, governance structures and procedures, as well as poor planning, corruption, autocratic management practices, and low levels of accountability. Thus a review of existing leadership and governance structures is central to any transformation agenda for universities. In a number of universities, leadership capacity within the different echelons of the institutional hierarchy is lacking, as is the practice of inclusive and democratic governance. This may necessitate a review of the legislation and accompanying regulations.

6.7 FUNDING

There are questions about the adequacy of the instruments within the funding framework to promote inter-institutional equity. It appears that the funding mechanism currently in place may serve to entrench and even accentuate inequalities between previously advantaged and previously disadvantaged institutions. Because of the high unit value per research output, the funding framework is biased towards rewarding research outputs at the expense of teaching. This has resulted in a very high increase of research output by advantaged institutions that have the means and capacity to “chase” research. The rigidity of the current funding system may serve to discourage mainstream implementation of a flexible curriculum framework (such as four-year undergraduate degrees) that can cater to the diverse needs of our students.

Earmarked funding is an important steering mechanism to ensure that some of the serious problems faced by our university system are addressed. The DHET aims to make greater use of such funding to introduce and develop key infrastructure programmes aimed at achieving greater institutional equity in the system, and to act as a catalyst for the transformation of the sector as a whole.

Funding for universities comes from multiple sources, at different junctures and for different purposes. Depending on an institution’s context and capacity, the reliance on funding from the state varies, as does its ability to have a high fee contribution (because of the relative wealth of its student body). The ability to attract third-stream income also varies widely. A Ministerial Committee for the Review of University Funding has been appointed to review the current framework and to determine the university system’s resource requirements over the next five to ten years. The following areas need to be addressed as a matter of urgency:

- If funding is to be a successful instrument for achieving the goals of the university system, then it is clear that new money has to be found to ensure that the current playing field is level. Current funding supports a planned growth of 2.8% and therefore does not allow for the expansion and demand as evidenced by the current growth of 4.6% within the system. Although infrastructure funding has provided some room for improving and developing facilities within our universities, it has not as yet enabled the creation of high-quality facilities at all institutions, nor has it addressed historical backlogs or enabled innovative ventures. This is evident especially in relation to increasing the numbers of students and consequently graduates in scarce and critical skills.

- Funding has not kept up with the rising costs of provision of university education, with the state contribution reducing quite sharply for all institutions. It is clear that state funding has not kept pace with the funding needed to support the increase in the volume of academic activity. This funding lag has contributed to an increase in fees.
- A significant component of existing funding is allocated on the basis of student numbers, with a two-year lag. The costing model for students works on the basis of a funding grid which allocates a weighting to specific fields. This model needs interrogation as it bears very little relation to the actual costs of teaching for a specific qualification.
- Research is an area that has multiple funders, with the DHET as a significant contributor, especially for postgraduate students. Stimulus funding is an area that needs to be explored, and requires fresh injections of funds as opposed to earmarking existing funds for this purpose. It is critical that in order to ensure a continuous supply of academics who are active researchers, the DHET provides a pool of sufficient funds to trigger this within our institutions.
- The continuing high drop-out rate, low graduation rate and throughput rate suggests that there is still inefficiency and not enough support provided at the foundational and entry level. Significant progress *has* been made. There has been an increase of 5% in the national student success rate from 69% in 2004 (the introduction of the Foundation Provisioning and Teaching Development grants) to 73% in 2009. However, there is still an acute need for further improvement in performance, and this will require both funding interventions as well as focused attention on the part of institutions.
- Infrastructure broadly requires a dedicated fund which can be accessed by institutions to leverage external funding. It is also necessary to insert into the funding formula an allocation for the construction *and* maintenance of buildings and infrastructure.
- Student accommodation problems are very serious at a number of universities and make the development of student residence infrastructure a priority. Accommodation shortages and inadequacies result in a lowering of the quality of life of students, leads to social problems and militates against better academic performance. The study of the accommodation needs of students is currently nearing completion and will guide future plans.
- The affordability of fees must be examined carefully and consideration given to whether there is a need for government regulation of fees charged by universities. This could be done, for example, through a framework for fee-setting by institutions which could provide parameters and processes for fee increases.

6.8 STUDENT FEES AND NSFAS

Most institutions charge student fees. While they are essential to institutional survival in the current funding environment, in many institutions fees have been increasing dramatically and are a major barrier to access. The DHET remains committed to progressively introduce free education for the poor up to and including undergraduate level. This is the basis towards which the DHET needs to work.

The National Student Financial Aid Scheme of South Africa was created in 1999 through an Act of Parliament to provide a sustainable financial aid system for study loans and bursaries for academically deserving and financially needy students. It incorporated the Tertiary Education Fund of South Africa (TEFSA), a fund scheme set up shortly after the transition to democracy. TEFSA had struggled to meet the needs of students, leaving many universities to raise funds for needy students. Between 1999 and 2008 the funds managed by NSFAS grew from R441 million to R2.375 billion, providing financial aid to almost one-fifth of university students over this period. By 2011 the funds made available through NSFAS had grown to R6 billion and are expected to continue growing. These funds are largely allocated through the DHET, but include monies from other government sources. NSFAS has been instrumental in providing access to education for almost a million students from poor and working-class backgrounds who would otherwise not have been able to go to university.

Despite large increases in funds, NSFAS provisioning has not kept up with the increasing demand for higher education in South Africa. In 2009, the Minister of Higher Education and Training appointed a Committee to review the governance, management and operations of NSFAS. The review committee was mandated to examine the following: why the administrative capacity of the fund has not kept up with the growth in size of the fund; necessary growth requirements of the fund to increase access for poor students; and challenges relating to existing distribution and allocation policies and mechanisms. The Report was submitted and processed in 2010. Its recommendations included: expanding access to the fund; changing the institutional allocation formula to one that is class-based and not race-based; implementing an allocation formula that is student-centred rather than institution-centred; and changing the composition of the institutional allocation to cover the full cost of study. A comprehensive turn-around strategy was developed and is being implemented.

As mentioned earlier in this Green Paper, NSFAS has recently been extended to students in FET colleges. NSFAS also administers bursaries on behalf of other entities such as the Department of Social Development and the Funza Lushaka Teacher Education Bursary Scheme on behalf of the Department of Basic Education.

Starting from 2011, as part of government's policy of progressively introducing free university education to the poor, students in their final year of study who qualify for NSFAS assistance will receive the full cost of study as a loan. If the student meets the requirements for graduation in that year, then the loan will be converted to a bursary. The assumption underlying this incentive is that a number of students could then focus on completing their studies without worrying about the finances attached thereto, thus increasing the success and throughput rates. It is envisaged that this programme will steadily be introduced to cater for students in the pre-final years.

An important challenge that still remains is finding the resources to address those students who do not qualify for NSFAS loans because their families' incomes exceed the threshold of R122 000 per annum but who do not earn enough to qualify for commercial loans. This group includes the children of many teachers and civil servants – precisely the groups from whose children future professionals and academics come from in most countries. The government must find ways to meet this challenge.

6.9 PRIVATE HIGHER EDUCATION

The Bill of Rights in the South African Constitution (Act 108 of 1996) stipulates the right to establish and maintain independent educational institutions. The DHET recognises

this and the fact that independent (private) institutions play an important role in the post-school education and training environment. Any re-conceptualisation of a post-school education and training system would therefore be incomplete without reference to both public and private spheres. At the same time, the DHET acknowledges limitations in its understanding of the size and shape of the private higher education system. There are gaps, duplications and overlaps in datasets available through SAQA and the DHET. Indications are that there are between 8 000 and 12 000 private post-school education and training institutions. These institutions are of various shapes and sizes, the bulk of them being small or very small in size. There appears to be a significant not-for-profit contingent in the private higher education sector.

The Higher Education Quality Committee Information System (HEQCIS) developed by the Council on Higher Education has recently begun to collect and analyse data on private higher education institutions. As of 7 April 2011, there were 87 private higher education institutions registered with the DHET. However, the register only includes institutions that offer learning programmes which result in the award of whole qualifications at levels 5 to 8 of the NQF – in other words, certificates, diplomas or degrees at higher education level. This means that a considerable number of institutions offering qualifications based on unit standards (as reflected on the SAQA database) are not registered with the DHET. According to the SAQA database, there are at least 362 private higher education institutions. These include both for-profit and not-for-profit institutions.

The most popular type of qualification offered by private higher education institutions are Diplomas, followed by Bachelor Degrees, Certificates and Higher Certificates. In addition, private higher education institutions registered with the DHET are geographically concentrated in the provinces of Gauteng, Western Cape and KwaZulu-Natal. Student enrolment figures for these private higher education institutions range from fewer than 20 students to approximately 15 000 students. This exemplifies differences in the size of these institutions. Generally, private higher education institutions offer programmes in five broad fields of learning: culture and arts; business, commerce and management studies; human and social sciences; health sciences and social services; and physical, mathematical, computer and life sciences.

It is clear that the erratic nature of data in private higher education must be addressed. The DHET will investigate various data collection processes and structures. Part of this process will involve the need to integrate the SAQA and DHET datasets into a single, consolidated dataset.

It is also clear, despite the limitations of our current data, that a large number of post-school youth and adults are being serviced by the private higher education sector. As pressure to expand the public post-school education and training system mounts (specifically in relation to higher education), greater and better alignment between its public and private components becomes increasingly important.

The role of the private higher education sector, especially in terms of their specific contributions to increasing the participation rate and developing scarce skills, needs to be better understood by government and supported as far as possible. The DHET will develop a nuanced strategy to work with established private providers, especially those operating in priority areas, to strengthen and expand provision, ensuring that this occurs within the parameters of quality and accreditation requirements. The possibility of partnerships between public and private institutions should be explored within a clearly defined regulatory framework that sets out the parameters for operation.

The DHET understands that a more informed understanding of the private education and training sector is required, based on additional research, including, for example:

- An assessment of the scale of duplication and/or gaps in terms of data across the private higher education sector with the purpose of identifying mechanisms to bring all of the data ultimately under one authority.
- The strengths and weaknesses of the private higher education sector with the purpose of fully utilising the sector in terms of the needs of the post-school system as a whole.
- The typologies of institutions: When is an institution an institution? Can small or very small providers be considered to be institutions?
- The demographic features of students registering at private post-school institutions. The data seems to suggest, for example, that private higher education institutions attract a different student population than private FET and adult education institutions, with the most vulnerable groups to be found in the latter two sectors.
- The articulation and progression routes between and among private and public institutions. The lack of mobility of students between these two sub-sectors may constrain the achievement of an integrated, diverse system.

6.10 AFRICAN LANGUAGES IN UNIVERSITIES

The potential demise of African languages poses a threat to linguistic diversity in South Africa. Many African language departments at universities have closed down due to insufficient resources and diminishing student numbers. The DHET envisages a cross-disciplinary approach that concretises African languages as part of the formal programmes of institutions with targeted resources, materials and support. Some universities require that students of, for example, medicine or social work take a course in an African language. The extension of such a policy will be encouraged, and the DHET will investigate how to do so effectively.

In order to do justice to the language policy of the Department of Basic Education and to ensure that African children can be taught in their home language in primary schools, there is a need for universities to train teachers to teach African languages effectively as the language of learning and teaching. One way of ensuring better communication among all South Africans, as well as raising the status of African languages in our country, is by encouraging students to undertake at least one language course in the degree or diploma programmes. The DHET will engage with universities to find ways in which this can be done in a systematic fashion.

The Minister has recently appointed a panel to advise him on African languages in South African universities. The panel will examine and advise the Minister on policies to strengthen African language departments in universities and on ways to develop South African languages in science and academia.

6.11 INTERNATIONALISATION

The internationalisation of higher education has grown in the past two decades, and is a reflection of globalisation. It takes various forms. These include: cross-border movements of students and staff, including international exchange programmes; international research collaboration; the offering of joint degrees by universities in different countries; the establishment of campuses by universities outside of their home

countries; the growth of cross-border education through satellite learning; the establishment of online distance education, including online educational institutions; arrangements between countries for the mutual recognition of qualifications; the harmonisation of qualification systems; and the increasing inclusion of an international, intercultural and global dimension in the curriculum.

Many of these international trends affect South Africa, largely to the benefit of our higher education system. In 2010, 66 113 foreign students were studying in South African universities. The vast majority (46 191 or 70%) were from countries belonging to the Southern African Development Community (SADC); most of the remainder (11 130) were from other African countries. In addition 3 653 came from Europe, 1 813 from Asia and 1 737 from North America. The remainder were from Australasia/Oceania, South America or were of unknown origin. In addition there were 6 000 foreign students in South African private higher education institutions. Unlike most countries which offer higher education to foreign students, in South Africa this is not a source of revenue but a cost as most foreign students cannot be charged the full cost of their studies. This is because the SADC Protocol on Education and Training requires all member countries to treat students from other member countries as local students for the purpose of tuition and residence fees.

Hosting tens of thousands of SADC students represents a major contribution by South Africa to the development of the sub-continent. It is also making a major contribution to the development of South Africa, because all countries in our region are interdependent and the strengthening of Southern Africa economies must inevitably result in the strengthening of South Africa's own economy. The presence of the future leaders of our sub-continent in South African universities is a great opportunity to build relationships which can flourish in the decades ahead, to the benefit of the entire sub-continent.

South African universities engage in collaborative research projects with other countries in many fields, and this plays an important role in ensuring that we participate fruitfully in international intellectual networks. These research links tend to be mainly with developed countries, but increasingly include collaborations with developing countries including India and Southern African countries. These linkages currently tend to be between the historically advantaged institutions and less so with historically black universities. The DHET will work towards facilitating stronger linkages between foreign universities and the historically black universities, and focus on the enhancement of teaching and learning as well as on research.

The establishment of the Southern African Regional Universities Association (SARUA) is starting to play an important role in promoting university linkages in the SADC region, and this has the potential to play an important developmental role in our region. The strengthening of all of these links is important. The state, through both the DHET and the National Research Foundation, should assist the development of collaborative intellectual and research networks, especially within the SADC region. The regular meetings of SADC Ministers of Education are another important forum for promoting co-operation between the universities – and indeed colleges – in Southern Africa.

The internationalisation of higher education could be used strategically to foster and strengthen both economic and political relations between South Africa and other countries. However, we must ensure that the strategic co-operative agreements we enter into are aligned to our foreign policy which places special emphasis on the promotion of regional partnerships, notably within SADC and the continent at large. The SADC region remains a number-one priority as far as our internationalisation efforts are concerned. This is in line with the SADC Protocol on Education and Training of which South Africa is a signatory. The Protocol aims to improve the standard and quality of

higher education and research by promoting co-operation and creating intra-regional synergies. This is happening in areas such as: the harmonisation, equivalence and eventual standardisation of entrance requirements; devising mechanisms for credit transfer; and encouraging the consistency of academic years to facilitate staff mobility and staff exchange programmes.

South Africa has a number of higher education programmes assisting African countries beyond SADC. An agreement with Rwanda, for example, allows 100 Rwandan students to study in South African universities on the same basis as SADC students, and has also provided study opportunities for students from other countries such as the Democratic Republic of Congo and South Sudan. Requests for similar assistance from the continent are growing and will need to be handled with care so that we assist those we can without unduly burdening our system.

Focus on the continent should, however, not be pursued at the expense of developing healthy alliances with the global North or new partnerships with developing countries such as the BRICS group of which South Africa is a member.

International co-operation which opens up opportunities for South African students to study abroad, especially for postgraduate, particularly doctoral, degrees could be of great assistance in producing high-level academic and technical personnel. It could assist particularly in producing the next generation of academics.

South Africa could, at least in the long term, begin to see the internationalisation of higher education as an opportunity to accrue revenue. This would entail attempting to attract foreign students to study in South Africa in the same way that universities in countries such as the USA, UK and Australia do, where higher education is a large earner of foreign revenues. Like these countries South Africa has the advantage of having English, which has become the dominant international language, as the main language of higher education. Part of the revenue generated from foreign fee-paying students could perhaps be directed into assisting needy students in South Africa or neighbouring countries.

This policy option has, however, to be explored with caution. Given the high demand for higher education places from South African students and the difficulty of our universities in meeting that demand, it may be counter-productive to treat higher education as the equivalent of an export industry. It is also true that, despite the advantages of educating SADC students in our universities, this is a costly exercise since, as noted above, they are subsidised in the same way as local students. This issue of using education as an income earner needs to be debated widely – not only in the higher education and training community but also by other government departments such as International Relations and Co-operation, Trade and Industry, Economic Development, Treasury and Home Affairs, as well as by organisations in civil society.

South Africa does not yet have a comprehensive, formal policy on the internationalisation of higher education. The only operational policy framework on international collaboration is the SADC Protocol on Education and Training. Thus, while internationalisation is a reality at individual institutional level, it remains uncoordinated, piecemeal and *ad hoc* at national level. There is a need to develop a national framework on the internationalisation of higher education. Such a framework would not only address itself to broader national imperatives but would also help to strengthen the existing international collaborative initiatives within the higher education system, particularly between South African and foreign universities. The framework would provide guidelines for new ventures, facilitate the recruitment of international staff and

students and guide the development of government-to-government relations with other countries.

Any DHET internationalisation policy could only succeed if the Immigration Policy and rules pertaining to staff-student mobility are enabling. The restrictive aspects of the policy, which does not take into account the nature of international interaction specific to education, must be explored further with the Department of Home Affairs.

7. ADDRESSING DISABILITY WITHIN POST-SCHOOL EDUCATION AND TRAINING INSTITUTIONS

Currently, there is no national policy on disability that guides education and training institutions in the post-school domain. Individual institutions determine unique ways in which to address disability and resourcing is allocated within each institution accordingly. Levels of commitment toward disability vary considerably between institutions, as does the level of resources allocated to addressing disability issues. The DHET recognises that addressing disability is important, and thus is part of its policy and broader constitutional mandate.

For the DHET to effectively address disability as part of its policy framework, the scale of disability across the post-school education and training system needs to be determined. Existing data on disability is inadequate and often inaccurate. In light of this, the DHET intends commissioning a disability prevalence study across the post-school education and training sector so as to facilitate better planning at institutional and national levels. Subsequently, the study will be used to inform further policy on disability. Moreover, existing data management systems such as FETMIS and HEMIS will be improved to better monitor disability across the system.

White Paper 3 on the Transformation of the Higher Education System (2007) highlights the need for an equitable and just system of higher education that is devoid of all forms of discrimination including against the disabled. This is based on the principles of equity and redress. The principle of equity requires fair opportunities to enter higher education programmes and to succeed in them. This policy has clearly not been fully implemented, either by institutions or by the allocation of sufficient financial support by government.

White Paper 6: Special Needs Education: Building an Inclusive Education and Training System (2001) provides a blueprint for inclusive education in South Africa as a means to address the challenge of disability across the education landscape. However, the focus is very much geared towards schooling. Where there is mention of further and higher education, this is largely in relation to access. *White Paper 6* also calls for "regional collaboration" when addressing disability. In practice, this is restrictive in terms of access as it implies that institutions only cater for certain disabilities at the expense of others. However, the cost of provision is extremely high and this may be the best route in the immediate future.

Despite attempts to integrate disability into the broader policy arena, disability in post-school education continues to be managed in a fragmented manner separate to that of existing transformation and diversity programmes at the institutional level. As such, the DHET will work towards developing a *National Disability Policy and Strategic*

Framework, which will seek to create an enabling and empowering environment across the system for staff and students with disabilities. Institutions may then customise the policy in line with their institutional plans and strategies. Such a policy will also serve as a benchmark for good practice.

In addressing disability, the DHET must emphasise a holistic approach that moves beyond the built environment and the use of specialised technology and assistance devices geared for the disabled. It must also work towards a more integrated approach that recognises the importance of adapting teaching and learning methodologies where necessary. This will create more awareness of the needs of students and staff with disabilities, and build capacity to address disability at all levels of the institution including that of lecturers, support staff and management. This policy will be aimed at the integration of students and staff with disabilities in all aspects of campus life, including academic life, culture, sport and accommodation. Such an approach will attempt to prescribe guidelines for what may be described as “reasonable accommodation” practices for students and staff with disabilities.

In addition, the *National Disability Policy and Strategic Framework* will attempt to accurately define disability in a manner that takes cognisance of multiple types of disability, from the physical to the cognitive and psychosocial. Careful distinction will be made with respect to learning disabilities such as dyslexia and dyspraxia as these are often wrongly diagnosed as a language barrier. As part of the policy development process, the DHET will promote a multi-sectoral stakeholder engagement process that will involve collaboration with other departments – such as Health, Social Development and Basic Education – as well as various advocacy and rights-based organisations representing disability services within education and training institutions. Part of such an engagement process will be to ensure that students with disabilities receive quality education and training as well as health care.

As part of its commitment to drive the broad disability agenda of the DHET, a disability task team will be set up to look into various disability-related issues of concern. Part of the role of this task team will be how best to realign existing funding principles for public higher and further education and training institutions. Attention will be given to how best to support these institutions with respect to both the provision and maintenance of disability units, based on the number of disabled students enrolled.

Insufficient funding for and resourcing of disability units at historically black institutions compared to that for historically white institutions is a cause for concern. This situation has been exacerbated by the fact that disability grants have never been included in institutional subsidies from the state and have been dependent on individual institutions accessing external funding through fund-raising. Thus, a differentiated approach to disability, based on the existing resources and needs of these institutions, will be considered so as to meet the benchmarked standards outlined in the national policy framework on disability.

Furthermore, the DHET must commission research on disability so as to better inform its understanding of disability and its planning going forward. Special attention should be paid to the plight of women with disabilities, throughput rates of disabled students, and the need for sheltered training and work-based opportunities for students both during and upon completion of their programmes. The research will also address how best to utilise the *National Skills Development Strategy III* for this purpose. Curricula at existing institutions and skills development centres that provide such “sheltered employment” will also be revised.

8. OPEN AND DISTANCE LEARNING: FLEXIBLE AND INNOVATIVE MODES OF DELIVERY

This document has noted the competing challenges to increase enrolment, throughput and curriculum relevance within a system and infrastructure that is already under strain. It has also highlighted the need for the post schooling system to cater for a very wide variety of potential student needs – including mature adult learners needing to learn and work at the same time, as well as younger people who may have dropped out of the schooling system due to financial, social, learning and other barriers to success.

Such students need access not only to a wide range of alternative kinds of programmes especially designed for their needs, but also to more flexible modes of delivery, which do not require them to attend classes very regularly, at fixed times and at central venues. Approaches based on distance education offer the potential to address these competing needs and challenges. Moreover, the emphasis that distance education places on well-designed learning materials allows for the possibility to achieve economies of scale. The challenge of turning the increased access into success requires substantial up-front investment in curriculum design and materials development. Attention must also be paid to issues of structure and pacing; meaningful formative assessment; investment in decentralised student support and increasing use of educational technology.

Programmes can be offered along a continuum ranging from provision based on a high level of contact and support on a regular basis (such as the Kha Ri Gude literacy programme) through to having contact in blocks or to more independent and decentralised approaches, supported by e-tutoring and mentoring. It is also possible to migrate between modes of provision based on changing needs.

The region already boasts examples of the successful use of such approaches. In South Africa over the last decade, distance education has accounted for nearly 40% of all public university headcount enrolments, equivalent to around 28% of full-time equivalent students. In 2009, this resulted in 25% of all public university graduates coming from distance education. On our borders, both Namibia and Botswana have successful open colleges (Namcol and Bocodol) which provide post-school opportunities for some 30 000 learners each.

8.1 NETWORK OF PROVIDERS AND SUPPORTING CENTRES FOR THE POST SCHOOLING SECTOR

Given the scope of the challenges in the post schooling sector, the potential of the above approach, and the increasing opportunities of educational technology, the DHET will now give serious consideration to creating a post-schooling distance-educational landscape consisting of

- a network of distance-education providers – described below – supported by
- a network of learning centres and/or connectivity for students, shared among the providers.

Advantages of this option include the development and availability of well-researched, high quality national learning resources (made available as open education resources for others to use), more efficient use of existing infra-structure for students, and an

increasing emphasis on independent study as preparation for subsequent formal higher learning.

In due course, this network could include current, mainly face-to-face universities and colleges as more of them move to online provision.

8.1.1 A network of providers

In the university sector, distance education is increasingly well-served by Unisa, as well as the University of Pretoria, North West University, the University of KwaZulu-Natal and a handful of other public and private institutions. At this stage these providers tend not to collaborate on the offerings. However, the sector is poised to expand, with policy proposals being considered on how this may be achieved in a planned and systematic manner that enhances access with success, and on how they might share in the growth of both ICT infrastructure and learning centres. At a post-graduate level, increasing access to web technologies has already resulted in considerable growth of modes of delivery alternative to face-to-face. However, for the post-schooling sector below university level, there is currently little distance education provision.

In order to develop the provider network referred to above, consideration will be given to:

- Establishing national open college(s) offering a range of programmes from NQF levels 2-5, using distance education methods. Programmes could include those: targeted at South Africa's burgeoning proportion of youth who are unemployed and not in education, designed to enable them to become financially productive and socially invested members of society. They could offer: foundational skills at Grade 9 level; Senior Certificate subjects; NASCA and NCV programmes or parts thereof; and programmes offering access to university education which inculcate the necessary skills and discipline, and even include some university credits.
- Encouraging the Higher Education Institutes in Mpumalanga and Northern Cape as they conceptualize their growth to consider themselves as part of this growing network of distance providers in the post-schooling sector.
- Supporting the development and co-ordination of a network of online providers – both public and private - which would concentrate on specialized programmes that could increasingly become accessible to students through the use of technology at the learning centres.
- Encouraging existing and new providers to offer distance education programmes for professional development for existing educators and lecturers (including both FET college and university lecturers) across the post schooling sector. (For example, most of the tutors in the Kha Ri Gude programme were trained through Unisa's ABET programme.)

Essential to the effectiveness of the above providers would be the access to technology and the administrative and learning support provided by a growing network of shared learning and support centres.

8.1.2 Shared learning and support centres

Experience elsewhere shows that Open and Distance Learning (ODL) institutions that engage in inter-institutional cooperation in establishing and running study centres have sound student support services and reasonable student retention and throughput ratios

as a result. The Indira Ghandi National Open University (IGNOU), for example, has 3000 study centres across India and has a global presence in 66 countries. In Namibia, the Namibian Open Learning Network Trust (NOLNET) facilitates sharing of resources and minimises duplication of services and resources by open learning institutions in the country. There are 45 NOLNET centres across the country, over and above the more than one hundred study centres that are mostly located at existing formal schools – all of which are open for use by students of any of the institutional members of NOLNET. Bocodol in Botswana runs 75 fully functional study centres throughout the country.

There are a substantial number of learning centres throughout South Africa that could serve as sites for the support or provision of open and distance learning programmes. They could provide administrative and logistical support, as well as access to computers and online materials, including access to library online services. Possibilities for centres range over the nearly 2400 existing Public Adult Learning Centres (and the proposed Community Education and Training Centres). Another possibility is the use of the facilities at high schools, colleges and university campuses for contact sessions, particularly in the evenings and over weekends and school holidays. Multi-Purpose Community Centres could also be used.

However, with increasing access to wireless connectivity and mobile technology, in the medium to long term the emphasis of student support will shift from centre and contact-based approaches to on-line web-based approaches. The relative balance of investment in new centres and the upgrading of existing centres and investment in ensuring access for all post school students to mobile, connected technology needs to be carefully weighed.

8.1.3 Professional development

It will also be necessary to ensure continuing professional development for full-time staff in the post schooling sector, and for the increasing numbers of part-time (e-)tutors and (e-)mentors, in appropriate resource-based and/or distance education approaches.

8.2 IMPROVED ACCESS TO AND USE OF APPROPRIATE TECHNOLOGY

ICT is increasingly becoming a critical ingredient for participation in a globalised world, as well as being an indispensable infrastructural component for effective education provision, especially in the post schooling sector. South Africa's particular challenge is to ensure that this infrastructure is extended equitably to all post schooling students. Currently, access is grossly uneven, making it impossible for distance education and other providers to fully harness the potential.

Recent increases in the availability of bandwidth in South Africa and the increasing affordability of digital devices will require the DHET to develop plans to ensure that, within the foreseeable future, all post schooling students have meaningful access to appropriate learning technologies and broadband Internet.

Possible mechanisms include:

- Collaboration with the Department of Communication and other government departments and stakeholders, to facilitate increased bandwidth and reduced costs for educational purposes.
- Engagement with stakeholders to negotiate easier access to and reduced costs for internet enabled devices.
- Appropriate DHET bids for funds to ensure that a comprehensive, enabling ICT infrastructure is put in place for all post-schooling providers and particularly the distance higher education providers.
- Facilitating the shared establishment and management of ICT-enabled, networked learning centres in areas where home-based provision is likely to be difficult in the short- to medium-term.

8.3 COLLABORATIVE DEVELOPMENT OF HIGH QUALITY LEARNING RESOURCES

The goal of attaining meaningful post schooling will be supported by the development and sharing of well-designed high quality learning resources that build on the expertise and experience of top quality scholars and educators. This is not only the case in distance education – which is driven by the communication of curriculum between learners and educators through resources that harness different media as necessary – but also in many courses and programmes in face-to-face institutions. Such institutions now incorporate extensive use of instructionally designed resources, as educators have learned the limitations of lecture-based strategies for communicating information to students, especially with the large classes that are common at first-year level in particular.

With this in mind, the DHET will support efforts that invest a larger proportion of total expenditure in the design and development of high quality learning resources, as a strategy for increasing and assuring the quality of provision across the entire post schooling system. These resources should be made freely available as Open Educational Resources (OER) for use with appropriate adaptation. This would be in line with a growing international movement, supported heavily by organizations such as UNESCO and the Commonwealth of Learning (CoL) that advocate the development of OER.

At a country level, the Brazilian government is currently considering draft OER policy, while in and New Zealand cabinet has approved an Open Access Licensing framework which encourages the most open licence for uses and re-use for public sector information. The US Labour Department recently announced substantial grants to develop new materials for community colleges and make these available as OER and in South Africa there is a growing number of examples of the use of high quality OER, developed locally, being used by a number of providers.

Key motivations for OER are the potential improvements in quality and reductions in cost. The DHET will accordingly:

- Determine ways to provide support for the production and sharing of learning materials as OER at institutions in the post schooling sector. In the first instance all material developed by the promised South African Institute for Vocational and Continuing Education and Training will be made available as OER.
- Consider the adoption or adaptation, in accordance with national needs, of an appropriate Open Licensing Framework for use by all education stakeholders, within

an overarching policy framework on intellectual property rights and copyright in higher education.

9. BUILDING STATE INSTITUTIONS AND STREAMLINING THE REGULATORY SYSTEM

9.1 OVERVIEW

The regulation of post-school education in South Africa is governed by an array of legislation and statutory bodies. The levy-grant institutions regulate funding that comes from employers, and that is used for the training needs of the employer's own staff as well as to support national training imperatives. These institutions also plan the skills needs of their respective economic sectors. Quality Councils oversee qualifications, standards, assessment and certification systems across three key sub-sectors of the education and training system. The National Qualifications Framework Act (No. 67 of 2008) provides the overarching context in which all regulation happens. The NQF provides the context for provision, assessment, certification and quality assurance.

Given the extent of problems with our regulatory systems, it is tempting to return to the drawing board to reconfigure our system from scratch. However, while there is duplication, overlap, incoherence, inconsistency and inappropriate functioning in much of our system, one lesson which we have learned is the difficulty of building new institutions. This does not mean that nothing should change, but rather that, wherever possible, it is better to build on existing institutional strengths and work within the existing systems in order to move forward.

The key focus of the DHET will be the strengthening of the state and its associated institutions, to fulfil all the many and complex roles necessary for a co-ordinated post-school system. We intend to address as many short-term problems as possible, while laying the basis for building institutional capacity that will serve South Africans in the coming decades. The DHET must institutionalise as many functions and capacities as possible, removing the need for constant short-term contracts, consultancies and *ad hoc* processes. It must make sure that the regulatory system enables and supports providers, both public and private, to do their work.

9.2 STRENGTHENING THE LEVY-GRANT INSTITUTIONS AND SYSTEMS

9.2.1 Sector Education and Training Authorities

9.2.1.1 Responsibilities and challenges

SETAs are structures established in 21 economic/industrial sectors. A "sector" is not necessarily the same as that defined in industrial sector planning (in the Department of Trade and Industry), although there are similarities.

SETAs are stakeholder bodies established in terms of the Skills Development Act (No. 97 of 1997). Representatives of employers, trade unions and government departments are responsible for each sector. Professional bodies and bargaining councils can also be included where agreed within the sector. From 1 April 2011, the Minister has started to appoint chairpersons of SETAs who are independent of the stakeholders in a particular SETA. He has also begun to appoint two other ministerial appointees to each SETA council.

The funding mechanism used by the SETAs is known as the levy-grant system. Employers pay a levy for skills development, which is discussed in more detail in section 11.2.1.3 below. The SETA then distributes the levy funds it receives back to employers to incentivise employer-based training. SETAs are expected to direct and facilitate the delivery of sector-specific skills interventions that help achieve the goals of NSDS III and address employer demand.

SETAs were established to be the authorities on labour market intelligence in their sectors, and to ensure that skills needs were identified and addressed. One of their core responsibilities is the development of sector skills plans. These are intended to outline current and future learning and qualifications needs of workers and employers and to develop interventions that are agreed upon with stakeholders and can improve the match between education and training supply and demand. The SETAs are then expected to manage their component of the skills levy in accordance with the relevant agreements and, with respect to the discretionary grant, in such a way as to direct supply to meet the anticipated demand.

SETAs must also ensure there is strong employer and trade union leadership and ownership of sector skills activities, and be able to articulate the collective skills needs of their stakeholders. SETAs are responsible for monitoring and managing occupational standards to ensure that provision of training, including the qualifications gained, meets sector, cross-sector and occupational needs.

Performance of the SETAs has been patchy and, in many cases, has not met expectations. Despite much positive work that has been done, many serious challenges remain. In addition to an unclear mandate, there is inadequate capacity in the SETAs to do skills planning and meet their critical purpose of identifying and articulating skills needs on a sector basis. The quality assurance functions are very complex, and there is no clear evidence that SETAs have improved the quality of learning that is taking place in the various sectors.

Much needs to be done to improve the efficiency and effectiveness of SETAs. Currently there are major changes taking place with regard to SETAs – including, as indicated, new boards and board chairpersons, a new National Skills Development Strategy, and new constitutions. During the current five-year SETA licensing period, a thorough review is needed based on a serious research-based evaluation of their performance in relation to NSDS III. The evaluation should also examine the extent to which SETAs have affected the provision of skills to enable the economy to grow as well as to ensure that individuals can progress along varied learning pathways.

A ministerial task team has been established to address the various problems facing the SETAs. This task team will also develop recommendations to strengthen the SETAs and to enable them to more effectively address the needs of the post-schooling sector. This Green Paper incorporates some of the ideas which are emerging from this task team, and poses options for consideration. It also suggests the ways in which the final recommendations of the task team can take into account the requirements of this sector in its thinking. This paper therefore sets out some broad principles which are laid out

below. These principles are informed by the imperative that the focus of the next period should be on ensuring that the environment creates stability and certainty among the public, while at the same time addressing challenges that have emerged during the course of implementation.

9.2.1.2 Scope and role of SETA work

A central problem that SETAs face is that they are expected to do too many things. This has led to a tendency to lose focus on areas of critical importance within their sector and their mandate. Various pieces of research have established the problems with this, and it is clear that SETAs, in the main, support the idea of a consolidated mandate. A consolidated mandate would include the following:

- The SETAs should have an understanding of changes within their sector, the implications of these for the demand for labour, and ultimately the way in which this must shape the supply in the short, medium, and long term. This assumes that SETAs should play a critical role in skills planning, though their role in relation to a broader economy-wide process is considered below in more depth. In addition, once the demand has been established they should play a critical role in steering provision towards identified needs. This should include supporting the development of providers where required. In addition, far greater emphasis should be placed on the SETAs' role in the monitoring and evaluation of the impact of skills interventions in their sector than is currently the case.
- The SETAs should focus on addressing the skills needs of established employers, including business and government. This means that they should focus on establishing the skills needs of the employers and should enable the implementation of programmes that address these needs. This must be done in a manner that meets the needs of both existing workers as well as unemployed and pre-employed individuals who will be entering these businesses or government departments.
- The above-mentioned focus implies that SETAs should increasingly be recognised as experts in relation to skills demand in their sectors. They should then be able to co-ordinate the skills needs of employers in their respective sectors, undertake sector-based initiatives, and collaborate on cross-sector skills areas to enable collective impact.
- This does not suggest that the needs of start-up businesses and co-operatives, or the needs of community development more broadly, are not critical. However, other bodies have been established by government to address these sectors. They should be supported by levy funds through the NSF to ensure that, as part of playing their role, they address the skills needs of their sectors. For example, as DTI-affiliated agencies are taking responsibility for small business development, they should be able to apply for funds from the NSF to enable them to bolster the skills development component of their work.
- Within this scenario there continues to be a role for SETAs. This pertains to the relationship that SETAs should have with government departments and agencies that are involved in assisting start-up businesses, co-operative development, community and rural development, ABET and so on. SETAs must ensure that all of these bodies are informed about key trends in the skills development sector, the skills needs that are emerging across established businesses (and how these differ for large, medium and small businesses), and the kinds of opportunities that this may

suggest for start up businesses, co-operatives, and for community and rural development. Critically, SETAs must ensure that they play a role in facilitating access to ABET for workers in their sectors, even if this is to direct them to the relevant institutions.

- There is some debate as to whether a percentage of the discretionary grant could be directed to ABET programmes, even if they are actually implemented by the DBE or as part of other initiatives within the DHET. Ideally, given the constitutional obligation to address ABET, the funding for it should come from the fiscus. Where this needs to be supplemented, it should be through the NSF, and not directly through the SETAs. The imperative for SETAs is to remain focused on those skills that will have an impact on growth and job creation in their sector. Government departments such as the DBE and DHET, on the other hand, should continue to focus on ensuring that all individuals who wish to attain ABET are able to access such a programme and be prepared for access to further learning, be it general, vocational or occupational.
- The SETAs will continue to play a defined role in quality assurance, as discussed in the section on quality assurance below.

An alternative to the above is that SETAs continue to play multiple roles in different sectors of the economy and society.

The focus of the next five years will be on ensuring that SETAs operate as clusters. This will enable them to align with economic strategies and engage in skills supply planning that is consistent with these strategies. A decision as to whether these SETAs should merge will then be considered based on the extent to which these cluster arrangements are considered sufficient to enable improved planning and improved levels of efficiency. This approach of both clustering the SETAs and focusing their scope to established business will ensure that bodies can operate within clear mandates, and consolidate their expertise and understanding of the sector for which they are responsible within the broader skills development landscape.

9.2.1.3 Funding from the skills levy

In terms of the Skills Development Levies Act (SDLA) of 1999, employers are required to pay 1% of salary costs to the South African Revenue Service (SARS). SARS then places all moneys collected in the National Revenue Fund. Thereafter, 80% is paid, via the DHET, to the relevant SETA and 20% to the National Skills Fund. Government departments are not expected to pay a levy, but are required to set aside their 1%, from which they contribute 10% to the appropriate SETA to assist with administrative costs. In accordance with the SDLA, SETAs are entitled to use one-tenth of the 80% that they obtain from the levy, plus what they obtain from government departments, on administration. The balance must be used to fund skills development in the various ways provided for in the SDLA.

The rules work for some SETAs but not for others. Ten per cent of a very large levy income is quite adequate to fund a very large institution. For SETAs in smaller sectors with low levels of levy income, however, 10% is a small amount and not adequate. Further, there is a debate about how to support skills development in sectors that are important for national growth but may not raise sufficient income, based on the existing tax base of employers in the sector. The way in which the levy as a whole addresses these imperatives is critical.

In the current system, the levy is managed in different ways. The mandatory grant is paid back to employers who submit a WSP and ATR. The discretionary grant is used to fund other interventions on approval of these by the Board. The discretionary grant is disbursed either as a grant to employer or training provider, or the SETA Project manages the intervention on behalf of employers.

There is one school of thought that sees the SETAs as grant-making institutions. The employer claims a grant, either mandatory or discretionary, to implement workplace skills plans and initiatives in support of the Sector Skills Plan, and the role of the SETA is to provide grants to incentivise such initiatives. There is another school of thought that has the SETAs promoting sector skills initiatives, making them available to employers, and project managing them on behalf of employers. The former model tends to suit larger, better established employers and the latter smaller or less established entities.

Those SETAs that have project-managed skills development interventions have tended to do this through tender processes. They invite training providers to deliver training against agreed unit standards or qualifications. Tenders are submitted and the SETA awards contracts. This project management approach of projects funded by the SETA or NSF is well supported and enables projects to be conceptualised, planned, implemented and monitored. The ability of all SETAs to effectively project-manage can be questioned, but the application of project management principles is positive. Adherence to the Public Finance Management Act and Treasury supply chain management regulations also assists, although there have been cases on non-compliance. However, there are some unintended consequences of bringing SETAs into this intermediary role between training providers and the students (whether employed by companies or unemployed). These are:

- SETAs will generally insist on training being aligned to unit-standard-based programmes provided by accredited training providers. In theory this sounds quite logical. Only such accredited courses can provide a student with credits towards a qualification and provide proof of competence that can be recognised by potential employers and training providers. It is also a means of removing fly-by-night training providers who add no value. However, the consequences can be the opposite of what is intended. The courses can be limited in value in terms of the skills developed, they can be more geared to formal achievement of unit standard outcomes than genuine learning, and they can be just as meaningless to future employers and providers as attendance certificates for unaccredited training.
- Another of the unintended consequences is that public providers (FET colleges and universities) have been largely excluded from the provision of training funded by SETAs and the NSF. If an FET college or university wants to participate in such training they must set up special units to monitor tenders and operate like a private company in the "education and training market". This is not something that they are geared to do, and can detract from their main immediate task which is that of strengthening their capacity to provide quality education to an increasing number of young people. This has meant that the opportunities that used to exist for longer-term developmental partnerships between employers and public education institutions have been replaced by short-term contract opportunities.
- While the establishment of quality assurance bodies should be improving quality of provision, there is serious doubt as to whether this has been achieved. In many cases quality assurance by SETAs has been reduced to meeting bureaucratic compliance requirements that have little to do with the quality of provision.

- The almost complete absence of monitoring and evaluation within the system has made it very difficult to identify and address shortfalls. The perception is of a system that continues to repeat errors on a regular basis.

There is general agreement that Workplace Skills Plans (WSP) and Annual Training Reports (ATR) need to be improved. The current Workplace Skills Plans submitted by business do not reflect real priorities for business. A number of studies have highlighted the extent to which the current system encourages employers to only include the priorities that can be addressed within the financial year so as not to lead to complications when claiming the mandatory grant. This tends to exclude programmes that result in a qualification, as these may take longer than a financial year. In addition the Annual Training Report tends to reflect only the training linked to the amount claimed in the mandatory grant rather than to provide a picture of all training that has taken place in the workplace.

It is clear, therefore, that the purpose of the WSP and ATR needs to be revised. Two options for revision have emerged:

- The WSP should be revised so that it ensures a more reliable base of data about the levels of skills and experience available, and should provide some indication of broad priorities and trends for the workplace. The ATR, which would no longer be assessed against the WSP, would indicate all the training (whether SETA-funded or not) that has taken place in the workplace in the past financial year. In this option the mandatory grant will be given on condition that the plans and reports are comprehensive, but this particular grant will not play the role of a "steering grant". This will enable these reports to become a rich source of data for skills planning and analysis of workplace training. Given this change, there may be a need to review the percentage available for the mandatory grant, and to potentially reduce this amount in favour of an increase in the percentage available to the discretionary grant.
- The other option is to tighten the planning and reporting requirements in the current system so that the weaknesses are addressed. Precise ways in which these challenges will be addressed will need to be considered, to ensure that the funds continue to be disbursed as agreed upon.

Furthermore, there must be tighter guidelines and commitments, fostered through service-level agreements between government and the SETAs, on how the discretionary funds of the SETAs are spent. Critically, the discretionary grant should only be made available for programmes that lead to a full qualification or an award. The discretionary grant will support sector priorities, which require qualifications and awards – that is, they will not be used for short courses or for the provision of a limited number of unit standards that do not lead to an award. This support could include payment for provision (private or public providers) and an incentive for the workplace experience – both the experience that may be required as part of the qualification, and experience that relates more to experience after the qualification is completed, such as an internship. It could also support bursaries for learners.. However, where the SETA is supporting bursaries this money should be earmarked and transferred to NSFAS. This would ensure that it is provided to an institution that has the necessary experience and specialist capacity to manage and support such a process.

In addition, a defined minimum percentage of the discretionary grant should be made available to support public providers (mainly colleges or universities of technology) so that they can offer these qualifications and awards. This could include a focus on

lecturer development and placement support. However, it is suggested that these mechanisms should complement existing interventions being supported through the fiscus. They should be linked to a clear performance management system so that there is accountability for improved performance of learners in the college or university through such a disbursement.

However, there are cases where institutions provide programmes supported by SETAs at the expense of learners who are in the main-stream programmes funded through the fiscus. The imperative is to ensure that there is an integrated approach to managing the money so that it leads to overall improvements for learners. This will be closely monitored and there will be clearly outlined consequences where such abuses are found to be taking place.

When reviewing these options it is important to consider that there is a debate about how levy-grant funding for use by the SETAs should be distributed. There has been a suggestion that the grant money that is currently allocated to SETAs, primarily for the mandatory and discretionary grants, should be held in a central fund (possibly the NSF) and then allocated to SETAs on the basis of proposals and in accordance with the importance of the sector to national economic growth, job creation and the skills needs within the sector. Alternatively, the mandatory grant monies could be retained by SETAs while the monies for the discretionary grants could be located centrally. The counter-argument is that the levy-grant was not introduced as a general skills tax but as a mechanism to encourage employers to train more workers. It is argued further that the bureaucracy associated with central disbursement of funding, as well as monitoring the outcomes and impact of this spending, raises questions about the practicality of implementing this approach.

9.2.1.4 Governance arrangements

There are numerous challenges related to SETA governance structures and processes. These include:

- diffused focus and multiple objectives;
- conflation of governance and operational roles and responsibilities;
- uneven strategic sector planning, research capability, operations management, administration and financial management across the SETAs;
- poor monitoring and evaluation and inadequate management information in the SETA system;
- inefficiencies in work planning, service delivery and performance management across the SETAs;
- difficulties in addressing cross-sectoral skills development and training requirements.

Governance arrangements should reflect the agreed priorities for the scope and role of the SETAs. Boards should continue to include organised business and labour as well as the relevant government department. These individuals should continue to be nominated by their constituents. However, in addition to these representatives there are now also two independent individuals appointed by the Minister, who have an understanding of the sector and can provide input. In addition the chairperson is appointed by the Minister in Cabinet, after consultation with the main stakeholders, to ensure that the focus remains on the needs of the sector and does not narrowly reflect the views of a particular constituency. This ensures that there are strong employer and labour voices in the SETA, that these parties can take ownership of sector skills activities, and that they

are able to articulate the collective skills needs of their stakeholders and members. At the same time they have to create a mechanism for ensuring that the needs of the constituencies are continually considered within the context of the needs of the sector and the country.

In line with the constitution that has been developed for all SETAs, explicit roles should be articulated for the board. The focus should be on strategic imperatives rather than on the operational issues that have tended to bog down the SETAs in the past. This should be enabled by the increased role that the DHET will play in setting norms and standards for staff remuneration in SETAs. The DHET will also play a role in guiding the SETAs in terms of posts required to fulfil their functions (though it is recognised that this will differ across SETAs and that space will need to be allowed for SETAs to determine their organogram and specific posts).

Mechanisms are being put in place to ensure that the accountability of the SETA's is increased. The DHET has established guidelines for the development of performance agreements, service level agreements, strategic plans and Sector Skills Plans. These need to be streamlined so that there is one document which articulates the sectors' skills needs (taking into account broader economic and social imperatives) and another document which indicates the strategic plan (with a clear logic model with explicit indicators) that the SETA will implement. The latter will be informed by the Sector Skills Plan and will be the basis against which the SETA is held to account.

9.2.1.5 Supporting capacity development

There is a need to ensure that government departments and state-owned enterprises play a much more significant role in skills development than in the recent past. Many are committing to accommodating large numbers of apprentices and learners in learnerships and driving particular sector relevant projects. It is critical that this is translated into practice. The DHET will work closely with other government departments to ensure that this work is supported and reinforced across government.

Workplace-based training remains very diverse, with excellent training opportunities in some places, but in general very few employers who are prepared to take on apprentices and give students opportunities for work experience. Though there do appear to have been some areas of improvement, it is not yet clear that our policies to encourage workplace-based training have done so adequately. The Minister has met with industry representatives and will continue to meet with them periodically, especially under the auspices of NEDLAC. Commitments have been given by the private sector through the National Skills Accord to mobilise resources to achieve national skills development goals. Clear commitments for artisan development and support have been made by state-owned enterprises and the private sector, and are being worked on together with the National Artisan Moderation Body. It is crucial that the way in which quality assurance is established, as well as the way in which funding incentives are developed, take into account the need to make increased numbers of workplace experiences available to learners and graduates. In addition there is a need to promote partnerships between SETAs, employer associations and relevant FET colleges. Such partnerships will make it easier to encourage employers to expand the availability of structured workplace experience places for FET graduates, including those who have completed their NCV. Coupled with this there is a need to strengthen FET college placement services so as to further enable this partnership.

9.2.2 National Skills Fund

Established in terms of the Skills Development Act, the NSF was established as a fund which would allocate a proportion of the skills levy money from organised employers to those who would not normally benefit from employer training. The money was supposed to be targeted at disadvantaged groups, particularly the unemployed, to improve their opportunities. The NSF is allocated 20% of the skills development levies collected from employers, and this is the Fund's main source of income. Other funds are potentially available, such as directly voted funds from the fiscus, unallocated levies, donations and so on. The NSF's income has been approximately R1 billion a year and much of it has tended to be unspent, thus accumulating both interest and public hostility.

The money in the Fund may be used only for the projects identified in the National Skills Development Strategy as national priorities or for "such other projects related to the achievement of the purposes of this Act as the Director-General determines". Essentially this has meant that the NSF develops a set of funding windows and criteria for applications, obtains sign-off from the Director General, and then allocates the funds.

The NSF has suffered from organisational, staffing and procedural constraints. Part of the problem is that the NSF was set up as a way to fund small projects and not as a decision-making body which supports the skills development component of broader programmes. There has also been confusion about how it is supposed to do its job. A proper strategy for the allocation of NSF funds is only now in the process of being fully established, and the result has been that funds were given out piece-meal. Thus the NSF has had very limited impact in terms of its primary purpose. Furthermore, NSF procedures have sometimes made it difficult for worthy recipients to access funds. One problem may have been a restrictive model focused on funding only training aligned to unit standards on the NQF, which has made it difficult for many developmental projects to obtain funding. In addition, staff shortages may have constrained the Fund's ability to utilise the funds it receives. The NSF has essentially the same number of staff today as it had managing much smaller sums at its inception over ten years ago.

There has been little evaluation of the impact of the projects it has funded, but it is likely that the overall impact of the NSF has been minimal. The NSF is currently developing a new strategic framework and criteria for the allocation of funds which will identify funding priorities in line with those set out in NSDS III and other key government strategies.

The National Skills Fund should complement the discretionary grant of the SETAs. The discretionary grant should support established employers, and the NSF should support other priorities, including the following:

- The prioritization of those skills programmes that lead to full occupationally directed qualifications. This is referred to as the PIVOTAL grant and is described in greater depth in NSDS III.
- National imperatives that result from new national strategies or because of the success of a particular industrial intervention. This may mean that certain qualifications and awards that have not been prioritised in Sector Skills Plans may need to be funded initially through the NSF – for example, new skills that relate to the Green Economy.
- Those priorities considered national imperatives but that are not addressed by the SETAs. These include a limited number of priorities such as community development and job creation programmes which have a skills development component (for example, the Community Works Programme and parts of the Extended Public Works Programme (EPWP), such as those in the social sector that

support early childhood development, adult education or home-based care), and programmes that are aimed at emerging small businesses or co-operatives. In addition the need to augment funding from the fiscus for ABET (allocated through both the DBE and the DHET as discussed previously) should be prioritised, particularly in sectors where there are large numbers of individuals that have not attained ABET.

The NSF must concentrate on larger programmes and projects, delegating authority to handle smaller projects to intermediaries responsible for certain funding windows – for example, the Department of Public Works for EPWP training and the Small Enterprise Development Agency (under the auspices of the DTI) for training for small and emerging firms and co-operatives. This will include allocating funding for priorities established by the DHET, such as those set out in NSDS III.

There is a need to simplify criteria and procedures to speed up approvals, as well as to strengthen monitoring and evaluation. The NSF should require rigorous reporting against outcomes, as well as impact assessments of all its funding. Most importantly, it should acquire capacity to consolidate the findings and take action on results to achieve programme improvements.

9.2.3 National Skills Authority

The National Skills Authority was established as a stakeholder body. It was originally set up to advise the Minister of Labour, and has now been transferred to the Minister of Higher Education and Training. In terms of the Skills Development Act, the NSA must advise the Minister on: national skills development policy; national skills development strategy; guidelines on the implementation of the national skills development strategy; the allocation of subsidies from the National Skills Fund; and any regulations needed. It is also supposed to report to the Minister on the progress made in the implementation of the national skills development strategy and to conduct investigations on any matter arising out of the application of the Act. The Authority has powers of entry to SETAs, and to question and inspect them.

The NSA has not been able to fulfil all these roles adequately, partly because it has had little institutional capacity, and partly because of its stakeholder composition. The DHET is now committed to providing the resources necessary to ensure that the NSA can fulfil its functions effectively. Representation on the NSA will be expanded to include representatives from other government departments, including those responsible for economic development, to ensure that it is able to integrate and accommodate national priorities. The board should be limited to four key constituencies (employers, labour, community organisations and government) to raise the stature of each constituency. Other sectors such as civil society, NGOs and training providers would then be constituted into a "skills consultative forum" which supports the work of the NSA.

As the South African Institute for Vocational and Continuing Education and Training is conceived, the status and functions of the NSA may need to be re-examined in order to ensure that the result is not two competing organisations.

9.3 THE NATIONAL QUALIFICATIONS FRAMEWORK

9.3.1 Overview

The National Qualifications Framework overarches the whole education and training system. It was intended to:

- create an integrated national framework for learning achievements;
- facilitate access to, and mobility and progression within education, training and career paths;
- enhance the quality of education and training;
- accelerate the redress of past unfair discrimination in education, training and employment opportunities.

The NQF is organised as a series of levels of learning achievement, arranged in ascending order from one to ten. All qualifications and part qualifications offered in South Africa are supposed to be registered on the NQF. Some qualifications are registered with subject curricula attached, some consist of unit standards, and others fit into a system of qualification types.

The South African Qualifications Authority is the body with overall responsibility for the implementation of the NQF. It is directly accountable to the Minister of Higher Education and Training. SAQA is a juristic person, with a board of twelve members appointed by the Minister of Higher Education and Training. Its official objectives are to advance the objectives of the NQF, oversee the further development and implementation of the NQF, and co-ordinate the three sub-frameworks that comprise the NQF. It also manages a national database of learning achievements, the National Learners' Records Database (NLRD).

9.3.2 Three sub-frameworks

The NQF was initially designed as one comprehensive framework. It was later reviewed and modified through the National Qualifications Framework Act (No. 67 of 2008) to consist of three "sub-frameworks" – for higher education, general and further education and trades and occupations. These sub-frameworks are the responsibility of the three Quality Councils – the Council on Higher Education, Umalusi, and the Quality Council for Trades and Occupations. The sub-frameworks are under development and close to completion. Drafts will soon be released for public comment. These sub-frameworks will, when they have been finalised, determine what the NQF looks like in practice.

The most advanced of the three is the Higher Education sub-framework. It has nine qualification types mapped onto the top six levels of the NQF:

- undergraduate (levels 5 to 7): Higher Certificate, Advanced Certificate, Diploma, Advanced Diploma, Bachelor's Degree.
- postgraduate (levels 8 to 10): Postgraduate Diploma, Bachelor Honours Degree, Masters Degree, and Doctoral Degree.

This sub-framework was promulgated in 2007 by the Minister of Education, and has recently been reviewed by the CHE. After public comment it will be finalised for signature by the Minister. It will bring together qualifications offered by universities and universities of technology and will increase public understanding of and confidence in higher education qualifications. It will enable the establishment of common parameters

and criteria for programme design, and facilitate the comparability of qualifications across the higher education system. The sub-framework is intended to facilitate articulation between further and higher education and within higher education. The minimum requirement for admission to a higher education institution is the National Senior Certificate or the National Certificate Vocational at level 4. However, the possession of a qualification does not guarantee a student's progression and admission to a programme of study. In terms of the Higher Education Act (No. 101 of 1997), the decision to admit a student is the right and responsibility of the institution concerned and each institution develops its own admission and selection criteria.

The implementation date for the Higher Education Qualifications Framework was originally set for 1 January 2009, and it was implemented for all new programmes at that time. However, it is recognised that higher education institutions will need some time to phase out their existing qualifications. There will thus be a transition period before full compliance is achieved. The Minister of Higher Education and Training will determine the compliance date by notice in the *Government Gazette*. Some issues are still in the process of being resolved. For example, the Framework has been criticised by the universities of technology whose concerns – particularly about the abolition of the B.Tech. degree which they see as hindering progression by students with diplomas to higher levels of study – will have to be considered before the HEQF is finally adopted. Important, in this regard, is to ensure that progression for students with a Diploma or Higher Diploma is not compromised and that routes for further study which recognise their prior learning are not cut off. Another criticism of the HEQF has been the absence of a two-year Diploma, strongly advocated by the Health Professions Council of South Africa (HPCSA) and its boards.

Another concern is how to increase flexibility, to allow for extended undergraduate programmes which are recognised and funded by the government. A diversified and more flexible framework could enable different institutions to respond to the actual levels of preparedness of their particular incoming students rather than being forced, as they are now, to try to achieve the same outcomes for very different types of students in the timeframe. These issues have been the subject of the review by the CHE mentioned above.

A General and Further Education and Training Qualifications Framework (GFETQF) has been developed by Umalusi, but remains a draft document until approved by the Minister of Higher Education and Training. The purpose of the draft GFETQF is to improve coherence within the sub-framework and to strengthen articulation with qualifications residing on the two other sub-frameworks which comprise the NQF. The Framework describes common parameters and criteria for the development of qualifications and allows for the comparability of qualifications within the sub-framework. Like the HEQF, the GFETQF is constituted as a register of qualification types, some with designated variants. Each qualification consists of different combinations of subjects, a prescribed curriculum and external assessment.

To date the following qualifications in the sub-framework are in use:

- National Senior Certificate (replaces the Senior Certificate; first examined in 2008; NQF level 4);
- Senior Certificate (to be phased out by 2014);
- National Senior Certificate (Colleges) (to be phased out by 2011);
- National Certificate Vocational (examined for the first time in 2009);
- National Certificate Vocational (NQF level 3);
- National Certificate Vocational (NQF level 2);

- General Education and Training Certificate: Adult Basic Education and Training (NQF level 1);
- N 3 Certificate;
- Subject and Learning Area statements.

Other qualifications which have been developed, but not yet offered, are:

- the General Education Certificate (NQF level 1);
- the Intermediate Certificate (NQF level 3);
- the National Independent Certificate and the National Senior Certificate for Adults (NQF level 4);
- the Further Independent Certificate (level 5), and the National Certificate (Vocational) 5 (NQF level 5).

Qualifications at NQF level 5 are currently outside of Umalusi's legal remit. However, if they are seen as post-school but not higher education qualifications, there may be reason for them to be located here.

The third sub-framework, for Trade and Occupational qualifications, has been developed, and awaits public comments. It is a framework of qualification types, as well as an approach to the development of qualifications and awards, based on an Organising Framework for Occupations (OFO). A five-level classification system organises occupations into clusters and identifies common features at successively higher levels of generalisation.

It is intended that qualification design and development processes will be based on agreement on the Occupational Profile by representative and credible occupational practitioners across economic sectors. This will be followed by development of the curriculum and assessment specifications. The focus on occupational profiles is seen as a distinguishing characteristic of the Occupational Qualifications Framework (OQF), and is intended to ensure that qualifications reflect occupational competence.

Currently the following occupational qualifications are recognised for purposes of registration on the NQF:

- national occupational awards, which are occupational qualifications representing an occupation on the Organising Framework for Occupations classified at skills level 2 or above on the OFO; and
- national skills certificates, which are occupational qualifications representing: an occupation or group of occupations classified at skills level 1 on the OFO; occupational specialisations or other specialisations linked to an occupation or group of occupations; distinct sub-components of national occupational awards; or occupational skill sets that require licensing, registration or certification.

At the same time, there are myriad qualifications which are ostensibly occupational and which have been registered on the NQF, some of which are quality assured and certified through the SETAs.

The development of trade and occupational qualifications which are externally assessed and have currency in the labour market is a crucial priority. These should build on the existing trade test and apprenticeship system, as well as qualifications quality assured and certified by SETAs, which have gained credibility and respect. A process is under way to resolve the challenges of the NQF with regard to learnerships and apprenticeships (such as where learnerships in trades do not necessarily enable a

learner to understand the trade test). In the short term, the focus of the Quality Council on Trades and Occupations should be on consolidating qualifications offered by SETAs which have gained credibility, eliminating qualifications which have proved ineffective, consolidating one-year qualifications into more rational packages of qualification types, and developing new qualifications where necessary, especially for artisans, as, despite a decade of work, no core occupational qualifications yet exist for the twelve basic artisan trades.

9.3.3 Simplifying the national framework

Aligning the HEQF with the GFETQF and the OQF and integrating them into a single National Qualifications Framework is likely to take some time. Between 2001 and 2007, the government undertook a lengthy review of the NQF, which, in the interests of space, is not discussed here. It is not the intention of the DHET to signal another major review. However, problems clearly remain, despite the new NQF Act and the establishment of the three sectoral Quality Councils. Now, with all the major role-players largely configured under a single Ministry, the DHET will ensure an ongoing process of critical engagement and targeted review or reconsideration of aspects within the system, including tackling problems with the NQF that have not yet been resolved. We want learners and providers to see that progress does not have to mean moving up the NQF "ladder", but that it can mean acquiring new knowledge and skills. We need to simplify the NQF where possible.

Option one is to make no more substantial changes, and to support the implementation of changes which have recently been made. In this model, the three sub-frameworks in their emerging forms would continue, with SAQA providing guidance on articulation between them, based on recommendations from each of the Quality Councils.

Option two is to introduce simplification by removing the levels on the NQF, and instead indicating relationships between the key qualification types in the three sub-frameworks. The creation of such a simplified, unified NQF could be done without substantial changes to the sub-frameworks as they are currently conceptualised. It would simply be necessary to map the agreed qualification types against each other. This would entail the removal of NQF levels and level descriptors, while maintaining a hierarchy of qualifications, and the possibility for locating qualifications on regional or international frameworks. In this model, SAQA's role would shift to a greater focus on research about where there are problems with articulation. This could include researching instances of unfair restrictions on articulation of programmes and qualifications, through mapping the curricula of qualifications and programmes against each other, and facilitating discussions with institutions based on research findings.

Many countries now have NQFs, and there are many different models and approaches. Continuing to look critically at experiences in other countries may assist as we progressively improve our system.

Whichever option is chosen, the development of thousands of unit standards (there are currently 11 615 unit standards on the SAQA database), large numbers of which are never used, is a waste of time and resources. The NQF Act provides for the recognition of part qualifications, which is important for credit transfer and accumulation. There are well-recognised programmes based on unit standards – substantial skills programmes that have legal weight, and allow individuals to do specific work, such as work underground in mines, or do certain work in tourism and banking. These programmes have meaning and value in the workplace, and a lot of time has been devoted to them.

They must be recognised, perhaps as occupational awards, and our system of occupational awards must have space for this type of programme. However, the proliferation of unit standards must stop. No providers should feel compelled to develop programmes against unit standards, nor should any quality assurer require their use.

The South African Qualifications Authority will continue to provide guidance and leadership on the development of the NQF. It will also continue to play a major role in the development and implementation of its newly developed national career guidance service, which is key to learner mobility.

9.4 QUALITY ASSURANCE, ASSESSMENT AND CURRICULUM ORGANISATIONS AND SYSTEMS

9.4.1 Quality assurance structures

9.4.1.1 Quality councils and professional bodies

The primary bodies with a direct role in governing quality assurance and certification (and, through their responsibility for standards setting, curriculum and assessment) are the Quality Councils. The three Quality Councils – the CHE, Umalusi, and the QCTO – are responsible for: defining the three sub-frameworks of the NQF (as discussed above); quality assuring the provision, assessment, and, in the case of Umalusi and the QCTO, certification of qualifications on their respective frameworks; and maintaining a database of learner achievements.

In addition, professional bodies (such as the South African Institute of Chartered Accountants, or the South African Nursing Council) have oversight of qualifications in specified areas, subject to the NQF Act. Many professional bodies exist through legislation which falls under various Ministers, while others do not owe their existence to legislation. The NQF Act requires SAQA to develop criteria for the recognition of professional bodies and the registration of their professional designations. This process is at an advanced stage. In some instances professional bodies may engage in exclusionary, gate-keeping practices in order to limit the numbers of people entering the profession. The DHET intends to establish the extent of this problem. The DHET recognises the role of professional bodies in maintaining professional standards, but it intends engaging directly with professional bodies, in collaboration with other relevant Ministries where necessary, in order to curb such exclusionary practices where they exist, and to support the production of more professionals, especially black and women professionals.

9.4.1.2 The scope of quality councils

One of the questions facing us as we move forward is whether the current configuration of Quality Councils, as well as the demarcation of responsibility among them, is the most rational for our system. A sensible organisation of quality assurance organisations should reflect a sensible organisation of qualifications. The current demarcation is problematic. Although Umalusi and the CHE were initially intended to oversee the quality assurance of qualifications in respective “bands” on the NQF, Umalusi, by arrangement with the CHE, has quality assured certain qualifications which are above NQF level 4. The QCTO is now responsible for occupational qualifications, as defined in

the Skills Development Act, at all levels – although in practice many higher education and training qualifications are occupational or professional in focus.

The qualifications for which these various bodies are responsible can be placed on a continuum from the very general (academic) to the very specific (occupational). It is not easy to clearly demarcate "occupational" qualifications on the one hand and vocational and professional qualifications on the other. Nonetheless, it is likely to be counterproductive to lose the distinction between general vocational qualifications and focused occupational qualifications. The risk is of narrowing general vocational qualifications, such as the NCV, currently the responsibility of Umalusi. This would be contrary to the DHET's intention of creating a more diverse array of options for learners.

One change which could bring some increased clarity into the system without creating any major institutional changes would be facilitated by the removal of levels on the NQF. Once the notion of level 5 as part of higher education is removed, there should be no problem with Umalusi continuing to quality assure qualifications that are part of the post-school system, but are not part of the higher education system. Even if levels on the NQF remain, the demarcation of quality assurance bodies does not need to narrowly correspond to these levels. For example, it is sensible for Umalusi to quality assure qualifications which are part of a defined package of qualification types, such as the NCV 5, which would relate directly to the NCV 4.

Four possible options present themselves for the configuration of the Quality Councils:

Option one: Amalgamate all quality assurance into a single overarching Quality Assurance Authority with three chambers corresponding to the current Quality Councils.

Option two: Continue to build the three bodies in their current forms, with their current jurisdictions of qualifications remaining.

Option three: Continue to build the three bodies in their current forms, and shift all occupational and professional qualifications to the QCTO.

Option four: Incorporate the newly emerging occupational awards into Umalusi and dissolve the QCTO. Umalusi and the CHE would delegate to the SETAs the quality assurance of workplace-based learning, and Umalusi would work with the National Artisan Moderating Body (NAMB) to quality assure the trade tests. (See section 9.4.2.3 for more on the NAMB.)

There are merits and demerits inherent in each of these options, and they must be carefully assessed. Option one may require substantial organisational rebuilding in the long term, but could be implemented, at least initially, on the foundation of the current organisational structures of the existing Quality Councils. Option two does not resolve the contestation around how to demarcate qualifications, but involves the least institutional change. Furthermore, while it is difficult to draw a clear line between vocational and occupational qualifications, the differences are nonetheless important. It may be useful, therefore, to have separate Quality Councils working together where there is overlap through, for example, the recently formed NQF Forum. Option three presents difficulties, as professional qualifications are in many cases very firmly part of the higher education system, and many vocational qualifications have considerable components of general education, which will not fit well in the QCTO. There is a great danger that the important academic content of such qualifications will be diluted. Furthermore, the QCTO is new and does not yet have institutional capacity, and it would make no sense from an operational perspective to transfer qualifications away from where capacity already exists, to where it is still being built. Option four overcomes the

problem of demarcating between occupational and vocational qualifications, but would involve institutional change.

These options need to be interrogated further by the DHET, SAQA, and the Quality Councils before any decision is made. Other stakeholders and the general public are also urged to contribute by making submissions to this debate. Meanwhile, the focus of the DHET will be on building capacity of the existing institutions, utilising whatever strengths there are in the system, and ensuring that current systems continue to function as well as possible. Building and strengthening relationships with professional bodies is a key part of this work. In the course of the next few years, some reorganisation of the work of the Quality Councils is probably inevitable, but it should be done with the least disruption possible.

9.4.2 Simplifying and strengthening quality assurance

9.4.2.1 Improving quality assurance

Quality assurance is an important part of our regulatory system. A key challenge is how to ensure that quality assurance is more focused on where it can make a real impact. We need to be far more targeted and strategic, and we need to ensure that our systems do not stifle initiative, responsiveness and the ability of providers to provide education.

It is increasingly clear that quality assurance and qualifications systems can tend towards bureaucratic implementation which eliminates professional judgement, while professional judgement, learning and continuous improvement are essential. We need to strengthen the professional capacity of all organisations involved in these areas, building on existing strengths, and not underestimating the time it takes to build up capacity. Staff who work in quality assurance need extensive experience in and knowledge of the specialised areas which they quality assure.

The DHET envisages a combination of a tight and focused quality assurance system for key national qualifications and institutions, and will consider a loosening up of quality assurance for some other types of provision. Finding the appropriate systems for the development of curricula, and the development and management of assessment and certification, will be an important part of simplifying and improving our quality assurance system.

9.4.2.2 Curriculum

In higher education, curricula are the responsibility of individual institutions. This is appropriate and should remain.

For the rest of the post-school system, some degree of curriculum centralisation is necessary. One problem is that we have, in many instances, placed far too much responsibility on individual providers for curriculum development. Outside of the higher education system most national qualifications would be improved by having a nationally specified curriculum. However, there is presently insufficient capacity nationally, in government and elsewhere, for curriculum development. In many instances curricula are developed through *ad hoc* processes and groups. Our ability to develop curricula nationally would be increased by institutionalising capacity for curriculum, under the auspices of the Quality Councils. It is vital to ensure that there are state or national bodies which can play this role and support the development of such bodies. The

proposed Institute for Vocational and Continuing Education could, once it is established, develop curriculum under the authority of the relevant Quality Council.

9.4.2.3 Assessment and certification

Assessment for higher education is institution-based, and moderated through peer-reviewed external assessment systems. Certification takes place at an institutional level. Quality assurance looks at the capacity of institutions to run and manage assessment and certification, among other functions. This system should continue.

For the rest of the post-school system, strengthening external assessment systems for national qualifications is a priority. The state must continue to assess the NCV and N courses (and the courses which will replace the latter). The state must also take responsibility for the assessment of the NASCA. This will enable a substantial reduction in the need for detailed accreditation processes of providers – which in practical terms are never rigorous when large numbers of providers must be dealt with. It will also reduce the need for the complex system of individually registered assessors, moderators and verifiers. When learners in educational institutions write examinations or participate in external assessment, this provides significant information to quality assurance bodies. While it does not provide information on many aspects of a quality learning experience, it does provide far more information than that obtained through most institutional accreditation processes, which do not, given the numbers of institutions involved, comprise lengthy evaluative visits to institutions. Quality Councils can use external assessment as an indicator of poor performance. They could investigate institutions where learners consistently perform poorly in such assessments in order to institute remedial or capacity-building measures. Problematic institutions could even be closed down where necessary.

In terms of the Skills Development Act, the DHET has recently established the National Artisan Moderating Body (NAMB) whose main statutory functions include the following:

- setting standards for quality artisan training;
- monitoring the performance of and moderating accredited artisan trade test centres;
- developing, maintaining and applying a national databank of instruments for assessment and moderation of artisan trade tests;
- developing and maintaining a national database of registered artisan trade assessors and moderators;
- recommending certification of artisans to the QCTO.

This is not a new trade test system, although currently a great deal of emphasis is on developing assessment instruments. In the absence of strong centralised assessment, the NAMB should move towards a greater assessment role, as opposed to a moderation role. Working with the QCTO and through NAMB, the DHET will update and improve the trade testing system. The different contractual and learning modalities which are represented by apprenticeships and learnerships respectively may both have value and need in our system, and may both be required in the future, but both should lead to national trade and occupational qualifications.

Quality Councils must ensure that wherever appropriate, institutions and assessment bodies allow candidates to sit for assessment without having first been registered on specific learning programmes. This will ensure that workers who have gained experience in the workplace will be able to attain trades and professional certificates.

9.4.3 Recognition of Prior Learning

Many institutions have policies and systems to assist with the placement of learners who do not meet the formal requirements for entrance, but who can demonstrate that they have appropriate knowledge and skills. These systems should be simplified, supported and strengthened, so that institutions make alternate routes for access possible.

Over the past seventeen years substantial work has been done by many institutions and organisations in the development of policies and systems to recognise prior learning, as well as in researching the efficacy of such policies. This work will be built on by a task team to be established by the Minister on the advice of SAQA. The priority is to continue to improve ways in which individuals can receive credits for prior learning towards a qualification. Where appropriate, learners should be able to enrol for assessment without having completed a formal educational programme. There will also be a strengthening of existing processes to recognise equivalent learning from other institutions, so that a learner may be exempted from undertaking a certain component of the programme.

9.4.4 Learning which does not lead to a qualification

There is much learning which does not need to lead to a national qualification. Such education and training need not be rigorously quality assured, as long as it is meeting the needs of learners, the relevant government department, private employer or community. We need to provide strong signals to other government departments and donors that non-formal educational provision targeted at specific community needs, as well as on-going professional development, need not always lead to qualifications or be provided through accredited providers.

9.4.5 Monitoring and evaluation

A comprehensive monitoring and evaluation framework will be developed which considers the impact that the overall system, including all implementation and regulatory bodies, are having on individuals, society and the economy. This will focus on whether the different bodies are achieving their goals, and whether they are having the anticipated impact on the overall goal of this system. For example, it could attempt to understand how the skills being developed are supporting economic growth and job creation.

Monitoring and evaluation should make it possible to understand the levels of efficacy that are being achieved, and identify where any blockages in the system may be emerging. This could form part of a loop-back into the Human Resources Development Strategy, and specifically the post-schooling strategy for the country. It should enable a more detailed and informed understanding of the skills deficits and the areas for focused growth linked to the country's needs.

This implies the need for a regular monitoring process in which the data is analysed in a meaningful way, and an evaluative process which focuses on specific issues as they arise, as well as providing an understanding of impact. It assumes, therefore, that data will be available, and that varied sources of data will be integrated into the framework. This will need to take place against defined indicators which, for the next three years at least, will draw on the NSDS III and on the indicators in the Minister's delivery

agreement with the President. It is critical that approaches to evaluation are incorporated early in policy development and implementation, so that the data that will be required is collected in an on-going manner.

10. ARTICULATION, COLLABORATION AND CO-ORDINATION

10.1 WORKING TOGETHER

The DHET will initiate and support policies and systems directed at building and strengthening co-operation between sub-sectors of the post-school system, and across the range of providing, regulatory and other institutions. The proposed post-school education system aims to achieve congruency within an integrated provision system. This system must be comprised of a set of clearly defined and differentiated types of providers. Institutional nomenclature for both the public and private sectors (such as *universities, colleges, institutes, academies*, and so on) should indicate defined sets of offerings. This could help to improve the transparency of the system for learners and the general public. Defining and applying this nomenclature should be the object of further investigation and discussion.

The DHET will work with other government departments to improve co-ordination and reduce duplication. For example, all student funding from the state should be coordinated through the National Student Financial Aid Scheme, and small business support should all be co-ordinated through the Department of Trade and Industry. This is key to building efficient institutional capacity in the state – there should be a single locus for all major aspects of the system.

A truly integrated education system implies that institutional growth paths are aligned to South Africa's overall development agenda with direct links to various development strategies such as the New Growth Path, the Industrial Policy Action Plan 2, the Human Resource Development Strategy for South Africa 2010-2030, and South Africa's ten-year Innovation Plan. These identify priority growth areas and job drivers for South Africa's economy including, among others, infrastructure and housing development, mining and minerals beneficiation, smallholder agriculture, metal fabrication, capital and transport equipment manufacture, "green" and energy-saving industries, the automotive industry, plastics, pharmaceuticals chemicals, bio-fuels, forestry and related industries, cultural industries, tourism, and the social economy, including co-operatives, NGOs and stokvels engaged in a range of activities. These areas of economic activity as well as the Department of Labour's scarce skills list provide guidance to SETAs and educational institutions on some of the most important skills required by the country.

The National Skills Development Strategy 3 (NSDS III) provides strategic guidelines for skills development and encompasses sector-specific direction for skills planning and implementation by the SETAs. Furthermore, NSDS III calls for greater synergy between post-school education providers, and better alignment between the education system and the labour market.

Our educational institutions must work together. Universities should support colleges and community education and training centres. We need institutions to develop realistic bridging programmes that can support individuals who do not have all the knowledge

and experience required for the education programmes of their choice. Such programmes will be funded by the DHET. We need to integrate adult learning into the skills development process.

Skills-levy institutions must fund and support public provision. They must also play a crucial role in building relationships between education and the labour market. Articulation between colleges and universities and within the university system (for example, between universities of technology and traditional universities) is essential to ensure that doors are not closed to learners. We envisage a key future focus for SAQA in leading the creation of a systematically articulated system by conducting focused research into areas that have been flagged as having unfair entrance requirements or where the qualification system or institutional practices are seen as unfairly restricting access to higher study opportunities. What is envisaged here is not a legislative change, but a process of strengthening a research-based understanding of problem areas, and of facilitating meaningful and substantial dialogue and discussion with involved institutions.

The DHET will work to strengthen collaboration between the private and public sectors, and between the three spheres of government. It must improve co-ordination between itself and departments that are responsible for specific sectors such as tourism and transport. Also crucial is improving co-ordination between relevant ministries that are critical to delivering improved post-school education, such as Basic Education, the Treasury, Labour, Science and Technology, Trade and Industry, and Economic Development. We need improved planning at sectoral and national levels to ensure that information exists to inform future investment in skills and human resources.

10.2 IMPROVING SKILLS PLANNING

The foundation of any planning process is the existence of comprehensive, accurate, integrated and effectively analysed data. The DHET faces a number of challenges in this respect. The data on educational institutions maintained by the former Department of Education was not always accurate, was not comprehensive and was not organised as part of an integrated system. University, college and adult education data are stored in separate systems. This made for an unsatisfactory management information system. The data was particularly weak in the college and adult education systems. In the levy-grant institutions, the data has been scattered among the SETAs and the NSF. Additional important data on the education system and the labour market is collected by SAQA, the Quality Councils, and the National Student Financial Aid Scheme.

The lack of congruence between different datasets seriously constrains the system's ability to compare, assess and evaluate the post-school system. It also negatively affects development of the planning and steering mechanisms that may be most useful for the system. The first step, therefore, is to establish an integrated system of data management among all institutions in the post-school system, something that the DHET has now embarked on. In addition, systems for analysing and using this data on an ongoing basis must be developed and put into effect.

In order to establish a credible national institutional mechanism for skills planning, the integrated DHET data system needs to be further integrated with data from other government departments, such as the Departments of Labour, Home Affairs, Trade and Industry, Science and Technology, Basic Education, Public Service and Administration, Rural Development and Economic Development, as well as Stats SA, through a specialist information system.

This is a major undertaking. A model for comprehensive skills planning on a national basis is currently being developed by the DHET and a consortium of research institutions. This consortium is being led by the Human Sciences Research Council and includes university-based research centres.

The primary objective of enhanced data collection and analysis is a better understanding of the education and training system and the needs of the labour market. The information thus generated will: guide policy and strategy formulation, implementation, monitoring and evaluation; support the planning of capacity building in institutions and national or provincial systems; enhance policy and strategy co-ordination across previously divided sub-systems; and assist in career guidance and career development by helping learners and their mentors to make more informed career and study choices.

Ultimately, we should remember, though, that no matter how good our skills planning is, the extent to which supply can meet demand is ultimately dependent on the extent to which the capacity of providers is developed. This must take into account the strengths of both public and private education providers as well as workplace provision.

11. CONCLUSION

Education and training at the post-school level have been brought together as a natural complement to each other in the Department of Higher Education and Training. This allows us to create a single, coherent system in which the different types of institutions each play an important role and co-operate for the mutual benefit of all. Universities, colleges, other post-school educational institutions and the SETAs all have something to offer one another, and all can benefit from the others. A major challenge lies in finding ways in which the co-operation can be optimised so that the system as a whole can be strengthened.

This Green Paper recognises that the range of education and training opportunities and pathways on offer are too limited to meet either the needs of society and the economy or the expectations of young people and their parents. It is argued that these opportunities need to be expanded very significantly. Such expansion must take place in all institutional types: universities, colleges and community education and training centres. The greatest growth must take place at the college level in order to produce middle-level skills to meet the economy's demand for these skills. Enrolments in the college system will need to expand at least ten times in the next twenty years. This poses a difficult challenge – ensuring that quality is improved simultaneously across the system.

An important characteristic of the post-school system must be articulation for students between different institutions, so that there are no dead-ends and students who wish to study further will not be obstructed by red tape. They should be able to transfer to more advanced programmes, if necessary in other institutional types. Equally important is building articulation between educational institutions and the labour market so that students can get practical experience in real workplaces, and find jobs when they complete their studies. The SETAs have a central role to play in building bridges between educational institutions and employers.

The Green Paper recognises that the education and training system on its own cannot create jobs. However, it is an indispensable prerequisite if the economy is to change from one in which a relatively highly paid skilled labour force can drive the economy in a

direction that relies more on the value-adding skills of its people than on easily replaceable and cheap unskilled labour.

The education and training institutions should be supported by effective policy, management, administrative and regulatory institutions at the national level. These include the DHET itself, quality assurance organisations, the levy-grant institutions and other support institutions such as the proposed South African Institute for Vocational and Continuing Education and Training and the Council on Higher Education. Of great importance is the proper collection, analysis and co-ordination of data, as well as the maintenance and effective use of an integrated data management system for the entire education and training system.

The funding of the different sub-systems of the post-school sector has always operated individually. Evidence over the last sixteen years confirms that there has been much wastage and inefficiency. The Green Paper envisages a more effective utilisation of funding in all post-school institutions – whether they be educational institutions, levy-grant institutions or other regulatory bodies. It argues for more porous boundaries between and among the different funding envelopes, and for more public accountability for the use of public funds.

It is important to emphasise that equity of access and success are the key principles that inform the policy direction of the post-school sector. Over the coming years, everything will be done to ensure that funding is not a barrier to access to education and training opportunities. Entry to post-school education and training must progressively become a right for all, and access to particular programmes must not be determined by family finances but rather by ability and proven capacity to study hard. Career guidance must become available to all young people as they choose their career paths.

Finally the Green Paper argues for a simpler NQF. It is also recognised that not all training has to necessarily adhere to specified outcomes that are registered on the NQF. The governance arrangements that pertain to quality assurance and standard setting are not yet optimal for the envisaged post-school system and must be re-examined.

Through this Green Paper, the Department of Higher Education and Training has provided a vision for drawing together various policy development processes, filling in gaps and signalling policy priorities, to provide a coherent policy framework for a diverse but integrated and coherent system. It has provided a vision for the future development of this system to guide the work of the Department as a whole in the coming years. Clearly, once a vision has been agreed upon, the capacity required by the Department to implement it must be urgently addressed.

While this Green Paper reflects emerging policy thinking in the DHET, it should not be considered as definitive government policy. In parts it reflects debates and policy options without necessarily attempting to state preferences. The Green Paper is being made public with an invitation to stakeholders and all other interested persons to make submissions with comments and recommendations. These submissions will be scrutinised by the Minister and his Department, and the process will be followed by the drafting of a White Paper on the post-school sector for submission to Cabinet and adoption as official government policy.