
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

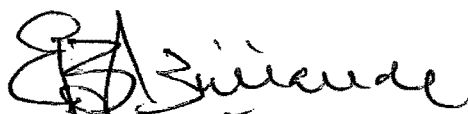
Written comments on the Green Paper for Post-School Education and Training should **preferably be emailed** to Mr Zakhele Hlongwane at the following address: hlongwane.z@dhet.gov.za

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

Mr Zakhele Hlongwane
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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

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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 unemployment 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 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 educare. 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