10-Point Plan for higher education and training

Skills for inclusive growth: Towards a long-term strategy for higher education and training

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Contents

Section A: Introduction

Background

The Department of Higher Education and Training (DHET) has requested the Development Bank of Southern Africa (DBSA) to produce a 10-Point Plan for the Higher Education and Training System. The aim of this exercise is to produce a high level 10-Point Plan with short-, medium- (to 2015) and long-term (to 2030) recommendations.

The DBSA produced Road Maps for Basic Education and Health in 2008/09. Both Roadmaps have been well received by the respective departments and significant elements have been adopted for implementation. The DBSA is involved in following up aspects of the recommendations.

The context and timing of this 10-Point Plan process is different from the conditions that prevailed at the time of the Basic Education and Health Roadmap processes. This exercise takes place almost one year into the current political administration; when the new DHET is energetically and extensively planning, consulting and formulating action plans to achieve an optimal departmental shape to achieve its objectives. As a consequence there are many activities that have already been initiated that will have short- and long-term consequences and which, in all probability, anticipate the outcome of the 10-Point Plan that emerges from this process.

Expectations for higher education

The White Paper stipulates that higher education in a knowledge-driven world must fulfill three important roles:

- Human resource development: the mobilisation of human talent and potential through lifelong learning to contribute to the social, economic, cultural and intellectual life of a rapidly changing society.
- High level skills training: the training and provision of person power to strengthen this country's enterprises, services and infrastructure. This requires the development of professionals and knowledge workers with globally equivalent skills, but who are socially responsible and conscious of their role in contributing to the national development effort and social transformation.
- Production, acquisition and application of new knowledge: national growth and competitiveness is dependent on continuous technological improvement and innovation, driven by a well organised, vibrant research and development system that integrates the research and training capacity of higher education with the needs of industry and of social reconstruction (Department of Education, 1997, 1.12).

These broad and still very much relevant expectations informed the various interactions and the analysis that formed part of the development of this 10-Point Plan.

Progress

In the development of this 10-Point Plan, recognition has been given to the substantial efforts already undertaken in planning and building the post-apartheid education system. The 10-Point Plan is not proposed as though the domain of higher education and training can be treated as a tabula rasa.

In the past 16 years progress has been made on the development and implementation of various legislation, policies, plans, funding norms and standards. Institutional arrangements to quality assure, address implementation challenges and to advise have been established.

At the FET college level this has included the creation: of a landscape through merging institutions into 50 colleges; some degree of recapitalisation, drawing up of a national plan, norms and standards for funding, introduction of student bursaries and adoption of a curriculum.

Over the last decade in the higher education sector innovations included the following: mergers and a new landscape, application of a funding formula, a student funding scheme, and a quality assurance system and qualification framework.

In this period, a skills levy-grant system, the Sector Education and Training Authorities, and the National Skills Authority were introduced to improve vocational and workplace training.

Nevertheless, the democratic developmental project for South Africa is being held hostage and hobbled by vestiges of apartheid social engineering. The challenges for basic education include underperformance of schools, poor student performance in core learning areas of mathematics, science and language. In the post school domain, the underdevelopment of the college system due to "job reservation" and the struggle to redress HBI's (which were established in homelands and on an ethnic basis) remains a challenge. The democratic South Africa must now adopt a different paradigm to unlock the potential of its human resources – one of the deepest challenges that the country faces.

Change, stability and continuity

In the process of developing this document, two common threads of concern articulated by participants related to: goal-setting and the attainability of stated goals, and the importance of achieving change without rupturing current functioning structures and processes.

The recent OECD *Review of National Policies for Education* in South Africa observes that in this country, the complexities of bringing about change have been underestimated: "It is clear that vision, idealism and high-minded concern for a greatly reformed education system were

very much in evidence among legislators and policy makers in the early years. However, it is also clear that there was an underestimation of the time, resources and qualitative teaching force required to make operational the policy aspirations in the schoolrooms throughout the country. Much research has indicated how difficult and complex it is to achieve major educational change, even in countries where the circumstances are much more favourable than they were in South Africa." (2008; 127).

The OECD document also warns that plans alone – even if aligned to policy and legislation – in and of themselves cannot instigate change. The commitment of resources and effort are indispensable to enact change. Of the South African education system the OECD document observed as follows: "Legislation and regulation could not ensure the transformation of education that was required. Experience has shown that sustained, multifaceted resourcing and supportive action are also required and the time scale for the transformation is much longer than was initially anticipated." (2008:127).

These lessons from the recent experience of successful change implementation, but also of failure to engineer positive change across the board in the South African education system must be acknowledged in this process.

The relationship between skills and development

Finally, it is necessary to note, as part of this introductory section, that there is no single point of departure for conceptualising the relationship between skills, growth and social and economic equality.

A scan of current policy and planning foci of government reveals that "skills for an inclusive growth path" is a key goal of South Africa's Medium Term Strategic Framework. It is also the fundamental developmental concept informing this 10-Point Plan for Higher Education and Training.

The DBSA's own *Perspective on South Africa's Long-term Development Path* defines inclusive growth as: "Growth that enables employment creation, income distribution, ownership of economic assets, education and skills" (DBSA:54)[1]. Inclusive growth is central to addressing inequality and is necessary for the consolidation of democracy at political, social and economic levels.

The discourse on the "developmental state" has implications for this discussion. While it is not possible to exhaustively discuss the nature of a developmental state, it is worth noting that essential conditions for a developmental state include (Gumede, 2009:9-12): A long-term developmental vision with the political will to strive for that vision. An efficient autonomous

1 A Perspective on South Africa's Long-term Development Path, DBSA, 2009

bureaucracy, with highly skilled technical staff appointed on merit, which has public and political legitimacy. An efficient centre that drives growth while addressing vulnerabilities with a focus on the national interest. A developmental partnership with all sectors of society, government, business, labour and civil society. The importance of skills is imbedded in notions of what the developmental state should achieve and how it should function. Finally, Gumede (2009:12) argues that the developmental state must pursue the goals of nation building and democracy at the same time and maintain a balance between "equity, economic growth and democracy" (2009:13).

The problematic of 'skills shortages' is also highly relevant to this discussion, especially where the mismatch between skills and the labour market is attributed to the nature of the economy. The International Panel on AsgiSA (Hausmann, 2007:4) observed "It is clear from business surveys and from the general national debate that skills are in short supply and a strategy to relax this constraint is necessary". The Panel also noted that "the skills constraint is aggravated by the pattern of growth that South Africa is experiencing, and in fact is in large part its result".

It argued further that South Africa needs to consider a strategy "based on the people that South Africa has, not on the people that it wished it had". However, there is need for a balance between high and low skilled workers as "high skilled and low skilled workers are strongly complementary, not substitutes" (Hausmann, 2007:8). In order to absorb low skilled workers, high skilled workers are also required in the economy. Aside from the implications for labour absorption, the balance between low and high skilled workers has implications for the cost of labour. A surplus of low skilled workers results in lower wages and a scarcity of high skilled workers results in them being overpriced, exacerbating inequality. The Panel goes on to state that "An obvious policy to quickly relax the constraint is through a liberalisation and encouragement of high skilled immigration". (Hausmann, 2007:8).

Finally there is a point of view that what South Africa needs is a functioning education system as a critical antecendent for positive economic performance. As Jeffrey Sachs (2008:3) states, "When the preconditions of basic infrastructure (roads, power and ports) and *human capital (health and education)* are in place, markets are powerful engines of development. Without those preconditions, markets can cruelly bypass large parts of the world, leaving them impoverished and suffering without respite" [*our emphasis*].

Process

In the 10-Point Plan that follows, the aim was to derive a set of interventions that would on balance – when viewed as a package – reflect recognition of the need to reconcile as far as possible the apparently contradictory states of change and of continuity. This contradiction was

clearly evident in the discussion of the FET colleges: where some protagonists drew attention to the necessity for stability and consolidation of a fragile set of institutions, whereas others argued that the time is ripe for swift, decisive and sweeping decision making.

The structure of this document

This document is structured as follows:

Section B gives a brief account of the *methodologies* that were followed in the course of developing the 10-Point Plan

The aim of Section C is to present a *high level summary of the 10 points* upfront in order to provide a framework for in-depth discussion of each point.

Section D is intended to provide important context to the 10 points. To do so, this section highlights *five macro issues that characterise the environment* within which the 10 pressure points are located. These macro issues will influence the levels of success with which interventions put forward in this document may be implemented.

Section E provides an in-depth discussion of each of the 10 points structured to answer three key questions: first, 'Why is this issue important to the DHET system?'; second, "What are the main problems/challenges?"; and third "What interventions should be undertaken to resolve the problems/challenges?"

Please note: That this document includes a series of Appendices that cover additional themes of relevance to the DHET context which could not be included in the main document, but are appended to show that the authors are aware of these themes.

Section B: This 10-Point Plan process and its contribution to the DHET's own long-term planning activities

In January 2010, the Department of Higher Education and Training (DHET) requested the DBSA to produce a '10-Point Plan' for the Higher Education and Training System.

In the preceding two years, the DBSA produced successful 'Road Maps' for Basic Education and Health in 2008/09. It is necessary to distinguish between the 'road map' and the '10-Point Plan' processes.

The education road map process was based mainly on consultation between the various stakeholders involved in the Basic Education system where the DBSA played a key role as facilitator and mediator. A structured set of meetings of sub-groups and technical working groups ensued leading to a sector wide consultative meeting towards the end of the process.

This 10-Point Plan process gives greater emphasis to the inputs of a range of experts which are then 'moderated' through a series of thematic meetings with stakeholders from the DHET, practitioners and experts. Looked at in its entirety, our view is that this 10-Point Plan more or less achieved a balance between stakeholder inputs and expert inputs.

The 10-Point Plan process was therefore the outcome of a combination of: a discursive process involving various inputs and an iterative process of developing the Plan by the DBSA writing team.

This document serves as one input among many into the DHET's own planning processes.

More specifically the development of this 10-Point Plan involved the following phases:

a. Consultation with the DHET on the project
b. Attendance at the FET Roundtable and the HE Summit both in April 2010
c. A literature search and a database search
d. Commissioning six expert papers focusing on the following: the higher education sector, the FET college sector, academic development, higher education transformation, forecasting skills demand, and workplace skills development. The titles of the papers are:
    i An overview of the demand for skills for an inclusive growth path
    ii Thinking 'out of the box' by thinking 'in the box': Considering skills development: Challenges and recommendations

iii Improving quality and expanding the further education and training college system to meet the need for an inclusive growth path

iv The challenges of transformation in higher education and training institution in South Africa

v Academic development for improved efficiency in the higher education and training system in South Africa

vi Transformation in higher education: A briefing paper

e. Workshops on each of the above thematic papers were attended by stakeholders where in each case the contracted expert presented her/his paper for discussion.

f. A series of one-on-one meetings with role-players involved in statutory bodies, and with higher education consultants, and presentation of work in progress to senior DHET management.

g. Selection of 10 high level points for intervention in the HE&T system.

h. Completion of the 10-Point Plan document.

Section C: The 10-Point Plan – a high level summary

In the sections that follow, the 10-Point Plan will be presented in a summary form, before engaging with detailed analysis.

High level perspective of what the 10-Point Plan should aim for

In the view of the DBSA four goals are key:

- In the long term, the "shape and size" of the post school system needs to be diverse, differentiated, yet coherent, and efficient. An appropriate mix of institutions for a growing economy and equal society must be established.
- In the medium term increasing numbers of students should complete schooling with a quality grade 12 and that those who have access to tertiary education should graduate, with appropriate quality qualifications and find appropriate employment.
- In the short term – 3–5 years – performing institutions which deliver these outcomes must be strenghtened, and supported through judicious application of incentives and focused policy intervention – such as around institutional differentiation in the higher education sector.
- The DHET system must be positioned to administer clearly specified yet robust accountability, through quality assurance, developmental plans, active application of policy to achieve goals and experienced practitioners from outside the DHET system.

Breakdown of the 10 points

Before proceeding with in-depth analysis in Sections D and E of this document, this section presents a *high level summary of the 10 points* in tabular form.

In the first case, the intention is to identify which of the 10-points addresses challenges experienced by:

- The Department of Higher Education and Training itself: two points focus on the capacity of the Department to carry out interventions and to develop management information systems.
- The institutions (universities, colleges, SETAs, etc.): Four points focus on institutional functioning in colleges SETAs and the private sector.
- The core beneficiaries the students: Table 1 shows that a cluster of four interventions/aims should improve student outcomes since each intervention/aim contributes to improved effectiveness and quality of higher education and FET institutions.

The second table provides an indication of the timeframes within which – in the view of the writing team – each of the 10 pressure points could be resolved. The timeframe assumes immediate actions to kick start all the interventions, though some would take place within a shorter timeframe, and the timeframe for others would be longer.

The existence of dependencies between the various interventions is noted but given the tentativeness of the timeframes, working on dependencies is not seen as useful in this exercise. Save for emphasising one aspect. That is, all of the interventions are to a great extent dependent on the capacity of the DHET to ensure that all are actioned and completed.

The 10 points selected are for inclusion in a set of interventions on the basis of their perceived relative importance to improving the HET system. The selection does not take into account, or try to build in, possible synergies between interventions – except for the four focusing on student outcomes – though these may exist.

This 10-Point Plan document acknowledges that in a highly complex system such as the post-school sector, for any of the 10 pressure points there is no single once-off 'silver bullet' intervention. In the discussion the reader will find that for each pressure point, a number of possible interventions are put forward all of which in some combination could bring about positive change.

At this early stage of planning, rating/ranking interventions according to: (a) resource intensity/ cost/effort; (b) feasibility; and (c) boldness has not been done.

Given the high-level approach of this project, and its short term duration, no detailed planning of interventions was done.

Table 1: Higher Education and Training 10-Point Plan: The focus of each intervention

		Focus of each intervention		
		DHET	Institutions	Students
1	Improve governance and leadership of all HEI, SETA and FET entities to empower them to address strategic challenges in the sector		X	
2	Build a new generation of high quality lecturers			X
3	Improve career information, including through the basic education system, to guide learner choices			X
4	Expand academic development programmes to address the needs of current cohorts of students			X
5	Mobilise public and private sector for work experience and training			X
6	Create a public comprehensive and coordinated system of HEI's that offer differentiated programmes that cater for national priorities and institutional comparative advantages		X	
7	Improve FET quality and completion rates whilst creating community education and traning centres to increase offerings to unemployed youth		X	
8	Streamline the SETA system to focus on sector priorities, allocating functions to appropriate national agencies		X	
9	Build the DHET capability to manage these goals for the sector, particularly with regard to ensuring that HET results, efficiencies and funding strategies are well aligned and performance managed – MIS, strategic management decision making, planning, M&E, reporting, funding	X		
10	Create a national skills demand forecasting process, factoring in strategic insights from SETAs and other labour market analysis	X		

Table 2: Higher Education and Training 10-Point Plan: Timescale for completion of interventions: short-, medium- and long-term

		2014	2020	2030
1	Improve governance and leadership of all HEI, SETA and FET entities to empower them to address strategic challenges in sector	X		
2	Build a new generation of high quality academics	X	X	X
3	Improve career information, including through the basic education system, to guide learner choices	X		
4	Expand academic development programmes to address the needs of current cohorts of students	X	X	
5	Mobilise public and private sector for work experience and training – including use of State entities and BBBEE	X		
6	Create a public comprehensive and coordinated system of HEI's that offer differentiated programmes that cater for national priorities and institutional comparative advantages	X	X	X
7	Improve FET quality and completion rates whlst creating community education and training centres to increase offerings to unemployed youth	X	X	
8	Streamline the SETA system to focus on sector priorities, allocating functions to appropriate national agencies	X	X	
9	Build the DHET capability to manage these goals for the sector, particularly with regard to ensuring that HET results, efficiencies and funding strategies are well aligned and performance managed – MIS, strategic management decision making, planning, M&E, reporting, funding	X	X	
10	Create a national skills demand forecasting process, factoring in strategic insights from SETAs and other labour market analysis	X		

*Short = 2014; Medium = 2020; Long = 2030

Section D: Key features in the higher education and training domain, which the 10-Point Plan must take into account

Before this document begins to introduce and explore the substantive elements of the proposed 10-Point Plan, it is necessary to identify certain key characteristics of the higher education and training environment which will influence the impact of the 10-Point Plan.

These features are not institution-specific, so they need to be taken into account across many institutional environments (e.g. FET colleges, HE, SETAs, enterprises offering skills development/ training etc.).

They are:

- The quality of basic education
- The huge numbers of young people aged 18–24 years who are not in education employment or training (the so-called NEETs)
- The impact of skills biased economic growth creating relatively more high skills jobs than low skills jobs
- The equity imperative
- The 3:1 ratio of enrolment numbers between higher education and further education and training, producing inefficient proportions between high and intermediate skills numbers – leading to acute shortages in certain categories of intermediate skills, against a background of general shortages across a range of occupations.

All of the 10 intervention points will directly or indirectly address these features.

Quality of basic education

The first characteristic of the broad environment within which the DHET is working is the poor quality of basic education.

Parents in South Africa hold the hope that over a period of roughly 12 years, their children will be exposed to and progress through successive grades and levels of education: from early childhood development, to general education and training (Grade 1 – Grade 9), and on to further education and training (Grade 10 – Grade 12). The quality of their experience at each successive grade or stage will be a strong determinant of how smoothly they transition to the next step in the system.

Children are exposed to an educational experience that is deficient in quality; this will result in dropout, repetition, poor grades, inappropriate subject choices, and low levels of preparedness for the next stage in the education value chain. This holds especially true for the transition of young people into the post-school system and how they succeed at that higher level.

In the South African system there are high levels of participation in terms of gross and net enrolment rates, and age-specific enrolment rates particularly up to the age of 15. Success has also improved where the completion rate for Grade 9 (for the General Education and Training Certificate at the end of the compulsory phase) increased from 75% to 83% between 1995 and 2007 (Department of Education, 2009:1).

However, the completion rate[2] of learners after Grade 9 in the FET phase (i.e. between Grade 10 and Grade 12) is far less impressive (Table 3). Completion rates of learners declines steeply between Grade 9 and Grade 12[3]. This reduction in the flow of learners through to Grade 12 is a significant bottleneck on learner throughput.

Table 3: Completion rate (alternative method[1]): 1995–2007 in percentages

	Grade 9	Grade 11	Grade 12
1995	75	54	39
1997	75	51	37
1999	76	54	41
2001	77	57	42
2002	79	55	40
2003	79	57	42
2004	82	56	42
2005	81	57	42
2006	82	58	43
2007	83	60	44

Source: Department of Education (2009:44) – Table 31

Note: Grade 10 percentages are not provided

The effectiveness of post-school education depends heavily on the quality of the schooling experience that young people bring with them from ordinary schooling. Internationally benchmarked tests show that the quality of South African schooling lags far behind levels of achievement in other national systems. We refer below to examples from the literature.

Progress in the International Reading Literacy Study (PIRLS) 2006

PIRLS is an international study, which measures reading literacy amongst Grade 4 learners in their home languages. In South Africa, 72% of participating learners wrote in an African language.

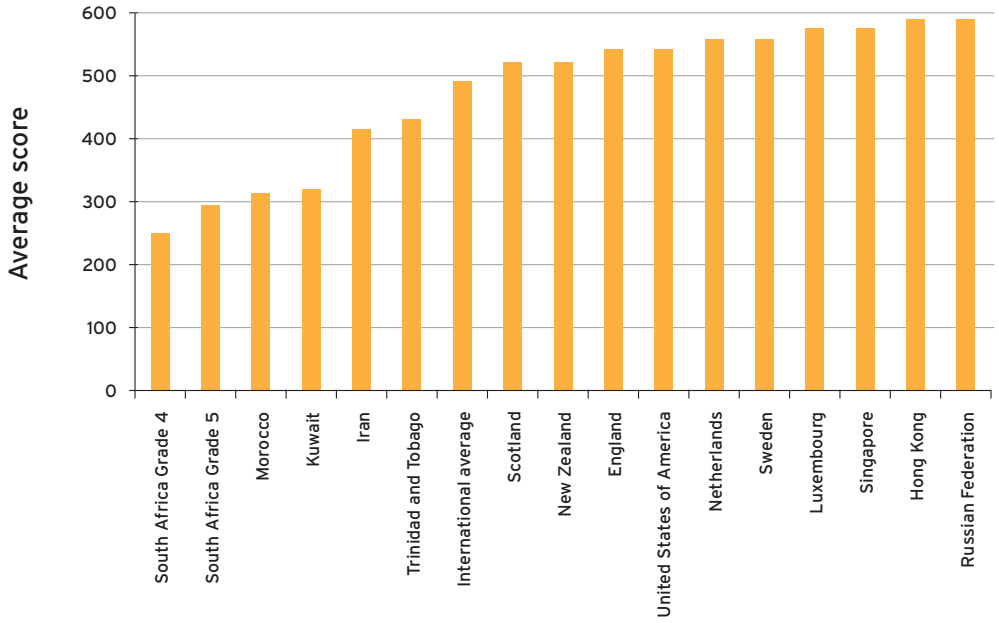
For the official PIRLS, the South African Grade 5 scores were compared with Grade 4 scores of other countries. The figure below (Howie et al, 2007) compares South African Grade 4 and Grade 5 scores with a selection of participating countries. The inclusion of South African Grade 4 and 5

2 A completion rate refers to the proportion of learners who have completed a given level in an education system.

3 This is despite incremental improvements in completion rates in the FET phase between 1995 and 2007

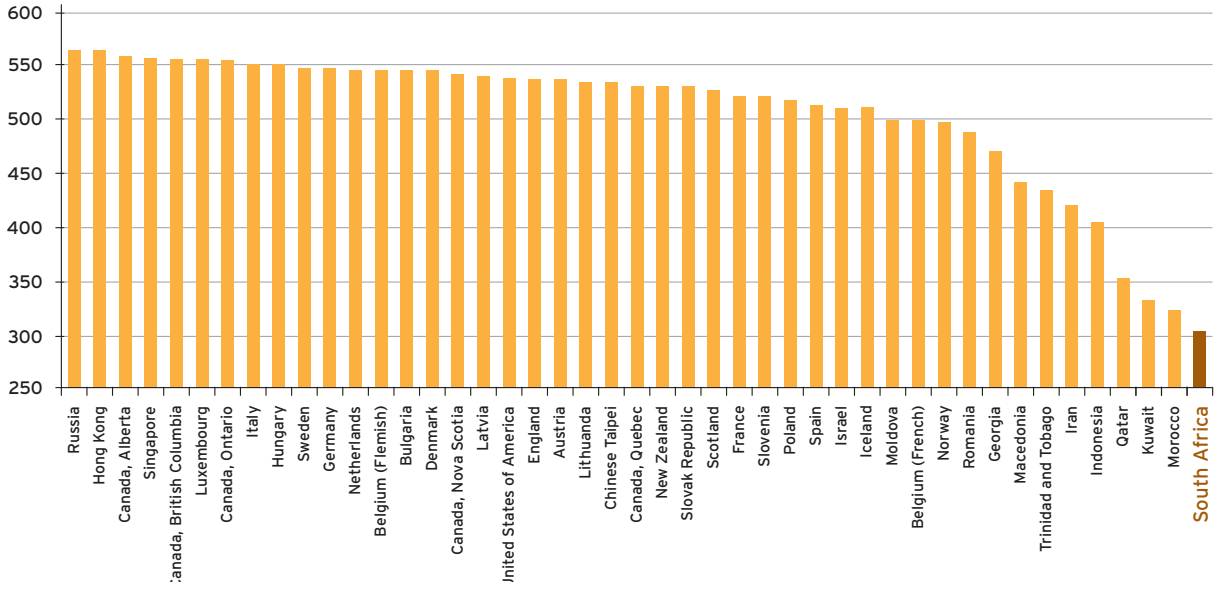
scores indicates some progression in reading achievement but the Grade 4 and Grade 5 results (Figure 1) are inadequate when set in an international comparison. South African scores were two standard deviations below the norm, which is extremely poor. Furthermore, the South African average achievement scores were significantly lower than any of the other 44 participating countries (Figure 2).

Figure 1: Comparative performance in PIRLS: South Africa and 15 selected countries



Source: Howie,2007:24 in Department of Education (2009:90) – Figure 26

Figure 2: Literacy scores for PIRLS, 2006



Source: DBSA (2009)

Third International Mathematics and Science Study (TIMSS) 2006

The TIMSS study is an internationally benchmarked analysis of mathematics and science achievement which includes developed and emerging economies. In the four years between the TIMSS 1999 and 2003, South African achievement scores in mathematics and science did not improve (Table 4).

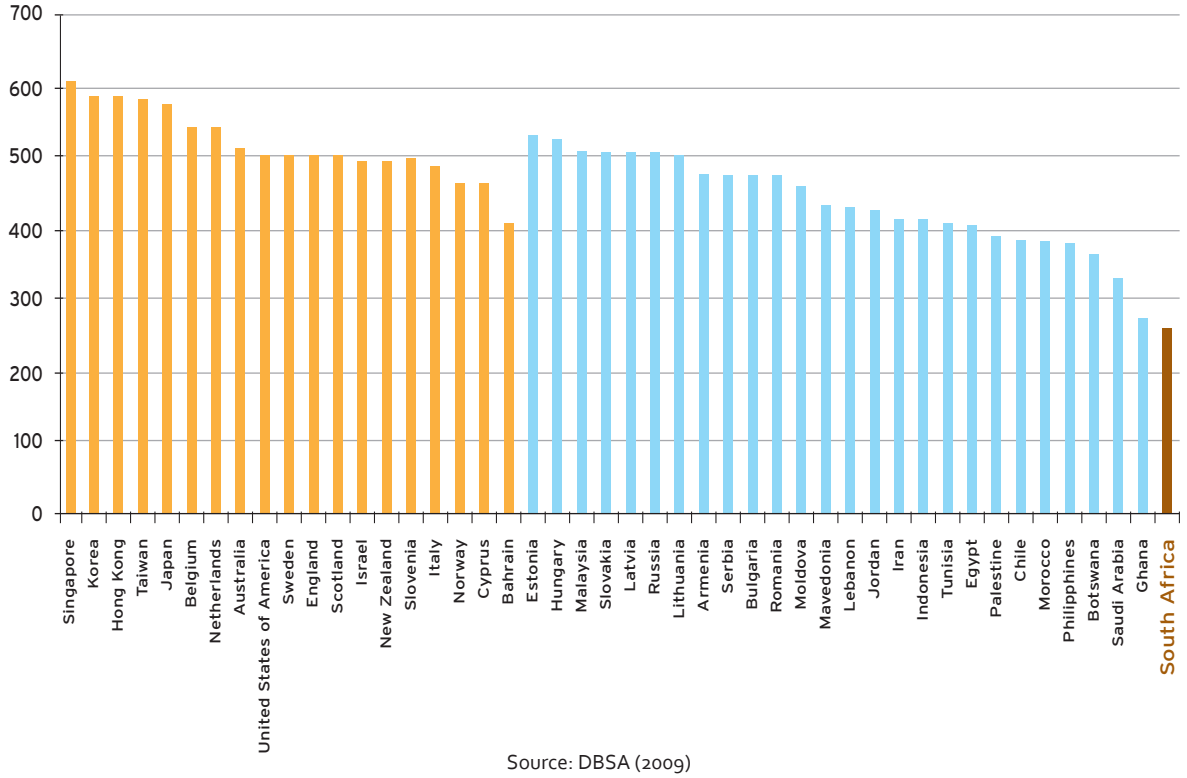
Table 4: Average score in the TIMSS 1999 and TIMSS 2003 Grade 8 mathematics and science achievement tests

	Mathematics		Science	
	1999	2003	1999	2003
South Africa average score	275	265	243	244
International average score	487	467	488	474

Source: Department of Education (2009:87) – Table 60

In the TIMMS 2003 study, South Africa's mean Grade 8 mathematics score was the lowest of 46 participating countries, while, in science achievement scores, South Africa only performed better than Ghana (Figure 3).

Figure 3: Mean mathematics score in the TIMMS 2003 achievement tests

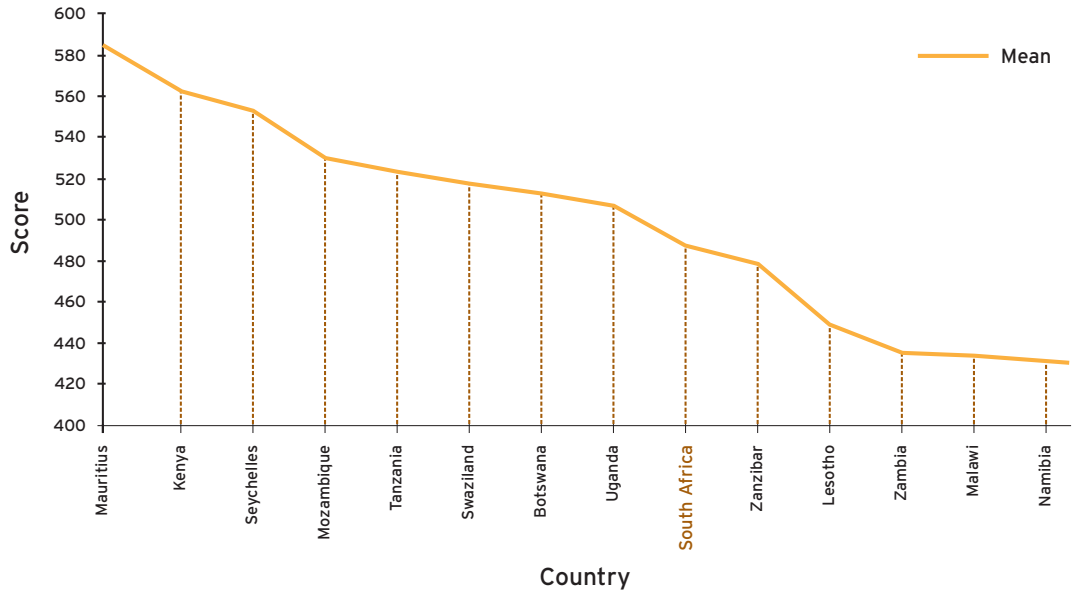


Source: DBSA (2009)

Southern African Committee on Monitoring Education Quality (SACMEQ)

The disappointing trend in South Africas school achievement is also reflected in regional benchmarked monitoring exercises, such as those conducted by the SACMEQ which revealed that South African learner mathematics scores were lagging behind eight countries in the region including: Zimbabwe, Kenya, Tanzania, Uganda and Botswana (Figure 4).

Figure 4: SACMEQ Mathematics Scores, Grade 6, 2000



Source: Van den Berg (2007:849-880)

South African National Senior Certificate (school leaving certificate)

In reference to recent results emanating from South Africa's own national Senior Certificate Examination, the Department of Education conceded in 2009 that: "The social consensus is that the system still does not produce the human resources that the nation needs." (Department of Education, 2009:77)

It is clear from the foregoing discussion of internationally benchmarked studies that South Africa's schooling system has been underperforming over more than a decade. This means that for some time to come many employers and many post-school education and training institutions will have to factor in the poor preparedness of large numbers of school leavers as workers or as students. This situation will apply until the situation is turned around in basic education, which is a long term objective that will probably require a decade or more to achieve.

We can expect that the quality of school leavers from the basic education system will affect South African universities. These institutions must compensate for the poor education background that

new entrants bring with them if they want their graduates to remain competitive against global higher education standards.

Table 5 below reveals how an unacceptably large proportion of first time entrants to undergraduate programmes dropped out in their first year.

Table 5: Dropout rates in a cohort of first time entrants to undergraduate programs at universities in 2000

	1st time entrants in 2000	Dropouts: end of 2000	Dropouts as % of entrants
African	69 636	21 096	30,3
Coloured	6 852	1 948	28,4
Indian	7 791	1 619	20,8
White	28 336	5 872	20,7
Total	**112 615**	**30 535**	**27,1**

Source: Soudien (2010:11) – Table 8

We know that schooling background alongside financial problems, family commitments, illness and other factors plays an important part in high dropout rates in higher education. Separating out and estimating the relative contribution of these factors driving dropout rates is a complex challenge.

In addition, we have to ask the following: Are higher education institutions themselves contributing to dropout rates? Are higher education institutions sufficiently open and responsive in addressing the effects of poor quality schooling?

Young people aged 18–24 years who are not in education employment or training (NEETs)

Unemployment remains a critical economic, social and political challenge for South Africa. The plight of unemployed youth has remained an enduring matter of concern in South Africa over a long period.[4] Youth unemployment is a vital human development and socioeconomic issue and ultimately if unattended can become a political-security issue.

Recently, Shepherd and Cloete (2009) have cast the dilemma of unemployed youth in stark terms, by quantifying the size of this demographic group through recourse to the Community Survey which is a recent innovation of Statistics South Africa (first survey in February 2007). They focus on the educational needs of post-school youth who are not in education, employment or training

4 After 1994, the new government recognised the plight of youth by establishing the National Youth Commission in 1996.

(the so-called NEETs) (Table 6). They showed that in 2007 there were 2 812 471 people in South Africa aged between the ages of 18 and 24, not in education, employment or training. (Shepherd and Cloete, 2010:10-11). This group has grown in size by 79 657 people every year since 2001. 86% of this group are African (45%) or Coloured (41%). Table 6 below describes NEETs with reference to their education background.

Table 6: Number of 18–24 year olds not in education, employment or training 2007

Primary or less	500 662
Secondary, less than Grade 10	508 597
Grade 10 and less than Grade 12	990 794
Grade 12 without exemption	598 657
Grade 12 with exemption	98 335
Grade 12 with certificate	47 294
Grade 12 with diploma	25 294
Bachelors degree	11 132
Masters/PhD	420

Source: Shepherd and Cloete (2009:9) – Table 4

A scan of the table above reveals that although NEETs share unemployment in common, they have quite different education backgrounds suggesting at least three broad categories with different skills development/training needs.

- 1 009 000 youth with a qualification of less than Grade 10 (Standard 8)
- 990 000 youth who qualified for further education and training
- 700 000 youth qualified for post-secondary education (Shepherd and Cloete, 2010:10-11)

This 2007 data is important for directing attention at the issues of youth unemployment. Since then the financial crisis of 2008–2010 triggered job-losses in South Africa estimated to be in the region of 900 000 in 2009. Furthermore, the unemployment rate for the first quarter of 2010 was 25.2% (narrow definition), increasing from the fourth quarter of 2009, with the formal sector and the informal sector shedding 140 000 and 100 000 jobs respectively. (Statistics South Africa First Quarter LFS 2010). The important point here is that the situation described by Shepherd and Cloete to be in the magnitude of 2.8 million youth will surely have increased to well over three million; especially in conditions where employers would be inclined to let younger workers with less experience go.

Shepherd and Cloete claim that there is "one simple message" from this situation which is to "improve post-secondary school education" (2009:10). The solution is not so simple. From an

education/skills development perspective the mission of the DHET must be: to generate skills development/training opportunities to youth that maximises their employability either in the formal or the informal sector.

However, it should be clear that in an economy with structural unemployment of such magnitude, no amount of skills training can substitute for a shortage of job opportunities. For this reason, it is vital that other relevant government departments (e.g. DPSA, Dti, Labour, Treasury, Economic Development, Social Development, Public Works) mobilise their own programmes for employment generation and to extend social safety nets. A lot will depend on the creativity of initiatives from across government departments. In the meantime, economic growth prospects and labour market absorption in the aftermath of the crisis will remain unpredictable.

Skills biased growth

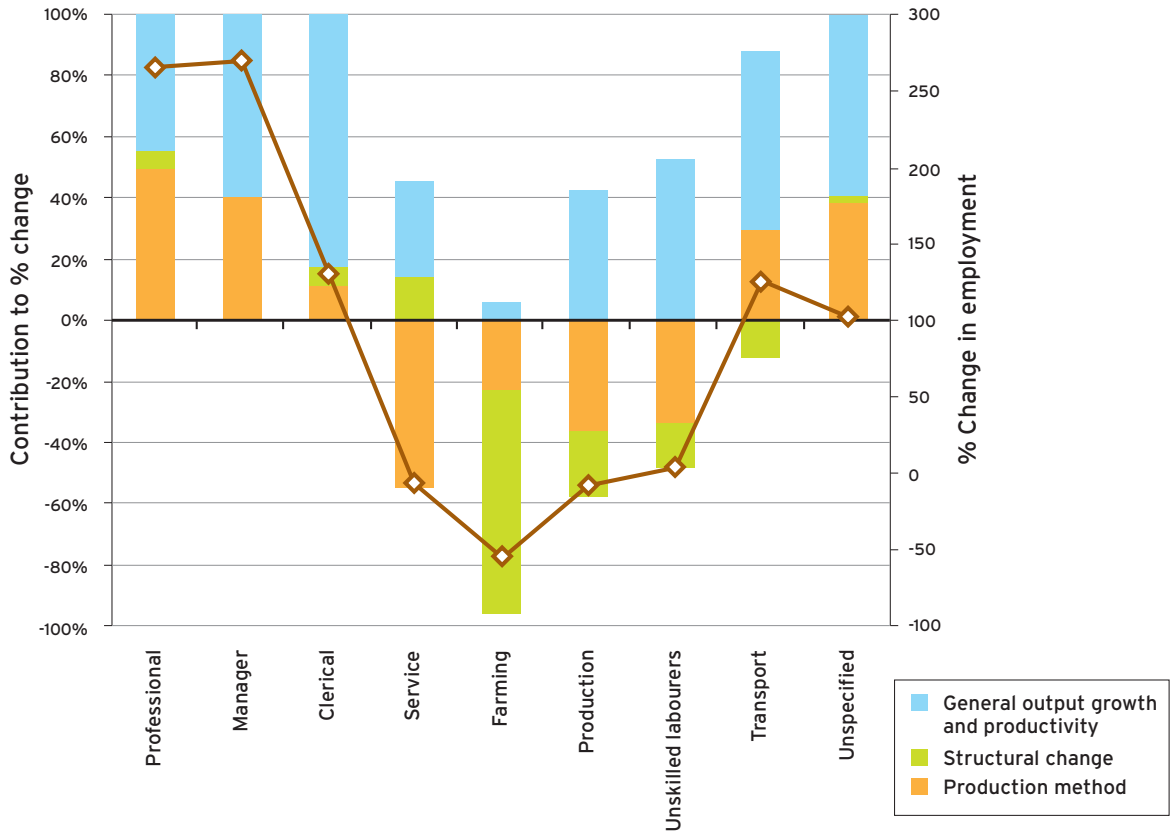
Unemployment has increased among low-skilled workers in South Africa, in spite of the fact that the local economy experienced one of the longest periods of sustained economic growth in history until 2008. This is partly attributable to a powerful labour market feature that has impacted on the labour market since the 1970s: skills biased technology change (SBTC). This is a trend where, over time, relative demand for low-skilled jobs decreases while concurrently, demand for high skills jobs increases.

This can happen as an economy changes. Structural change in a modern economy frequently manifests as a shift in emphasis from the production of raw materials to the production of services – i.e. from primary sectors to tertiary sectors. Under these circumstances, the demand for labour in the primary sector declines whereas demand for labour especially in the services sector increases. Primary extractive industries tend to employ relatively large proportions of low and unskilled labour, and services industries tend to employ a greater proportion of intermediate to high skills workers. Consequently, any broad shift in emphasis across the economy away from primary sectors to tertiary sectors will entail a decline in demand for low-skilled labour and rising demand for higher skilled labour. Figure 5 below shows that between 1970 and 1995, farm worker, production worker, and unskilled labourer occupations experienced a substantial decrease in employment.

Over time, new technologies – machinery and computer applications – are absorbed and implemented in production in enterprises and across whole sectors. The impact of technologies on production causes shifts in the workforce needs of enterprises, sectors and whole economies. Technologies in the form of machinery and more recently computers directly impact on the distribution of skills needs driving demand for higher skilled workers while eroding the demand for

low skilled workers. Capital deepening can also contribute to higher unemployment of low skilled workers because it affects the skill composition of the workforce.

Figure 5: Percentage change in employment, by occupation, 1970–1995



Source: Bhorat and Jacobs (2010:3)

The cumulative impact of structural changes and of the implementation of machine and information technologies have driven SBTC in South Africa at least since the 1970s up to 1995, the period of most intense change. From 1995 to the present this trend has continued. Information technologies have proved to be a more powerful influence on the rate of SBTC than have structural changes. This labour demand trajectory is not a function of regulation or of wages. It reflects 'a fundamental altering of the growth process'.

This skill biased labour demand has had the effect of increasing unemployment levels in an economy which already suffers extraordinary levels of high unemployment. Job losses in the recent recession reflect the same bias: unskilled, less experienced and younger workers were most likely to lose their jobs. The crisis response amongst employers is therefore accentuating the basic patterns.

In this country, the gradual and ineluctable shift in demand for the higher skilled has strongly affected those population groups who were historically denied access or opportunity to complete a basic education qualification and or the opportunity to pursue post-school study. SBTC also prejudices new work seekers who do not hold the requisite skills and qualifications and who will find it increasingly difficult to obtain sustainable employment.

For young people who hope to find a job, these conditions place greater emphasis on the importance either of obtaining a Senior Certificate with the option of further study in the post-school domain, or of getting training for a skill or a skill set that is valued in the labour market. The critical issue is for the individual to find an education or training opportunity that will raise their occupational skills levels – to an intermediate level – above those competing for unskilled or low skill occupations.

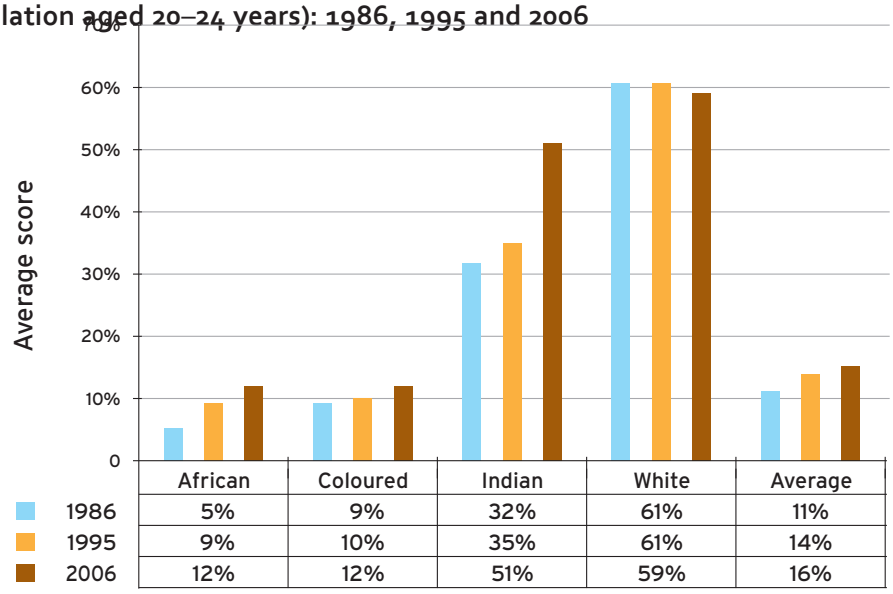
Equity of access and of outcomes: Enrolments and graduates in higher education

A key assumption is that the sector must improve equity in access and quality of outcomes. Though the system of higher education and training has undergone substantial changes since 1994, the burden that apartheid bequeathed this system is still openly visible in the form of enduring social and economic inequalities and in asymmetrical patterns of access to higher education. These patterns are evident in terms of access to higher education. Figure 6 below shows how, in 2006, enrolment in public higher education institutions substantially favoured White students to the extent that 59% of the relevant age group were enrolled in higher education. In comparison, only 12% of African students in the same age cohort had access. The shape of this distribution has shifted very slowly since the 1980s despite substantial increases in gross enrolment.

Improving access to education for disadvantaged groups is just the first step and that access must be associated with larger numbers of students successfully converting their opportunity into graduations. Soudien shows that this desired outcome is far from fruition in South African universities.

Based on a cohort of over 120 000 students entering higher education in 2000 (Table 7), Soudien shows how African students suffered a traumatically high dropout rate of virtually 60% while only 1:5 students graduated in the period of four years. In contrast, White students suffered dropout of just under 40%, with a graduation rate of just over 40% (Table 8).

Figure 6: Gross enrolment rates in public higher education institutions by race (as a proportion of the population aged 20–24 years): 1986, 1995 and 2006



	African	Coloured	Indian	White	Average
1986	5%	9%	32%	61%	11%
1995	9%	10%	35%	61%	14%
2006	12%	12%	51%	59%	16%

Source: Department of Education (2009:28) – Figure 8

Table 7: Outcomes of first time entrants to undergraduate programs at universities: 2000–2003

	1st time entrants in 2000	Dropouts 2000–2003	Graduates 2000–2003	Still enrolled for study
African	69 636	41 713	13 294	14 629
Coloured	6 852	3 661	1 696	1 495
Indian	7 791	3 312	2 253	2 226
White	28 336	10 795	11 610	5931
Total	**112 615**	**59 481**	**28 853**	**24 281**

Source: Soudien (2010:11) – adapted from Table 8

Table 8: Outcomes of first time entrants to undergraduate programs at universities: 2000–2003 in percentages

	1st time entrants in 2000	Dropouts 2000–2003	Graduates 2000–2003	Still enrolled for study
African	100	59.9	19.1	21.0
Coloured	100	53.4	24.8	21.8
Indian	100	42.5	28.9	28.6
White	100	38.1	41.0	20.9
Total	**100**	**52.8**	**25.6**	**21.6**

Source: Soudien (2010:11) – adapted from Table 8

Based on his calculations, Soudien observes that of the entire cohort of Black children entering school in any one year the education system – from Grade 1 to undergraduate degree completion – can only manage to convey approximately 5% to graduation. This contrasts starkly with the fortunes of White children who have approximately a 60% chance of graduating from university (Soudien, 2010:6). Clearly, across the education system and especially within higher education, efforts to obtain equity of access are neutralised by barriers to graduation of Black students.

Having drawn attention to the importance of access *and* success in the form of acceptable throughput/graduation rates, we must beware of framing the issue solely as a challenge for shifting the quantitative numbers of participants in the system.

Soudien (2010:1) observes that there are two main approaches to the question of transforming higher education: "the first sees transformation as a demographic intervention around the imbalances of race, class, gender, language while the second argues that it is about the nature of privilege and power. Positions based on the first approach insist that numbers matter, and, more specifically, particular kinds of numbers. This is essentially the representivity approach. The second position argues that transformation is an ideological process which has to engage with domination and its attendant forces and discourses. This position emphasises the distribution of political and economic power in society and the processes through which social inclusion and exclusion are effected." We concur with Soudien's argument that *both* are valid, and that neither perspective is sufficient in its own right as a basis from which to plan and drive transformation.

Supply of graduates from South African higher education and FET institutions

It is vital that analysis of skills demand pays attention to the broader underlying pattern of economic growth in a national economy that will express particular skills demands. Thus, particular attention must be given to how changes in the structure of the economy over time will cause shifts in the relative demand across broad types of skill.

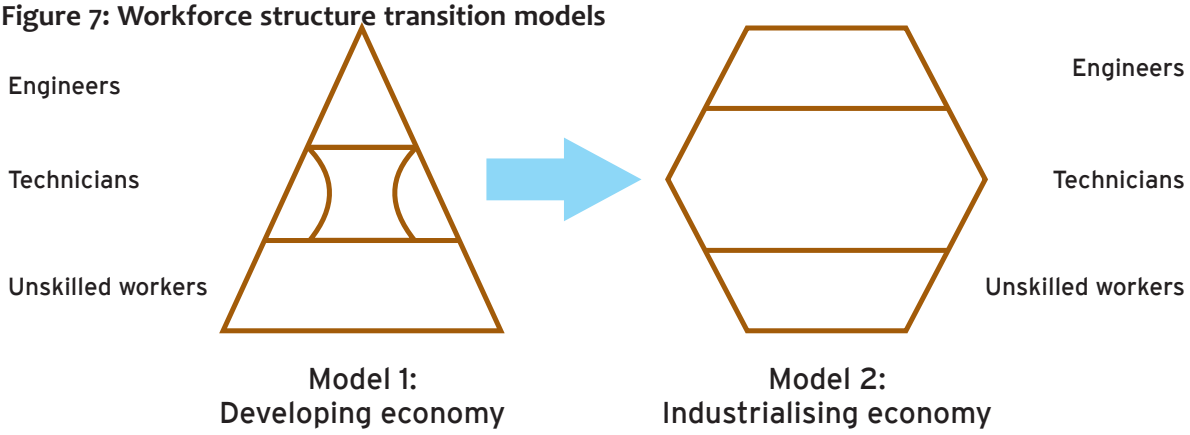
The notion that the workforce structure in a particular economy is always in a process of transition is based on the assumption that as an economy changes, the shape of its skills needs will also change. For example Figure 7 below draws attention to how in the transition from a developing economy to an industrialising economy the following underlying shifts are manifested:

- Increased demand for high skill professionals
- Increased demand for intermediate skilled associate professionals and technicians
- Reduction in demand for workers with basic skills

- Sharp reduction in the demand for unskilled workers

Figure 7 draws attention to the relationship between the economic structure of the economy and the skills structure of the labour force. As such the figure is not intended to represent South Africa's situation exactly.

Figure 7: Workforce structure transition models



Source: Association of Canadian Community Colleges. Sri Lanka. Proposed Human Resource Investment Project. Project Preparation Technical Assistance Report for named project, ADB, Manila, 2004:39

The changes in skills demand identified above refer to very large-scale shifts in the *proportionate* requirements between different skills levels in the workforce. It is vital to take these macro shifts into account, not necessarily in the precise forecasting or modelling of sectoral or occupational skills needs, but rather in the planning of the institutional shape of the education system as a whole.

This is possible because there is a degree of specialisation across the public system of education between institutions that offer programmes focusing on different skills levels. Nevertheless, in reality there is some overlap between institutions in the production of workers with different skills levels (e.g. between higher education and the FET colleges).

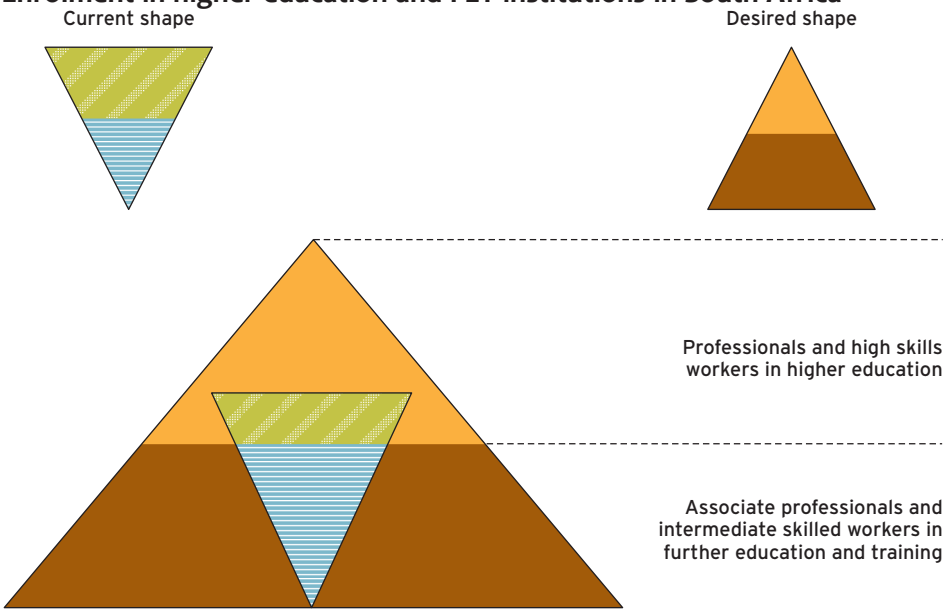
It is necessary for government to monitor macro shifts in skills demand because government is in a position to steer the size and shape of these meso level systems. In South Africa, this would be the case in respect to the relative size and shape of higher education and FET college sectors.

We assume that the shape of higher education and FET enrolment and graduate production should reflect the shape of the demand for labour in the economy.

Figure 8 refers to only the two broad higher skills levels, namely high skills generated in the

main by higher education, and intermediate skills generated by the FET colleges and related institutions (e.g. pre-vocational and occupational training, artisan training and apprenticeships, and learnerships). The desired distribution of the proportions between high skilled and intermediate skilled and technical workers is given in Figure 8 (a) below. It reflects the need for higher proportions of intermediate skill workers in relation to high skill workers.

Figure 8: Enrolment in higher education and FET institutions in South Africa



The current situation in South Africa is depicted in (b), showing that the proportions of enrolment in higher education are larger than enrolment in the FET sector. This disproportionate relationship runs counter to the needs discussed above. This shows that the current shape of the key post-school institutions is not configured to respond to the huge population of NEETs. While South Africa is short of both high and intermediate skills, the shortage of intermediate skills is perceived to be more acute.

Indicator Ten: of the *Human Resource Development Strategy of 2000* focused on the 'Distribution of learners across FET and HE'. It argued that the relationship between the total outflow of students from the school system per annum and the proportionate absorption of school leavers into different parts of the post-school system is very important. The 2000 HRDS document observes that an "inverted triangle diagram is a very important metaphor for a system that is structurally flawed if compared to other systems internationally." At the turn of the century in South Africa, enrolments were "skewed in the wrong direction – the largest number of students should be (but currently are not) enrolled in the FET technical college sector" and "the smallest intake, internationally, is usually in the traditional university sector." (Department

of Education and Department of Labour, 2001:29). In 1998–1999, university (245 000) and technikon (141 000) FTEs combined to make 386 000 FTEs, while FET college FTEs amounted to 122 740, or a ratio of just over 3:1.[5]

The total head count enrolment in public higher education in 2007 was given as 761 092 (Department of Education, 2009a:24 – Figure 5) and the number of students given for public FET colleges was 320 679 (Department of Education, 2009a:29 – Table 16). These numbers contradict the view expressed that young people should not automatically presume that higher education is their best path to an occupation. This structural problem needs to be addressed urgently. Also the rates of return that accrue to graduates with degrees continue to reinforce this pattern of demand for university study.

5 The head count of learners in the FET colleges was 302 550 in 1998, the actual full-time equivalent was only 122 740. The head count tally is an inflated view of learner volume because many students may not be full-time students. Distinguishing between data on student numbers – either head count or FTE – is essential.

Section E: 10-Point Plan: Detailed analysis

Point 1: Improve governance and leadership of all HEI, SETA and FET entities to empower them to address strategic challenges in the sector

Why this is important

More than 100 institutions are the core delivery agents of the HE&T system. Each has a Council or a Board. The members of Boards or Councils are appointed by the Minister or nominated by a constituency to serve as their representative. These boards and councils have autonomy and responsibility for governance and management of their institution, within the confines of national policy, legislation and norms and standards for funding. This involves being the custodian of significant public resources and public expectations. The responsibilities of good governance and leadership are significant, multilayered and central to the challenges faced by the system. Boards or Councils generally include representatives of various constituencies, such as academic board, the labour movement, a student representative. However, several appointments are made by the Minister/MEC, which is a useful lever of influence and there is a responsibility to provide expert capability to the institutions. Across the system the numbers are significant, in excess of a few hundred.

The period to 2030 is critical to consolidate gains, but also requires tough decisions to build an efficient, but cohesive system. A board or council able to manage bold developments and appreciate the risks in this context will be an asset to an institution.

Student organisations must begin to play a more constructive role, with a change in attitude from entitlement to contribution, from purely political to a more rounded view of leaders in all fields in the future.

Key challenges

- The challenge is to manage significant change, build sound organisations that produce graduates; make the best decisions in the interests of the institutions; strive to ensure that decisions are implemented as agreed and on time within budget, that ethical and honest behavior prevails. It requires leadership and good management to ensure that strategic and sustainable plans are made and executed; resources are deployed correctly and accounted for. The challenge is to inspire confidence in the interests of the institution.
- Perceptions and experience of poor governance and leadership results in poor quality participation from constituency members; staff and students. For example the decision to make each FET college an employer, has led to large numbers of staff opting to leave the colleges.
- There is a perception that SETA's are ineffective and so programme benefits are not achieved. Furthermore there are complaints about under spend of the levies raised.

- Concerns have been raised about level of salaries paid to Vice Chancellors and of corruption at institutions.
- Transformation is a major goal and challenge. As the Soudien Report documents, though there is compliance, much still has to be done.
- On an annual basis there is protest action by students, over issues that recur. The challenge is for constructive engagement with students to resolve these issues.

Interventions

1. The Minister to immediately establish a small advisory group to assist in identifying and recruiting appropriate candidates for the Boards and Councils at institutions and where constituencies make appointments to ensure correct fit and mandate is provided.
2. By January 2011 arrange for 3–5 year secondment of experienced managers from the public or private sector onto Boards/Councils and into management where there is a current absorptive capacity at FET colleges and SETA's. Progressively professionalise management at institutions. There should be agreement on the critical success factors, for improved governance, differentiation, management and leadership, based on self assessment by institutions.
3. Appoint Boards/Council members for the contribution and skills they bring. The capacity of members can also be built through assigning a portfolio of responsibility to a member. Boards should be of manageable size have a planned tenure and a succession plan developed to ensure continuity and sustainable institutions.
4. Include a review of governance matters in institutional audits and work towards full compliance within a specified period of time. This can be supported through introduction of due diligence practices and conducting internal audits. The appointment of Board members with experience and offering training, guidelines and mentoring will assist to improve numbers and quality of people who can play a role at institutions. The appointment of company secretaries and encouraging alumni to play a role can bring added value.
5. Encourage students organisations to play a role in improving their own and institutional performance. They could also play a role, in raising awareness of the opportunity cost and public investment in each student in supporting the selection processes and finding means to minimise conflict with management at institutions.

The Commission on Experiences of Leadership, Management and Governance at the HE Summit, April 2010 emphasised the need to "reject all forms of corruption... call on all members of the council to declare their business interests. The commission calls upon the Department of Education to develop a programme aimed at eradicating corruption in institutions of higher learning. That council members read their documents". Other discussions in the 10-Point Plan process noted that when there is a complaint e.g. of sexual harassment against a senior person, it is difficult to manage; that appointments of staff has a strong racial bias.

Point 2: Build a new generation of high quality lecturers

Why is this important?

The quality of teaching in education institutions directly impacts on repetition, drop out, graduation and labour market success rates. Teaching quality directly impacts on the individual student's learning and study experience.

South African HE and FET colleges accommodate numbers of students who have endured a poor quality basic education experience. This presents a significant challenge to academics and lecturers who need to take account of student learning needs while sustaining a generally high standard of teaching-learning interactions.

The quality and volume of research outputs from HE is a key input into innovation in both economic and social life of a country. It is also an essential characteristic of countries that aspire to global competitiveness in the generation of new knowledge.

Challenges

The intention of the DHET is to massively expand enrolment of FET colleges and of higher education institutions. This will likely increase the pressure on the available academic and teaching cohorts in the system.

Age cohort analysis of HE academic staff shows the impending departure of significant numbers of White male senior academics who make a significant contribution especially to research outputs.[6] The replacement of this group is an important challenge. On the positive side this presents opportunities to renew the core staffing of the institution. Retirements are also opportunities to reallocate scarce faculty salary resources to areas where the student demand is greatest.

Reproduction of the academic and lecturer labour force is a long-term project. Attracting young academics, while retaining academics in the system are priorities.

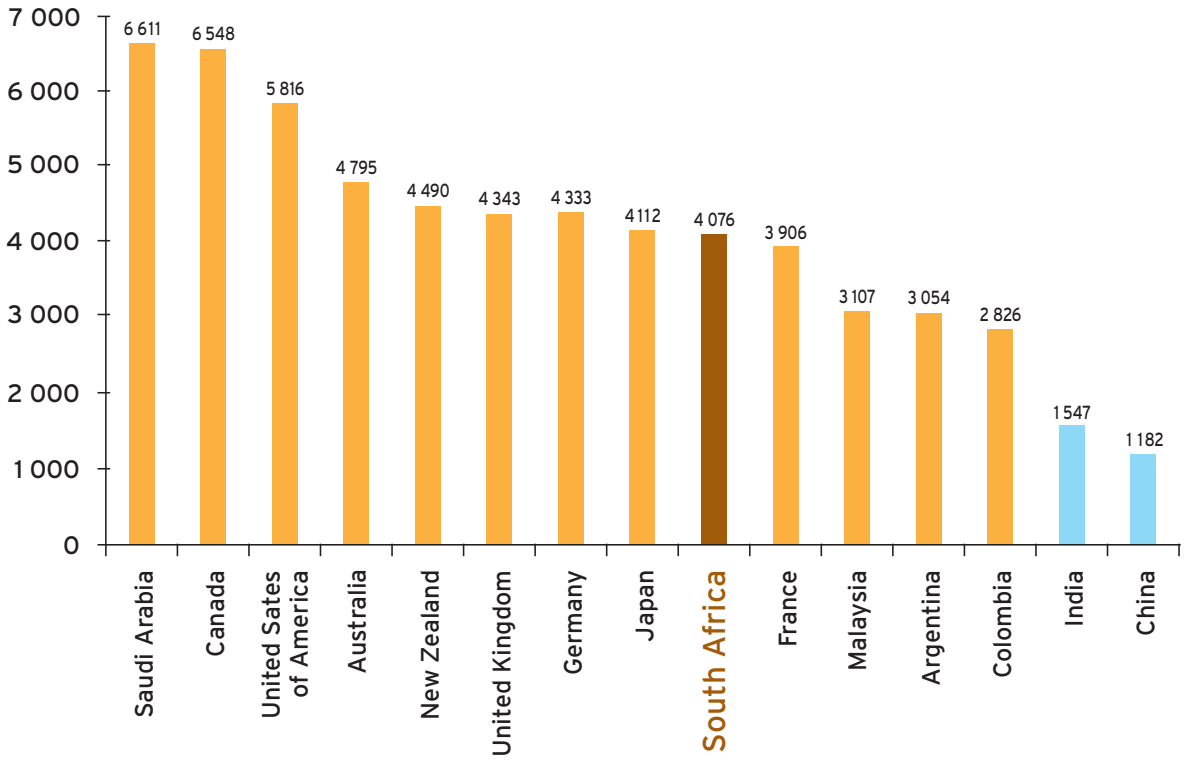
There is a demographic challenge of relatively low numbers of Black South African graduate students as compared with proportion of White and foreign students.

Recent changes in the governance structures of the FET colleges were associated with an outflux of an estimated 36% of college lecturers from the system. Recruitment of new staff represents an opportunity to establish quality standards and to focus on curriculum changes taking place.

6 There are substantial differences within institutions in the age structures of their faculty.

Improving academic and teaching salaries and work conditions has been raised as a retention and attraction incentive. Recent research shows that South African academics appear to be competitively remunerated internationally – though perhaps not as well as other professionals within the domestic labour market. Further analysis of this issue is necessary.

Figure 9: Average academic salaries, selected countries (US$ 2008 PPP*)



Source: Rumbley, Pacheco and Altbach (2008) – Figure 6.3
* Purchasing power parity

- It is important to address concerns that FET councils are not well equipped to appoint and manage lecturing/teaching staff (Gewer, 2010).
- College lecturers require a balance of technical and pedagogical qualifications, as well as industry experience. Currently this does not apply in colleges where few lecturers possess this combination of background and experience. A recent study on a sample of colleges (Gewer,2010:11-12) showed that.
  - 41% possess technical qualifications at NQF levels 6–8 but most of these do not have the necessary pedagogical qualifications.
  - 26% of the respondents have technical qualifications at NQF levels 2–5 but most have no pedagogical qualifications.
  - 33,5% have no technical qualifications but have the largest group of lecturers with pedagogical qualifications.

Interventions

1. Require every university and FET college to investigate their staffing situation and to put forward an institutional plan indicating: (a) how potential new academic staff will be generated within the institution and (b) through national and international recruitment. Continue to monitor the age distribution, qualifications, academic outputs and teaching background of academics and lecturers so that the academic and lecturing staff in HE and FET can be produced in appropriate numbers.
2. In the FET colleges it is important to bring all college staff into the same minimum salary structure.
3. In the short term recruit foreign nationals to South Africa – permanent or contract – to compensate for departure and retirement of current staff.
4. Put in place lecturer posts for young academics. This can also slow down the casualisation of the junior academic workforce.
5. Put in place and reinforce mechanisms to support young academics and teachers such as: mentoring of junior faculty, effective Faculty Development Programmes; reward senior academics who make significant contributions in the development of young academics.
6. Improve the opportunities for Black students to study for higher degrees (e.g. financial support, opportunity to work in the faculty/department, career-pathing)
7. Initiate a retention plan for retiring academics who are still strongly engaged and effective. Institutional needs, benefits and long-term interests should be considered in this.
8. Institutions must encourage cooperation and collaboration across institutions on sharing academic teaching and research resources.
9. Develop a Course Experience Questionnaire (CEQ) which offers a reliable, verifiable and useful means of determining the perceived teaching quality of academic units in institutions.
10. Consider how the administration burden is shared among academics with a view to shifting this load to non-academic administrators.

Point 3: Improve career information, including through basic education, to guide learner choices

Why is this important?

A significant proportion of the government's budget and of household expenditure is allocated to education in South Africa. In considering how to make education investments more effective and more efficient, an overwhelming emphasis is placed on how to make institutions, curricula and learning programmes more effective and efficient.

Considerably less attention is paid to how individuals – or parents and senior members of the household – choose particular courses for study. Circumstantial evidence suggests that in many

instances the basis for making such decisions is based on hearsay, on incorrect information and on pressure in the family or from peers.

From the institutional perspective, hardly any attention has been given to the basis on which FET colleges admit young people as students. Low admission criteria can create a learning environment in which the learning institution becomes less efficient. Given the large amounts of investment at stake by the state and by individuals/households, greater attention needs to be given to reduce the risk of poor outcomes.

Driven by access demands, institutions attempt to broaden admissions through entrance testing procedures, to enhance success rates through implementing academic development and through recognition of prior learning (RPL) measures.

Information about subjects at school and options at post school institutions will provide parents and students with better choice according to interest and investment of the time of the student and the public purse; it will allow for efficient use of places and may result in a better match between the course of study and eventual occupational employment.

Another aspect of high importance is to give school learners the opportunity to explore their own values and interests. These values and interests are important indicators for young people to take into account in committing towards particular study, work and career paths. These aspects should be emphasised in the school life orientation curriculum.

The grade 12 results are not a good or sufficient indicator of how students will cope or perform at higher education institutions. Universities use a system of points to consider admission to certain programmes while FET colleges admit those with grade 12 passes.

As entry levels have been set relatively low, admissions criteria allow students to register for courses they will not cope with. Students "walking on" to campuses at the beginning of the year leave no time for counselling, even those who are counselled, are often adamant about their choice – however unsuitable – and subsequently may not manage the programme they chose. The potential of students is frustrated by inappropriate choice of course/level (e.g. a student may perform better if s/he chooses to do a diploma instead of a degree level course).

Internationally there is widespread usage of selection measures for students seeking access to institutions for further study, especially within a differentiated post school institutional landscape and where places are at a premium. Some examples are given below:

- Germany uses a range of instruments to select students; this includes school grades, waiting lists, number of spaces for courses (e.g. medicine, dentistry) university selection tests and procedures, interviews and aptitude tests.

- Australian school scores are standardised for different states and then each provider has a required score for entry (this may vary for the same qualification at different institutions e.g. 95 for bio-medicine at Melbourne University and 50 at Deakin University). Aptitude tests are used, sometimes to supplement or to admit poor students.
- In the United Kingdom universities are assisted by a centralised admissions system, while universities decide who to admit.
- In the United States students go to colleges as long as they get the required school grades, without any selection process.

Key challenges

- Progress and graduation of students who come from an under performing schooling system and poor socioeconomic conditions is dependent on subject choice at school, and whether their parents are graduates and/or employed. (Access to career guidance is particularly important for children whose parents are unemployed or have limited formal education experience. In these households children are less likely to be exposed to adequate guidance and opportunities to discuss and consider their own employment and vocational decision making. These children are therefore dependent on inputs from government sources such as: career guidance lessons at schools and post-school institutions, and employment advice from labour centres). These students also tend to have low exposure to career information and knowledge as it is not within their experience. The challenge is to break this inter-generational trend. Exposure and information about career choice needs to be created in an innovative meaningful way.
- Students arrive at institutions, wanting to do a particular course of study but do not have the school subjects required. They dropout because they do not have information on what courses require and are unable to decide for themselves what course of study to pursue. Information and guidance about what is needed at HE&T institutions for enrollment would contribute to better preparation.
- Students do not apply timeously to institutions for admission. There are many causes for this, including examination administration problems in the schools system. The consequences of this are: lack of time for counselling, limited choice for students, narrow window of opportunity to obtain funding. Students who start their courses late are at risk as they need to catch up.
- There seems to be a hierarchy of choice of institutions and courses students aspire to, hence they "shop" from one to the next. This is expensive, and results in inefficient admissions, and no time for counseling or opportunity to consider their choice of courses. Students may "walk-on" to an institution and experience delays in securing financing and experience distress in sourcing basics such as food and board.
- According to Soudien (2010), students are given an incorrect evaluation of their potential (by the schooling system), about their ability to cope with certain programmes offered in higher education.

- It has to be acknowledged that merely providing career information without reference to the student's reality will be of little value at all. The challenge is how to design career discussion and career information delivery can be made relevant to the context of the student, but also offer hope for full employment and personal growth in the future.

Interventions

1. Establish a bilateral standing committee – DBE and DHET – to deal with issues at the interface between the schooling system and the post-school system including information about career options, study options and how to go about making a realistic study/career selection. Implement curriculum and support materials for life orientation teachers at school especially to support the subject choices that are made at the Grade 7 and Grade 9 levels.
2. Create "hype" at Grades 9 and 12 about choice of subjects and careers. A variety of channels could be used to provide information to students and parents, for example, retail outlets, trade unions, public sector employees, faith-based organisations and the public broadcaster.
3. Higher education institutions should review their admissions score criteria and consider introducing additional alternative selection measures as part of their procedures. At the appropriate time conduct public campaigns to promote timeous application, direct students to secure financial aid, counsel students to make best choice of course for their talents.
4. Consider the introduction of a central admissions service: this could progressively assist to significantly strengthen selection processes; reduce cost to students; assist students with options for course and institutions based on their applications and provide institutions with information about applicants.

Point 4: Expand academic development programmes to address needs of current cohorts of student

Why is this important?

In all countries, the quality of teaching and learning in domestic higher education becomes more important as graduate success is increasingly tested in the global labour market – whether the location of the work is at home or abroad.

The poor performance of the South African basic education system – in combination with socioeconomic background and other co-factors – directly contributes to large numbers of students dropping out or repeating in the first year and subsequent years at a huge cost to individuals, households and the state.

Unacceptably small percentages of students graduate, despite substantially improved access to South African HE&T over the past decade. According to Badat (2010:29): "Equity of opportunity and outcomes is constrained by inadequate funding to address under-preparedness for higher education programmes…"

Practitioners argue that the scale of the challenge is massive. Some estimate that approximately 70% of students require support. They observe that although significant numbers of students requiring support measures are African, the challenge is by no means limited according to race. Significant numbers of students across race groups require academic support.

The general experience in higher education is that quality of learning and teaching in the undergraduate phase will positively influence the proportion of students moving into higher degrees, research and academia. Likewise, it would seem that high quality teaching is positively related to the quality of graduates and in turn to their propensity to find occupational success in the labour market.

South Africa's access and redress goals have produced mixed ability classes in higher education. The manner of teaching and learning needs to adjust to this, as "It requires education systems that are receptive to diversity and are physically, pedagogically and socially accessible to all..." (OECD Report, 2008:262).

The reality suggests that this goal is far from achieved in South African higher education. Scott et al (2007:20 quoted in Badat, 2010:29) argue "under-performance of Black students will not change spontaneously. Decisive action needs to be taken in key aspects of the educational process – and at key points of the educational 'pipeline' – to facilitate positive change in outcomes".

Key challenges

- Under-preparedness of students that needs to be addressed is said to include fundamental conceptual skills, academic literacy and numeracy.
- In the earlier school phases long before the learner arrives at the door of the post school institution to register, students need appropriate career guidance and life orientation (dealt with separately as a key point in its own right) to make better decisions about their studies.
- There are fundamental challenges associated with the financial sustainability of student status: fees, accommodation, travel, food and books that have been partially addressed by the NSFAS scheme.
- On the teaching side academic staff may have no professional training as teachers. Institutions must improve the ability of staff to deal with student diversity; to appreciate language issues where student groups may be studying through their second or third language; and to select situation appropriate methods to enhance teaching and learning interaction.
- The inroads made by proponents of 'academic development' have encountered resistance from some academics, who are not keen to change the way they structure and teach the curriculum, or set up assessment processes.

- Currently, students resist academic development (AD) programmes because they feel stigmatised by association with a 'special' class. According to Soudien, some students label those perceived to be taking their studies too seriously as "coconuts".
- Senior managers and academic staff pose a challenge to AD practitioners, who are viewed as marginal practitioners and not "authentic" academics.
- The teaching and funding implications of mainstreaming an AD-like approach in an institution are very substantial. A key question is how would the costs and benefits weight against each other?

The issue of improving teaching and learning in South African higher education is linked to the evolution of what was originally termed 'academic development'. Over the years, the institutional response to the needs of under-prepared students has evolved from academic support (AS) which was equity focused and developed off a deficit theory. This then became academic development which built on the early work of AS and began to engage with the structure and culture of institutions. The current discourse, 'institutional development' has as its aims the institutionalisation and mainstreaming of AD. This amid calls for AD to be developed as a discipline with appropriate recognition in South African academic practise.

Interventions

The overarching goal should be to institutionalise and mainstream improved teaching and learning in higher education and FET colleges. This will require some of the following:

1. Fund the development of a rigorously conceptualised and designed high quality academic development programme, including its implementation, and monitor its impact.
2. Implement a national benchmarking test to assist students to be placed in programmes and align admissions criteria to programmes based on performance in these tests. Ensure parents, students and student leadership clearly understand the value and use of this instrument.
3. Extend the length of time taken to complete a qualification to take into account academic development requirements. Institutionalise a four year first degree at the national level. This should receive incentive funding as compared to individuals that pursue the three-year model.
4. The DHET must urgently commission research specifically to understand why 30% of students drop out in the first six months after enrollment in their first year of study. (We need to go beyond anecdotal statements from students.)
5. Enlist the assistance of professional bodies in each discipline (e.g. engineering, accounting) to adapt the design of a curriculum and its teaching for an extended programme.
6. Reward the professional development of academic staff as educators or as designers and managers of innovative teaching programmes.

7. Support the work of the Higher Education Learning and Teaching Association of South Africa to organise practitioners, and to evolve into a national resource.

Point 5: Mobilise public and private sector for work experience and training

Why is this important?

Workplaces are rapidly changing to adapt to: the onset of new technologies, to local and global competition, to changes in their position on the product/service value chain and to changing regulatory environments.

Constructing links between workplace and training/institutions brings a range of benefits for teachers and students, and employers. Teachers/lecturers are able to keep up to date with changes in workplaces and infuse this knowledge in their teaching. They are also able to negotiate placements for their students if they have links with industry workplaces, and they can give their students information about workplaces to enable better career/study decisions.

Exposure to the workplace (as part of their learning programme) is an essential part of the career development of students. This exposure enables students to understand the link between theory and practice, and to apply their skills in a live situation. They will find the period before starting work less stressful as they will have a picture of how businesses work and how management in workplaces thinks.

Exposure to a workplace to apply their skills in the occupation for which they have trained makes the student/graduate more employable (i.e. lowers the employer cost of inducting them into their professional role in the business). Employers are able to observe graduates undergoing work experience on site which assists in their selection and recruitment processes.

These links between workplace and training/institutions are of critical value to the economy. They contribute by: short-circuiting expensive and inefficient labour market and recruitment mechanisms. By facilitating the flow of graduates into employment, they improve the impact of and return on – social and individual – investment in education.

In any national economy, it is important to offer young people the opportunity to select from a range of qualifications that cover occupation skills relevant to obtaining work within the current labour market environment.

In the South African field of post school education and training – excluding higher education – the most significant public sector provider is the FET colleges. However, the footprint of this institutional form is relatively small related to the skills challenges.

Other institutions or programs that operate in this space include: large private enterprises (e.g. Arcelor Mittal) and parastatals (e.g. Eskom) that have developed their own training capacity for internal needs but which could supply training to scale for consumption in the general labour market, and numerous private enterprises whose core business is supplying training to the labour market. In addition there are numbers of CBOs and NGOs which run training programmes.

Though government bears a large responsibility to provide the opportunity to acquire skills and qualifications relevant to the labour market, it cannot seek to do this in isolation. Private sector training must be part of the qualifications mix to enable wider choice.

Ironically, there is little information available on the contribution of private FET to overall accessibility. In 2007 private FET was estimated to offer about 20% of all enrolment opportunities at the FET level (Table 9).

Table 9: Estimated enrolment at public and private institutions, 2007

Institution	Public	Private	Total
Schools	11 455 00	290 000	11 745 000
FET colleges	370 000	100 000	470 000
HEIs	740 000	50 000	790 000
Total	12 565 00	440 000	13 005 000

Source: Department of Education (2008) National plan for Further Education and Training Colleges in South Africa *Government Gazette* 12/12/2008 No. 31712:30 – Table 3.

Challenges

The pattern across the HET sector institutions and across qualifications (with a few exceptions) is that teacher/lecturer and student exposure to industry and workplaces is far below what could/ should be achieved.

Students at FET colleges and the Universities of Technology are supposed to be exposed to the workplace as part of their learning programmes. These provisions are said to be working poorly, and in some instances not at all (e.g. the introduction of new programmes has negatively affected these links in the FET sector – NATED-NCV). Recent work by Gewer (2010:14) shows that a sample of colleges exposed less than half of their students to workplaces in a given year (see Table 10 below).

Table 10: Ratings by NCV students of role of the college in preparing them for world of work

Kind of experience	% of valid total who selected the experience listed				
	Gauteng	KwaZulu-Natal	Limpopo	Western Cape	All four provinces
Part of a learnership/apprenticeship	21	19	21	31	22
Through a company with college links	9	8	11	9	10
Company that took student in for work experience	13	1	13	19	14
No work experience	57	60	58	41	56
Other	7	3	6	8	6
Valid total	2 910	711	3 659	1 078	8 358
Did not complete question	551	201	623	152	1 527
Grand total	**3 461**	**912**	**4 282**	**1 230**	**9885**

- Internships in the private sector are based entirely on the initiative of individual firms and are relatively small in scale.
- In recent years, graduate internships have been put forward as an important approach to generating work experience opportunities for graduates from FET and HET institutions – after completion of their qualifications. This option is hardly supported by business.
- In 2002 government set out the aim of introducing internships across the provincial and national spheres, thereby making the public sector a model for how to operate internships. Large scale targets were announced amounting to 5% of the staff establishment of government departments. This target has not been met.
- Employers do not necessarily have the facilities (e.g. office space, equipment, etc.) nor can they be assumed to have spare capacity available to allocate to management and supervision of interns.
- In 2010, the FET colleges offer a limited number of skills development/training opportunities (estimated to be in the range of 330 000 FTE). This number is said to be insufficient when compared to international benchmarks of a 2 or 3:1 ratio of FET to HE enrolments.
- The growth of private FET provision has been limited by regulations put in place by the Department of Education, which has aimed at assuring minimum levels of quality in the service provided as well as in the worth of the qualifications offered. It has been observed that this "license-permit" system is cumbersome and bureaucratic so that private education is either highly regulated or operates entirely outside the system.
- There is a strong pressure to improve the supply of post school, FET level learning opportunities in the light of a massive number of post-school youth not in employment or education –

2.8 million 18–24 year olds. The need to respond to the needs of this cohort of youth is urgent. It is also far larger than even the overambitious plan put forward by the DHET for FET college expansion. Though government might begin to address the needs of this group through its current FET college system, the sheer numbers involved require that other education resources should be brought into play. The opportunity exists for the public FET system to be supplemented by private sector and/or community involvement. This provides the opportunity for government to mobilise a swift response to the crisis of youth without employable skills. This resort will generate chances for youth to achieve higher levels of employability.

- A more open environment for private providers to operate has the potential to generate greater social inclusion than could have been offered solely through the current FET colleges. Furthermore, it can be implemented in the short term, while further DHET plans for FET expansion are in the pipeline.

Interventions

Work experience

1. High level leadership in institutions in the FET and HET sectors must take up this issue as priority and develop an institutional response. This responsibility should not be left up to teaching staff.
2. Faculty/school/department level initiatives should focus on recruiting workplaces to accept students.
3. Clear expectations of the parameters/requirements of workplace experience within the calendars of the students, institutions and workplaces must be developed as a basis for negotiation.
4. The DHET must make a financial incentive for employers to take on students for work experience.
5. The DHET must put in place funding for each institution to increase the capability of, or establish a career services centre that administers and supports student-workplace interaction and serves as a contact point for employers.
6. Among the criteria for the recruitment of lecturers in the FET and HET sectors should be:
   - The recentness of their working experience in the industry relevant to their teaching/professional field
   - The quality of their networks within industry in their field
7. Encourage redeployment/secondment of experienced people from the private and public sector to teach at institutions.
8. In the United Kingdom there is a "National Council for Work Experience", a non-profit making enterprise. The costs and benefits of setting up a similar body in South Africa should be investigated.
9. Linking workplaces with education institutions should begin with schools. The schooling system should initiate interactions such as: service learning, school-based enterprise and entrepreneurship programmes.

Mobilise private sector training

10. The DHET must change the regulatory environment in order to minimise barriers to entry of private providers into the market. This refers to the reformulation of regulations and procedures that restrict private institutions.
11. The DHET must implement a faster and more efficient system of accreditation of providers and of qualifications without losing control over quality. This must be monitored on a regular and efficient basis. Those responsible for monitoring must be responsive to complaints from students and parents regarding operations of service providers.
12. The DHET must encourage stronger supply of FET level learning programmes through public-private-partnerships (e.g. current initiatives with artisans).
13. The DHET must apply demand-side financing methods where applicable (e.g. where the local market – such as a small town or rural area – does not provide a sufficient market for a private training provider to operate) such as vouchers.
14. The DHET should consider granting subsidies or assistance grants directly to private schools or to particular programmes or courses that private providers are offering – subject to criteria.
15. The DHET should canvass current private training supply (e.g. artisans, call centre operatives, tourism) to identify best practice models

> "Implementation of work-based learning programs requires a great deal of organisation and coordination... A new organisational model for school-to-work transition is necessary to accommodate ongoing collaboration among a broad range of partners... A core of quality work-based learning pedagogy, curriculum, and delivery structures needs to be fully developed and implemented... Substantial professional development is required for teachers, counselors, administrators, employers, and mentors."
>
> Mason, S. (1996) "*Critical Issue: Developing Work-Based Learning Opportunities*" Center on Education and Work, University of Wisconsin at Madison. Date accessed: 21 May 2010 URL: http://www.ncrel.org/sdrs/areas/issues/envrnmnt/stw/sw300.htm

Point 6: Create a public comprehensive and coordinated system of HEI's that offer differentiated programmes that cater for national priorities and institutional comparative advantage

Why is this important?

Democratic developmental South Africa is being held hostage and hobbled by vestiges of apartheid social engineering. Since 1994 the discourse has been about historically disadvantaged and advantaged universities and efforts have been made to redress and transform the past.

Mergers (at universities and FET colleges) have been key to the reconfiguration of the system and a new landscape has emerged with mixed success. While larger numbers of students now have access, the graduation rates are poor and dropout rates are high, infrastructure at some institutions requires substantial investment, academic staff has limited qualifications and is not being replenished and serious issues of race, class and gender remain.

A new paradigm is needed. As the next iteration of reconfiguration takes place, the new administration presents the opportunity to reconfigure the higher education system, from one which has been shaped by: (a) apartheid inherited institutional identities (e.g. 'Bantustan institutions or 'bush colleges'); (b) unplanned differentiation partly influenced by market competition; (c) differentiation by default through unequal ability to access and to effectively use funding to deliberately forge a unique institutional identity; and (d) differentiation by default through the refusal to accept that not all institutions in South Africa can compete equally as high end research driven institutions.

It will be essential to consider a variety of criteria (such as comparative advantage of curricula offered, location, niche, stage of development, contribution to national and local economic development, infrastructure, publications record, etc.) against which each institution should be required to plot a suitable developmental path within a nationally differentiated higher education system.

Key challenges

- In South Africa, developments over the past 16 years have created an environment where "differentiation" exists as a consequence of deficit model approach and reactive, redress modes of thinking. The challenge is to take charge of the landscape, and use mechanisms in a proactive developmental manner to direct innovation, advancement and maturity of the system.
- South African higher education institutions seem to be captivated by a particular paradigm of university development – to be a UCT or Wits when they grow up. This is not necessarily the best paradigm.
- Entrenched vested interests have developed in institutions, such as research and teaching specialisations, and niche programmes. But despite their value, they may not be able to sustain the mother institutions in which they are located. The contribution of all departments/faculties/institutes and programmes needs to be considered as a coherent plan to ensure the sustainability and growth of the institution within a differentiated national system.
- Differentiation is an international phenomenon. A recent McKinsey and Company report noted that "Global trends are reshaping the overall landscape of higher education."

These trends include:

- increasing mobility of staff and students and setting up of foreign campuses
- emergence of non-traditional players such as corporate universities, online universities and niche research centres
- diversification of funding sources due to falling state funding
- interdisciplinary and inter-institutional cooperation
- increasing partnerships with industry, links with schools and community
- increasing the options of paths through executive and continuous education and online studies
- professionalisation of higher education leadership to support strategy and planning and differentiation of faculty tracks: research, teaching and generalist practitioner

- Recently, Cloete (2010) applied a simple set of quantifiable measures to the South African universities (Table 11) in order to test whether any groups of institutions with shared characteristics would emerge. The results of the analysis based on a set of measures[7] is given in Figure 10.

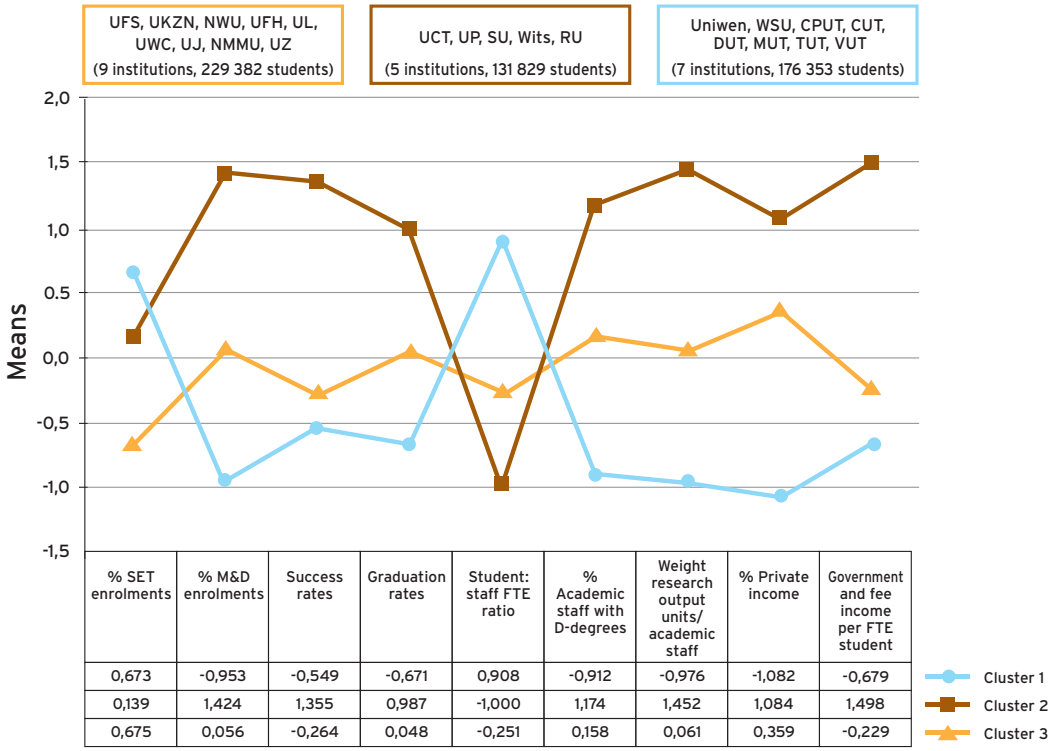
Table 11: South African public higher education institutions

Subgroup	Range	Institutions in group
Universities		
Large universities	Enrolments of 30 000 and above	UP, NWU, UKZN
Medium universities	Enrolments of 20 000 – 29 999	UFS, Wits, UCT, SU
Small universities	Enrolments below 20 000	UL, UWC, UFH, RU
Universities of technology		
Large UT	Enrolments of 30 000 and above	TUT
Medium UT	Enrolments of 20 000 – 29 999	CPUT, DUT
Small UT	Enrolments below 20 000	VUT, CUT, MUT
Comprehensive universities		
Large comprehensive	Enrolments of 30 000 and above	Unisa, UJ
Medium comprehensive	Enrolments of 20 000 – 29 999	WSU, NMMU
Small comprehensive	Enrolments below 20 000	Univen, UZ

Source: Cloete, N. Presentation at HE Summit, April 2010

7 The measures included: current input variables such as % head count in science, engineering and technology; head count enrollments at masters and doctoral levels; academic staff to FTE ratio; permanent staff with doctoral degrees; income from government, fees and private and output variables of success rates, graduation rates and weighted research output per permanent staff member.

Figure 10: Grouping of institutions with shared characteristics



	% SET enrolments	% M&D enrolments	Success rates	Graduation rates	Student: staff FTE ratio	% Academic staff with D-degrees	Weight research output units/ academic staff	% Private income	Government and fee income per FTE student
Cluster 1	0,673	-0,953	-0,549	-0,671	0,908	-0,912	-0,976	-1,082	-0,679
Cluster 2	0,139	1,424	1,355	0,987	-1,000	1,174	1,452	1,084	1,498
Cluster 3	0,675	0,056	-0,264	0,048	-0,251	0,158	0,061	0,359	-0,229

Source: Cloete, N. (2010) Presentation at HE Summit, April 2010

The value of Cloete's input is that it has demonstrated that a form of institutional differentiation currently exists, one in which apartheid history and more recent events have played a role. This is a valuable starting point for discussion of a differentiated institutional terrain in South Africa. A coherent policy framework is essential to develop a cohesive system for South Africa and to provide the milieu within which institutions can with confidence set their paths.

For instance, a varied landscape offers opportunities to build an appropriate sized system, with an appropriate mix of institutional roles, from research universities to teaching universities; and where institutions can elect to focus on their identity as local, regional or global player and in particular fields of knowledge competition within the system should be managed carefully.

Fortuitously at the Higher Education Summit in April 2010, a commission addressed the issue of differentiation, a valuable and constructive engagement, resulting in a key recommendation, namely "A working group should be urgently convened to take forward the framework for differentiation developed in the summit and develop recommendations in consultation with the sector". This represents a major forward leap in the discourse, as it offers an opportunity to concentrate resources and effort on constructing an optimal higher education landscape for South Africa and a space to design "optimal growth paths" for all institutions.

Interventions

1. The Minister and DHET make an informed and in-principle decision that a differentiated and diverse system is the basis for the next phase of development for HE institutions in South Africa.

   For example:
   - Focus on a particular discipline or field of knowledge
   - Produce graduates for particular professions e.g. medical school
   - Teach in general disciplines and undertake limited research
   - Generate new knowledge, undertake basic and applied research, preferably in specialised fields at post-graduate levels
   - Focus on local, regional or international students
2. Decide on the mandate/TOR of the Working Group agreed to at the HE Summit; which could include building a system of measurement/benchmarks for the South African system (not to dovetail with international ranking systems) and develop steering mechanisms for each institutional type: funding formula, QA; planning; support for organisational change, etc.
3. Based on the above, each institution must produce its developmental plan, based on criteria that may include amongst others, "values, shape, size, infrastructure development needs, strengths and shortcomings" (Badat, 2010:12) and individual trajectories and goals for 5, 10, 20 and 30 years. Once these plans are mutually agreed to, the DHET must ensure that progress is measured, the institutions are supported and can access performance related incentives.
4. A special task team must look at the performance of UNISA, its admission numbers and graduation rates and to consider the potential of distance and or online education must be commissioned.

Point 7: Improve FET quality and completion rates whilst creating community education and training centres to increase offerings to unemployed youth

Why this is important

Despite valiant efforts in the Further Education and Training (FET) college system, it is undersized and underperforming, yet the DHET has plans for one million (youth and adults) to participate in FET programmes by 2014. There is however an appreciation that "it is also the subsystem that is the most fragile as a result of the complex and incomplete transitions it has experienced in recent years" (DHET, 2010:9)[8]. The ambition to expand numbers and responsibilities of these institutions must take note of this fragile state and what resources are available. It is therefore critical to first stabilise the system, improve current quality and efficiency in order to turn the system around.

8 DHET, Round Table Working Document, April 2010.

Over the last decade the colleges were merged and recapitalised resulting in a new landscape. A national plan has been produced, new curriculum implemented and norms and standards agreed to facilitate implementation. The current Medium Term Budget Policy Statement sets the scene for the FET colleges to play a critical role in training for the needs of South Africa's economy and to address the needs of millions of young unemployed people. There is also an agreement to shift FET colleges from a provincial responsibility to a national competency. Despite these developments, the numbers of enrollments has recently decreased and the numbers and quality of those who complete do not meet the needs of individuals (many of whom do not secure employment) or of industry.

The DHET held a roundtable on FET in April 2010, with participation from a wide range of key stakeholders. The Round Table Working Document clearly sets out the challenges faced by the sector. This led to the establishment of a steering committee to plan a summit for August 2010 that would plot the way forward.

Meanwhile, in the labour market unemployment remains a critical economic, social and political challenge for South Africa. The unemployment rate for the first quarter of 2010 was 25.2% (narrow definition). The formal sector and the informal sector shed 140 000 and 100 000 jobs respectively (StatsSA, First Quarter LFS: 2010). The job losses in South Africa for 2009 were estimated at about 900 000.

In 2007, there were 2 812 471 people in South Africa aged between the ages of 18 and 24, not in education or employment. (Cloete and Sheppard, 2010: 10–11). Each year, roughly 500 000 people are added to this group.

The stark reality of such high levels of youth unemployment is in the main attributable to the structure of the economy which creates relatively high numbers of intermediate to high skill jobs and low numbers of low skill jobs. Furthermore the capacity of the economy to generate more jobs is diminished in the current economic downturn.

Youth unemployment – and its corollary, underemployment – if not addressed, is a central human development, socio-economic and political-security issue. There is a strong concern that with so many young people not in education or employment this has become a social problem, with the fear that these young people will display antisocial and disruptive behaviour, be liable to substance abuse, or become involved with crime. In the wake of the recent financial crisis similar concerns have been expressed in countries from West Africa to members of the European Union.

General FET challenges

The overall challenge is that the system must grow substantially, produce the quantity and quality of graduates required by the country. The colleges need to be supported in their current extremely 'fragile' state. In building the colleges the following challenges are to be addressed:

- The FET system has to grow substantially to address the "hour glass shaped education system" DOE. 2009:11. International experience is that the shape of the education and training system has large numbers at the base in general education; that the next largest volume of students are located in technical/vocational education and training level and the apex consists of higher education with the smallest numbers. In developed countries the ratio is three in vocational education to one in higher education. In South Africa, the ratio is approximately three higher education students to one FET level student.
- The target group is huge, including those who drop out of basic education and post school institutions and those who may have completed the school leaving examination but cannot access work or education and training opportunities. There are one million school leavers each year, at least half of whom do not find work, or go to tertiary institutions. There is already a pool of 2,8million 18–24 year olds who are out of school, not at work and not in further education.
- Currently the colleges are not meeting the needs of society or the economy. Industry has taken steps to address its own needs by training people.[9] A BUSA[10] representative expressed frustration at the basic education system and indicated it was a priority to get it to perform better. He observed that basic literacy, numeracy, logic and communication skills are lacking which is an important base from which industry could employ and train people. The issue of broadening the programme mix in FET colleges is a challenge. For example, BUSA is extremely concerned at the demise of 'NATED' programmes and are in discussion with DHET to reintroduce them.
- There is concern that there is too much emphasis on the National Curriculum (Vocational) (NCV), a three year programme, which is pitched at level 4 of the NQF. 80% of the funds provided to colleges are applied to the NCV programmes. Colleges that offer short courses need to charge fees from the learner or the employer.
- Workplace exposure is critical for several reasons. It is vital for students to acquire readiness for work. Appropriate work placement as part of the learning programme enhances the qualifications of students. Interaction with the workplace is also valuable for ensuring that the curriculum is current and meets the expectations of potential employers. In addition, further workplace exposure could play a role in keeping knowledge of the teaching staff current.

9 Discussion with Mr. Brian Angus, Manger of a BUSA initiative to train 5000 artisans over five years by companies.

10 Discussion with Mr. Mabena, Chairman of Training Committee BUSA, 18 May 2010.

- The image of the sector, better selection by students and colleges, the need for quality inputs from basic education and articulation and accreditation between school and FET and FET and HEI are further issues.

The challenge of the NEETS

- The DHET on its own cannot take responsibility for the 2.8 million unemployed youth (age 18–24) population. Nor can it be expected that the FET colleges should take on the training needs of the NEET cohorts.
- It must also be acknowledged that education and training cannot compensate for structural unemployment in the economy. Despite the lack of work opportunities, training surplus skills in the medium term has its value for self-employment, for "export" and for when industrial and other policies are implemented. It is imperative to hold this focus, noting also that government has in place and must continue to support other programmes in social protection, active labour market policy, and post-crisis layoffs.
- The training provided in the FET colleges and in other institutions must take account of differences in education background in the target population, viz:
  - 990 000 youth who have qualified for further education and training
  - 1 009 000 18–24 year-olds unemployed with a qualification of less than Grade 10
  - 700 000 youth qualified for post-secondary education. (Cloete and Sheppard, 2010:10–11)

General interventions in the FET colleges

1. Arrange the secondment of experienced public and private sector people onto boards/councils and into management of at least 20 FET institutions, where there is an absorptive capacity and a commitment to a college development plan for at least five years. The outcomes to be achieved may include: that good governance and management practices are implemented. Also, steps must be taken to strengthen teaching so that 80% of students are placed in appropriate employment.

2. Establish a facility to support the regeneration of the colleges and promote the interests of the sector as a whole. This facility should be established by and in the DHET and supported by a small powerful multi-stakeholder group.

3. Investigate the potential contribution of the nonprofit sector, the private sector and private training providers and incentivise them to contribute to the goal of enrolling one million students by 2014.

4. Manage a strategic, "ruthless" zero based change process with the existing set of public providers for the medium term to 2020. This will involve ensuring that: staff has both technical and pedagogic skills, there is a good selection process for students, and there are appropriate links with the workplace, improved completion rates and improved governance. Closing sites or colleges that are unable to meet a minimum threshold and are not appropriately located, must be seriously considered.

5. Based on progressively improved performance in the basic education system, work towards a more mature FET system, that streams students, offers a good mix of programmes and is confident of the employability of its graduates.

6. Investigate novel responses to meet the needs of those who drop out of the education system, rather than expect the FET system to cater for all those not in education, employment or training.

Intervention in FET programmes to meet the needs of NEETs

NCV

7. This document shows that in the FET colleges there is a heavy emphasis on the NCV programme. The NCV extends over three years which means that the colleges can accommodate a relatively small number of students. In contrast, if the colleges offered a six month or one-year programme they could provide skills to three times as many students. Currently, the NCV caters mostly for students who have completed Grade 12. The focus on the NCV in the colleges has the following consequences: fewer students graduate, the per student cost is higher, and a narrow group of students is catered for.

   Based on these observations, the existing public FET colleges must reduce their allocation of resources (staff teaching resources, time and venues) to the three year NCV programme from 70% to 30%. This will make space for non-NCV shorter courses that can meet the needs of a greater number of students with a wider range of needs. In addition such a move provides the space to downsize and consolidate the NCV programme in preparation for going to scale and to establish the qualified staff to teach on the NCV programme.

8. Initiate selection of all applicants for the NCV programmes, which will strengthen the value of admission on the course. Also programmes could focus on the 700 000 youth who have a Grade 12 certificate. This is based on the observation that, very small numbers of students of school going age in the 16-18 year old cohort attend FET-level course offerings at NQF 2–4 levels (See Tables 12 and 13). A decision to focus on post Grade 12 learners would then remove the requirement to present the NCV to two different groups of students: the Grade 9 completers and those who left before completing their SCE, and those who successfully completed their Grade 12.

Table 12: Age-specific enrolment rate for 16–18 year olds in school and in FET colleges: 2002–2006

	2002	2003	2004	2005	2006
Attending school	2 337 898	2 418 581	2 388 002	2 363 568	2 454 551
Attending college	28 060	26 250	19 474	24 094	23 689
Population: 16–18 years	2 909 301	2 999 191	2 934 944	2 952 871	3 057 103
ASER school	80.4	80.6	81.4	80.0	80.3
ASER college	1.0	0.9	0.7	0.8	0.8

Source: General Household Survey, Statistics South Africa, 2006:42 – Table 29

Table 13: Gross enrolment rate for secondary-level education, in relation to FET college's enrolment: 1997–2005

	1997	1998	1999	2000	2001	2002	2003	2004	2005
Secondary GER (excluding FET enrolment)	84	86	85	82	84	81	80	89	89
Secondary GER (including FET enrolment)	–	89	–	87	–	91	92	94	94

Source: Department of Education (2009b:23) *Trends in education macro indicators report: South Africa 2009* Pretoria, Department of Education – Table 12

Implement short courses that can be expanded because of the consolidation of the NCV programme

9. 70% of FET college resource should be focused on presenting short courses that provide employable skills for unemployed youth. The FET bursary programme should support students on short courses. Employers may contribute to ongoing training through short courses.

Community education and training centres

10. Investigate, design, plan and fund a substantial programme that offers training, basic work-readiness skills and temporary, part time work experience for youth not in education, employment or training. Public, private and civil society sector resources, organisations and programmes are considered in the mix of programmes.

Private FET provision

11. Subsidise private FET institutions and particular FET-level qualifications provided by other non-public providers subject to quality controls (e.g. independent local or international accreditation/ benchmarking such as: Microsoft, City and Guilds etc.).

Employment opportunities generated by government

12. Motivate and lobby for other government departments to sustain or expand their programmes which are labour absorbing (e.g. Expanded Public Works Programme, training young school leavers to become early childhood development practitioners, home-based/community-based care practitioners, and community development practitioners).

Point 8: Streamline SETA system to focus on sector priorities and allocate functions to appropriate agencies

Why is this important?

The SETAs were implemented to provide an institutional framework to devise and implement national, sector and workplace strategies to replenish and improve the skills of the South African workforce. The SETAs work within the Skills Development Act: to provide for learnerships that lead to recognised occupational qualifications; to provide for the financing of skills development by means of a levy-grant scheme and a National Skills Fund; to provide for and regulate employment services; and to provide for matters connected therewith.

The SETAs perform the following functions:

- develop a sector skills plan within the framework of the National Skills Development Strategy (NSDS)
- promote and establish Learnerships
- approve workplace skills plans
- allocate grants to employers, education and training providers and workers
- monitor education and training in the sector
- collect and disburse the skills development levies
- liaise with the National Skills Authority (NSA)
- liaise with the employment services of the Department of Labour and any education body established under any law regulating education in the Republic to improve information about employment opportunities; and between education and training providers and the labour market.[11]

The operation of the SETAs must be understood within the context of the broader skills development system architecture including the targets set in the NSDS by the Department of Labour, the influence of the NSA and the oversight of the Human Resource Development Council.

11 Skills Development Act (Act No 97, 1998) and Skills Development Amendment Act (Act No 37. 2008).

The work of the SETAs must be conceived as central to meeting the overarching challenge of generating occupational skills not only for economic growth but also for inclusive growth.

Key challenges

- SETAs have been required to serve too wide a spectrum of beneficiaries. These include target groups of individuals whose work status may be employed, pre-employed and the unemployed. Furthermore SETAs have been required to meet the needs of a range of skills levels from unskilled workers to highly skilled professionals (i.e. a SETA needs to have the capacity to manage skills development from ABET to specialised post-graduate training).
- The skills development opportunities that are mobilised by the SETAs are limited in their impact because of the poor basic skills that learners/workers bring with them from the basic education system into the workplace. As a result, learnerships offered by some SETAs explicitly set out to compensate for the gaps in recent school-leavers basic skills.
- There are low levels of throughput in learnerships and apprenticeship programmes especially in comparison with the need for such intermediate skills
- In the main, sector skills plans present interpretations of the current environment and future skills demand that remain unconvincing to employers, who continue to focus narrowly on their own immediate skills needs.
- Barring some exceptions, employers still observe that SETAs provide poor service (e.g. support, information etc). This means that employers are less likely to participate in the levy-grant scheme and consequently will be less likely to provide training opportunities for their employees.
- The make-up of the levy-grant scheme and the administration of the system by the SETAs has consistently failed to impact on small firms. These firms often lack personnel with the skills or cannot spare the time taken in meeting the bureaucratic requirements built into the levy-grant system.
- The SETAs have regularly failed to successfully deploy the income that accrues to them. This cannot be explained solely through reference to inefficiency of SETAs. The SETA system has been associated with maladministration and poor governance. This is evidenced in qualified audit reports and the need to place SETAs under administration from time to time.
- The training market is over subscribed. This means that especially among large and medium firms, the volume of demand for training service providers is not adequately met, with an impact on quality and variety of training available.
- There is an imbalance between the availability of short largely informal training and more lengthy and formal skills development opportunities. This impression is reinforced by observations that the proportion of occupationally directed qualifications available to workers is lower than desired.

Interventions

1. **Stabilisation and strategic choices**

   It is critical to recognise and implement existing policy, to build system stability, to create greater coherence, and to monitor progress before making major changes. Where necessary, implementation can be reviewed within the current policy framework, because the current framework offers sufficient flexibility to allow for adaptation of the existing institutions and processes.

   The appropriate strategic, planning and operational responsibilities of the SETAs, NSF and NSA should be guided by the strategic direction that will be articulated by the Human Resource Development Council and may be expressed through strategic documents – including for instance the National Skills Development Strategy.

2. **Range of possibilities for restructuring SETA functions**

   Based on the argument that SETAs have too wide a range of functions to perform, it is recommended that the load and variety of responsibilities should be reduced to enable SETAs to focus on a manageable set of core functions. Some possibilities are given below:

   - The administration of grants could be allocated to a centralised function
   - Quality assurance of providers and or qualifications and their registration could be ceded to an appropriate entity such as the QCTO. The quality assurance and administration of qualifications such as Learnerships and Apprenticeships could be managed through the QCTO, leaving SETAs with the role of supporting these programmes
   - The development of national and sector skills plans could be ceded to a planning group/committee linked to the NHRD Council which may include representatives from Department of Trade and Industry, Economic Development Department the National Planning Commission and Department of Labour. The HRD Council could add value to strategic skills development planning by the SETAs through modeling and advising SETAs on cross-sectoral economic and labour market trends.
   - ABET programmes could be made the responsibility of the proposed Community Centres or of the Skills Development Institutes mooted in the Skills Development Amendment Act (Act no 37, 2008).

   Once some of the above functions are stripped away, the SETAs can focus entirely on operationalising and supporting skills development. SETAs can continue to mobilise industrial groupings together for the purpose of addressing their skills needs, and generating reliable skills forecasting and advisory services for enterprises. In addition, SETAs may also pay more attention to encouraging growth in the number and quality of training providers.

3. **Range of possibilities for the allocation of grant monies.**
   This could involve the allocation of parts of the total grant amounts received between the following:
   - To the NSF to continue current practices or new approach as mooted in NSDS III
   - To the agencies that may take over some SETA functions
   - To the SETAs in accordance with revised functions and where the SETAs are required to address the needs of new 'client needs' e.g. research, support to academic profession
   - To the rejuvenation of programmes for artisan development as envisaged in the Skills Development Amendment Act of 2008
   - To the creation of a voucher scheme that can be exchanged for placement with employers for important workplace experience

4. **Range of options for investment of the current accumulated funds**.
   It is proposed that the current accumulated funds be converted into a capital fund and a multi-year programme to implement any of the following:
   - Implement the Community Education and Training Centres
   - Create an endowment for teaching, research and academic development
   - Contribute to developing the guidance, information and selection process
   - Offer short courses for young unemployed people
   - Support PPP's with private FET and other institutions
   - Implement the concept of Skills Development Institutes

   Investigate and negotiate with stakeholders on the basis of Section 28 (1) of the Skills Development Amendment Act (Act No 37, 2008) which provides for the use of funds for "projects identified in the national skills development strategy as national priorities".

Point 9: Build the DHET capability to manage the 10-Point Plan for the sector and all its regular responsibilities

Why is this important?

The Department of Higher Education and Training (DHET) Strategic Plan sets out the responsibility of the department:

- Need to anticipate needs, in unpredictable economic climates
- Facilitate institutional linkages that optimise conditions for individuals to make choices

- Provide a policy and resource environment where providers are supported and accountable to be efficient and effective
- Establish and manage incentives that enable the system to be responsive and relevant to the complex dynamics of demand

The development of education systems is a long term project, the South African system has undergone much change over the past 16 years, and has entered a new phase due the establishment of a new department, extensive review of progress, impacts of the global and national economic crisis, and is poised to make choices for the next 20–30 years.

There is need to ensure that to manage the demands of the system the DHET is equipped and is not hamstrung due to its own capacity constraints. A key aspect of the DHET is the ongoing change and development of the institutions in the system. A capacity that can plan, manage and support institutional development and change is critical.

The need for good quality data collection and access to timely, reliable, consistent, appropriate information is central to manage the resources, to make long term investments, for planning at all levels, to monitor performance of the system, to make policy and programme decisions. Information for the national HRDS, about economic sectors and for performance of institutions and the labour market is required.

Key challenges

- The DHET has to meet the needs of a wide range of education and skill needs, establish a new department, launch a national human resource development strategy and manage its relationship with a significant number of institutions, while improving the performance of the system. It is essential it has the information and capability to achieve its goals.
- The DHET has acquired various "post-school" functions. In addition to the higher education institutions, the department now has responsibility for the Skills Development Act, which has moved from the Department of Labour. It is to provide the Secretariat to the Human Resource Development Strategy – South Africa and Council and in due course to the further education and training colleges, which are to become a national competency from being a provincial responsibility.
- Thus the span of issues is very wide: formulating multiple skills strategies, for diverse sectors and labour market needs; addressing the large numbers of young unemployed people needing access to intermediate level skills for employment and self-employment; generating graduates with professional and high level skills for innovation and growth; responding to the needs of a range of existing and new economic sectors (e.g. as contained in the IPAP and other government progammes).

- The DHET has to implement this through managing a large number of institutions of different types. 23 universities, universities of technology and comprehensive universities; 50 FET colleges; the SETA's, the NSA and the NSF; statutory bodies such as those for quality assurance, SAQA that is responsible amongst other things for the national qualifications framework; as well as advisory bodies such as the Council for HE and forums such as HESA.
- Extensive information on education and the labour market is available from government agencies, from the DHET's own management information systems and through independent research actors (e.g. universities, NGOs). Despite this, gaps remain, in our existing knowledge – for example, What are the key skills needed for specific economic sectors? What is happening to our skills base – who is emigrating, why? What can be done to retain our skilled citizens? How can funding formulas be adjusted to incentivise graduation rates without compromising institutional stability? Why do certain graduates struggle to find employment? With regard to FET colleges important questions include: What is the throughput and performance of each college and of the system? Why have significant numbers of lecturers resigned, and what impact does this have on the capacity of the system to meet increasing expectations? What is the relationship between the qualifications and years of industry experience of lecturers and the quality of teaching and learning in colleges? What kinds of support do learners need? How can students be assisted to make correct choices of subjects at school or of degree programmes at university? Will tax incentives offered to employers assist unskilled people to gain work experience? Is South Africa getting value for its investment in the education system?
- These knowledge gaps constrain decision making at various levels and a proactive approach to map out the information and knowledge needs of the system, to build on what is already taking place is necessary.

Interventions

1. Establish a structure, specify functions and recruit people for the DHET to address the expanded responsibilities it has acquired:
    - Build excellent systems: reliable and systematic information, adequate physical resources, and professional healthy management practices.
    - Acquire and retain staff capabilities such as strategic thinking, (developmental) change managers, education economists; planners; contract managers; monitoring and evaluation specialists.
    - Talents such as stakeholder management, alternate conflict resolution and negotiation should be acquired.
2. Establish a facility to manage institutional change. This expertise can be drawn from within the DHET, with specific talents from other public and private actors drawn in as necessary.

3. Recruit the best resources in the country from the HE&T system, public and private sectors to kickstart delivery, to support action in stagnant statutory structures or to project manage special projects (e.g. FET colleges turn around).
4. Extract the best value of the HRDS Council by providing a high quality and consistently professional Secretariat function and maximise the strategic value of the Council through supporting it with excellent quality information and resources.
5. Progressively establish an "Education Research Council", a facility that will manage, without centralising, a comprehensive research agenda. Encourage research, including post-graduate students. Build a portal for storing, managing, processing and making the information available to a multiple set of stakeholders, across the system at all levels. Build the ability of institutions to capture data, process and use information. Encourage evidence-based decision making processes. Ensure a reasonable budget for functioning of the Council.
6. Lead by example (e.g. the HE Summit ran on time). Through good leadership, governance, professionalism and set the tone for institutions accountable to DHET and the public service generally.

Comments at DBSA discussions:

"The objective of transformation is hindered by the fact that the department does not have the capacity to deal with university transformation reports. No action is taken when institutions fail to meet goals." In order to assist monitoring and compliance, The Department should include measures for transformation into its audit processes.

There is need to investigate in detail the experience of students and why they drop out, or do not pursue post graduate studies. There were a number of anecdotes of unhelpful behavior and the difficulty students and parents experience, which seems to be to leave them frustrated."

Point 10: Create a national skills demand forecasting process, with strategic insights from SETAs and other labour market analysis

Why is this important?

Governments and enterprises experience labour market challenges, such as unemployment, underemployment, skills mismatches (including skills shortages and gaps) among others. These labour market phenomena reflect labour market inefficiencies and the immediate question is to what extent information can be applied to reduce the severity of the problems. Identifying and resolving skill needs, mismatches and shortages becomes more difficult as economies develop, differentiate and integrate (e.g. through migration, outsourcing, off-shoring, etc.) into the global economy.

Sound labour market information is necessary for the formulation of policies and programmes to support the generation of employment opportunities, and other social policies and to support economic growth. For these reasons, labour market information must be of reasonable scope and level of disaggregation; be published with regularity, and be publicly available.

Ideally, labour market information should be generated through applying standardised methodologies, to enable comparability and replicability in survey design, data collection, and analysis. Acquiring labour market demand intelligence has to rely on research methods that draw on both quantitative and qualitative information and that apply different techniques as the constraints on data availability and the nature of key questions require.

Challenges

- The quality of sector demand information generated by the SETAs through their aggregation of Workplace Skills Plan (WSP) and Annual Training Report (ATR) data as submitted by enterprises is not sufficiently dependable for signaling the most appropriate direction for skills development in the sector for which they are responsible. This is because the reliability of the process of data inputting by enterprises cannot be guaranteed. Also, low WSP and ATR returns for SMMEs reduces the validity of findings at this level.
- The 'Scarce skills list' as generated by the Department of Home Affairs is highly unreliable. SETAs submitted data based on different methodologies, so the list is inconsistent.
- It is doubtful that information about skills development/training in government formations (nearly 40 national departments and more than 130 provincial departments) is properly made accessible. This raises questions about skills planning in government formations.
- This forecasting should not be confused with "manpower planning". Forecasting of skill needs is a process of considering exsiting and likely demands (SSP). It involves a process of scenario development and strategic assesment for informed decision making.

Interventions

1. Labour market information and analysis processes and systems and institutional capacity in the SETAs and in government formations must be improved (including the collection, cleaning, manipulation, storage, security protection and archival conservation of labour market data). This refers to entities other than StatsSA.
2. At the national level, enhanced coordination and quality assurance will have to be applied either through the Skills Development Planning Unit (formerly of the Department of Labour) or an entity of similar or higher status.
3. The labour market indicators applied by the DHET should be defined according to internationally accepted standards that can serve as a basis for comparative analysis.

4. Information on local – at least provincial – supply and demand for skills must be developed for both employers and job-seekers in order to stimulate labour mobility.
5. The DHET should consider creating an entity that may be linked to the HRD Council that oversees all agencies involved in generating and maintaining labour market information and in adding value through reporting on labour markets. This unit would focus on useful ways of linking data sets and would identify additional research, on specific questions, that should be undertaken to fill in the gaps in the existing knowledge/ data holdings.

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Appendix 1: The need to enhance science, technology and innovation potential in South African graduate production

The level of economic growth targeted by the South African government requires continuous advances in technological innovation and in producing new knowledge. This in turn requires that the DHET and the Department of Science and Technology need to consolidate their role in ensuring that the graduate supply of scientists, technologists and innovators can sustain the development and growth ambitions of South Africa. The long term stability of the concept of inclusive growth depends on the realisation of South Africa's potential to excel in a set of high skill, high technology and high growth industries.

In the first instance it is important to establish whether South Africa's higher education system is increasing its graduate output. Table A shows that there is some annual growth in each year between 2000 and 2006, but that the increments fluctuate quite widely.

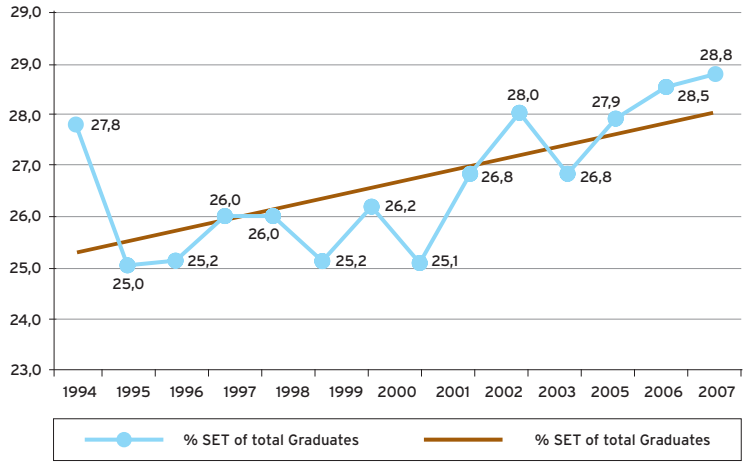
Table A: Number and percentage growth in science, engineering and technology (SET) graduates from higher education institutions: 2000–2006

	Number of SET graduates	% change over previous year
2000	85 986	–
2001	95 329	10.9
2002	100 242	5.2
2003	105 155	4.9
2004	116 797	11.1
2005	120 063	2.8
2006	124 671	3.8

Source: DST (2007:96) – Table 63

Is the graduate output of science, engineering and technology (SET) graduates keeping pace with aggregate graduate production in higher education? Figure A suggests that SET graduates as a proportion of all graduates did increase between 2004 and 2007.

Figure A: Graduating science, engineering and technology (SET) students as a percentage of the total of higher education graduates: 1994–2007

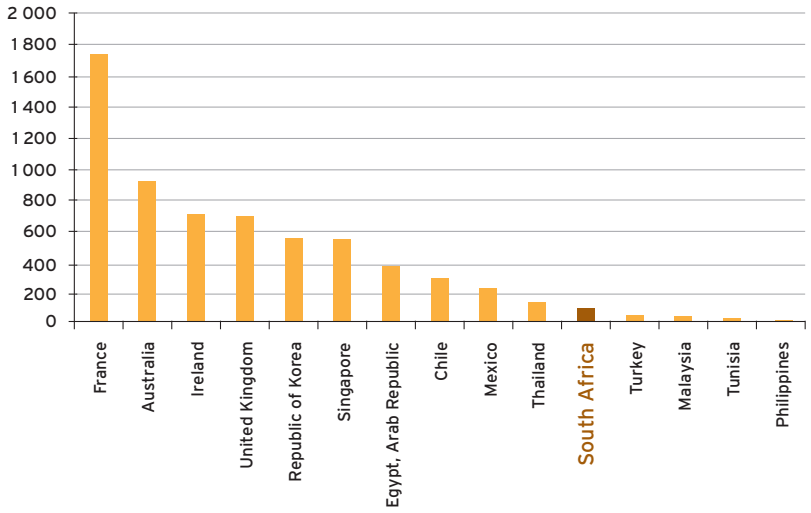


Source: DST (2007:96) – Figure 29

The question is then whether the output of SET graduates is sufficient to support the economic growth aspirations of the country which depend on the innovation capacity of the SET workforce. An important sub-group of the broader SET workforce consists of scientists and technicians who are involved in Research and Development (R&D).

Benchmarked international data on a range of countries compares technicians per $1x10^6$ population (Figure B) and scientists per $1x10^6$ population (Figure C) reveals that the proportion of technicians and scientists in R&D in South Africa is smaller than in other countries that South Africa would be considered to be competitive with. The inference to be drawn from inspection of this data is: that South Africa does not seem to have a sufficient density of R&D workers to support its drive towards an economy within which a group of sectors are globally competitive.

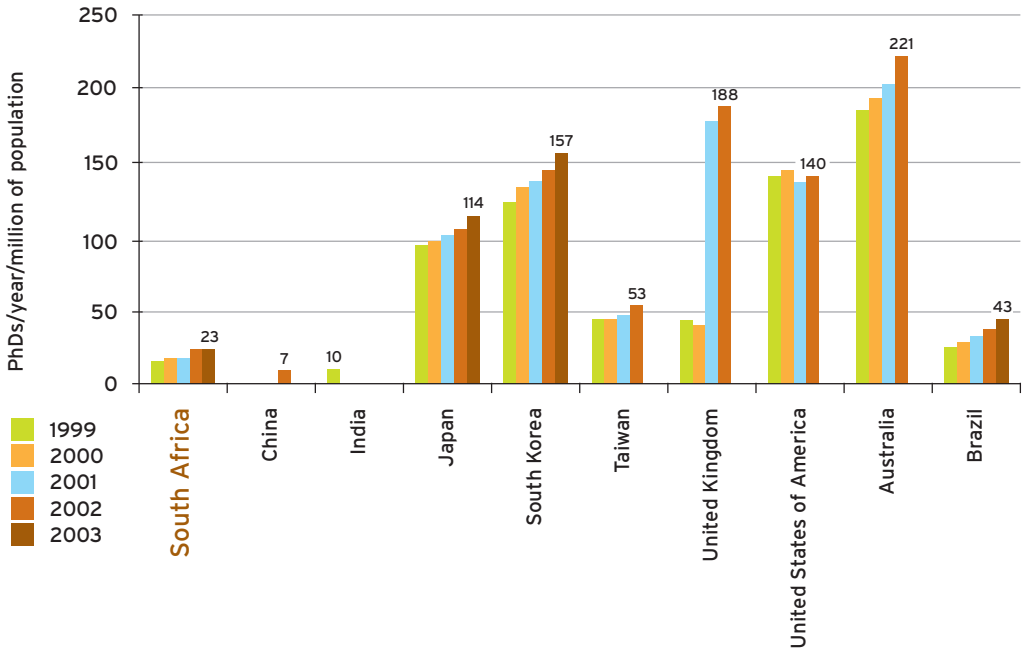
Figure B: Technicians in R&D per million population (average 2004–2006)



Source: World Bank online statistics

In this section we provide a final supply-side perspective on the country's production of graduates with PhDs, who constitute an important component in innovation, SET and R&D systems. The figure reveals how – based on the PhD production measure – South Africa's rate of human capital formation in the science and technology and innovation spheres falls far behind the countries that it might seek to emulate.

Figure D: Selected country PhD production rates, 2000



Source: DST (2007:25) – Figure 7 from Higher Education Management Information System, DoE.

Appendix 2: The potential impact of HIV and AIDS, on students and lecturers in the post-school sector

There are at least three ways in which HIV and AIDS can influence the demographic profile of those who are in a position to access and complete post-school education.

First, the impact of HIV and AIDS on parental death and more generally on adult mortality – especially those employed – affects the availability of resources in households to absorb the costs of keeping a family member at school or in higher education.[12] These circumstances can restrict or rule out would-be students from accessing higher education opportunities, and increase the chances that once enrolled they will be forced to abandon their studies for financial reasons or care-giving responsibilities at home.

Second, a proportion of students themselves may be HIV positive and illness, and absenteeism may affect their academic progress or curtail their studies prematurely.

Third, a proportion of HIV positive students will qualify and, with appropriate ARV medication and support, will live healthily and work productively for a long period.

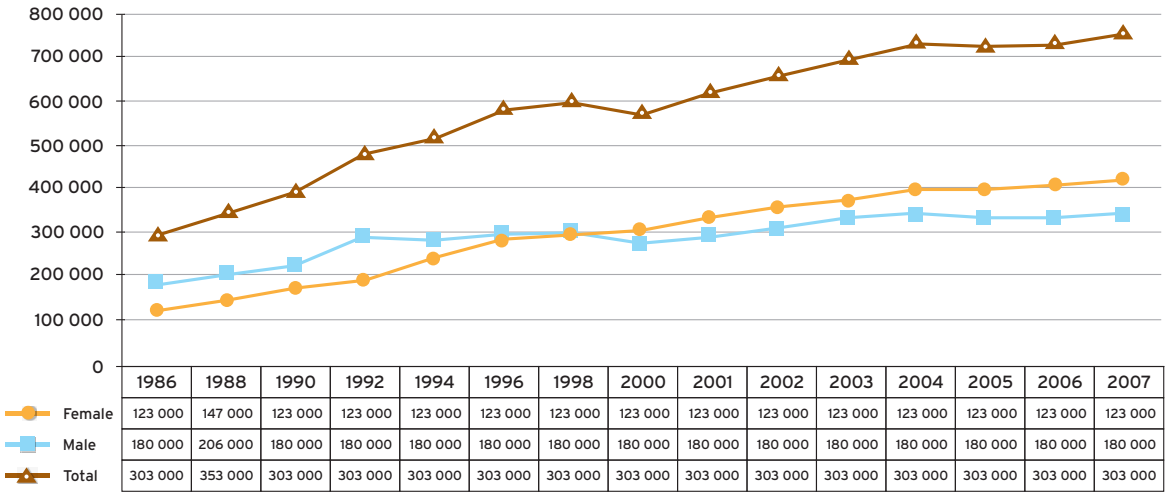
The selective mortality impact of AIDS on students and young professionals implies that ART rollout alongside prevention strategies present important opportunities. The question is how this can be most effectively implemented alongside strategies to increase the numbers of candidates enrolling for degree programmes which are considered to be critical for improving graduate production rates to meet needs in the economy.

Finally, the potential impact of HIV and AIDS on lecturers in the various institutions of the post-school sector is recognised.

12 Studies dealing with the impact of HIV on the educational careers of household members tends to focus more strongly on young children.

Appendix 3: Higher education and FET enrolment

Figure E: Total head-count enrolment in tertiary education



	1986	1988	1990	1992	1994	1996	1998	2000	2001	2002	2003	2004	2005	2006	2007
Female	123 000	147 000	123 000	123 000	123 000	123 000	123 000	123 000	123 000	123 000	123 000	123 000	123 000	123 000	123 000
Male	180 000	206 000	180 000	180 000	180 000	180 000	180 000	180 000	180 000	180 000	180 000	180 000	180 000	180 000	180 000
Total	303 000	353 000	303 000	303 000	303 000	303 000	303 000	303 000	303 000	303 000	303 000	303 000	303 000	303 000	303 000

Source: Department of Education (2009b:24) – Figure 5

Enrolment in higher education/100 000

Enrolment in higher education per 100 000 of the population was 1 591/100 000 in 2007 (Department of Education, 2009b:29 Figure 9)

FET colleges enrolment

The need for valid and reliable information on South African institutions is an imperative for planning. There is confusion around what the actual numbers of enrollments, and what the actual numbers of graduates have been from the FET colleges over a lengthy period.

The following data was obtained from a number of sources. It is placed in time sequence.

Table B: Enrolment on formal Department of Education programmes by age and gender, 2003–2004

	2003				2004			
	Male	Female	Total	%	Male	Female	Total	%
<15	1 331	989	2 320	1	1 357	648	2 005	1
15–19	34 631	23 183	57 814	19	42 172	28 324	70 496	22
20–24	97 024	61 018	158 042	53	103 764	66 646	170 410	54
25–29	29 050	17 812	46 861	16	27 028	16 454	43 482	14
30–34	9 685	4 787	14 472	5	9 257	5 030	14 287	4
35–40	6 792	2 824	9 616	3	6 319	2 903	9 222	3
41+	6 049	2 861	8 910	3	5 944	2 637	8 581	3
Total	**184 456**	**113 474**	**298 036**	**100**	**195 320**	**122 512**	**317 832**	**100**

Source: Department of Education (2008:28) – Table 2

Table C: Enrolment in public FET colleges in 2004 by programme

Course	Business	Engineering	Educare	Utility	Art/Music	General	Total
NIC/NSC	20 160	9 065	935	1 233	446	1 313	33 152
N1–N3	13 575	131 113	196	1 455	518	4 262	151 119
N4–N6	73 521	53 816	789	3 996	716	723	133 561
Learnership	312	895	184	237	19	2 635	4 282
Skills	–	–	–	159	–	129	288
Other	1 348	1 924	–	888	–	796	4 956
Non-formal	1 931	2 090	33	712	675	4 342	9783
Unspecified	5 946	12 137	1 344	3 169	1 355	12 361	36 312
Total	**116 793**	**211 040**	**3 481**	**11 849**	**3 729**	**26 561**	**373 453**

Source: Department of Education (2008:28) – Table 1

Table D: Enrolment at public FET colleges in South Africa in 2007

Province	Enrolment
Eastern Cape	20 173
Free State	14 224
Gauteng	94 434
KwaZulu-Natal	77 431
Limpopo	17 037
Mpumalanga	36 463
North West	14 318
Northern Cape	10 666
Western Cape	35 933
National Total	320 679
Number of teachers	5 987
Number of FET institutions and ABET centres	50

Source: Department of Education (2009a:29) – Table 16

Table E: Enrolment in n course and NC(V) 2006–2009

Programme	2006	2007	2008	2009	Total
Report 191 (N courses)	523 852	498 768	456 657	397 314	1 876 591
Estimated N enrolments	209 540	199 507	182 662	158 925	750 634
NC(V)		26 451	67 512	122 921	216 884

Source: DoE, 2010:17 "The Report 191 (N courses) reflects the totals of the subject entries in different programmes and those of NC(V) reflect the number of FTEs) through the years. In order to provide an enrolment comparison, the Report 191 course enrolments have been divided by 2.5 to give an estimate of students enrolled as this is the typical number of N courses undertaken by an individual in a year."

The data available is not sufficient to develop a – verifiable – time series between 2000 and 2009 on:

- Enrolment (head count or FTE)
- Completions (head count or FTE)
- Enrolments and completions by programme

Appendix 4: Adult education

Structures and legislation

Adult Basic Education and Training (ABET) Directorate was established at the Department of Education, in 1996

In 2000, the Adult Basic Education and Training Act (Act 52, 2000) was passed, which provided the basis for the provision of adult education and training.

Specific adult education plans and targets are given in the in the Dept of Labour's National Skills Development Strategies (NSDS) covering the period 2001–2010.

Field of adult education

Adult education can refer to: access to literacy, access to second chance opportunities for basic education, technical skills training, on the job training and professional skills acquisition. This range of learning opportunities implies a view of adult education and training in a lifelong learning context.

According to Pandor "It can be described as a pressing demand for a wide variety of education and training opportunities – access to literacy, second chance opportunities for young adults, flexible learning paths, work-linked skills programmes, life skills programmes that will strengthen the quality of life of adults, access to formal qualifications for workers trapped at low levels of employment and then also a basic interest in acquiring increased knowledge in a specific domain or discipline." (Pandor, 2009)

What have been the main forms of adult education provision?

Access to schooling (prevention of illiteracy)

The incidence of adult illiteracy is directly related to the ability of the ordinary school system to provide access to all of school going age and to retain students in school for the full compulsory term. Therefore – improved access to schooling since 1994 in South Africa has impacted positively on literacy levels amongst the youth, because it has exposed larger proportions of age cohorts of school-going age to at least 7 years of school education which can be taken by convention as the length of school attendance which will generate functional literacy.

Adult learning within the formal education system

Through the Department of Education, adult learning opportunities are made possible through study after hours mainly located in school buildings and mainly offered by people who are employed as school teachers in school hours. The focus was on adult learning opportunities to the minimum of level one literacy or formal study for a senior certificate. Thereafter learners could proceed to achieve a matric equivalent certificate through this Adult Basic Education and Training (ABET) programme. Learner achievement in this the General Education and Training Certificate is sluggish. There are several reasons for this including: adult learners find difficulty in sustaining attendance on account of time and energy pressure to keep attending after work, other responsibilities in the household or community, economic shocks, in rural areas peak season times such as harvesting break into attendance etc.

Table F: Enrolment at public ABET centres in South Africa in 2007

Province	Public ABET
Eastern Cape	43 724
Free State	20 670
Gauteng	85 170
KwaZulu-Natal	12 948
Limpopo	29 718
Mpumalanga	24 814
North West	29 311
Northern Cape	8 818
Western Cape	37 561
National Total	292 734
Number of teachers	**19 200**
Number of FET institutions and ABET centres	**2 476**

Source: Department of Education (2009a:29) – Table 16

Adult literacy in the workplace

Adult literacy is offered at the workplace by employers which are affiliated to a SETA. The level of provision through employers as supported by SETAs has depended greatly on the levels of union mobilisation in the respective sectors and the extent to which the unions pressurise for access to adult literacy. In some sectors access to adult literacy opportunities is much better organised such as in mining (MQA) and manufacturing (MERSETA).

Greater involvement may be generated through the provincial Departments of Labour (DoL) in driving private agencies to provide a limited level of education and training usually contracted through a SETA as a service provider to an employer. Before 1994, adult literacy activity was taken forward by a wide range of large progressive NGOs and CBOs across the country, and in the trade union ranks but the institutional landscape has changed since then, with government taking on the challenge.

A number of government departments and entities across the national and provincial and local government spheres provide training to employees (e.g. KwaZulu-Natal Department of Transport).

Workplace skills development

Working adult members of society should be exposed to various forms of skills development opportunity in the course of their working life to achieve different purposes. These opportunities may be acquired on the individual's own initiative, via her employer or through a third party provider that is commissioned by her employer or a SETA. The opportunities may or may not be accredited, may range from basic to high level skills, and may be acquired through formal or informal on-the-job training.

Government literacy campaigns

Department of Education was able to launch its Ithuteng (Ready to Learn) campaign in 1996 as the first pilot ABET programme nationwide.

In 2000, the DoE launched the South African National Literacy Initiative (SANLI). The priority was to substantially reduce illiteracy in five years through targeting about 3.3 million illiterate adults. By 2006, only about 343 000 persons were reached via the SANLI initiative (Ministerial Committee on Literacy, 2006:6).

The Kha ri Gude mass literacy campaign was launched in 2008. Campaign statistics show that 65% of the volunteer educators are below the age of 35 years. The campaign aims to use venues that are easily accessible for learners – such as homes, the markets, churches, old age homes, schools, prisons – and to engage structures such as traditional leaders, councilors, faith-based organisations (FBO), community organisations dealing with the disabled, and the aged. As 92% of the volunteers are unemployed and live in the areas targeted for literacy, the stipend paid to volunteers for teaching contributes to lifting them out poverty. The campaign is conducted in all official languages (Pandor, 2009). "Kha Ri Gude" Mass Literacy Campaign, aims to reach 4.7 million adults by 2012.

In this period, adult education will be extended, with a focus on basic literacy and numeracy, as well as on the development of relevant skills amongst adults through an integrated plan involving three state Departments. Also, the DoE Strategic Plan, 2008–2012 envisages formation of partnerships with SETAs to deliver the accelerated skills development projects in agriculture, building and construction industry, and hospitality skills to promote skills building and lifelong learning. Projects will be implemented to increase participation in skills building and to increase enrolment in the formal ABET levels one to four programmes.

Some challenges

- Despite some developments, "...South Africa still has 6.7 million adult citizens who are either totally or functionally illiterate. Thus far, the provision of adult basic education has been insufficient to further reduce these numbers." (Dept of Education, 2009:104).
- There are significant gender disparities to deal with in achievement of literacy.
- The absence of a resolution around conditions of service poses a substantial challenge to the recognition of Adult Basic Education and Training (ABET) educators.
- Coordination of adult education initiatives across government.
- Development of reading and library materials for adult learners in all official languages.

Recent developments:

In 2008 Minister Pandor established a Ministerial Committee to draft a Green Paper on the renovation of the adult education and training system in SA. This will be followed by a White Paper on adult education in South Africa, and the development of new legislation and the adoption of a new act for adult education and training.

The Green Paper Committee submitted its final report in November 2008. (See the report for: policy proposals on the following key areas of action: the policy and legislative environment; funding for adult learning; the institutional landscape; human resource framework; curriculum and qualifications; and a new governance framework for adult learning.)

Appendix 5: Government funding for education

Why is this important?

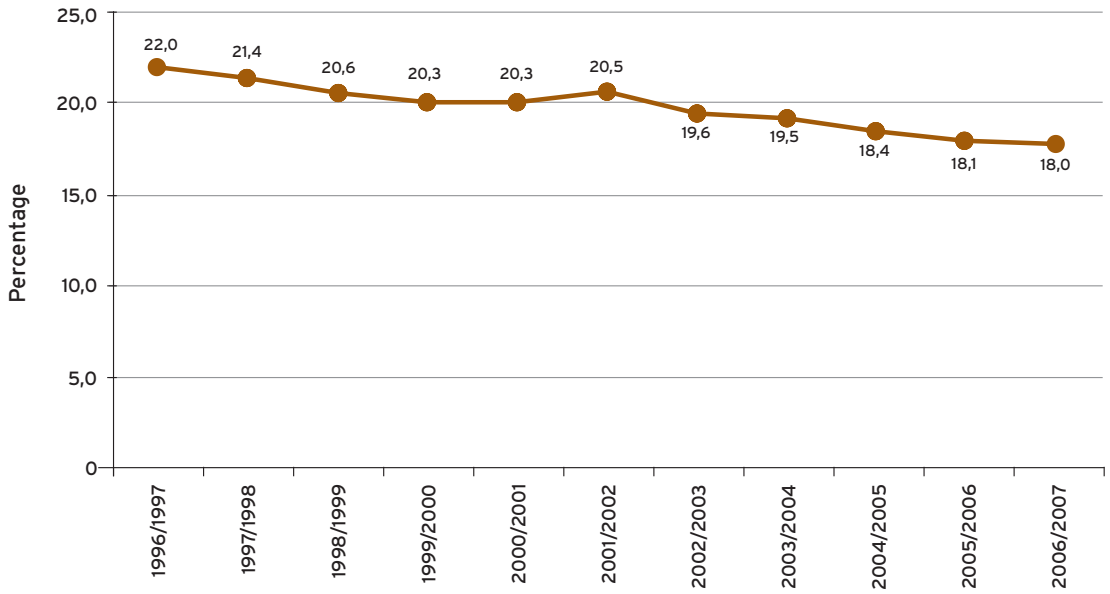
Demand for education and skills emerges as a consequence of the historical development of national economies and of the global economy. Supply of education and skills is strongly influenced by how governments respond to: the education aspirations of society, the skills needs of the economy, the constitutional mandate to provide equitable access to quality education opportunities. Fiscal constraints place limits on government's response.

The funding envelope available for the DHET is a key resource that conditions what the department is able to achieve within its mandate. The intention here is to focus on how the DHET can improve on how it uses the available funding rather than on attempting to argue that the DHET should be allocated more funding. In any case, a high level ten point plan cannot serve as the basis for a credible argument for more funding from the fiscus.

Challenges

- Education expenditure by government is declining relative to overall national expenditure and in relation to GDP. This trend is set to continue in the aftermath of the economic downturn.

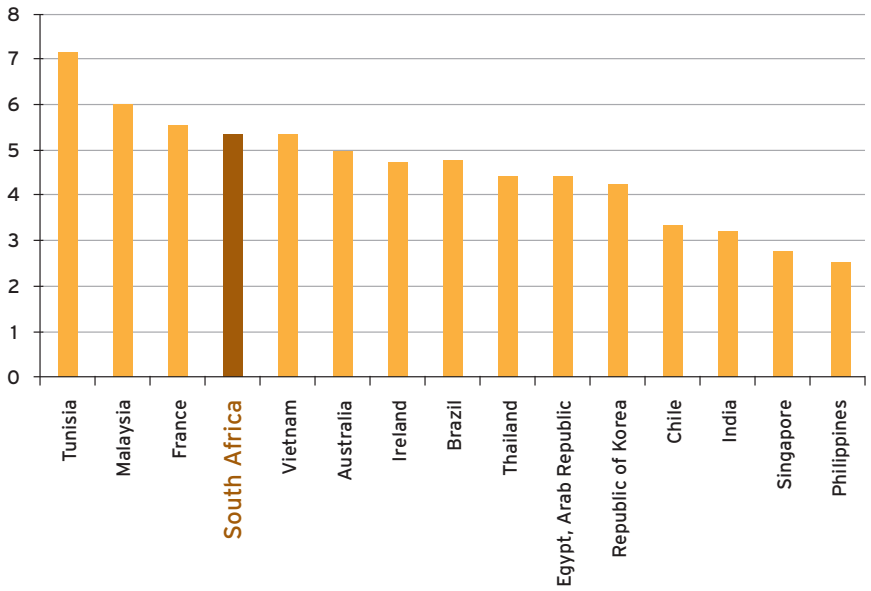
Figure F: Public education expenditure as a percentage of total government expenditure: 1996/97–2006/07



Source: Department of Education (2009b:107) – Figure 31

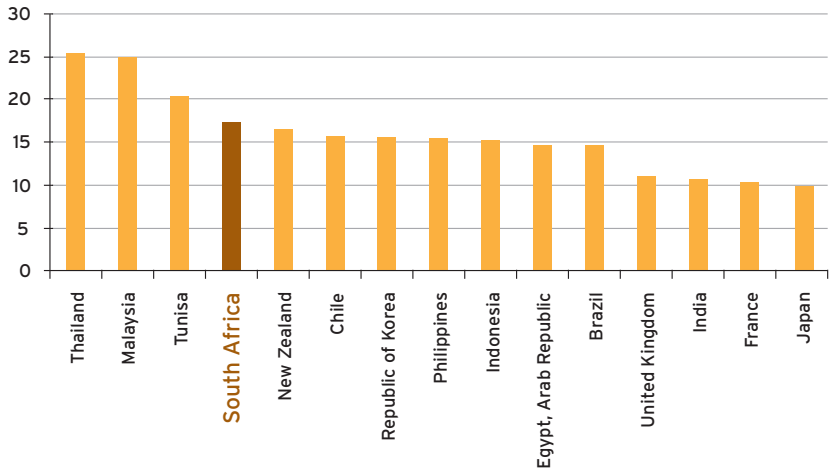
- In the previous decade, South Africa has spent a relatively high proportion of its GDP on education, and a high proportion of government expenditure was allocated to education, as shown in the comparisons below

Figure G: Public expenditure on education as % GDP (average 2005–2008)



Source: World Bank online statistics

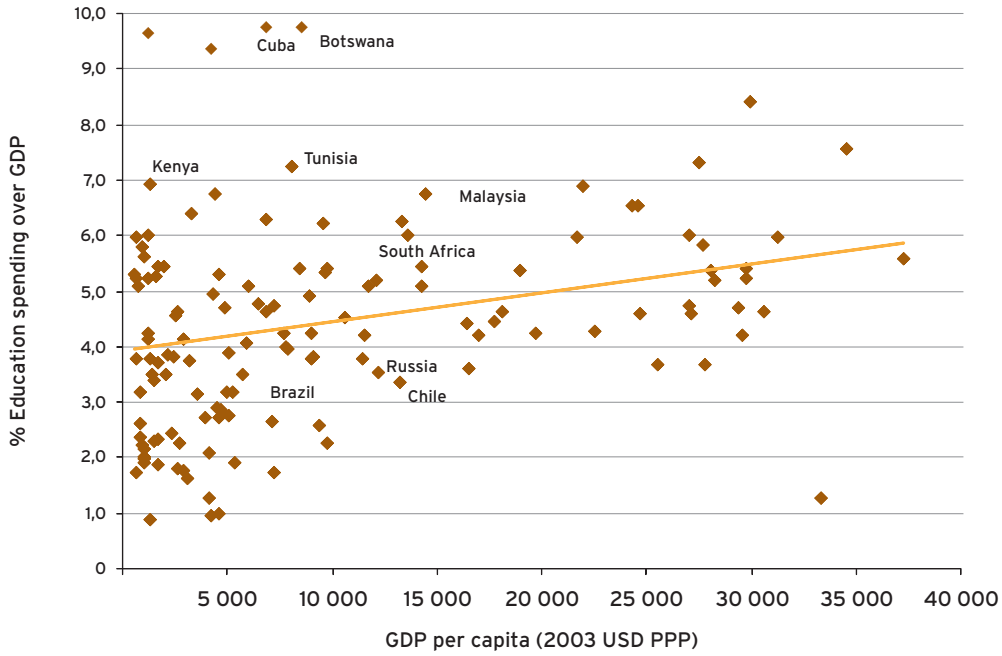
Figure H: Public spending on education as % of total government expenditure (average 2004–2006)



Source: World Bank online statistics

- South Africa's performance in making the most from its education expenditure is not impressive in comparison with other countries. Overall spending on education is related to GDP per capita internationally in the figure below. The level of expenditure of over 5% should be sufficient to generate far greater benefits to the population. South Africa is overspending in relation to its return on investment in education. Though there is no direct link between education expenditure and economic growth, the contribution of education cannot be discounted.

Figure I: Spending on education relative to GDP per capita in 2006



Source: Department of Higher Education and Training – HRDSA (2009:71) – Figure 19

Interventions

1. The DHET must pursue ways to improve the efficiency of its use of funding.
2. Each higher education institution must consider its curriculum offerings in relation to their revenue generation, from programme to individual course level. This kind of exercise should be useful in identifying sustainable programmes and courses. This should not follow a strict financial rationale, but take into account an assessment of the social and cultural value of knowledge.
3. Financing options must be developed to support the differentiation process in higher education institutions.