

The challenges of transformation in higher education and training institutions in South Africa

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Introduction

This paper, commissioned by the Development Bank of Southern Africa, responds to the Bank's request:

- For 'a diagnosis and analysis of the key issues on Challenges of Transformation in Higher Education and Training Institutions in South Africa, including achievements to date'.
- To 'develop and rank recommendations and interventions for the medium-term (2020) to long term (2030). These could be interventions that do not require policy, budget and legislative changes and issues that require new system design and policies'.

The paper

1. Briefly sets out the context of post-1994 South African higher education, including the wide-ranging imperatives and goals that the South African *Constitution* of 1996 and the 1997 *Higher Education Act* and *White Paper* direct higher education to realise in and through higher education.
2. Identifies the achievements of the past 16 years, even if some of these have to be qualified.
3. Sets out and analyses the key issues and challenges that continue to confront the state and higher education institutions, beginning with certain policy and macro issues and thereafter specific issues related to access, opportunity and success in higher education.
4. Advances medium-term (2020) and long-term (2030) recommendations and interventions, and ranks/prioritises the recommendations and interventions.

Context

In South Africa, social inequalities were embedded and reflected in all spheres of social life, as a product of the systemic exclusion of blacks and women under colonialism and apartheid. The higher education system was no exception. Social, political and economic discrimination and inequalities of a class, race, gender, institutional and spatial nature profoundly shaped, and continue to shape, South African higher education. Given this, South Africa's new democratic government committed itself in 1994 to transforming higher education as well as the inherited apartheid social and economic structure and institutionalising a new social order.

Post-1994, there has been a wide array of transformation-oriented initiatives seeking to effect institutional change. These have included the definition of the purposes and goals of higher education; extensive policy research, policy formulation, adoption, and implementation in the areas of governance, funding, academic structure and programmes and quality assurance; the enactment

of new laws and regulations; and major restructuring and reconfiguration of the higher education institutional landscape and of institutions. These initiatives have often tested the capacities and capabilities of the state and higher education institutions and have affected the pace, nature and outcomes of change.

The South African *Constitution* of 1996 and the 1997 *Act* and *White Paper* directed the state and institutions to realise profound and wide-ranging imperatives and goals in and through higher education. It was assumed that their progressive substantive realisation would contribute immeasurably to the transformation and development of higher education and society.

The *Constitution* committed the state and institutions to the assertion of the values of human dignity, the achievement of equality, and the advancement of non-sexism and non-racialism and the human rights and freedoms that the *Bill of Rights* proclaims; and to “respect, protect, promote and fulfil the rights” embodied in the *Bill of Rights* (Republic of South Africa, 1996). The *Higher Education Act* declared the desirability of creating “a single coordinated higher education system”, restructuring and transforming “programmes and institutions to respond better to the human resource, economic and development needs” South Africa, redressing “past discrimination”, ensuring “representivity and equal access” and contributing “to the advancement of all forms of knowledge and scholarship, in keeping with international standards of academic quality”. The *Act* also proclaimed that it was “desirable for higher education institutions to enjoy freedom and autonomy in their relationship with the State within the context of public accountability and the national need for advanced skills and scientific knowledge” (1997).

The *White Paper* identified various social purposes that higher education was intended to serve:

- To mobilise “human talent and potential through lifelong learning” (DoE, 1997, 1.12), and “provide the labour market, in a knowledge-driven and knowledge-dependent society, with the ever-changing high-level competencies and expertise necessary for the growth and prosperity of a modern economy” (ibid:1.3)
- To undertake the “production, acquisition and application of new knowledge” and “contribute to the creation, sharing and evaluation of knowledge” (ibid: 1.12, 1.3)
- To “address the development needs of society” and “the problems and challenges of the broader African context” (DoE, 1997:1.3, 1.4)
- To contribute “to the social...cultural and intellectual life of a rapidly changing society”, socialise “enlightened, responsible and constructively critical citizens” and “help lay the foundations of a critical civil society, with a culture of public debate and tolerance” (ibid:1.12, 1.3, 1.4)

In essence, the social purposes resonate with the core roles of higher education of disseminating knowledge and producing critical graduates, producing and applying knowledge through research and development activities and contributing to economic and social development and democracy through learning and teaching, research and community engagement.

Concomitantly, and as part of the “vision...of a transformed, democratic, non-racial and non-sexist system of higher education” (DoE, 1997:1.14), higher education was called upon to advance specific goals. These included:

- “Increased and broadened participation”, including greater “access for black, women, disabled and mature students” and “equity of access and fair chances of success to all... while eradicating all forms of unfair discrimination and advancing redress for past inequalities” (DoE, 1997:1.13, 1.14).
- Restructuring of “the higher education system and its institutions to meet the needs of an increasingly technologically-oriented economy” and to “deliver the requisite research, the highly trained people and the knowledge to equip a developing society with the capacity to address national needs and to participate in a rapidly changing and competitive global context” (ibid:1.13).
- “To conceptualise (and) plan...higher education in South Africa as a single, coordinated system”, “ensure diversity in its organisational form and in the institutional landscape”, “diversify the system in terms of the mix of institutional missions and programmes that will be required to meet national and regional needs in social, cultural and economic development”, and “offset pressures for homogenisation” (DoE, 1997:1.27, 2.37).
- To “support a democratic ethos and a culture of human rights by educational programmes and practices conducive to critical discourse and creative thinking, cultural tolerance, and a common commitment to a humane, non-racist and non-sexist social order” (ibid:1.13).
- To “create an enabling institutional environment and culture that is sensitive to and affirms diversity, promotes reconciliation and respect for human life, protects the dignity of individuals from racial and sexual harassment, and rejects all other forms of violent behaviour” (ibid:1.13).
- “To improve the quality of teaching and learning throughout the system and, in particular to ensure that curricula are responsive to the national and regional context”, and to promote quality and quality assurance through the accreditation of programmes, programme evaluations and institutional audits (ibid:1.27).
- “To develop and implement funding mechanisms ...in support of the goals of the national higher education plan” (DoE, 1997:1.27).

In pursuing the defined social purposes and goals, the *White Paper* clearly and explicitly stated the *principles* and *values* that had to be embodied and also promoted by higher education.

These were: equity and redress, quality, development, democratisation, academic freedom, institutional autonomy, effectiveness and efficiency, and public accountability (DoE, 1997:1.18-1.25). The key levers for transforming higher education were to be national and institution-level planning, funding and quality assurance.

In the context of a commitment to societal reconstruction and development programme to which higher education was expected to make a significant contribution, the higher education transformation agenda was necessarily extensive in scope and also fundamental in nature. Of course, such a transformation agenda had considerable financial and personpower implications, which would unavoidably shape the trajectory, dynamism and pace of institutional change.

Achievements

There have been a number of achievements during the past 16 years, even if some of these, as will be noted later, have to be qualified.

1. A comprehensive agenda and policy framework for higher education, as explicated in various policy documents, has been defined, even if the nature of the transformation agenda and certain elements require ongoing critical debate. The progressive realisation of this agenda has the potential to create a higher education system that is congruent with the core principles of social equity and redress, social justice, democracy and development.
2. The foundations have been laid for a new higher education landscape constituted by a single, coordinated and differentiated system encompassing universities, universities of technology, comprehensive institutions, contact and distance institutions and various kinds of colleges. The attendant institutional restructuring has provided the opportunity to reconfigure the higher education system in a principled and imaginative way, more suited to the needs of a democracy and all its citizens in contrast to the racist and exclusionary imperatives that shaped large parts of the apartheid system.
3. There has been increased and broadened participation within higher education to advance social equity and meet economic and social development needs, a crucial goal given the legacy of disadvantage of black and women South Africans, especially of working class and rural poor origins.

Student enrolments have grown from 473 000 in 1993 to some 799 388 in 2008. There has also been an extensive deracialisation of the student body, overall and at many institutions. Whereas in 1993 African students constituted 40% (191 000), and black students 52% of the student body, in 2008 they made up 64.4% (514 370) and over 75% respectively of overall enrolments (CHE, 2004; DHET, 2009).

There has also been commendable progress in terms of gender equity. Whereas women students made up 43% (202 000 out of 473 000) of enrolments in 1993, by 2008 they constituted 56.3% (450 584 out of 799 388) of the student body (CHE, 2004; DHET, 2009).

4. In relation to the *National Plan* goal of 40% enrolments in humanities and social sciences (HSS), 30% in business and commerce (BC) and 30% in science engineering, and technology (SET), there have also been shifts as desired – from 57% HSS:24% BC:19% SET in 1993 to 43% HSS:29% BC:28% SET in 2008 (MoE, 2001; CHE, 2004; DHET, 2009).
5. Isolated from the rest of Africa and the world more generally, democracy has brought a welcome internationalisation of the student body and also, although to a more limited extent, of the academic workforce.

International student enrolments increased from 14 124 in 1995 to 51 224 in 2005, constituting about 7% of the total student body. Students from the South African Development Community bloc increased from 7 497 in 1995 to 35 725 in 2005. Students from other African countries increased from 1 769 in 1995 to 7 586 in 2005. Students from the rest of the world totalled 7 913 in 2005.

6. With respect to teaching-learning, research and community engagement, in a number of areas of learning and teaching, institutions offer academic programmes that produce high quality graduates with knowledge, competencies and skills to practice occupations and professions locally and anywhere in the world. Various areas of research are characterised by excellence and the generation of high quality fundamental and applied knowledge for scientific publishing in local and international publications, for economic and social development and innovation, and for public policy. In a variety of areas, there are also important and innovative community engagement initiatives that link academics and students and communities.
7. A national quality assurance framework and infrastructure has been established and policies, mechanisms and initiatives with respect to institutional audit, programme accreditation and quality promotion and capacity development have been implemented since 2004. These developments have significantly raised the profile of quality issues across the sector, and have linked notions of quality in teaching and learning, research and community engagement to the goals and purposes of higher education transformation. There has also been a concomitant emerging institutionalisation of quality management within institutions.
8. A new more goal-oriented, performance-related funding framework has been instituted, and a National Student Financial Aid Scheme (NSFAS) has been successfully established and expanded as a means of effecting social redress for poor students.
9. Following the constitutional provision for the existence of private higher education institutions on condition that they did not discriminate on the grounds of race, registered with the state,

and maintained standards that were not inferior to those at comparable public institutions, a small private higher education sector has come into existence. Criteria that private institutions need to meet to achieve university status are in place.

Overall, parts of South African higher education display considerable strengths and much promise with respect to knowledge production and dissemination, to contributing to social equity, to economic and social development and democracy, and to the development needs of the Southern African region and the African continent.

Issues and challenges

Notwithstanding some significant achievements, a number of key issues and challenges continue to confront the state and higher education institutions.

The paper first identifies certain policy and macro issues that require attention and then discusses specific issues related to the fundamentally important issues of access, opportunity and success in higher education.

1. Mediating competing goals

There has been an intractable tension between a number of values and goals of higher education.

For example, to the extent that government and universities have sought to pursue social equity and redress and quality in higher education simultaneously, difficult political and social dilemmas, choices and decisions have arisen, especially in the context of inadequate public finances and academic development initiatives to support under-prepared students, who tend to be largely black and/or of working class or rural poor social origins.

An exclusive concentration on social equity and redress without adequate public funding and academic development initiatives to support under-prepared students has negative implications for quality, compromises the production of high quality graduates with the requisite knowledge, competencies and skills, and adversely affects economic development. Conversely, an exclusive focus on economic development and quality and 'standards', (especially when considered to be timeless and invariant and attached to a single, a-historical and universal model of higher education) results in equality being retarded or delayed with limited erosion of the racial and gender character of the high-level occupational structure.

This example (others can be provided) illustrates that the transformation agenda in higher education embodies paradoxes, in so far as government and institutions seek to pursue *simultaneously* a number of values and goals that are in tension with one another. The paradoxes necessarily raise social and political dilemmas, difficult choices and the question of possible trade-offs between values, goals and strategies.

It has been pointed out that when confronted with an intractable tension between dearly held goals and values – various ‘simplifying manoeuvres’ are possible. One simplifying manoeuvre is to refuse to accept the existence of a dilemma. A second is to elevate one value or goal above all others making this the value in terms of which all choices and policies are to be made. A third simplifying manoeuvre is to rank values and goals in advance so that if there is a conflict between them one will take precedence. In the latter two cases, the effect is to privilege one value or goal above another (Morrow, 1997).

Recommendation

It should be accepted that for good political and social reasons, values, goals and strategies that are in tension *need* to be pursued *simultaneously*. Paradoxes have to be creatively addressed and policies and strategies have to be devised that can satisfy multiple imperatives, *balance* competing goals and enable the pursuit of equally desirable goals.

To the extent that certain conditions, including inadequate financial resources, make trade-offs necessary and result in particular choices and decisions at DHET and institutional levels, there should be open acknowledgement of the basis of such choices and decisions and communication between various constituencies in this regard.

2. Post-school education

In 2008, there were 874 680 students at South African higher education institutions, 799 490 at public institutions and 75 190 at private institutions. There were 640 166 students at further education and training colleges, 520 235 at public institutions and 147 901 at private institutions

Simultaneously, as the table below indicates, there were a total of 2 781 185 people between the ages of 18-24 that were neither in employment, nor at education or training institutions:

Table 1: People between the ages of 18-24 not in employment, education or training

Qualifications	Numbers
Bachelors degree/Masters/PhD	11 552
Grade 12 plus diploma/certificate	72 588
Grade 12 with exemption	98 335
Grade 12 without exemption	598 657
Grade 10 and less than Grade 12	990 794
Less than Grade 10	1 009 259
Total	2 781 185

Source: Cloete ed., 2009

These figures clearly highlight the challenges of post-school education and training.

As has been noted, 'the finding that 41.6% of the 18-24-year-olds are not in education or training, nor are they employed, is not only an educational problem, but constitutes a social and economic disaster' (Cloete ed., 2009:43). There is clearly a growing need for expanding opportunities for post-school education and training, for post-secondary education and for higher education.

The *National Plan for Higher Education* set the target of a 20% participation rate by 2011/2016. The participation rate, which was 15% in 2001, has only increased by 1% by 2008, which has negative consequences for economic and social development.

The Department of Higher Education and Training (DHET) is seeking to incorporate an increase additional 100 000 students within higher education, in a context in which the capacities of public universities are already stretched. Concomitantly, there is a pressing need for enhancing pass rates and graduation rates and also enhancing the quality of the graduates of many institutions.

All of these issues mean that it is vitally important to give urgent and considered attention to the expansion of post-school education, including higher education, and to the spectrum of post-school institutions that are required in relation to economic and social development needs.

Recommendation

There is a critical and immediate need to reconceptualise and clarify the scope, structure and landscape of the post-school system and institutions as well as to expand opportunities for high quality post-school education and training.

As a newly created ministry that has responsibility for post-school education, the Ministry of Higher Education and Training (HE&T) provides the welcome opportunity to both consider these issues in a systemic and integrated manner and to lead a process of reconceptualisation, clarification and intervention.

Such a process should also clarify the purposes and roles of higher education institutions vis-à-vis further education and training colleges and other possible post-school institutions, and address the need for an expansion of higher education opportunities in order to realise the goal of a 20% participation rate in higher education.

The reconceptualisation of the scope, structure and landscape of post-school institutions will almost certainly require legislative and policy changes, the possible redirection of available funds (the National Skills Levy funds) and the investment of new funds.

The expansion of opportunities in higher education will require injections of new funds into both the National Student Financial Aid Scheme and higher education institutions.

3. Differentiation and diversity

A third key issue is the policy goal of the establishment of a national, coordinated and differentiated higher education system

In 1994, the higher education sector comprised of 21 public universities, 15 technikons, 120 colleges of education and 24 nursing and 11 agricultural colleges. By 2001 all the colleges of education were either closed or incorporated into the universities and technikons.

The 1997 *White Paper* made clear that “an important task in planning and managing a single national co-ordinated system was to ensure diversity in its organisational form and in the institutional landscape, and offset pressures for homogenisation”, and “to diversify the system in terms of the mix of institutional missions and programmes that will be required to meet national and regional needs in social, cultural and economic development” (DoE, 1997:2.37, 1.27).

Four years later the *National Plan* reaffirmed its commitment to these goals: to ‘achieving diversity in the South African higher education system’, and ‘to diversify the system in terms of the mix of institutional missions and programmes that will be required to meet national and regional needs in social, cultural and economic development’. The Department of Education (DoE) set itself the strategic objective of ensuring ‘diversity in the organisational form and institutional landscape of the higher education system through mission and programme differentiation’ which would be ‘based on the type and range of qualifications offered’ (MoE, 2001:49).

Since then there have been two elements in the creation of a new differentiated institutional landscape. One has been institutional restructuring which reduced the previous 36 higher education institutions to 23 through mergers and incorporations based on various criteria. The result was the present landscape of 11 universities, six comprehensive universities (one distance) and six universities of technology. Two institutes of higher education were created, as facilities through which particular academic programmes of the existing universities could be provided in provinces that did not have universities. The other has been the negotiation of the academic offerings of institutions, in terms of which institutions are restricted to specific approved undergraduate and postgraduate qualifications and programmes, must seek state approval for the offering of new qualifications and receive quality accreditation from the CHE.

The institutional restructuring that occurred after 2001 provided the opportunity to reconfigure the higher education system so that it was more suited to the needs of a developing democracy. While various challenges remain, the foundations have been laid for a new higher education landscape.

Nonetheless, differentiation has been and remains a difficult, contentious and challenging policy issue for a number of reasons (see Badat, 2009).

Historically the apartheid higher education system was differentiated and diversified along lines of 'race' and ethnicity, resulting in the advantaging in various ways of the historically white institutions and the disadvantaging of the historically black institutions.

In this context there were legitimate concerns among historically black institutions that a policy of differentiation and diversity post-1994 could continue the historical patterns of the disadvantaging of black institutions and the advantaging of the historically white institutions, especially if there were an absence of strategies of institutional redress and institutional developmental trajectories for historically black institutions as a way of addressing the apartheid legacy, and to enable these institutions to take on new social and educational roles.

If there is an in-principle opposition to differentiation and diversity and a South African higher education institutional landscape comprising of differentiated and diverse universities, this would run counter to the thrust of post-1994 higher education policy and will require on the part of Higher Education South Africa major policy engagement and negotiations with government.

The history of higher education should not, however, obscure the immense contribution that a differentiated and diverse higher education system can make to the new socio-economic and educational goals and objectives of democratic South Africa. The economic and social needs of South Africa are highly varied and diverse, and a responsive higher education system requires a diverse spectrum of institutions. There is no virtue in homogeneity where every higher education institution seeks to be the same and do the same thing, and all aspire to be a ('research') university.

As noted, there have been two elements in the creation of a new institutional landscape: *institutional restructuring* through different forms of combination of previous institutions, and the negotiation of *new academic qualification and programme mixes* for institutions.

The creation of a new institutional landscape has, therefore, needed to proceed at two levels simultaneously. On the one hand, it has required the creation of new institutional identities through the development of new institutional missions, social and educational roles, academic qualification and programme mixes, and organisational forms, structures and practices as appropriate for different institutions. On the other hand, the complexity of the restructuring could not end simply with new identities for institutions. It has also needed to confront the historical burden of South African higher education: namely apartheid institutionalised inequities which translated into a 'system' of institutions characterised by educational, financial, material and geographical advantage and disadvantage.

It may be the case that on the part of historically black universities there is no in-principle opposition to differentiation, but legitimate concerns regarding the implications of its implementation in the absence of clear policy signals regarding developmental trajectories, compounded by the absence of significant new funds for higher education.

Indeed, the problem until very recently has been that the creation of effective developmental trajectories for all higher education institutions, and especially the historically disadvantaged, has encountered inadequate financial support on the part of government. This is notwithstanding the provision of merger and recapitalisation funding and a new funding formula that introduced aspects of institutional redress funding.

In this context, differentiation and diversity have, not surprisingly, been considered by universities as financially a zero-sum game, with almost certain winners and losers.

However, with the recent DoE allocations to universities of R2.0 billion (2008-2010) and R3.1 billion (2011-2013) for capital infrastructure and 'efficiency' interventions it is evident that differentiation need not be a zero-sum game.

New funds can help make possible the implementation of a policy of differentiation and diversity, in which universities through negotiation with the DoE pursue specific institutional missions and related qualifications and programmes and institutional development trajectories (related to their values, shape and size, infrastructure development needs, strengths and shortcomings), without any necessary financial disadvantaging of historically black institutions.

Of course, it could be argued by historically black universities (and others that perceive themselves to be disadvantaged in one or other way) that there is on their part no in-principle objection to differentiation; simply that until the needs (identified and quantified in terms of their negotiated missions and qualifications and programmes) of historically black universities and those that view themselves as disadvantaged are met, any and all new funds for higher education should be allocated to these institutions.

In this case, the issue is not differentiation as much as it is about: (a) institutional redress, or (b) the balance between financial support for institutional development trajectories of historically black universities and those that view themselves as disadvantaged, and support also for developmental trajectories for historically white universities, to the extent that these universities require support if they are, in a differentiated and diverse higher education system, to contribute optimally to social equity and redress and the economic and social development needs of South Africa and the continent.

The creation of a differentiated and diverse institutional landscape is unlikely to succeed unless all these issues are effectively addressed. It remains to be seen whether the state will pursue differentiation and diversity explicitly and openly on a planned systemic level or opt to do so at the level of individual institutions using the levers of planning and funding and quality assurance.

The institutional restructuring of higher education and a new landscape was intended to 'lay the foundation for an equitable, sustainable and productive higher education system that will be of

high quality and contribute effectively and efficiently to the human resource, skills, knowledge and research needs of South Africa' (MoE, 2001: 16)

However, while institutional restructuring is a *necessary* condition of the transformation of South African higher education it is not a *sufficient* condition. Other concomitant initiatives are required to give effect to higher education transformation and realise its contribution to social equity and the economic, social, cultural and intellectual development needs and goals of South Africa.

It should be noted that there is ample evidence that, notwithstanding contestation around differentiation, a policy of differentiation has been in implementation by both the old DoE and the Department of Science and Technology through the use of various allocation and funding mechanisms. Indeed, the higher education system is, de facto, highly differentiated and there is also considerable diversity in missions.

Recommendation

No restructuring of the higher education system can succeed unless the above issues are addressed seriously. Taking into account institutional histories as well as envisaged new social and educational roles it is imperative to create the conditions and opportunities and provide the necessary resources for developmental trajectories for all higher education institutions, and especially the historically disadvantaged. The capacities, capabilities and institutional profiles of higher education institutions are not fixed. All of these can be developed over time and serve vital social needs.

The DHET should facilitate an open and serious discussion with universities and Higher Education South Africa on the issue of a national, coordinated and differentiated and diverse higher education system with a view to settling this issue. The discussion should include the Department of Science and Technology.

Such a debate should include questions such as:

- Are 'differentiation' and 'diversity' one and the same thing?
- If they are different, what are the differences?
- If there is a relationship between 'differentiation' and 'diversity', how are they related?
- Does a policy that seeks to promote the existence of a 'diversity' of institutions necessarily require 'differentiation'?
- Can 'diversity' only be achieved 'through mission and programme differentiation... based on the type and range of qualifications offered' or are there other ways to achieve diversity?
- What might be other ways to achieve 'diversity'?
- A differentiated system also requires mechanisms for articulation between different institutions to facilitate student and academic mobility. Are there adequate mechanisms of articulation in these regards?

- Does the current funding framework promote differentiation or does it instead lead to isomorphism?

4. The diverse purposes of higher education

Locating higher education within a larger process of “political democratisation, economic reconstruction and development, and redistributive social policies aimed at equity” (*White Paper, 1997:1.7*), the *White Paper* emphasised a ‘thick’ notion of the responsiveness of higher education that incorporated its wider social purposes.

Increasingly, however, the trend has been to approach higher education and investments in universities from the perspective largely of the promotion of economic growth and the preparation of students for the labour market and as productive workers for the economy.

As much as the previous Ministry of Education maintained a multi-faceted conception of the value and purposes of higher education, the discourse of other state departments, various education and training agencies and sections of business has revolved around the supposed lack of responsiveness of universities to the needs of the economy, the alleged mismatch between graduates and the needs of the private and public sectors and the demand for a greater focus on ‘skills’. This development has its roots in various conditions.

Higher education *must* cultivate the knowledge, competencies and skills that enable graduates to contribute to economic development, since such development can facilitate initiatives geared towards greater social equality and social development. In many cases there is also a need for extensive restructuring of qualifications and programmes to make curricula more congruent with the knowledge, expertise and skills needs of a changing economy.

However, it cannot be assumed that if a country produces high quality graduates, especially, in the natural science, engineering and technology fields this will automatically have a profound effect on the economy. The formation of professionals through higher education is a *necessary condition* for economic growth and development, innovation and global competitiveness, but is not a *sufficient condition*. The contribution of graduates is also dependent on the institutional economic environment outside of higher education – in particular, industrial policy, the availability of investment capital and venture capital and the openness and receptivity of state enterprises and the business sector. There should also be no pretence that, in terms of a higher education response to labour market needs, it is a simple matter to establish the knowledge, skills, competencies and attitudes that are required by the economy and society generally and by its different constituent parts specifically.

An instrumental approach to higher education which reduces its value to its efficacy for economic growth, and calls that higher education should prioritise professional, vocational and career-focused qualifications and programmes and emphasise ‘skills’ development is to denude it of its considerably wider social value and functions.

For one, higher education has intrinsic significance as an engagement between dedicated academics and students around humanity's intellectual, cultural and scientific inheritances (in the form of books, art, pictures, music, artefacts), and around our historical and contemporary understandings, views and beliefs regarding our natural and social worlds.

For another, higher education also has immense social and political value. As Nussbaum argues, education is intimately connected to the idea of democratic citizenship and the "cultivation of humanity" (2006:5). Nussbaum states that "three capacities, above all, are essential to the cultivation of humanity" (ibid:5). "First is the capacity for critical examination of oneself and one's traditions'.... Training this capacity requires developing the capacity to reason logically, to test what one reads or says for consistency of reasoning, correctness of fact, and accuracy of judgement" (ibid:5). The "cultivation of humanity" also requires students to see themselves "as human beings bound to all other human beings by ties of recognition and concern" – which necessitates knowledge and understanding of different cultures and "of differences of gender, race, and sexuality" (ibid:6). Third, it is, however, more than "factual knowledge" that is required. Also necessary is "the ability to think what it might be like to be in the shoes of a person different from oneself, to be an intelligent reader of that person's story, and to understand the emotions and wishes and desires that someone so placed might have" (Nussbaum, 2006:6-7). Finally, higher education also has profound value for the promotion of health and wellbeing, the assertion and pursuit of social and human rights, active democratic participation and critical citizenship.

Here, it is also important to note that, today, the competition for and concentration on economic advantage means that certain kinds of knowledge and research, especially that generated by the natural, medical and business sciences and engineering are privileged. The Ministry of Science and Technology's discourse of the 'national system of innovation' has also tended to reduce science to the natural and biological sciences and to privilege these sciences. However, as Mkandawire argues, "attempts to improve Africa's prospects by focusing on scientific advances and the benefits accruing from them have all too often overlooked the important perspectives which the humanities and social sciences afford" and "it is vital that the social sciences and humanities are granted their rightful place...if Africa's development challenges are to be fully and properly addressed" (2009:vii).

As an instance of the relative marginalisation of the arts, social sciences and humanities, student enrolments in language studies, and especially African languages studies, at many universities are declining with consequences for the promotion of multilingualism. There is today also a dearth of critical rigorous scholarship on key social questions that are vital to South Africa's future. The reasons for this include the lack of affirmation on the part of government, the state, and other important social actors of the value of critical scholarship; inadequate funding of such scholarship, as opposed to narrow domain-specific 'policy' research; the tendency to define policy-oriented research as the only 'relevant' research; the migration of critical scholars from universities to other institutions and into consultancy policy-oriented research, and an increase in the volume of teaching and contract research, with a concomitant decline in critical scholarship.

Recommendation

In the face of attempts by various actors to reduce higher education responsiveness to responsiveness to the economy and the labour market, the Ministry of HE&T should be unequivocal about the diverse purposes that higher education must serve and must promote such a diversity of purposes. This would be in congruence with both the White Paper on higher education and the report of the Ministerial Committee on Progress towards Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions.

The HE&T Ministry must also give concerted attention to the protection of African languages studies at universities as a vital element of the promotion of multilingualism and more generally, safeguarding the arts, humanities and social sciences.

The HE&T Ministry should lobby the Ministry of Science and Technology to ensure that there are adequate investments in arts, humanities and social sciences research in general and critical scholarship in particular and for postgraduate scholarships and fellowships in these fields.

5. Adequate state funding

An enabling policy framework that encompasses thoughtful state supervision, effective steering, predictability, continuity and consistency in policy is vitally necessary for higher education to realise its social purposes and goals. However, while an enabling policy framework is vitally important, it is on its own not enough. Such a framework must be also supported and reinforced by adequate state funding, otherwise the promise of higher education will be undermined by financial constraints.

For example, the Higher Education and Training Ministry's commitments to increasing enrolments and participation rates and to access, equity and redress may be handicapped by the inadequacy of the state budget devoted to higher education. Similarly, equity of opportunity and the enhancement of quality may be retarded by the absence of or limited funding for programmes of academic staff and student academic development at institutions.

Recommendation

It is increasingly clear that public funding of higher education is inadequate in the face of the legacy of past inequities and the new demands on and expectations of universities. At least three areas of higher education are in need of either additional funding or dedicated new funding:

- In terms of the current higher education funding framework, the block grant component of funding to universities
- The NSFAS in order to provide equity of access, opportunity and outcomes for talented students from indigent and lower middle class families

- Earmarked funding for: high quality academic development initiatives to enhance equity of opportunity and outcome; curriculum innovation, renewal and transformation to enhance the capabilities of institutions to meet the graduate needs of the economy and society; producing the next generation of academics, and the protection of African language studies and the promotion of multilingualism

The infrastructure funding that has been provided to universities since 2008 for academic buildings, student accommodation and scientific equipment has been a welcome contribution, and to ensure effective and long-term planning there must be certainty, consistency and continuity of funding on the basis of clear and transparent criteria.

At the same time, and in the face of the infrastructure challenges, the extent to which such funds can be creatively leveraged to provide more funding for universities should be explored.

6. Intellectual spaces

To effectively undertake its diverse educational and social purposes, a university must have a commitment “to the spirit of truth” (Graham, 2005:163), and must possess academic freedom and institutional autonomy.

However, while academic freedom and institutional autonomy are necessary conditions, they are also rights in which duties inhere (Jonathan, 2006).

In the South African context, we must recognise, as André du Toit urges, “the legacies of intellectual colonisation and racialisation as threats to academic freedom” (2000); and that “the powers conferred by academic freedom go hand in hand with substantive duties to deracialise and decolonise intellectual spaces” (Bentley et al, 2006).

Higher education holds the promise of contributing to social justice, development and democratic citizenship. Yet, this promise often remains unrealised and instead universities frequently continue to be a powerful mechanism of social exclusion and injustice, through both their own internal thinking, structures, cultures and practices and their external conditioning by the wider society.

This regime of social exclusion extends well beyond issues of access and admissions to universities. It includes the questions of the opportunities for intellectual, social and citizenship development and for success. It extends to the issues of institutional and academic cultures, and largely ignored epistemological and ontological issues associated with learning and teaching, curriculum development and pedagogical practice. It further extends to the very ideas and conceptions of the purposes and roles of universities.

Recommendation

- Any serious agenda of inclusion in higher education entails the duty of using 'the powers conferred by academic freedom' to substantively decolonise, deracialise, demasculinise and degender our inherited 'intellectual spaces'.
- It means creating the space for the flowering of other epistemologies, ontologies, methodologies, issues and questions other than those that have dominated, perhaps even suffocated, intellectual and scholarly thought and writing.
- While there have been various changes related to curriculum, insufficient attention has been given to issues that include: How have the dominant discourses that characterise the intellectual space of higher education developed and been reproduced historically?
- What are the implications of the dominant discourses for social inclusion and social justice in higher education, for the affirmation and promotion of human dignity and rights, social cohesion and respect for difference and diversity, irrespective of 'race', class, gender, nationality, home language and sexual orientation?
- What are the prevailing conceptions of epistemology and ontology and to what extent have these been or are being deracialised, degendered and decolonised. There is often reference to providing students with epistemological access rather than just physical access, but to which epistemologies?
- How do the dominant wider cultures of higher education affect student learning, progress and success and social equity and redress?
- Similarly, how do these dominant wider cultures also affect the development and retention of a new generation of academics that must also, in the light of the current social composition of academics, be increasingly women and black?
- Finally, how permeable is the currently constructed social space of higher education to a critical reflexivity, learning and innovation and institutional change?

7. Current postgraduate outputs

In 2007 South African universities enrolled almost 60 000 postgraduate honours students, over 43 000 masters students and just over 10 000 doctoral students. In the same year, there were 7 516 masters (3 442 research masters) and 1 274 doctoral graduates. In 2008, the output of doctoral graduates decreased to 1 181 (Mouton, 2010).

Postgraduate student enrolments and outputs are low and sorely inadequate in relation to South Africa's economic and social development needs. They also constrain the transformation of the social composition of the new generation of academics. While there have been advances, white and male Masters and Doctoral graduates continue to predominate. In 2005 White students constituted 52% of

Masters graduates and 59% of Doctoral graduates. Male students made up 55% of Masters graduates and 56% of Doctoral graduates. In 2008, 45% of doctoral graduates were black and 41% women, meaning that they are considerably under-represented at this level. Furthermore, women graduates continued to be concentrated in the humanities and social science fields (CHE, 2008:32).

The mean age of Masters graduates was 34 years and that of Doctoral graduates was 40 years (CHE, 2008:36). Doctoral graduation rates are a cause for concern. The national benchmark graduation rate is 20% but the national average is only 11%.

It should also be noted that only 32% of university academics possess doctorates, which acts as another constraint on significantly enhancing the output of doctoral graduates. Academic staff with doctorates at the 12 South Africa universities that produce most of South Africa's doctoral graduates and scientific publications range from 20% to 59%.

Turning to specifically doctoral level study, Table 5 below illustrates student enrolments between 1994 and 2007.

Table 5: Doctoral enrolments by 'race' and gender, 1994-2007

Year	Enrolments				
	Men	Women	White	Black	Total
1994	3 436	1 488	4 137	787	4 924
%	69.8	30.2	84.0	16.0	100
2000	3 958	2 435	3 993	2 400	6 393
%	61.9	38.1	62.5	37.5	100
2007	5 772	4 230	4 751	5 251	10 002
%	57.7	42.3	47.5	52.5	100

There are a number of salient points related to doctoral student enrolments:

- While doctoral student enrolments have more than doubled between 1994 and 2007, relative to overall university enrolments (1.3%) and total postgraduate enrolments (8.8%), doctoral enrolments are low and inadequate for South Africa's economic and social development needs
- While the previous poor participation of black and women students in doctoral study under apartheid has improved tremendously under democracy, given that blacks constitute 91% of the South African population, black participation remains significantly low relative to white student participation. The participation of women also remains low given that women make up 51% of the populations and constitute almost 55% of undergraduate enrolments

- The mean age of first enrolments for doctoral study is 38 years
- The majority of enrolments for doctoral study are in i) the Humanities and Social Sciences, and ii) Natural and Agricultural Sciences, with the lowest enrolments in iii) Health Sciences and iv) Engineering
- In 2005, of a total of 2 692 first enrolments for doctoral study, 26% were international students – 37% from Southern African Development Community (SADC) countries, 37% from the rest of Africa, 10% from Europe and 16% from the rest of the world
- The Honours and Masters students enrolments, however, indicate there is potential for a larger doctoral student enrolment

Table 6 below illustrates doctoral graduates between 1994 and 2007.

Table 6: Doctoral graduates by 'race' and gender, 1994-2007

Year	Graduates				
	Men	Women	White	Black	Total
1994	518	219	666	71	737
%	70.3	29.7	90.4	9.6	100
2000	572	400	674	298	972
%	58.8	41.2	69.3	30.7	100
2007	742	529	691	580	1271
%	58.4	41.6	54.4	45.6	100

Key issues related to doctoral graduations are the following:

- In relation to its economic and social development needs South Africa produces an extremely small number of doctoral graduates.
- In 2003, South Africa produced only 23 doctoral graduates per million of population, compared to 43 by Brazil, 157 by South Korea and almost 200 by Australia.
- While the proportions of women and black graduates have increased significantly they remain low relative to men and white graduates.
- In 2005, 25% of doctoral graduates were international students; of these, 69% were from the rest of Africa – 32% from SADC countries and other 37% from other African countries, 15% from Europe and 16% from the rest of the world (CHE, 2008:40, 42).
- The majority of doctoral graduates are in i) the Humanities and Social Sciences, and ii) Natural and Agricultural Sciences, with the fewest in iii) Health Sciences and iv) Engineering.

- The national benchmark doctoral graduation rate is 20% but the national average is only 11%.
- Average time to completion is 4.7 years - which is similar to international completions rates.
- The mean age of Doctoral graduates is 40 years (CHE, 2008:36). If this is the norm in the case of graduates entering academic careers, this has to be a matter of concern with respect to the development of academic capabilities and research productivity.

The National Research Foundation's 2007 *South African PhD Project* seeks to double the number of doctoral graduates by 2015, while the Department of Science and Technology wishes to increase doctoral graduates five-fold by 2018. These ambitions are welcome, but there are various constraints that will have to be overcome.

Recommendation

Current postgraduate enrolments and graduate outputs are low and inadequate and must be improved to support South Africa's economic and social development needs.

The participation of black and women South Africans at postgraduate level needs to be significantly enhanced so as to give effect to redress and social equity for historically disadvantaged social groups.

One constraint is that the funding made available for postgraduate study (especially full-time study) through the National Research Foundation, and the size of the awards that are currently provided through the National Research Foundation, are both severely inadequate. If South Africa is to accelerate economic and social development as well as ensure greater opportunities for and participation by black students from indigent backgrounds in postgraduate study it must invest significantly more funding in postgraduate and especially doctoral level study.

At many South African universities the availability and quality of research infrastructure, facilities, and equipment is a constraint on the enrolment and production of doctoral graduates. This is so even at the 12 of the 23 universities that produce 95% of doctoral graduates (7 universities produce 74%) and also the bulk of peer-reviewed scientific publications. The fact of a select number of universities producing the overwhelming number and proportion of both doctoral graduates and also peer-reviewed scientific publications raises the issue of whether all universities necessarily must undertake doctoral education and more generally postgraduate education.

The challenge of the enhancement of institutional capacities is, however, not confined to nor should be reduced to infrastructure, facilities, and equipment. It also relates to the capacities to expand and mount new doctoral programmes, the management of doctoral education, the management of research and the mobilisation of funding for doctoral studies and students. In these regards, there is great scope for international donor support and inter-university collaboration and cooperation of an institutional development nature. Of course, the nature, terms and conditions

of such support and collaboration and cooperation are important issues. Ideally, for various good reasons, there should be a South-South or intra-African dimension to the building of the institutional capacities of African universities.

As a consequence of apartheid, knowledge production in South Africa has been predominantly the preserve of white men. The democratisation of knowledge requires special measures to induct previously excluded social groups such as black and women South Africans into the production and dissemination of knowledge.

Special attention must also be paid to improving the proportion of academics with doctoral qualifications through a dedicated programme and support.

However, it cannot be assumed that academics with doctorates will be accomplished supervisors of doctoral students. Attention has to be given to equipping academics to supervise effectively – possibly through formal development programmes, mentoring and experience in co-supervising alongside experienced supervisors. More effective supervision could also contribute to improving graduation rates.

Another constraint has been the lack of any real confluence between thinking, policy and planning in the Department of Science and Technology and the previous Department of Education. If important goals are to not be compromised, it is vital that there be an effective confluence in the domains of postgraduate funding and support and research between the new Ministry of Higher Education and the Ministry of Science and Technology.

8. Creating a new generation of academics

In South Africa, racism and patriarchy were key features of colonialism and apartheid and shaped all areas of social life, including higher education. In the specific domain of the academic workforce, the consequence was a racialisation and gendering which bequeathed South Africa with a predominantly white and male academic work force. Post-1994, in accordance with new constitutional and social imperatives and higher education goals and policies, South African universities have needed to advance *redress and social equity for black and women South Africans*.

At the same time, as the result of the interplay of various factors, it has become clear that South African universities also need to give serious attention to *producing and retaining a new generation of academics*.

It is necessary to emphasise the *simultaneity* of these two tasks. A preoccupation with simply reproducing a new generation of academics without any concomitant and purposeful attention to redress and social equity for black and women South Africans is likely to largely reproduce

the inequalities that characterised apartheid higher education. The overall task, therefore, is to *produce and retain a new generation of academics and simultaneously transform the historical social composition of the academic work force.*

There is, however, an additional important task. If the substantive transformation and development of South Africa’s universities and the enhancement of their academic capabilities are indeed key national goals, this necessarily has profound implications for the *character* of the new generation of academics that has to be produced.

The corollary is that a new generation of academics must not only be increasingly constituted by blacks and women South Africans, but must also possess the intellectual and academic capabilities related to teaching and learning, research and community engagement that are a necessary condition for transforming and developing South Africa’s universities.

In 1994, as Table 1 below indicates, academics at South African universities were overwhelmingly white (83%) and male (69%).

Table 2: Permanent instruction staff at all South African universities by ‘race’ and gender, 1994¹

‘Race’	Male	% Male	Female	% Female	Total	% Total
African	–	–	–	–	1048	10
Coloured	–	–	–	–	312	3
Indian	–	–	–	–	384	4
White	–	–	–	–	8520	83
Total	7 051	68.7	3 217	31.3	10 267	100

The sheer inequality of representation is highlighted by the fact that although Black South Africans (African, Coloured and Indian) constituted some 89% of the population, they comprised only 17% of academics at South African universities. The under-representation of Africans was especially severe: although comprising almost 80% of the population, they constituted only 10% of the academic work force. Similarly, while women made up just over 50% of the population, they comprised only 31% of the academic work force of South African universities.

¹ The data does not include the universities of North West, Transkei and Venda.

Table 3 below illustrates the situation that prevailed some twelve years later.

Table 3: Permanent instruction staff at all South African universities by 'race' and gender, 2006

'Race'	Male	% Male	Female	% Female	Total	% Total
African	2 440	15%	1 476	9%	3 916	24
Coloured	455	3%	368	2%	823	5
Indian	755	5%	590	4%	1 345	9
White	5 629	35%	4 351	27%	9 980	62
Total	9 279	58%	6 785	42%	16 064	100

While, by 2006, the academic work force remained predominantly white (62%) and male (58%), there were significant advances in the representation of black (from 17% to 38%), and especially African South Africans (from 10% to 24%), and women (from 31% to 42%).

Overall, however, the inequalities remained stark. While black South Africans comprised almost 91% of the population they made up only 38% of academics; African South Africans although making up some 80% of the population enjoyed only a 24% representation in the academic workforce, and women, who comprised 51% of the population, made up only 42% of academics (Statistics South Africa, 2008).

It must be appreciated that this illustrates the social composition of academics at the level of the university system in general. Prior to 1994, South African universities were reserved for specific 'race' groups. Notwithstanding extensive changes in the institutional landscape and policy, the characterisation of South African universities as 'historically black' and 'historically white' retains some validity. In this regard, it is important to note that in 2005 black academics comprised between 12% and 90% of the academic workforce of universities and women academics comprised 28% to 52% (DoE, 2006). The differential representation of black academics at universities is related, of course, to the racialised history of South Africa's universities and exemplifies the specific challenge of the deracialisation of the academic workforce of the 'historically white' universities.

If the above indicates the social equity challenge, Table 4 below indicates another dimension of the challenge of reproducing a new generation of academics.

On the basis of the current retirement age of 65, in the coming decade over 4 000 or some 27% of academics will retire and need to be replaced. In so far as professors and associate professors, who constitute the most highly qualified and experienced academics, are concerned, almost 50% are due to retire.

Table 4: Permanent instruction staff at all South African universities by rank, age and gender, 2006²

	Professor		Associate Professor		Senior Lecturer		Lecturer		Junior Lecturer	
	M	F	M	F	M	F	M	F	M	F
Age	M	F	M	F	M	F	M	F	M	F
Under 25	–	–	–	–	–	–	1	2	–	1
25 - 34	2	–	9	5	142	136	546	625	186	220
35 - 44	93	35	213	127	689	576	1 223	1 203	161	162
45 - 54	521	202	542	246	907	579	839	888	54	102
55 - 59	478	84	284	103	395	244	267	288	19	34
60 - 62	298	42	143	50	185	93	103	98	11	5
63 - 65	190	29	73	25	107	53	52	41	2	2
66 - 69	101	8	31	10	42	10	19	20	4	4
Over 70	19	2	2	–	3	–	5	–	3	1
Total	1 702	402	1 297	566	2 470	1 691	3 055	3 165	440	531
55 +	1 086	165	533	188	732	400	446	447	40	46
55 + (%)	63.8	41.0	41.1	33.2	29.6	23.7	14.6	14.1	9.1	8.7
Total male and female	2 104		1 863		4 161		6 220		971	
55 +	1 251		721		1 132		893		86	
55 + (%)	59.4		38.7		27.2		14.4		8.9	
55 +	1 972				2 025				–	
55 + (%)	49.7				19.5				–	
Total	15 319									
55 +	4 083									
55 + (%)	26.7%									

These categories are also the most productive researchers. More generally, academics over the age of 50 have increasingly come to bear responsibility of publishing. Thus, whereas in 1990 20% of (research) articles were published by scientists over 50 years old, by “2000 nearly 50% of publications were authored by scientists over the age of 50” (COHORT, 2004:14). Thus, the new generation of academics will also need to be equipped to discharge the responsibility of conducting research and publishing, so that the knowledge needs of South Africa are effectively met.

² This excludes those staff below the rank of junior lecturer (144), and others whose rank was undesignated (601). The total academic workforce was 16 064 of which 9 279 were males and 6 785 were females.

There are also a number of other challenges:

- Apart from retirees needing to be replaced, it is also necessary to take into account the additional academics that will be required if the university system expands, as envisaged by the 2001 National Plan for Higher Education, from the current gross participation rate of 16% to that of 20% by 2011 or 2016
- The current outputs of Masters and Doctoral graduates also constrain the transformation of the social composition of the new generation of academics
- The qualifications and expertise of academics make them relatively mobile and a certain proportion will inevitably be continuously lost to the public and private sectors, and to emigration
- The legislation related to employment equity in South Africa was recently amended to define only black and women South Africans as 'designated groups' that may be the beneficiaries of employment equity.

Recommendation

With respect to the current social composition of the academic labour force and employment equity, South Africa has an immediate and serious challenge. It is also evident that with regard to the reproduction of a new generation of academics there is a looming and serious challenge.

There should be no doubts about the urgency of producing a new generation of academics that is not only increasingly constituted by blacks and women South Africans, but which also possess the intellectual and academic capabilities related to teaching and learning, research and community engagement (as necessary conditions for transforming and developing South Africa's universities).

A failure to invest in and cultivate a new generation of high quality academics will have far-reaching consequences. Redress and social equity and the pace and extent of the deracialisation and degendering of the academic work force will be negatively affected. The quality of academic provision will be increasingly debilitated by the dearth of high quality academics, with consequences for the capabilities of universities to produce high quality graduates and knowledge. The goal of transforming and developing South African universities, including enhancing their teaching and research capabilities, will also be compromised. Finally, the ability of universities to contribute to development and democracy through a new generation of outstanding scholars that are committed to critical and independent scholarship and social justice will be hampered.

There are pioneering initiatives and there is accumulated knowledge, expertise and experience related to developing a new generation of academics that can and must be called upon to support further initiatives and a more systemic response.

HESA has established a Working Group to develop a carefully considered and costed national programme (including values and principles, goals, framework, strategies and mechanisms) for building a new generation of South African academics, and especially black and women academics. It is vitally important that the HE&T Ministry engage with the HESA proposal and mobilise dedicating funding for building a new generation of academics.

While the employment of 'suitably qualified'³ black and women South Africans must be prioritised, and there is the danger of a 'brain drain' that denudes other African countries of highly qualified graduates to the benefit of South Africa and its universities, the South African state is strongly ill-advised to place constraints on the employment of academics from other African countries and elsewhere as they have a vital contribution to make to the transformation and development of South African universities.

9. Remuneration of academics

South African academics are inadequately remunerated relative to occupations in the public (state, public enterprises and science councils) sector and private sector that require similar levels of qualifications and expertise. The remuneration differentials between universities and the public and private sectors are significant and have been widening. Consequently, the public and private sectors wield a powerful pull on current academics and on Masters and Doctoral graduates. It also means that there is a minimal flow of potential academics from the private and public sectors to universities, to the detriment of universities and economy and society. Further, from the perspectives of social equity and the transformation of universities, universities are also denied the contributions of first generation black graduates from working class and rural poor origins, given the opportunity costs (lower incomes and support of families) that have to be borne by these graduates.

Recommendation

The improvement of public subsidies to attract outstanding graduates to the academic profession and more generally facilitate the recruitment and retention of academics through adequate remuneration is vital for the future wellbeing and contribution of universities.

The HR&T Ministry and HESA need to act in concert in this regard and a task team should be established to address principles, mechanisms and timelines for the improvement of academic remuneration.

3 To use the phrase employed by employment equity legislation.

10. Access, opportunity and success in higher education

a) African and Coloured participation rates

Although black student enrolments have increased since 1994, the gross participation rate of black, and especially African and Coloured, South Africans continues to be considerably lower than for white South Africans.

Table 7: Participation rates by 'race'

'Race'	Participation rate	
	1993	2005
Africans	9	12
Coloureds	13	12
Indians	40	51
Whites	70	60
Overall	17	16

Source: CHE, 2004:62; Scott et al, 2007:10

In 2001 the *National Plan for Higher Education* estimated the gross participation to be 15% and set a target of 20% gross participation rate by 2011/2016 (MoE, 2001). Clearly, there has been only a minimal improvement in the overall gross participation rate and severe inequities continue to exist in the participation rates of African and Coloured South Africans relative to White and Indian South Africans. Indeed, "given that the participation is expressed as gross rates and includes appreciable numbers of mature students – well under 12% of the (African) and Coloured 20-24 age groups are participating in higher education (it) must be a cause of concern, for political, social and economic reasons, if the sector is not able to accommodate a higher and more equitable proportion" of those social groups that have been historically disadvantaged and under-represented in higher education (Scott, et al, 2007:11).

Recommendation

It is necessary to give especial attention to improving the participation rates of African and Coloured students. On the one hand, this is dependent on improving conditions in schooling. On the other hand, it highlights that the National Student Financial Aid Scheme needs to be funded more adequately so that African and Coloured students can be supported to access higher education.

b) Continued under-representation of blacks and women

While there has been significant progress in the representation of both black, and especially African, and women students in higher education, this progress nonetheless masks inequities in their distribution across institutions, qualification levels and academic programmes. Large numbers of African students continue to be concentrated in distance education, and both African and women students continue to be under-represented in science, engineering and technology and business and commerce programmes.

Recommendation

Constant attention should be given to the representation of black and women students at specific institutions and qualification levels and in particular academic programmes. Carefully designed interventions need to be created to ensure improvements in representation in areas where black and women students continue to be under-represented.

c) Improvement of pass and graduation rates

Judging by drop-out, throughput and graduation rates a substantial improvement in equity of opportunity and outcomes for black students remains to be achieved. Current undergraduate success rates should, according to the Department of Education (DoE, 2006b), be 80% "if reasonable graduation rates are to be achieved". Instead, they range from 59% to 80% with an average of 75%. White student success rates in 2005 were 85%, while African student rates were 70%. The DoE's target for throughput rates "is a minimum of 20% which would imply a final cohort graduation rate of about 65%" (ibid.). Instead, throughput rates for 2000-2004 were between 13% and 14%, and the cohort graduation rate was 45% in 2004, with an overall drop-out rate of 45% (ibid).

A recent study notes that "the major racial disparities in completion rates in undergraduate programmes, together with the particularly high attrition rates of black students across the board, have the effect of negating much of the growth in black access that has been achieved. Taking account of the black participation rate, the overall attrition rate of over 50% and the below-average black completion rates, it can be concluded that the sector is catering successfully for under 5% of the black (and Coloured) age-group" (Scott et al 2007).

The conclusions are clear: "this has central significance for development as well as social inclusion", and "equity of outcomes is the overarching challenge" (ibid). Clearly, if higher education institutions "are to contribute to a more equitable South African society, then access and success must be improved for black (and particularly black working class) students who, by virtue of their previous experiences, have not been inducted into dominant ways of constructing knowledge" (Boughey, 2008).

There is, however, a further and important conclusion, namely that the 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” (Scott et al, 2007:20). It is argued that “such key points occur particularly at the interface between major phases of the system: between general education and FET, for example, as well as between FET and higher education, and, increasingly significantly, between undergraduate and postgraduate studies....(C)ontinuity in the system as a whole is necessary for improving graduate outcomes, without which meeting national developmental needs will continue to be an elusive goal” (ibid.).

The enhancement of academic capabilities includes adequate public funding for academic development initiatives. Equity of opportunity and outcomes is constrained by inadequate funding to address under-preparedness (conceptual, knowledge, academic literacy and numeracy) for higher education programmes of especially indigent students.

Recommendation

In the light of unacceptably poor current pass and graduation rates and high dropout rates:

- the enhancement of the academic capabilities of universities, and specifically academics, and
- rigorously conceptualised and designed high quality academic development programmes to support academics and students

are urgent and important tasks in order to ensure equity of opportunity and outcome, especially for students of working-class and rural poor social origins.

There is accumulated knowledge, expertise and experience at some universities related to the design and implementation of high quality academic development programmes and more generally enhancing the learning and teaching capabilities of academics and universities. This should be harnessed, expanded and put to work for the benefit of all universities.

d) Academic infrastructure

Concomitant with the building of academic capabilities is ensuring that institutions are provided the necessary capacities in terms of infrastructure and equipment for effective learning and teaching and the production of high quality graduates.

Recommendation

The infrastructure funding that has been provided to universities since 2008 must be continued in order to effectively capacitate universities in terms of infrastructure and equipment.

e) Funding

One reason for the very high rate of dropouts among black students is almost certainly inadequate state funding in the forms of scholarships, bursaries and loans. Although the National Student Financial Aid Scheme (NSFAS), which operates on a means-test basis, has been successfully established and considerable funding has been allocated to promote redress for indigent students, the overall amounts allocated fall far short for providing effective support for all eligible students in need. This highlights the reality of the interconnection of race and class – equity of access for students (largely black) from working class and impoverished rural social backgrounds will continue to be severely compromised unless there is a greater commitment of public funding for financial aid to indigent students.

Recommendation

It must be hoped that the recommendations arising out of the recent review of NSFAS will effectively address the challenges of the greater funding that is required for NSFAS and especially the level of support that will be made available to indigent students.

f) Learning and teaching and curriculum

The extent to which there exist at all institutions academically supportive cultures that promote higher learning, cater for the varied learning needs of a diverse student body through well-conceptualised, designed and implemented academic programmes and academic development initiatives, and mechanisms to promote and assure quality are moot issues. An important recent study argues that “systemic responses are essential for improving the educational outcomes”, and that

necessary conditions for substantial improvement include: the reform of core curriculum frameworks; enhancing the status of teaching and building educational expertise...to enable the development and implementation of teaching approaches that will be effective in catering for student diversity; and clarifying and strengthening accountability for educational outcomes (Scott et al, 2007:73).

This raises sharply the academic capabilities of universities.

At the same time, separate from academic capabilities, it is necessary to emphasise the continued under-developed institutional capacities of historically black institutions. Providing access to and admitting students from largely rural poor and working class families, adequate state support is required to ensure that these institutions are fully capacitated to advance equity of opportunity and outcomes.

Recommendation

Adequate public funding is necessary to enhance the capacities and academic capabilities of universities with respect to teaching and learning.

However, the shortcomings of universities with respect to the quantity and quality of graduates that are produced may not be rooted entirely in inadequate public funding; that is to say, such funding is a necessary condition but is not a sufficient condition.

The extent to which there is on the part of universities and academics a willingness to address important learning and teaching curriculum, and pedagogical issues has to be honestly confronted.

g) Institutional cultures

Institutional cultures, especially at historically white institutions, could in differing ways and to varying degrees compromise equity of opportunity and outcomes. The specific histories of these institutions, lingering racist and sexist conduct, privileges associated with social class, English as the language of tuition and administration, the overwhelming predominance of white academics and administrators and male academics, the concomitant under-representation of black and women academics and role-models, and the continuing challenge of building respect for and appreciation of diversity and difference could all combine to reproduce institutional cultures that are experienced by black, women, and working class and rural poor students as discomforting, alienating, exclusionary and disempowering.

This has possible negative consequences for equity of opportunity and outcomes for these students. Even if equity of opportunity and outcome are not unduly compromised, the overall educational and social experience of such students may be diminished. The reproduction and limited erosion of class-based, racialised and gendered institutional cultures also obstruct the forging of greater social cohesion.

André du Toit links institutional culture to academic freedom. He notes 'that the enemy' in the forms of colonial and racial discourses 'has been within the gates all the time', and endangers 'empowering intellectual discourse communities'. 'Ongoing transformation of the institutional culture' is therefore a necessary condition of academic freedom (du Toit, 2000:103).

Recommendation

The transformation programmes of historically white universities must given specific attention to and encompass the systematic and progressive transformation of institutional cultures, in congruence with constitutional ideals and values.

The tasks are to uproot historical cultural traditions and practices that impede the development of more open, vibrant, democratic and inclusive intellectual and institutional cultures, to respect, affirm and embrace the rich diversity of the people that today constitute and must increasingly constitute historically white universities, and to purposefully create and institutionalise cultures that embrace difference and diversity, and sees these as strengths and powerful wellsprings for personal, intellectual and institutional development.

h) South African schooling

Finally, the pace of social equity and redress in higher education continues to be severely constrained by conditions in South African schooling.

Despite almost universal formal participation in schooling, South Africa's schools evince significant problems related to drop outs, retention, progression and successful completion. As has been noted, "the simple reality is that enrolment is not the same as attendance and attendance does not imply learning" (Sayed, 2007:8). South African school students perform extremely poorly on a range of international assessment tests, in terms of which "65% of school leavers...are functionally illiterate" (ibid.:6).

One measure of the formidable challenge is that currently 10% of some 7 000 secondary schools – independent schools and public schools previously reserved for white students – produce 60% of all senior certificate endorsements (the entrance requirement to higher education). Another 10% of mainly historically black schools produce a further 20% of all senior certificate endorsements. Thus, 80% of senior certificate endorsements are generated by 20% of secondary schools, while the remaining 80% of secondary schools produce a paltry 20% of senior certificate endorsements. It is clear that a fundamental challenge is to improve the quality of education and schools.

Recommendation

Ultimately, improved access and outcomes in higher education, especially for black South Africans and in the fields of science, engineering and technology, is strongly dependent on significant improvements in the quality of South African schooling.

Conclusion

In as much as there has been significant institutional change in higher education since 1994, there has been no "total, rapid and sweeping displacement" of structures, institutions, policies and practices (Wolpe, 1992:16). It is also arguable whether there could be, given the post-1994 policy choices of the ANC, the constraints of the negotiated political settlement in South Africa, and various other conjunctural conditions and pressures. Nonetheless, during the past 16 years there have been

“a multitude of changes that have transformed higher education in South Africa” (Jansen, 2004:293) and “while continuities remain, the higher education system does not represent the distortion, upheaval and fragmentation that marked the sector at the start of the 1990s” (ibid.).

In summary, change in post-1994 South African higher education has been characterised:

- By *relative stasis* in certain areas, such as the decolonisation, deracialisation and degendering of inherited intellectual spaces and the nurturing of a new generation of academics who are increasingly black and women, and by great fluidity in other areas, such as the composition of the student body.
- By *ruptures and discontinuities* with the past resulting in a recasting of higher education values, goals and policies and the emergence of a new institutional landscape and configuration of public universities; and by continuities in institutions and conditions – such as institutional cultures; greater access and success for students from the capitalist and middle classes; and limited change in the social composition of academics. Thus, in 2008, black academics constituted only 43% of the total academic staff of over 15 000. Women academics, who made up 46% of academics, continued to be concentrated at the lower levels of the academic hierarchy. As a result “the knowledge producers in higher education remain largely white and male” (Jansen, 2004:311) and there has been little democratisation of knowledge production.
- By *conservation* of institutions as well as by the *dissolution*, restructuring and reconstruction of institutions and institutional types.
- By “small and gradual changes (and) large-scale changes” (Jansen, 2004:293), and by modest improvements, more substantial reforms and deeper transformations, as in the case of the emergence of new institutional landscape.
- By policies that have sought to proactively signal, direct, facilitate and regulate, and by policies that have followed and attempted to respond to changes already in train within the system and institutions.
- By policies that have served as “political symbolism” in that at particular moments policy development “hinged largely on the symbolism rather than the substance of change in education” or was “limited to the symbolism of policy production rather than the details of policy implementation” (Jansen, 2001:41, 43), and by policies that have been of a substantive, distributive, redistributive, material and procedural nature (de Clerq, 1997).
- By successes as well as by failures and shortcomings in policy, planning, strategy and implementation.

- By attempts on the part of government and institutions to address ambiguities in policy and practice and also resolve profound paradoxes and their attendant social dilemmas, resulting in antinomies in policy outcomes, difficult trade-offs and the privileging of some goals and the sacrificing of others.

O'Donnell and Schmitter (1986) have written of transitions in terms of the "numerous surprises and difficult dilemmas", of "elements of accident and unpredictability, of crucial decisions taken in a hurry"..., of actors "facing insolvable ethical dilemmas and ideological confusions, of dramatic turning points reached and passed without an understanding of their future significance".

This could also be an apt characterisation of the nature of change thus far in post-1994 South African higher education.

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Summary of key points and recommendations

Ranking of interventions

Achievements

There have been a number of achievements during the past sixteen years, even if some of these, as will be noted later, have to be qualified.

1. A comprehensive agenda and policy framework for higher education, as explicated in various policy documents, has been defined.
2. The foundations have been laid for a new higher education landscape constituted by a single, coordinated and differentiated system encompassing universities, universities of technology, comprehensive institutions, contact and distance institutions and various kinds of colleges.
3. There has been increased and broadened participation within higher education to advance social equity and meet economic and social development needs.
4. In relation to the *National Plan* goal of 40% enrolments in Humanities and Social Sciences (HSS), 30% in Business and Commerce (BC) and 30% in Science Engineering, and Technology (SET), there have also been shifts as desired.
5. Isolated from the rest of Africa and the world more generally, democracy has brought a welcome internationalisation of the student body and also, although to a more limited extent, of the academic workforce.
6. A national quality assurance framework and infrastructure has been established and policies, mechanisms and initiatives with respect to institutional audit, programme accreditation and quality promotion and capacity development have been implemented.
7. A new more goal-oriented, performance-related funding framework has been instituted, and a National Student Financial Aid Scheme (NSFAS) has been successfully established as a means of effecting social redress for poor students.
8. A small private higher education sector has come into existence. Criteria that private institutions need to meet to achieve university status are in place.

Overall, parts of South African higher education display considerable strengths and much promise with respect to knowledge production and dissemination, to contributing to social equity, to economic and social development and democracy, and to the development needs of the Southern African region and the African continent.

Issues and challenges

1. Mediating competing goals

There has been an intractable tension between a number of values and goals of higher education.

For example, to the extent that government and universities have sought to pursue social equity and redress and quality in higher education simultaneously, difficult political and social dilemmas, choices and decisions have arisen, especially in the context of inadequate public finances and academic development initiatives to support underprepared students, who tend to be largely black and of working class or rural poor social origins.

Recommendation

It should be accepted that for good political and social reasons, values, goals and strategies that are in tension *need* to be pursued *simultaneously*. Paradoxes have to be creatively addressed and policies and strategies have to be devised that can satisfy multiple imperatives, *balance* competing goals and enable the pursuit of equally desirable goals.

2. Post-school education

'The finding that 41.6% of the 18-24-year-olds are not in education or training, nor are they employed, is not only an educational problem, but constitutes a social and economic disaster' (Cloete ed., 2009:43). There is clearly a growing need for expanding opportunities for post-school education and training, for post-secondary education and for higher education.

All of these issues mean that it is vitally important to give urgent and considered attention to the expansion of post-school education, including higher education, and to the spectrum of post-school institutions that are required in relation to economic and social development needs.

Recommendation

There is a critical and immediate need to reconceptualise and clarify the scope, structure and landscape of the post-school system and institutions as well as to expand opportunities for high quality post-school education and training.

Such a process should also clarify the purposes and roles of higher education institutions vis-à-vis further education and training colleges and other possible post-school institutions, and address the need for an expansion of higher education opportunities in order to realise the goal of a 20% participation rate in higher education.

3. Differentiation and diversity

A key issue is the policy goal of the establishment of a national, coordinated and differentiated higher education system.

Nonetheless, differentiation has been and remains a difficult, contentious and challenging policy issue for a number of reasons (see Badat, 2009).

The history of higher education should not, however, obscure the immense contribution that a differentiated and diverse higher education system can make to the new socio-economic and educational goals and objectives of democratic South Africa. The economic and social needs of South Africa are highly varied and diverse, and a responsive higher education system requires a diverse spectrum of institutions. There is no virtue in homogeneity where every higher education institution seeks to be the same and do the same thing, and all aspire to be a ('research') university.

The creation of a differentiated and diverse institutional landscape is unlikely to succeed unless a number of key issues are effectively addressed.

Recommendation

The DHET should facilitate an open and serious discussion with universities and Higher Education South Africa on the issue of a national, coordinated and differentiated and diverse higher education system with a view to settling this issue.

Such a debate should include questions such as:

- Are 'differentiation' and 'diversity' one and the same thing?
- Does a policy that seeks to promote the existence of a 'diversity' of institutions necessarily require 'differentiation'?
- A differentiated system also requires mechanisms for articulation between different institutions to facilitate student and academic mobility. Are there adequate mechanisms of articulation in these regards?
- Does the current funding framework promote differentiation or does it instead lead to isomorphism?

4. The diverse purposes of higher education

Locating higher education within a larger process of "political democratisation, economic reconstruction and development, and redistributive social policies aimed at equity" (*White Paper, 1997:1.7*), the

White Paper emphasised a 'thick' notion of the responsiveness of higher education that incorporated its wider social purposes.

Increasingly, however, the trend has been to approach higher education and investments in universities from the perspective largely of the promotion of economic growth and the preparation of students for the labour market and as productive workers for the economy.

Recommendation

In the face of attempts by various actors to reduce higher education responsiveness to responsiveness to the economy and the labour market, the Ministry of HE&T should be unequivocal about the diverse purposes that higher education must serve and must promote such a diversity of purposes.

The HE&T Ministry must also give concerted attention to the protection of African languages studies at universities as a vital element of the promotion of multilingualism and more generally, safeguarding the arts, humanities and social sciences.

5. Adequate state funding

An enabling policy framework that encompasses thoughtful state supervision, effective steering, predictability, continuity and consistency in policy is vitally necessary for higher education to realise its social purposes and goals. However, while an enabling policy framework is vitally important, it is on its own not enough. Such a framework must be also supported and reinforced by adequate state funding, otherwise the promise of higher education will be undermined by financial constraints.

Recommendation

It is increasingly clear that public funding of higher education is inadequate in the face of the legacy of past inequities and the new demands on and expectations of universities. At least three areas of higher education are in need of either additional funding or dedicated new funding:

- In terms of the current higher education funding framework, the block grant component of funding to universities
- The NSFAS in order to provide equity of access, opportunity and outcomes for talented students from indigent and lower middle class families
- Earmarked funding for: high quality academic development initiatives to enhance equity of opportunity and outcome; curriculum innovation, renewal and transformation to enhance the capabilities of institutions to meet the graduate needs of the economy and society; producing the next generation of academics, and the protection of African language studies and the promotion of multilingualism

6. Intellectual spaces

In the South African context, we must recognise, as André du Toit urges, “the legacies of intellectual colonisation and racialisation as threats to academic freedom” (2000); and that “the powers conferred by academic freedom go hand in hand with substantive duties to deracialise and decolonise intellectual spaces” (Bentley et al, 2006).

Higher education holds the promise of contributing to social justice, development and democratic citizenship. Yet, this promise often remains unrealised and instead universities frequently continue to be a powerful mechanism of social exclusion and injustice, through both their own internal thinking, structures, cultures and practices and their external conditioning by the wider society.

Recommendation

Any serious agenda of inclusion in higher education entails the duty of using ‘the powers conferred by academic freedom’ to substantively decolonise, deracialise, demasculinise and degender our inherited ‘intellectual spaces’.

It means creating the space for the flowering of other epistemologies, ontologies, methodologies, issues and questions other than those that have dominated, perhaps even suffocated, intellectual and scholarly thought and writing.

7. Current postgraduate outputs

Postgraduate student enrolments and outputs are low and sorely inadequate in relation to South Africa’s economic and social development needs. In 2008, 45% of doctoral graduates were black and 41% women, meaning that they are considerably under-represented at this level. Furthermore, women graduates continued to be concentrated in the humanities and social science fields (CHE, 2008:32).

It should also be noted that only 32% of university academics possess doctorates, which acts as another constraint on significantly enhancing the output of doctoral graduates. Academic staff with doctorates at the 12 South Africa universities that produce most of South Africa’s doctoral graduates and scientific publications range from 20% to 59%.

Recommendation

If South Africa is to accelerate economic and social development as well as ensure greater opportunities for and participation by black students from indigent backgrounds in postgraduate study it must invest significantly more funding in postgraduate and especially doctoral level study.

At many South African universities the availability and quality of research infrastructure, facilities, and equipment is a constraint on the enrolment and production of doctoral graduates.

The challenge of the enhancement of institutional capacities also relates to the capacities to expand and mount new doctoral programmes, the management of doctoral education and the management of research.

The democratisation of knowledge requires special measures to induct previously excluded social groups such as black and women South Africans into the production and dissemination of knowledge.

Special attention must also be paid to improving the proportion of academics with doctoral qualifications through a dedicated programme and support.

Attention has to be given to equipping academics to supervise effectively through formal development programmes, mentoring and experience in co-supervising alongside experienced supervisors.

It is vital that there is an effective confluence in the domains of postgraduate funding and support and research between the new Ministry of Higher Education and the Ministry of Science and Technology.

8. Creating a new generation of academics

A new generation of academics must not only be increasingly constituted by blacks and women South Africans, but must also possess the intellectual and academic capabilities related to teaching and learning, research and community engagement that are a necessary condition for transforming and developing South Africa's universities.

Inequalities remained stark. While black South Africans comprised almost 91% of the population they made up only 38% of academics; African South Africans although making up some 80% of the population enjoyed only a 24% representation in the academic workforce, and women, who comprised 51% of the population, made up only 42% of academics (Statistics South Africa, 2008).

On the basis of the current retirement age of 65, in the coming decade over 4 000 or some 27% of academics will retire and need to be replaced. In so far as professors and associate professors, who constitute the most highly qualified and experienced academics, are concerned, almost 50% are due to retire. These categories are also the most productive researchers.

Recommendation

There should be no doubts about the urgency of producing a new generation of academics that is not only increasingly constituted by blacks and women South Africans, but which also possess the intellectual and academic capabilities related to teaching and learning, research and community engagement. A failure to invest in and cultivate a new generation of high quality academics will have far-reaching consequences.

While the employment of 'suitably qualified' black and women South Africans must be prioritised, and there is the danger of a 'brain drain' that denudes other African countries of highly qualified graduates to the benefit of South Africa and its universities, the South African state is strongly ill-advised to place constraints on the employment of academics from other African countries and elsewhere as they have a vital contribution to make to the transformation and development of South African universities.

9. Remuneration of academics

South African academics are inadequately remunerated relative to occupations in the public (state, public enterprises and science councils) sector and private sector that require similar levels of qualifications and expertise.

Recommendation

The improvement of public subsidies to attract outstanding graduates to the academic profession and more generally facilitate the recruitment and retention of academics through adequate remuneration is vital for the future wellbeing and contribution of universities.

The HE&T Ministry and HESA need to act in concert in this regard and a task team should be established to address principles, mechanisms and timelines for the improvement of academic remuneration.

10. Access, opportunity and success in higher education

a) African and Coloured participation rates

Although black student enrolments have increased since 1994, the gross participation rate of black, and especially African and Coloured, South Africans continues to be considerably lower than for white South Africans.

Recommendation

It is necessary to give especial attention to improving the participation rates of African and Coloured students. On the one hand, this is dependent on improving conditions in schooling. On the other hand, it highlights that the National Student Financial Aid Scheme needs to be funded more adequately so that African and Coloured students can be supported to access higher education.

b) Continued under-representation of blacks and women

While there has been significant progress in the representation of both black, and especially African, and women students in higher education, large numbers of African students continue to be concentrated

in distance education, and both African and women students continue to be under-represented in science, engineering and technology and business and commerce programmes.

Recommendation

Constant attention should be given to the representation of black and women students at specific institutions and qualification levels and in particular academic programmes. Carefully designed interventions need to be created to ensure improvements in representation in areas where black and women students continue to be under-represented.

c) Improvement of pass and graduation rates

Judging by dropout, throughput and graduation rates a substantial improvement in equity of opportunity and outcomes for black students remains to be achieved.

A recent study notes that “the major racial disparities in completion rates in undergraduate programmes, together with the particularly high attrition rates of black students across the board, have the effect of negating much of the growth in black access that has been achieved” (Scott et al 2007).

The conclusions are clear: “this has central significance for development as well as social inclusion”, and “equity of outcomes is the overarching challenge” (ibid). Furthermore, the underperformance 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” (Scott et al, 2007:20).

The enhancement of academic capabilities includes adequate public funding for academic development initiatives. Equity of opportunity and outcomes is constrained by inadequate funding to address under-preparedness (conceptual, knowledge, academic literacy and numeracy) for higher education programmes of especially indigent students.

Recommendation

In the light of unacceptably poor current pass and graduation rates and high dropout rates:

- The enhancement of the academic capabilities of universities, and specifically academics, and
- Rigorously conceptualised and designed high quality academic development programmes to support academics and students

are urgent and important tasks in order to ensure equity of opportunity and outcome, especially for students of working-class and rural poor social origins.

d) Academic infrastructure

Concomitant with the building of academic capabilities is ensuring that institutions are provided the necessary capacities in terms of infrastructure and equipment for effective learning and teaching and the production of high quality graduates.

Recommendation

The infrastructure funding that has been provided to universities since 2008 must be continued in order to effectively capacitate universities in terms of infrastructure and equipment.

e) Funding

One reason for the very high rate of dropouts among black students is almost certainly inadequate state funding in the forms of scholarships, bursaries and loans.

Recommendation

It must be hoped that the recommendations arising out of the recent review of NSFAS will effectively address the challenges of the greater funding that is required for NSFAS and especially the level of support that will be made available to indigent students.

f) Learning and teaching and curriculum

The extent to which there exist at all institutions academically supportive cultures that promote higher learning, cater for the varied learning needs of a diverse student body through well-conceptualised, designed and implemented academic programmes and academic development initiatives, and mechanisms to promote and assure quality are moot issues. An important recent study argues that "systemic responses are essential for improving the educational outcomes" (Scott et al, 2007:73).

This raises sharply the academic capabilities of universities.

Recommendation

Adequate public funding is necessary to enhance the capacities and academic capabilities of universities with respect to teaching and learning.

The extent to which there is on the part of universities and academics a willingness to address important learning and teaching curriculum, and pedagogical issues has to be honestly confronted.

g) Institutional cultures

Institutional cultures, especially at historically white institutions, could in differing ways and to varying degrees compromise equity of opportunity and outcomes. Even if equity of opportunity and outcome are not unduly compromised, the overall educational and social experience of such students may be diminished. The reproduction and limited erosion of class-based, racialised and gendered institutional cultures also obstruct the forging of greater social cohesion.

Recommendation

The transformation programmes of historically white universities must give specific attention to and encompass the systematic and progressive transformation of institutional cultures, in congruence with constitutional ideals and values.

The tasks are to uproot historical cultural traditions and practices that impede the development of more open, vibrant, democratic and inclusive intellectual and institutional cultures, to respect, affirm and embrace the rich diversity of the people that today constitute and must increasingly constitute historically white universities, and to purposefully create and institutionalise cultures that embrace difference and diversity, and sees these as strengths and powerful wellsprings for personal, intellectual and institutional development.

h) South African schooling

Finally, the pace of social equity and redress in higher education continues to be severely constrained by conditions in South African schooling.

Recommendation

Ultimately, improved access and outcomes in higher education, especially for black South Africans and in the fields of science, engineering and technology, is strongly dependent on significant improvements in the quality of South African schooling.

Short-term interventions
<p>Post-school education</p> <p>There is a critical and immediate need to reconceptualise and clarify the scope, structure and landscape of the post-school system and institutions as well as to expand opportunities for high quality post-school education and training.</p> <p>Such a process should also clarify the purposes and roles of higher education institutions vis-à-vis further education and training colleges and other possible post-school institutions, and address the need for an expansion of higher education opportunities in order to realise the goal of a 20% participation rate in higher education.</p>
<p>The diverse purposes of higher education</p> <p>The Ministry of HE&T should be unequivocal about the diverse purposes that higher education must serve and must promote such a diversity of purposes.</p> <p>The Ministry must also give concerted attention to the protection of African languages studies at universities as a vital element of the promotion of multilingualism and more generally, safeguarding the arts, humanities and social sciences.</p>
<p>Access, opportunity and success: <i>Improvement of pass and graduation rates</i></p> <p>In the light of unacceptably poor current pass and graduation rates and high dropout rates:</p> <ul style="list-style-type: none"> • The enhancement of the academic capabilities of universities, and specifically academics, and • Rigorously conceptualised and designed high quality academic development programmes to support academics and students are urgent and important tasks in order to ensure equity of opportunity and outcome, especially for students of working-class and rural poor social origins.
<p>Access, opportunity and success: <i>Learning and teaching and curriculum</i></p> <p>Adequate public funding is necessary to enhance the capacities and academic capabilities of universities with respect to teaching and learning.</p> <p>The extent to which there is on the part of universities and academics a willingness to address important learning and teaching curriculum, and pedagogical issues has to be honestly confronted</p>
<p>Access, opportunity and success: <i>Institutional cultures</i></p> <p>The transformation programmes of historically white universities must be given specific attention to and encompass the systematic and progressive transformation of institutional cultures, in congruence with constitutional ideals and values.</p>
<p>Mediating competing goals</p> <p>It should be accepted that for good political and social reasons, values, goals and strategies that are in tension <i>need</i> to be pursued <i>simultaneously</i>. Paradoxes have to be creatively addressed and policies and strategies have to be devised that can satisfy multiple imperatives, <i>balance</i> competing goals and enable the pursuit of equally desirable goals.</p>
<p>Creating a new generation of academics</p> <p>There is great urgency to produce a new generation of academics that is increasingly constituted by blacks and women South Africans, and possess the intellectual and academic capabilities related to teaching and learning, research and community engagement.</p> <p>While the employment of 'suitably qualified' black and women South Africans must be prioritised, the South African state is strongly ill-advised to place constraints on the employment of academics from other African countries and elsewhere.</p>

Medium-term interventions
<p>Adequate state funding</p> <p>Three areas of higher education are in need of either additional funding or dedicated new funding:</p> <ul style="list-style-type: none"> • The block grant component of funding to universities • The NSFAS in order to provide equity of access, opportunity and outcomes for talented students from indigent and lower middle class families • Earmarked funding for: high quality academic development initiatives to enhance equity of opportunity and outcome; curriculum innovation, renewal and transformation to enhance the capabilities of institutions to meet the graduate needs of the economy and society; producing the next generation of academics, and the protection of African language studies and the promotion of multilingualism
<p>Current postgraduate outputs</p> <p>If South Africa is to accelerate economic and social development as well as ensure greater opportunities for black students from indigent backgrounds in postgraduate study it must invest significantly more funding in postgraduate study.</p> <p>At many South African universities the availability and quality of research infrastructure, facilities, and equipment is a constraint on the enrolment and production of doctoral graduates.</p> <p>The democratisation of knowledge requires special measures to induct previously excluded social groups into the production and dissemination of knowledge.</p> <p>Special attention must be paid to improving the proportion of academics with doctoral qualifications through a dedicated programme and support.</p> <p>Attention has to be given to equipping academics to supervise effectively through formal development programmes, mentoring and experience in co-supervising alongside experienced supervisors.</p> <p>It is vital that there is an effective confluence in the domains of postgraduate funding and support and research between the new Ministry of Higher Education and the Ministry of Science and Technology.</p>
<p>Intellectual spaces</p> <p>Any serious agenda of inclusion in higher education entails the duty of using 'the powers conferred by academic freedom' to substantively decolonise, deracialise, demasculinise and degender our inherited 'intellectual spaces', and to create the space for the flowering of other epistemologies, ontologies, methodologies, issues and questions other than those that have dominated intellectual and scholarly thought and writing.</p>
<p>Remuneration of academics</p> <p>The improvement of public subsidies to attract outstanding graduates to the academic profession and more generally facilitate the recruitment and retention of academics through adequate remuneration is vital for the future wellbeing and contribution of universities.</p> <p>The HE&T Ministry and HESA need to act in concert in this regard and a task team should be established to address principles, mechanisms and timelines for the improvement of academic remuneration.</p>
<p>Access, opportunity and success: <i>Academic infrastructure</i></p> <p>The infrastructure funding that has been provided to universities since 2008 must be continued in order to effectively capacitate universities in terms of infrastructure and equipment.</p>
<p>Differentiation and diversity</p> <p>The DHET should facilitate an open and serious discussion with universities and Higher Education South Africa on the issue of a national, coordinated and differentiated and diverse higher education system with a view to settling this issue.</p>

Long-term interventions
<p>Access, opportunity and success: <i>African and Coloured participation rates</i></p> <p>It is necessary to give especial attention to improving the participation rates of African and Coloured students, through improving conditions in schooling and adequately funding the National Student Financial Aid Scheme.</p>
<p>Access, opportunity and success: <i>Continued under-representation of blacks and women</i></p> <p>Constant attention should be given to the representation of black and women students at specific institutions and qualification levels and in particular academic programmes. Carefully designed interventions need to be created to ensure improvements in representation in areas where black and women students continue to be under-represented.</p>
<p>Access, opportunity and success: <i>South African schooling</i></p> <p>Improved access and outcomes in higher education, especially for black South Africans and in the fields of science, engineering and technology, is strongly dependent on significant improvements in the quality of South African schooling.</p>

Discussions

A presentation based on the paper prepared for the DBSA, “The Challenges of Transformation in Higher Education and Training Institutions in South Africa” (Badat, 2010), was made and extensive discussions followed. Brief additional presentations were made on international trends in HE and on distance education. The key issues raised included:

1. The road already travelled

The presenter reminded the participants of the context and agenda set by the White Paper for HE. It was noted that it is “a profound document”, still very relevant for the current period and that its formulation provides additional insights with every reading. A detailed paper authored by the presenter entitled, “*The Challenges of Transformation in Higher Education and Training Institutions in South Africa*” provides useful information and sets out the 10 most important things that need to be done in the short-, medium- and long-term in that sector. It provides a nuanced and ranked set of short, medium and long term interventions required in the period to 2030.

It was emphasised that, there was need to “consolidate” as there were long time horizons to effect change in the HE system. That for consolidation “certainty, continuity and consistency of policy” were essential. That poor decisions and uncertainty could debilitate and “unleash instability” in the sector was emphasised. That due to the varying abilities and capacities across institutions to respond to changes, conditions of discontinuity and uncertainty could be destructive to some institutions.

In this regard it was noted that one important matter that needed attention was the organisation of the HE sector, to enable dialogue amongst players and with the DHET. The DHET is keen for a mechanism that will facilitate dialogue.

2. Issues and interventions

There was concurrence among the participants in the workshop with the issues raised by the paper and the set of interventions proposed. The participants noted that in the short term interventions required decisions, planning and budgeting whereas implementation and realisation of outcomes were, by their nature, longer term. It was noted that several issues required “smart thinking” and then additional budgets. An additional issue overall was that of Distance Education and Distance Education Institutions, which may offer opportunities to broaden access and to enrich curriculum offerings in higher education subject to certain limitations. This mode of delivery seems to be relatively under exploited.

Key issues that were discussed extensively included.

3. Shape and size

It was noted that in 2007 the numbers of enrollments were in excess of 750 000 representing a participation rate of 15.8% short of the goal of 20%. Participants indicated that there was need for clarity on what was measured in gross participation rates, was it 20% of the age cohort or of those who had gained appropriate passes in grade 12 for admission to institutions. Considering the large number of youth requiring opportunities for education, training and employment, some considered whether the configuration of current institutions needed to be developed to take care of new needs. Is there need for community colleges or other institutions/offerings in the landscape, to realise the goal of a 20% gross participation rate?

It was noted that an audit is currently underway as the available FET figures are unreliable, it is likely that 25 000 refers to enrollments in courses/programme offerings and not the headcount number of students. In the main programme, the NCV, the number of students that completed their final (3rd year) and wrote the examinations was about 4 000.

It was noted that approximately 30% of enrollments in HEI's were at UNISA, a distance education institution. It was further noted that some "contact" institutions also had large numbers of distance education students. For example Pretoria University has 40 000 contact and 20 000 distance students, with increasing numbers at other universities.

However, the issues of completion of programs and graduation at UNISA are a major concern. When performance has improved, does distance education have the potential to balance access, quality and cost? It has the potential for growth as UNISA has made less than 1% growth over seven years; distance education can contribute to a more blended learning environment (face to face and distance) which is the direction institutions need to go in this technological era; furthermore distance education could play an important role in continuing professional development of school teachers.

4. Differentiation

The participants noted that the "biggest elephant in the room" is the issue of Differentiation. It was noted that the DHET would need to take an initiative to make progress in the discussion on differentiation. It was stated that in comparison to 15 years ago there is a better climate for this discussion and that in fact some form of differentiation was already taking place based on past history, spatial location and existing patterns of competition.

It was noted that differentiation is an international phenomenon, where universities are making choices based on a variety of criteria, for example level of ambition in reach and focus: choice to be a local, regional or global player; to be research orientated or undergraduate focused; to excel in a single focus or on multiple subjects. This is reflected in the enrollments of postgraduates to undergraduates

based on the focus of the institution. Within this space, interdepartmental/faculty/school, inter-institutional collaboration and partnerships with companies and organisations has led to growth in the scale of institutions and to improved performance (e.g. research, profile) and specialisation.

A participant shared that the University of Technology in the Free State was taking steps to become a “Developmental University”, with the intention of playing a role in its region of operation and province.

Another participant stated that a similar type of discussion was taking place in relation to Development Finance Institutions; which are required to articulate more clearly what the comparative advantage of each institution is, and to indicate what each institution can/will deliver.

It was noted that a change from a three to five year planning cycle, would enable better planning and an opportunity for the DHET to negotiate developmental trajectories with each institution. The application of quality assurance systems, and funding and planning instruments were considered useful mechanisms in this regard.

It was noted that this has major implications for:

- the funding formula and the flexibility it allows
- That investment based on good developmental trajectories with excellent leadership could yield substantial and rapid gains at institutions
- That differentiation was to be located and developed within a comprehensive, coordinated and integrated system of higher education

5. Access, opportunity and success (efficiencies)

It was noted that, for increased success, change in at least the following was required:

- Institutional culture to manage diversity.
- That adequate public funding is necessary to improve the skills and capabilities of academics with respect to appropriate teaching of curriculum, improved understanding of teaching and learning dynamics, and related pedagogical approaches.
- Appropriate recognition of languages of teaching and learning, and that capacity to teach languages has been lost. (in this regard it was noted that perhaps only Rhodes has some excellence in a language and that at great expense UNISA retains a substantial (70) staff capacity currently cross-subsidised by other programmes; that if various institutions across the country took responsibility for at least one language within its programme much will be gained).

- That to secure success in the longer term a new generation of academics needs to be generated with a great sense of urgency (already valuable time has been lost). That this will require paying specific attention to work conditions and benefits such as: special premiums be paid in specific disciplines, improved remuneration for academics; good succession planning; qualification requirements for tenure of academics such as being bound to undergoing appropriate courses nominated by the institution (e.g. to induct new academics into an understanding of culture and learning and teaching issues). The above aspects need to be incentivised by revision of the funding formula.

6. School performance and better guidance/selection

It was noted that the other “big elephant in the room” was school performance. There was a need to compensate for the schooling system, in preparing students to optimise their successfully completing their programs.

That some of the actions that can mitigate the poor schooling experience that learners bring with them from school include: better and earlier information on subjects needs for certain courses; more information on the wide range of choices post school – and guidance to make appropriate choice of course; to consider expanding the duration of courses to five years against the massive cost of drop outs, not only a financial cost but also on the morale of the students and the capacity of institutions.

Conclusion

In conclusion it was noted that the key issues for the 10-Point Plan from this discussion include shape and size; differentiation, information and career guidance.