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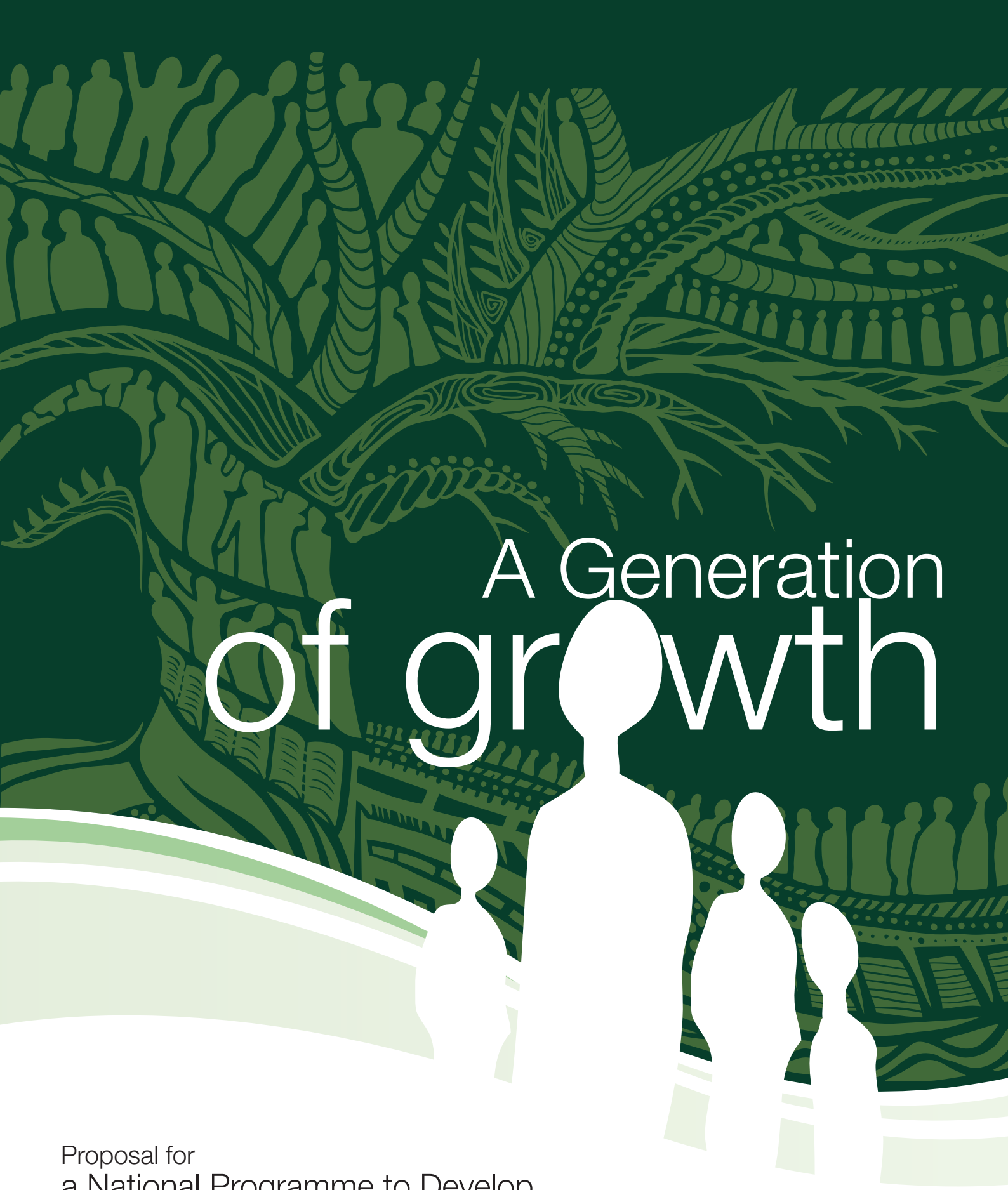

A Generation of growth

Proposal for
a National Programme to Develop
the Next Generation of Academics
for South African Higher Education

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Proposal for a National Programme to Develop the Next Generation of Academics for South African Higher Education

Higher Education South Africa

Foreword

During 2009 Higher Education South Africa (HESA) agreed to an initiative to develop a proposal for a national programme for building the Next Generation of academics.

In June 2009, a national workshop was held at Rhodes University which usefully examined various institutional initiatives that existed for building the Next Generation of academics as well as for supporting new academics and current academics, and also clarified the challenges related to building the Next Generation of academics. The national workshop was attended by most universities and officials from HESA, and the Department of Higher Education and Training (DHET).

A Working Group was thereafter established to lead the development of a proposal. The Working Group comprised: Prof Thoko Mayekiso (Chair) (NMMU); Mr Tembile Kulati (Wits); Dr Bernadette Johnson (VUT); Ms Jo-Anne Vorster (RU); Prof Gideon De Wet (UFH) and Dr Saleem Badat (HESA/RU), who also served as Convenor of the overall initiative.

The aims of the Working Group were to explicate the goals that should be advanced by a national programme, and the values and principles that should underpin such goals and a national programme; to identify strategies and mechanisms for developing a Next Generation of academics, and especially black and women academics; to identify the conditions that are critical at national and institutional levels for developing a Next Generation of academics, and to propose a funding model and budget that is cost-effective and sustainable.

The Working Group examined the current literature and institutional case studies on building the Next Generation of academics; clarified the goals of building a Next Generation of academics, and the specific social and educational challenges and imperatives that have to be addressed; considered national conditions and differing institutional conditions, needs and challenges related to building a Next Generation of academics, and also looked at initiatives, developments and processes in higher education and science and technology that could facilitate building the Next Generation of academics.

A draft proposal was discussed at a national consultative workshop in Port Elizabeth on 24 August 2010 that was attended by almost all universities and officials from the Council on Higher Education, HESA and DHET. Taking into account comments and suggestions that were made at the workshop, the proposal was then finalized by Dr. Jo-Anne Vorster of the Centre for Higher Education, Research, Teaching and Learning at Rhodes University with the support of Dr. Mignonne Breier of the University of Cape Town's Research Office.

I wish to thank numerous people for their contributions to the HESA initiative to develop a proposal for a national programme for building the Next Generation of academics:

- The Chairperson and members of the Working Group
- The representatives of all the universities that participated in the workshops at Rhodes University and in Port Elizabeth
- The critical readers that commented on the draft proposal: Prof Nan Yeld, Prof. Belinda Bozzoli and Ms. Nasima Badsha
- Dr. Mignonne Breier of the Research Office at the University of Cape Town
- Dr. Jo-Anne Vorster of the Centre for Higher Education, Research, Teaching and Learning at Rhodes University
- Michael Gordon, Data Administrator in the CHE Monitoring and Evaluation directorate, and
- Ms. Jana van Wyk of Higher Education South Africa, who acted as Project Administrator for the initiative.

I also thank the Higher Education Partnership for Africa for contributing $28 600 towards this initiative.

Dr. Saleem Badat
Convenor

Grahamstown
May 2011

Proposal for

a National Programme to Develop the Next Generation of Academics for South African Higher Education

1.Introduction

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 and social composition of the academic work force (Badat, 2009).

It is widely recognised that South African higher education institutions - and indeed higher education institutions in the rest of Africa and elsewhere - are increasingly challenged to recruit and retain adequate numbers of academics and researchers to constitute the Next Generation of academics (Altbach, 2009). The 'Next Generation', in contrast with a 'new generation', refers to individuals who are currently not academics or on a trajectory towards a career in academia.

Over the last ten years concerns have been raised in various forums, including the Council on Higher Education (CHE), Committee of Heads of Research and Technology (COHORT) and the Department and Science and Technology (DST)) with regard to the challenges faced by the higher education sector in South Africa in developing the Next Generation of academics. Higher Education South Africa (HESA) mandated Dr Saleem Badat (as chairman of the HESA Funding Strategy Group) to develop a proposal outlining a national strategy to address the challenges. To this end, HESA hosted a national workshop at Rhodes University in June 2009 where representatives from 12 universities with dedicated initiatives for building the Next Generation described the purposes, processes, management, successes and challenges of their programmes. Following this workshop a six-member Working Group was established to develop a proposal. A draft was presented to a number of critical readers and then, at a workshop in August 2010, to representatives from all public universities as well as the Centre for Research on Evaluation, Science and Technology (CREST) and the HR Directors' Forum, a HESA community of practice. Feedback from workshop participants was used to develop the final proposal which is presented here.

This proposal outlines some of the key challenges facing South African HE institutions before presenting a detailed plan for a National Programme to Develop the Next Generation of Academics for South African Higher Education.

2. Key challenges

South African universities face a multi-dimensional crisis in attracting, appointing and retaining academic staff. Academia is not a particularly attractive career option due to relatively low salaries, expanding student numbers and consequent workloads and institutional culture issues, among others.

Despite some changes, the current academic workforce remains unrepresentative of the South African population: it is still predominantly white and male and many academics are aging. About one fifth of academics are due to retire in less than a decade, including nearly half of the professoriate. The concern is that there are insufficient numbers in the existing academic and postgraduate pipelines to replace them. These factors are discussed in detail in the following sections of this proposal.

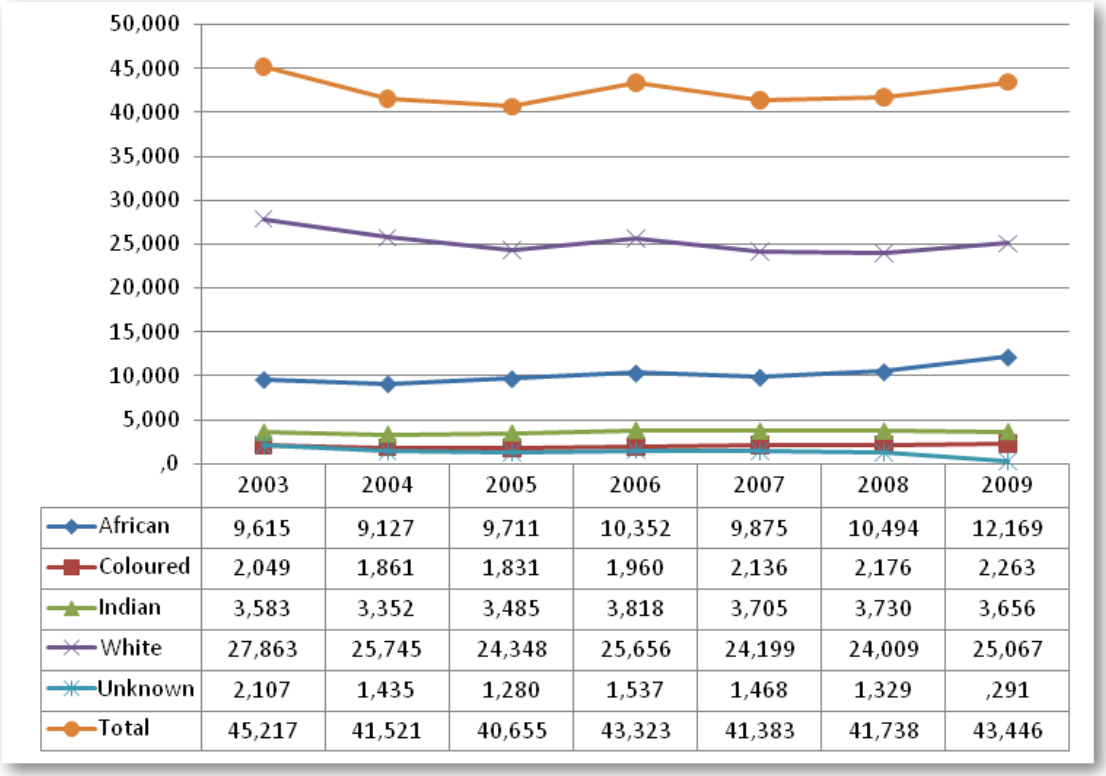
2.1 Inequality of representation

The racism and patriarchy that were key features of colonialism and apartheid in South Africa, shaped all areas of social life, including higher education. In the academic workforce, the consequence was a racialisation and gendering which bequeathed South Africa with a predominantly white and male academic work force[1]. Seventeen years into our democratic dispensation, South African academics are still predominantly male and white. In 1994, academics at South African universities were overwhelmingly white (83%) and male (69%) (CHE, 2004:62). 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.

Since then there has been some progress towards greater representivity but, as the following figures show, there is a great deal more progress to be made.

Figure 1 below shows the total number of academic staff at all 25 higher education institutions (inclusive of tutors and temporary academics), by population group, between 2003 and 2009.

Figure 1: All academic staff, 2003 to 2009, by population group*



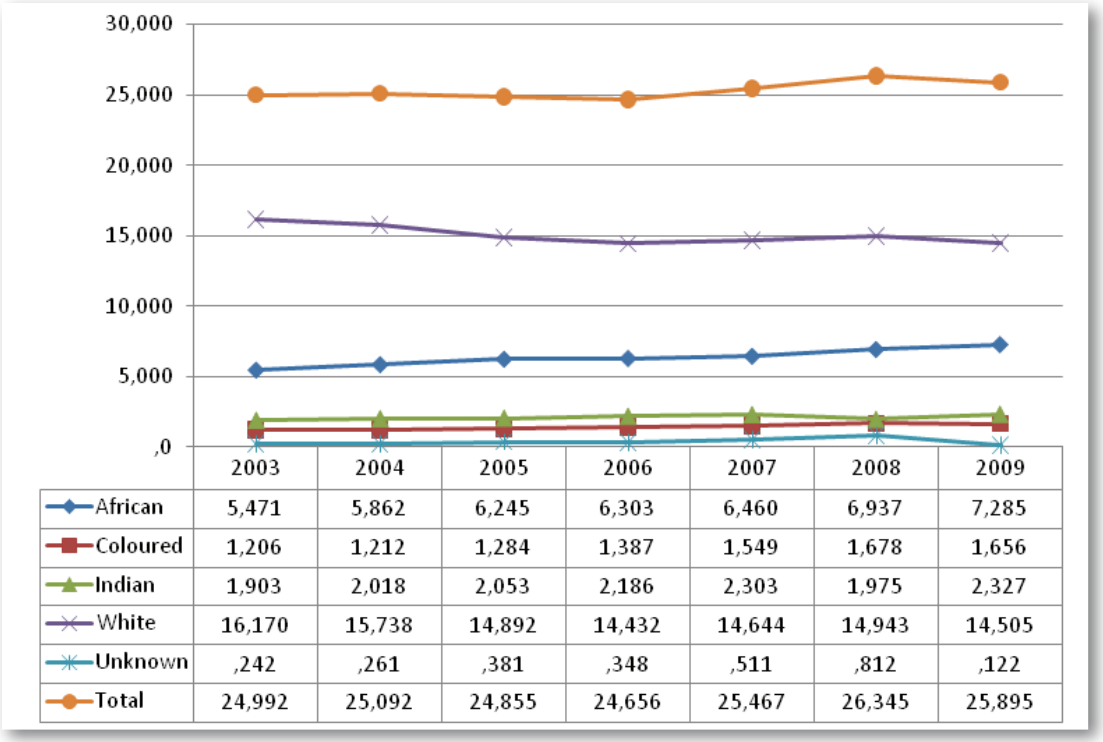
	2003	2004	2005	2006	2007	2008	2009
African	9,615	9,127	9,711	10,352	9,875	10,494	12,169
Coloured	2,049	1,861	1,831	1,960	2,136	2,176	2,263
Indian	3,583	3,352	3,485	3,818	3,705	3,730	3,656
White	27,863	25,745	24,348	25,656	24,199	24,009	25,067
Unknown	2,107	1,435	1,280	1,537	1,468	1,329	,291
Total	45,217	41,521	40,655	43,323	41,383	41,738	43,446

*Includes tutors and temporary academic staff but does not include specialised support professionals.
Source: DoE HEMIS (2011)

By 2003, 10 years after democracy, the overall academic work force remained predominantly white (61.6%) though there had been advances in the representation of black (from 17% to 33.7%), and especially African (from 10% to 21.3%) academics. Proportions of black academics continued to increase and by 2009 they constituted 41.6% of the academic work force. However, this increase has to be seen in relation to declining overall numbers of academics. Between 2003 and 2009 there was a decline in the total academic workforce from 45 217 to 43 446. The decline was predominantly among whites (their numbers dropped 10% from 27 863 to 25 067 and their proportion from 61.6 to 57.6%), and the category of 'unknown' (from 4.7% of total to 0.7%). Seen in this context, the increase in numbers of black academic staff is less impressive. They rose from 15 247 to 18 088, an increase of 18.6%, while that of Africans rose from 9 615 (21.3% of total) to 12 169 (28.0% of total), a numerical increase of 26.5%.

Figure 2 below excludes academics below the level of junior lecturer and categories labelled by HEMIS as 'undesignated'. The figures refer to Professors, Associate Professors, Senior Lecturers, Lecturers and Junior Lecturers only. They include temporary as well as permanent staff.

Figure 2: Academic staff from Professor to Junior Lecturer, 2003 to 2009, by population group.*



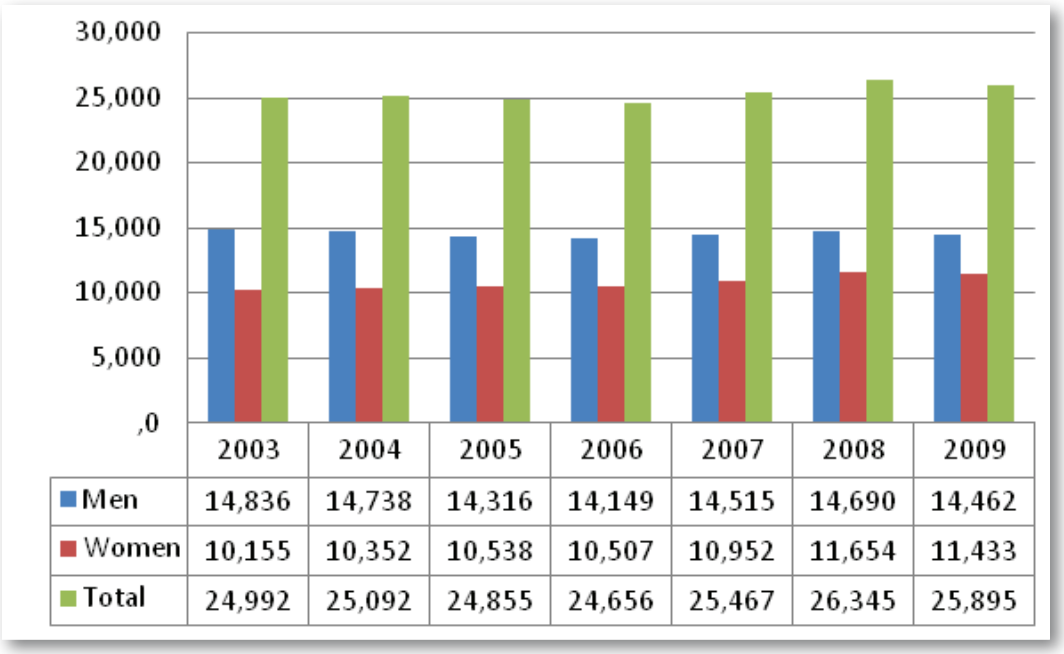
	2003	2004	2005	2006	2007	2008	2009
African	5,471	5,862	6,245	6,303	6,460	6,937	7,285
Coloured	1,206	1,212	1,284	1,387	1,549	1,678	1,656
Indian	1,903	2,018	2,053	2,186	2,303	1,975	2,327
White	16,170	15,738	14,892	14,432	14,644	14,943	14,505
Unknown	,242	,261	,381	,348	,511	,812	,122
Total	24,992	25,092	24,855	24,656	25,467	26,345	25,895

* Excludes staff below junior lecturer and 'undesignated' academics.
Source: DoE HEMIS (2011)

In the seven year period between 2003 and 2009, there was a small increase in the total number of academics from Professor to Junior Lecturer level – 903 or 4% more in 2009 than in 2003. The proportion of black academics increased from 34.3% of total to 43.5%. In numbers, this represents an increase of about one third from a total of 8 580 black academics to 11 268. The proportion of white academics declined from 64.7% of total to 56.0%. In numbers they declined by 1 665 academics or 10.3%. Those categorised 'unknown' halved in proportion from approximately 1% to 0.5%. African staff increased from 21.9% of total to 28.1%, representing an increase in numbers of one third (1 814 academics).

On the gender front, there has been progress since 1994 when women comprised only 31% of the academic work force of South African universities (but just over 50% of the population), but they remain in the minority in academia. As Figure 3 shows, by 2003 women constituted 40.6% of academics in the major categories (a total of 10 155). By 2009, that proportion had increased to 44.2%, their numbers having increased by 1 278 or 12.6%.

Figure 3: Academics from Professor to Junior Lecturer, by gender, 2003 to 2009



	2003	2004	2005	2006	2007	2008	2009
Men	14,836	14,738	14,316	14,149	14,515	14,690	14,462
Women	10,155	10,352	10,538	10,507	10,952	11,654	11,433
Total	24,992	25,092	24,855	24,656	25,467	26,345	25,895

*Excludes staff below junior lecturers and 'undesignated' academics.
Source: DoE HEMIS (2011)

When reading the 'race' and gender figures in the tables and figures above one needs to be mindful of the fact that the distribution patterns vary across the institutions and there are large discrepancies. The figures need to be seen in the context of the differentiation of the higher education system prior to 1994, when South African universities were reserved for specific 'race' groups. Notwithstanding extensive changes in the national and institutional landscapes, the characterisation of South African universities as 'historically black' and 'historically white' retains some validity. The Department of Education's annual publication of education statistics has recorded that in 2009 proportions of black academic staff ranged from 17% to 91% with the differential representation clearly related to the racialised history of South Africa's universities (DoE, 2010). Gender distributions also vary - from 29 to 51% of academic staff in 2009 – but the patterns of association are less clear than for 'race'.

2.2 Current postgraduate pipeline

The second major challenge to the higher education system is the current limited output of masters and doctoral graduates, which constrains the transformation of the social composition of the Next Generation of academics. Notwithstanding some advances, white and male masters graduates continue to predominate. In 2005 white students constituted 52% of masters graduates and male students 55%. Women graduates continued to be concentrated in the humanities and social science fields (CHE, 2008:32).

Doctoral enrolments and graduations

In planning for a Next Generation of academics, the doctoral pipeline is particularly important. Tables 1 and 2 below illustrate trends in doctoral enrolments and graduations between 1994 and 2009.

Table 1: Doctoral enrolments by gender and population group, 1994 to 2009

Year	Enrolments				
	Male	Female	White	Black	Total
1994	3,436	1,488	4,137	787	4,924
%	69.8	30.2	84	16	100
2000	3,958	2,435	3,993	2,400	6,393
%	61.9	38.1	62.5	37.5	100
2007	5,803	4,249	4,751	5,251	10,052
%	57.7	42.3	47.5	52.5	100
2009	6,041	4,486	5,826	4,637	10,529
%	57.4	42.6	55.3	44	100

*50 individuals did not specify a population group in 2007 and 66 in 2009

As Table 1 shows, doctoral enrolments have more than doubled since 1994, with a threefold increase in numbers of women enrolments and a nearly six fold increase in the numbers of black doctoral enrolments. Nonetheless blacks and women remained in the minority, and the proportions need to be seen in the context of the overall demographics of the country in which blacks constitute 91% of the population and women 51 %. The enrolments are low in relation to overall university enrolments (1.3%) and total postgraduate enrolments (9.1%) and inadequate for South Africa's economic and social development needs. The female enrolments also show a worrying drop off of women after undergraduate studies, given that undergraduate enrolments are almost 55% female. The following further trends in doctoral enrolments (from Academy of Science for South Africa, ASSAF, 2010) are relevant to this proposal.

- The mean age of first enrolments for doctoral study is 38 years.
- In 2005, of a total of 2 692 first enrolments for doctoral study, 26% were international students.
- There is a significant "pile up" of PhD students in the system. In 2007, for example, of the total number of PhD enrolments, 27% were first enrolments, 12% graduated, while 61% constituted on-going enrolments. The figure for ongoing enrolments had been at this level for the period 2004 – 2007, according to ASSAF (2010).
- The Honours and Masters student enrolments, however, indicate there is significant potential for a larger doctoral student enrolment. In 2007, for example, 85 454 students passed the Senior Certificate examination with endorsement, 52 388 students obtained a first degree, 21 839 received Honours degrees and 7516 graduated with Masters degrees, but only 1274 obtained PhDs, according to ASSAf (2010).
- 31% of students who decided to pursue PhDs did so during their masters studies while 39% made the decision after the completion of their masters degrees. There thus seems to be considerable opportunity to influence students' decisions to pursue the PhD route.

Table 2 below illustrates doctoral graduates between 1994 and 2009.

Table 2: Doctoral graduates, by gender and population group, 1994 to 2009

Year	Graduates				
	Male	Female	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	744	530	691	580	1274
%	58.4	41.6	54.4	45.6	100
2009	807	573	697	675	1,380
%	58.5	41.5	50.5	48.9	100

*Three individuals did not specify a population group in 2007 and eight in 2009

While the table above shows considerable improvement in the numbers and proportions of black and women doctoral graduates since 1994, there are other salient factors to consider, which have been highlighted in the reports from ASSAf (2010) and CHE (2008). These are some of them:

- In relation to its economic and social development needs South Africa produces an extremely small number of doctoral graduates.
- South Africa's PhD growth rate remains significantly lower than that of other countries. 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. In 2007, South Africa produced 26 doctoral graduates per million of population, compared to 52 by Brazil, 187 by Korea and 251 by Australia (ASSAf, 2010).
- 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 (CHE, 2008:40, 42); this figure increased to 29% in 2007 (ASSAf, 2010).
- The national benchmark doctoral graduation rate is 20% but the national average is only 11%.
- Average time to completion is 4.8 years - which is similar to international completions rates.
- The average age of South African PhD graduates is higher is than in other countries. In 2007 only 12% of doctoral graduates were younger than 30 years – 7% of these were black. The mean age of doctoral graduates is 40 years (CHE, 2008:36), while one fifth of PhD graduates are 50 years at the time of graduation (ASSAf, 2010). Currently 12% of PhD students are already employed by South African universities (ASSAf, 2010).
- The majority of PhD graduates are in the fields of Education, Economic and Management Sciences and Religion (ASSAf, 2010).

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 (DST) wishes to increase doctoral graduates five-fold by 2018 (Vaughan, 2008:94). While these ambitions are welcome, there are various constraints that will have to be overcome.

Constraints

Infrastructure

At many South African universities the availability and quality of research infrastructure, facilities, and equipment (including information and communication technologies, library holdings, etc.) 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 (nine universities produce almost 83%) and also the bulk of peer-reviewed scientific publications.

Whether doctoral education is generalised to include all universities or is selectively focused and concentrated at specific universities, expansion of research infrastructure, facilities, and equipment will be required to enhance institutional capacities, especially if the ambitions of the NRF and DST to significantly enhance the outputs of doctoral graduates are to be realised.

Limited supervision expertise

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 sustain doctoral programmes, 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. Only about a third of all permanent academic staff at South African universities currently hold PhDs and are thus eligible to supervise at this level. However, not all of these have the supervisory experience or receive the appropriate training and mentorship to fulfil this task (ASSAf 2010). An additional problem is that most of the supervisory capacity is currently within traditional universities. In 2007 only 12% of academics at Universities of Technologies had PhDs compared to 30% at comprehensives and 41% at universities (ASSAf, 2010).

Funding

From 2005 to 2006 the National Research Foundation (NRF) support for PhDs rose by 61%; the NRF supported 1 360 PhD students in 2005, and in 2006 the number of supported PhD candidates rose to 2 186. However, this level of increased support has not been sustained, possibly as a consequence of the DST cutting its support to the NRF in 2009. The NRF still aims to increase the number of PhDs they support to 6 000 per annum by 2025. In the meantime, though, the 1% target contribution of gross domestic product to research and development by 2008, envisaged by the Mbeki government, has not yet been realised (Cherry, 2010).

The higher education sector experiences multiple challenges as a result of inadequate public funding. In 2010 the state will allocate 0.74% of GDP to universities; this is slightly higher than the 2009 allocation of 0.71%. However, it is lower than the expenditure of other sub-Saharan African countries, including Botswana, Burundi, Ethiopia, Kenya, Rwanda, Senegal and Swaziland, which allocate up to 2.1% of GDP to higher education (CHE, 2008:9). The current rate of state expenditure on the sector is inadequate given that working conditions within many HE institutions show signs of deterioration. In various institutions there is poor and/or deteriorating infrastructure, including insufficient teaching and laboratory spaces and student accommodation. Large and growing student-lecturer ratios are an issue at higher education institutions since growing student numbers have not been accompanied by concomitant increases in academic staff. In addition there is limited funding for research programmes, including for funding postgraduate students.

During 2008-2009, government spending on research and development was 0,92% of GDP; this is below the target of 1% set by government for this period, according to the HSRC's CeSTII (Centre for Science, Technology and Innovation Indicators), (CeSTII, 2010). At present, given inadequate public funding, funding arrangements require students to contribute significantly to their studies. The imperative for prolonged funding of studies may constrain talented and eligible students, especially from indigent social backgrounds, from pursuing postgraduate degrees.

2.3 Remuneration of academics

The third major challenge has to do with academic salaries which are simply not competitive with public and private sector salaries, and the differentials between public and private sector salaries and those offered by higher education institutions is sizeable and growing. Institutions in small towns or rural institutions experience especial challenges to attract and retain academics, and there is evidence of migration from these institutions, which pay relatively lower salaries to urban and relatively higher-paying institutions. Given the financial obligations that many first-generation black graduates, and graduates from working-class backgrounds, have to their families, higher paying employment opportunities in other sectors become more attractive.

Women graduates are also highly sought-after and can often choose amongst multiple lucrative employment opportunities which are more financially attractive than employment within the higher education sector. This is evident in a number of professions, where there have been significant increases in female enrolments and graduations, but much smaller increases in female professionals (See Erasmus and Breier, 2009.)

2.4 Institutional culture

Fourth, the struggle of historically white institutions to attract and retain black and women academics can also, in part, be attributed to alienating institutional cultures. Black academics tend to find themselves marginalised by the 'whiteness' of institutional environments and cultures and the hegemony in the centres of administrative and academic power (committees, disciplines, departments and faculties) of white academics and administrators.

Young female scholars have also expressed concern about institutional cultures and with the sexism that continues to pervade male-dominated academic institutions. In addition, there are insufficient women role models and most institutions lack mentorship programmes to guide the potential next and new generations in their academic careers. Institutional and professional culture issues have been cited as reasons why, for example, female medical graduates do not want to enter certain specialisations such as surgery. Others are concerned about lack of opportunities for part time registrar positions which would enable them to specialise while also raising young children (see Breier and Wildschut, 2006). Female engineering students are often put off by professional culture issues which they encounter in their practical experience (Du Toit and Roodt, 2009).

It may also be important for higher education institutions to develop a better understanding of the so-called Y-generation and their orientation to institutional structures and work arrangements. In recent research into the recruitment of Generation Y it was noted that this generation are interested in flat structures, flexible and responsive work arrangements; do not seem to commit to one workplace or even one career for the long term and see their lives as having dual or multiple career tracks (Hammil, 2005; Smith, 2008). Consideration may need to be given to ways in which academic careers are made attractive to Generation Y as the potential pool of the Next Generation of academics.

2.5 Academic mobility

Fifth, there is a continuing loss of academic expertise through the 'brain drain', which has its basis in political and social conditions. Between 1987 and 1997, for example, South Africa lost 41 496 skilled emigrants, a proportion of whom were from the higher education sector. This figure is 3.2 times more than the officially declared figure of 12 949. Furthermore, academics constitute a highly sought after and mobile sector of society. According to ASSAf (2010), however, only a small number (14% of a total of 1060 polled respondents) of recent South African PhDs are currently employed in other countries, and almost 50% of them are employed within higher education institutions. A third of non-South African PhD students intended to stay in South Africa. Currently more than 50% of PhD graduates are employed by the higher education sector. This points to the sector's potential to absorb its PhD graduates and the propensity of PhD graduates to seek employment within the sector; thus if more PhDs are produced by the sector, it is likely that they will be employed by the sector. More than half of recent PhD graduates indicated that they were now working within the university sector (ASSAf, 2010:86).

2.6 Age profile of academics

The current age profile of academics points to another key dimension of the challenge of producing a Next Generation of academics.

Table 3 below profiles permanent academic staff at South African universities by rank, age and gender during 2009. Note that the figures are for the same categories as in Figures 2 and 3 (Professors, Associate Professors, Senior Lecturers, Lecturers and Junior Lecturers) but exclude temporary staff.

Table 3: Permanent Academic staff from Professor to Junior Lecturer, at all South African Universities by Rank, Age and Gender, 2009*

Age	Professor		Associate Prof		Sen lecturer		Lecturer		Jnr lecturer	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Under 25	0	0	0	1	4	2	32	21	42	16
25 - 34	9	14	25	44	271	283	1,009	889	222	188
35 - 44	68	184	163	263	632	743	1,203	1,183	117	148
45 - 54	219	579	263	508	572	850	882	748	77	47
55 - 59	82	458	102	250	212	336	246	235	22	15
60 - 62	40	257	29	88	70	130	47	70	4	5
63 - 65	11	114	12	34	29	42	20	29	3	0
66 - 69	2	10	0	1	1	8	6	4	0	0
Over 70	0	1	1	0	0	2	0	2	0	0
Total	**431**	**1,617**	**595**	**1,189**	**1,791**	**2,396**	**3,445**	**3,181**	**487**	**419**
Total M + F		**2,048**		**1,784**		**4,187**		**6,626**		**906**
55 +	135	840	144	373	312	518	319	340	29	20
55 + %	13.8	86.2	27.9	72.1	37.6	62.4	48.4	51.6	59.2	40.8
55 +				1,492				1,489		49
55 + %				49.2				49.1		
Total										**15,551**
55 +										3,030
55 + %										19.5

*The figures include the same categories as Figures 2 and 3 but exclude temporary academics.
Source: DoE HEMIS (2011)

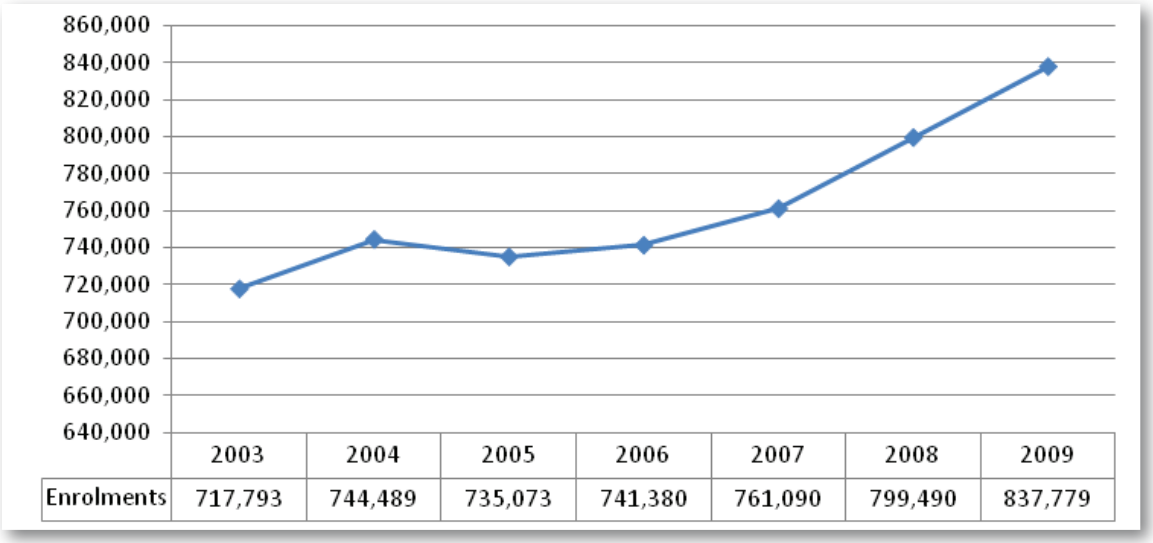
On the basis of the current retirement age of 65, in less than a decade over 3 000 or approximately one fifth of permanent instruction staff will retire and need to be replaced. Of these 32% (975) are professors and 17% are associate professors, which means the country is soon to lose almost half of its most experienced and highly qualified academics.

Although South Africa's current science and technology rankings may be equivalent to those of other middle developing economies, these achievements are under threat. The publication output of the South African research community has increased over the last four years from 6 356 units in 2006 to 9 264 units in 2009 (ISI Web or Science – Thompson Reuters). This level of productivity seems to be under threat. The most active researchers in the country are gradually ageing while not enough younger researchers and academics are being recruited and retained. Combined age and race data suggest that a serious crisis is looming. As the over 50 largely white and male cohort moves closer to retirement there is little evidence of a commensurate black and female cohort waiting in the wings and ready to emerge.

2.7 Expansion of higher education

An additional issue that has to be factored is the continued expansion of the higher education system, presented graphically in Figure 4. 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 at the latest (MoE, 2001: Scott, 2007:10). Tettey (2008) argues that mass increases in student enrolments in South Africa and elsewhere in Africa are resulting in high student staff ratios and high teaching loads, poorly qualified staff and staff vacancies.

Figure 4: Headcount student enrolments in South African higher education institutions, 2003 to 2009



	2003	2004	2005	2006	2007	2008	2009
Enrolments	717,793	744,489	735,073	741,380	761,090	799,490	837,779

Source: DoE HEMIS (2011)

Student enrolments increased from some 717 793 in 2003 to over 837 779 in 2007, a growth rate of just over 11%. However, if we compare the student enrolment data with that of academic staff for the same period (see Figure 4), it is evident that while total student enrolments show steady growth between 2003 and 2009, the overall number of academics that were employed in the system fell from 45 217 in 2003 to 43 446 in 2009. The increased student enrolments at a time of declining academic employment has led to very high teaching loads and ultimately constitutes a threat to academic standards.

3. Rationale for a National Programme

A critical task is to ensure that the Next Generation of academics is intellectually and academically equipped to substantively transform and develop South Africa's universities and significantly enhance their academic capabilities related to teaching and learning, research and community engagement. The challenges in these regards are serious and must not be underestimated. The following are some of the reasons why a national programme is needed.

3.1 The nature of academic work

Academic work today is much more demanding than before. The challenges need to be addressed both at the level of the system and among individual academics. Scott et al (2007:23) have emphasised that "systemic responses are essential for improving the educational outcomes" and the "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" (ibid:73).

Excelling in and managing the teaching, research and community engagement functions of the university and academic life and institutional transformation challenges require knowledge, specialist expertise and experience on the part of the academic. Both increased student numbers and a context where a large proportion of students are under-prepared for university study place great demands on the teaching role of academics.

Academics require pedagogic expertise to develop academic programmes and curricula, facilitate learning and assess students who come from increasingly diverse social, cultural, linguistic and educational backgrounds. It is clear that academics, and especially new and the Next Generation of academics, must navigate and undertake their responsibilities within a complex context.

A key challenge, therefore, is to ensure that the Next Generation of academics possesses the teaching-learning capabilities that are essential to produce high quality graduates and enhance equity of opportunity and outcomes for students. Given current drop-out, undergraduate success and graduation rates, a substantial improvement in equity of opportunity and outcomes for especially black students remains to be achieved. As Boughey (2008) writes, if universities "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".

3.2 Research and publishing

It has been noted that almost 50% of professors and associate professors are due to retire in the next decade. 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 Next 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.

Embarking on a research career in addition to one's teaching responsibilities is no easy task but can be facilitated by structured programmes designed to introduce the academic to the conventions of research and publishing and to help them plan a research trajectory that starts with the masters and PhD degrees that they might need to obtain.

Such a programme should also be mindful of the third dimension of academic work –community engagement (or social responsiveness as it is sometimes called) as well as the need to transform modes of knowledge production in South Africa.

Intellectual discourse, teaching and learning, curriculum and texts, and knowledge production and research at South African universities were strongly shaped by the racist, patriarchal and authoritarian colonial and apartheid social orders. Indeed, there is evidence that discourses associated with and dominant under apartheid continue to shape knowledge production and, potentially, also the production of new academics (see Herman, 2008). Given this, a Next Generation of academics must contribute to the intellectual and academic decolonisation, de-racialisation and de-gendering of the inherited intellectual spaces of South Africa's universities, and more generally, to re-orienting universities to serve, in accordance with their social purposes, new constitutional, economic and social needs and development challenges.

3.3 Transformation of institutional cultures

A Next Generation has also to contribute to the transformation of institutional cultures, especially at historically white institutions, which 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 and male academics and administrators, the concomitant under-representation of black and women academics and role-models, and insufficient 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 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.

The problems associated with institutional cultures at universities were recognized by the National Plan for Higher Education and further underscored by the recent report of the Ministerial Committee on Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions. Aspirant and new black and women academics may find institutional environments and cultures alienating and difficult to traverse and have to be prepared and supported if they are to remain for extended periods at universities.

3.4 Funding

A number of institutions have developed strategies to increase the numbers of black and women postgraduates and various historically white institutions have established programmes for the recruitment, development and retention of black and women academics. Initiatives to improve the equity profile of senior academics have also been put in place at some institutions. These programmes, which have been in operation for the better part of a decade in some institutions, have largely been made possible by donor funding. It is not possible, however, to sustain these programmes through such donor funding.

A necessary, though not sufficient condition, for a Next Generation programme is acknowledgement on the part of the state and higher education institutions that the problem of producing a Next Generation of academics, and through it also addressing social equity imperatives, is both serious and urgent. It must also be recognised that under current national, higher education and financial conditions, the building of a Next Generation of academics will not be addressed, let alone resolved, without active interventions by the state and institutions.

In as much as it is recognised that it takes an extended period of induction, practice, mentoring and support to develop as a researcher, it is inadequately acknowledged that to become an effective teacher in an academic context similarly requires an extensive period of induction, practice, mentoring and support. In the same way as theory, methodology and methods are explicitly taught as part of the grounding of a researcher, it is also necessary to ground future and new academics in the purposes of higher education, the challenges of transformation, engaging with a diverse student body, the nature and assessment of student learning, the induction of students into disciplines and knowledge production, and so on. Universities are complex institutions and, similarly, future and new academics require support to navigate, mediate and where necessary transform departmental, faculty and institutional thinking, structures, processes and practices; this includes transformation at the level of the curriculum and building a culture of scholarship in contexts where this is lacking.

Both the National Plan for Higher Education and the White Paper on Higher Education highlight the imperative for improving the equity profiles of historically white HEIs and the need to recruit and retain black and women academics in the sector as a whole. Employment equity laws also require higher education institutions to set equity targets and make progress on their achievement. In the face of both social imperatives and various challenges, it is indisputable that national and institutional interventions and structures are needed to build a Next Generation of academics, including their recruitment, selection, development and retention within higher education.

The remainder of this document outlines the key features of an envisaged systemic, national Next Generation Development Programme.

4. Towards a National Next Generation Development Programme

The values and principles of the proposed programme are informed by the following assumptions:

- Transforming the current composition of the academic workforce through attracting and retaining a socially diverse Next Generation of academics at all levels is a serious and urgent national challenge.
- The social imperatives of higher education transformation and development, including transformation and development in research, learning and teaching and institutional cultures require a well-prepared and responsive Next Generation of academics.
- The holistic preparation and progression of academics should be based on the integration of the core roles of the academic, namely, research, teaching and learning, and community engagement.
- Initiatives under the Next Generation Development Programme should be informed by a humanising pedagogy rather than deficit models.
- Investment in a Next Generation Development Programme is a joint and collective responsibility of the state and higher education institutions and must benefit higher education and society in general.
- The Next Generation Development Programme should foster the development of initiatives that build inter-institutional networks, collaboration and cooperation.

4.1 Guiding Values and Principles

The national programme for the development of the Next Generation academics will be guided by certain core values and principles:

Social Justice

- We recognise that equity and redress are social imperatives and essential to social justice for all, and an important component of the transformation of higher education. In pursuing these goals, we seek to address the inequities and barriers that keep people from learning and working to their full potential.

Transformation and development

- Given the historical context of South African higher education, the Next Generation Development Programme will seek to contribute towards higher education transformation and development through the development of new cohorts of academics.
- Furthermore, the programme will contribute to the development of capacity for the successful implementation of Next Generation staff development programmes.

Inclusion

- We recognise the need to create environments in which all individuals or groups feel welcomed, included, respected, supported and valued.
- We embrace and affirm the exciting potentialities and intellectual richness of the multiple perspectives, knowledge, ideas and experiences brought to the higher education sector by people from a diverse range of social, cultural, national and linguistic backgrounds and identities.
- The Next Generation of academics will be welcomed as respected new colleagues, who are valued for the knowledge, experience and enthusiasm they bring to their respective departments.

Diversity

- Higher education institutions must be open, inclusive, affirming, intellectually and culturally vibrant places of teaching and learning, research and community engagement where everyone is respected and supported in pursuit of social justice, development and excellence.
- We recognise that diversity is integral to academic excellence, and that without the contributions of diverse people, perspectives, and ideas, we cannot achieve the highest level of excellence in research, teaching and learning and community engagement.

Excellence

- The programme aims to contribute to the development and maintenance of academic excellence through appointing the best candidates to Next Generation positions.
- We recognise the need to provide a supportive and affirming environment that enables our Next Generation academics to reach their full potential.
- The quality of the experience of the Next Generation of academics is crucial to the creation of a transformed research and learning environment in higher education.

Colla boration

- We recognise that transformation and development goals will be achieved through the individual and collective investment of ideas, energy and resources between the state and higher education institutions, between higher education institutions, and between academic departments and those who lead and manage the Next Generation Development Programme.
- The programme has the potential to increase inter-institutional cooperation between universities as institutions collaborate towards this shared goal. Institutions with capacity need to work with institutions with more limited capacity to ensure that Next Generation academics are created for the whole system.

Sustainability

- The sustainability of the Next Generation Development programme is predicated on commitment to the social and educational value of building the Next Generation of academics as well as commitment to mobilise and invest the necessary financial resources essential to successfully implement the programme.
- In order to sustain the growth in the number of Next Generation academics it is imperative to minimise dependence on donor funding and significantly increasing government funding for the creation of a diverse pool of South African academics.

We recognise the need to clearly identify goals and desired outcomes and to formulate benchmarks, to measure the results of our effort against these, and to continuously seek ways to improve.

4.2 Purpose

The overall purpose of the Next Generation Development Programme is to facilitate the quantitative growth and qualitative development of Next Generations of academics for the South African/African higher education sector through the establishment of appropriate national and institutional structures, (as well as where relevant, multi-national) processes and activities.

A specific and vitally important purpose of the programme is to increase the numbers of black and women academics who are recruited to, prepared for, and retained within higher education. The main purpose of the programme is to focus on increasing, in the first instance, the numbers of South African scholars that embark on academic careers. However, given the current limited numbers of South African black scholars completing PhDs, and the relatively higher numbers of African scholars pursuing PhDs in this country, it makes sense to also target those scholars for Next Generation posts. Employing academics from the rest of Africa will add to the diversity of and enrich the higher education environment in this country.

4.3 Aims

The principal aim of the Next Generation Development Programme is to provide black and women South Africans and Africans the opportunity to acquire the knowledge, expertise, skills and experience necessary to function as outstanding teachers, researchers and higher education professionals.

The aim of the programme will be achieved through carefully structured institutional-level programmes of three-year duration that provide opportunities for the Next Generation of academics to:

- Acquire PhD degrees or undertake post-doctoral work, or in selected fields, acquire masters degrees.
- Enhance their disciplinary and professional knowledge.
- Build their expertise in teaching, research and community engagement.
- Gain teaching expertise and experience, including acquiring some kind of higher education teaching qualification.
- Develop research skills, including scientific publication skills.
- Obtain exposure to service-learning and community engagement.
- Participate in academic departmental activities and administration processes.
- Participate in a range of other developmental opportunities.

4.4 Objects

In pursuit of the values, principles, purposes and aims of the Next Generation Development Programme, activities oriented to developing the Next Generation of academics will seek to:

- Build understanding regarding of the tripartite purposes of higher education – teaching, research and community engagement.
- Build capacity to respond to the unique and inter-connected aspects of teaching, research, and community engagement.
- Build critically reflective competences.
- Enhance interpersonal skills, written and oral scholarly and popular communication, cross-cultural sensitivity, conflict resolution, etc.
- Provide opportunities to develop collaborative networks with academics across the university, locally, nationally and internationally.
- Facilitate the development of scholarly and professional identities through, for example, encouraging membership of discipline specific and professional organisations.
- Facilitate mentoring opportunities by experienced academics.
- Facilitate the development by academics of carefully designed and planned career trajectories.

It is important to recognise that within a differentiated higher education system, institutional missions, priorities, needs and contexts differ. The specific requirements of universities, universities of technology and comprehensive universities will need to be accommodated in any effective Next Generation Development Programme.

4.5 Expected Outcomes

- An increase in the number of South African black and women academics throughout the higher education system.
- Staff development capacity across the system to develop the capacity of Next Generation academics to enhance their ability to produce research and publish, teach a diverse student body, contribute to the transformation of institutional cultures and participate in community development projects.
- A Next Generation of academics with a clear career path within academia.
- Inter-institutional cooperation in relation to the setting up and management of Next Generation programmes.

4.6 Current lessons

Experience of existing successful Next Generation programmes points to a number of conditions that need to be in place for the successful implementation and outcomes of such programmes. These are:

Commitment to employment

There has to be a commitment by institutions to appoint (through screening) Next Generation academics upon the successful achievement of agreed goals. This entails an institution, in consultation with academic departments or research entities, making provision for the employment of the Next Generation academic through effective succession planning.

It is imperative that Next Generation academics are contracted with the understanding that, if they are successful in realizing agreed goals and developing as academics, they will be screened for vacant posts (arising through retirement, resignation) or new posts in their institutions. The future academics should have met the institution's probationary requirements by the time they have completed their contract periods, and should be ready for appointment to a tenured position.

Should the Next Generation academic decide to leave academia or move to another institution during the course of or after completion of the three-year contract, s/he or his/her new employer will be required to re-imburse the host-institution for the period employed.

Status as academic

To facilitate their development, it is important to confer on the Next Generation academic the status of an academic (as opposed to a postdoctoral fellow or student).

Mentors

It is vital that experienced senior academics should be appointed as mentors to Next Generation academics. The role of the mentor is to introduce the future academic to the complexities of academic life and to guide them in developing the requisite knowledge and skills to become successful academics. This means mentors should provide insights, based on their experience, into what underpins successful teaching and learning and appropriate assessment in the discipline, how to establish a research career, sharing strategies for course design and other departmental administrative tasks; helping the future academic to get to know institutional and departmental structures and cultures, facilitating his/her access to institutional and departmental structures, and so on.

Senior academics who wish to contribute to the development of the Next Generation of academics will be trained as mentors. It is envisaged that the Next Generation Programme will establish a national mentor development initiative for senior academics.

It is envisaged that in some cases, retired senior academics may be employed as mentors for Next Generation academics.

Three-year development plans

It is necessary to establish structured three-year development plans for Next Generation academics, with regular joint reporting by the Next Generation academic and mentor on progress.

A key role of the mentor is to work with the future academic to devise a realistic three-year development plan that sets out the developmental activities that s/he will engage in over the three-year period. The development plan is also used as a guide against which to measure the ongoing development of the future academic. Regular reports should be produced by the mentor, in conjunction with the future academic. The reports will provide structured opportunities for reflection and evaluation of the future academic's progress against the aims established for the three-year developmental plan. Development plans should be adjusted based on the lived experience of the academic in relation to the set goals.

The reports will enable the institutional leadership and programme managers to gauge the extent to which programme goals are being met and put in place additional and appropriate support as and when necessary. Where possible and appropriate, regional development programmes for Next Generation academics will be provided.

Development opportunities

There has to be an academic department or research entity that is committed to providing teaching development and other relevant development opportunities and support.

Engagement in development opportunities is made possible by a reduced teaching load, and structured within the framework of a mentorship programme, which is supported by institutional-level Next Generation structures and processes. The support would include research capacity development through participation in masters or PhD research; training, including proposal writing, budgeting and grants management (in the case of post-doctoral candidates); teaching development through participation in higher education teaching development courses such as Curriculum Design and Assessor and Moderator Development or the Postgraduate Diploma in Higher Education; participation in departmental and institutional committees, and national structures. Where appropriate it could include improved linkages with overseas institutions, industry and professional bodies. It is important to establish, where possible, mentorship of women by women and to provide special programmes for women academics (such as the workshops provided under the auspices of HERS-SA).

Institutional-level programme management

In a review of capacity development programmes for the Carnegie Foundation, Cloete and Galant (2005:5) noted that the 'governance', that is the management and implementation of such programmes within institutions, was critical. It is important that an institutional-level entity or person is appointed to oversee and co-ordinate all aspects of the programme.

Experiences of successful initiatives indicate that programmes should both have the strong support of vice-chancellors and senior managers and also be managed by entities and individuals who understand the nature of academic and academic development work. In order to ensure the coherent management of the programme, managers should have a central role in the recruitment, appointment, orientation and on-going support of mentors and future academics, the monitoring of development plans, programme evaluation and progress report writing.

In addition, the responsibilities of all parties should be clearly stipulated. This includes the responsibilities of programme coordinators, Deans, HoDs, future academics, mentors and supervisors. It is also important to structure peer support activities for Next Generation academics at an institution. Experience has shown that peer support structures are highly valued, especially within institutions where institutional and academic cultures are not as open as they could be.

4.7 Proposed structures and processes

Core programme features

- The Next Generation Development Programme will provide black and women South Africans (possibly individuals from other African countries) the opportunity to acquire the knowledge, expertise, skills and experience that are essential to function as outstanding teachers, researchers and higher education professionals.
- The Next Generation Development Programme can, if desired, be extended to include aspirant academics from other African countries through contractual partnerships with other African governments and higher education and research institutions.

- Individuals who wish to be considered for Next Generation posts must be committed to building an academic career.
- Individuals will be provided contracts and support by institutions for three years.
- Next Generation academics will be accorded the status of an academic.
- Upon completion of the three year contract, Next Generation academics should be contractually bound to undertake employment within their host institution for a three year period (in the case of individuals from other African countries employment would be with the sponsoring institution).
- Carefully structured three-year development plans will be developed for each Next Generation academic, and there will be regular joint reporting to institutional leaders and managers by the Next Generation academic and her/his mentor on progress.
- Next Generation scholars will have a reduced teaching load so that they have the opportunity to develop academic capacities through activities that could include: completing masters or (preferably) doctoral studies; post-doctoral activities; undertaking scholarly research and writing; applying for research grants; developing teaching expertise through structured programmes or qualifications; acquiring postgraduate supervision expertise; exposure to service-learning and community engagement, obtaining experience of academic administration, and attending and presenting at conferences to develop disciplinary and professional networks.
- Each Next Generation academic will be allocated a mentor whose role will be to work with the future academic to devise a realistic three-year development plan. Mentors will be seasoned academics who introduce the future academic to the complexities of academic life and guide them in developing the requisite knowledge and skills to become successful academics. It may be necessary to contract retired academics as mentors should suitable mentors not be available within an institution.

National-level programme management

- The Next Generation Development Programme should be viewed as a Department of Higher Education and Training (DHET) national capacity building project.
- The Next Generation Development Programme should prioritize the creation of opportunities for, in the first instance, black and female South Africans, with due consideration of individuals from other African countries or from other disadvantaged or under-represented groups, where appropriate.
- Earmarked funding for Next Generation posts should be made available to institutions that satisfy clear and transparent criteria. These criteria should include demonstrable institutional willingness and capacity to establish and manage high quality institutional-level programmes that provide developmental opportunities for Next Generation academics within their institutions, and appointment of successful Next Generation academics to permanent posts.
- Institutions should be required to apply for posts and funding.
- An expert reference group should be appointed to support the DHET in scrutinizing applications from institutions and making recommendations for awards of Next Generation posts to institutions.
- There should be annual institutional reporting on the management and implementation of the programme. Continued award of posts and funding should be contingent on institutions complying with specified programme requirements.
- After three years, there should be a comprehensive national evaluation of the programme.

Institutional-level programme management

- The Next Generation Development Programme should have the support of institutional-level leadership.
- The institutional-level Next Generation Development Programme should prioritize the creation of opportunities for, in the first instance, black and female South Africans, with due consideration of individuals from other African countries or from other disadvantaged or under-represented groups, where appropriate.
- Institutions will be required to apply for posts and funding, which will be earmarked for Next Generation posts. Institutions will be required to satisfy clearly specified criteria in order to access funding.
- Institutional-level programmes will be managed by a designated academic institutional entity such as a Teaching and Learning Centre / Centre for Higher Education Development or other appropriate cross-disciplinary, university-wide unit, or a person with the necessary expertise to manage and implement the programme.

- Institutions will be required to submit annual reports on the management, implementation and evaluation of the programme. Continued award of posts and funding will be contingent on institutions complying with specified programme requirements.
- After three years, institutions will undertake a comprehensive evaluation of the programme.
- Regular meta-analyses of institutional evaluations will be conducted.
- Should an institution not have the capacity to manage and implement the Next Generation Development Programme and host Next Generation academics, another institution may be contracted to provide support through a partnership agreement. It is recommended that a community of practice be established to assist institutions to strengthen their proposals for Next Generation posts / programmes before they are submitted.

4.8 Proposed financing

To date initiatives at various institutions to develop a Next Generation of academics have been implemented largely through the support of international donor funding. Such donor funding is neither open-ended nor adequate nor able to develop sustainable long-term initiatives oriented to a systemic and national effort to produce a Next Generation of academics.

It is clear that public funding through the DHET, the DST and the Skills Development Fund is required to mount a Next Generation Development Programme and to support higher education institutions to manage and implement such a programme.

It is proposed that in the light of pressures on the current higher education budget, funding for the Next Generation Development Programme should be new funding that is mobilised by the DHET, the DST and the Skills Development Fund through the National Treasury. The investment proposed below is extremely modest relative to the immense direct as well as indirect benefits that will be yielded by the Next Generation Development Programme. In the event that support from the National Treasury is not immediately forthcoming, it is proposed that the DHET examine its current categories of earmarked funds to support in the short-term the Next Generation Development Programme. Funding should be:

- of a dedicated earmarked nature that is available on application by higher education institutions
- awarded on the basis of higher education institutions meeting criteria specified by the DHET. Institutions will develop criteria for the selection of candidates.
- available for at least three cycles of three years duration
- able to provide for:
    - Next Generation academic posts of three years duration that include salaries and benefits.
    - Costs associated with infrastructure and equipment for Next Generation academics.
    - Costs associated with development activities for Next Generation academics (such as attendance of courses, workshops and conferences), their mentors and the emerging community of practice to manage and support these academics.
    - Contracting mentors for Next Generation academics.

Higher education institutions would be required to bear the costs associated with the management of the Next Generation Development Programme.

The table below indicates the costs associated with a Next Generation Development Programme. Provision is made for an annual escalation of 8%.

Table 4: Budget for Next Generation Development Programme.

Item	Year 1 (R)	Year 2 (R)	Year 3 (R)
Next Generation academic posts: 300 posts x R 350 000	105 000 000	113 400 000	122 472 000
Infrastructure and equipment: 300 posts x R 50 000	15 000 000	-	-
Development activities: 300 posts x R 50 000	15 000 000	12 960 000	13 996 800
Mentors: 300 posts x R 30 000	9 000 000	9 720 000	10 497 600
Total per year	**144 000 000**	**155 520 000**	**167 961 600**
Total for three-year cycle			**R 467 481 600**

5. Conclusion

The Next Generation Development Programme will not solve all the problems of the attraction, recruitment and retention of academics. It is clear that the current remuneration of academics also requires serious attention if South Africa is to build and sustain a high quality higher education system.

Nonetheless a structured, well-supported programme can provide opportunities for newcomers to experience the many very positive aspects of an academic career – from the personal rewards associated with successful teaching to the pleasure of achieving a published journal article or attending an international conference or participating in an intellectually stimulating community.

For a modest investment of funds, the Next Generation Development programme will reap many long-term benefits for the higher education system in general and higher education institutions.

It will represent a long overdue systemic and national tackling of the serious, longstanding and now very urgent problem of building a Next Generation of academics. It will contribute to advancing the imperatives of redress and social equity in higher education. It will also ensure that future academics are adequately prepared for the challenges of learning, teaching, research and community engagement as well as the myriad challenges of transformation in higher education. Finally, the learning that will occur through the Next Generation Development Programme and its ongoing development will be usefully applied to the cultivation of new academics generally and the more effective support of current academics.

6. References

AASAf (Academy of Science for South Africa)(2010) The PhD Study. An evidence-based study on how to meet the demands for high-level skills in an emerging economy. Consensus Report. ASSAf.

Altbach, P. (2009) It's the faculty, stupid! The Times Higher Education, 30 April 2009. http://www.timeshighereducation.co.uk/story.asp?storycode=406313. Accessed 14 October 2010.

Badat, S. (2009) Producing, transforming the social composition of, and retaining a new generation of academics. Keynote address at the Higher Education South Africa Developing the Next Generation of Academics Workshop, Rhodes University, Grahamstown, 22 June.

Boughey, C. (2008) Private communication.

Breier M and Wildschut A (2006) Doctors in a divided society: the profession and education of medical practitioners in South Africa. Cape Town: HSRC Press.

CeSTII (Centre for Science,Technology and Innovation Indicators, HSRC) (2010) National Survey of Research and Experimental Development (2008/2009 Fiscal Year) Pretoria: Department of Science and Technology.

CHE (Council on Higher Education) (2004) South African Higher Education in the First Decade of Democracy. Pretoria: Council on Higher Education.

CHE (2008) Postgraduate studies in South Africa: A statistical profile. Higher Education Monitor 7. Pretoria: Council on Higher Education.

CHE (2008) The State of Higher Education in South Africa. . Higher Education Monitor No 8. Pretoria. Council on Higher Education.

Cherry, M. (2010) South African science: black, white and grey. Nature, Volume 463, 11 February.

Cloete, N. & Galant, J. (2005) Capacity building for the Next Generation of academics. Review report for the Carnegie Project: To train and retain the Next Generation of academics. Cape Town: Centre for Higher Education Transformation.

COHORT (Committee of Heads of Research and Technology) (2004) Securing Tomorrow Today: Facing the Challenge of Reproducing and Transforming the Social Composition of New Generations of South African Science and Technology Personpower. Draft Policy Report. Pretoria: November

DoE (Department of Education) (2010) Education Statistics in South Africa 2009. Pretoria: Department of Basic Education.

DoE HEMIS (Department of Education Higher Education Management System) (2011) www.dhet.gov.za

Du Toit R and Roodt J (2009) Engineers in a developing country: the profession and education of engineering professionals in South Africa. Cape Town: HSRC Press.

Erasmus J and Breier M (2009) Skills shortages in South Africa: Case studies of key professions. Cape Town: HSRC Press.

Hammill, G. (2005) "Mixing and Managing Four Generations of Employee": FDU Magazine Online, Winter/Spring 2005. http.www.fdu.edu/newpubs/magazine/05ws/generations.htm

Herman, C. (2008) Political Transformation and Research Methodology in Doctoral Education. Higher Education Close Up 4 Conference, University of Cape Town, 26-28 June.

Ministry of Education (2001) National Plan for Higher Education. Pretoria: Department of Education.
Scott, I., Yeld, N. & Hendry, J. 2007. A Case for Improving Teaching and Learning in South African Higher Education: Higher Education Monitor No. 6. Pretoria: Council on Higher Education.

Smith, D.G. (2008) "Identifying benchmarks for success and Monitoring Progress: Diversifying the Faculty for the Next Generation - Advancing and Empowering Scholars". Harvard University – (April 11-13, 2008) http. aacu.org/irvinediveval/index.cfm

Tettey, W. (2008) Comparative analysis of Next Generation of academics indicators. Paper presented at the University Leaders' Forum Conference. Accra, Ghana, 22 - 25 November

Vaughan, C.L. (2008) Alternatives to the publication subsidy for research funding. South African Journal of Science, 104, March/April