

**Diversity Management in Higher Education:
A South African Perspective in Comparison to a
Homogeneous and Monomorphous Society
such as Germany**

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Preface

The research project and the visit to the Centre for Higher Education Development-Consult (CHE-Consult GmbH) in Guetersloh were made possible through a research grant for three months from the Alexander von Humboldt Foundation in Germany. The Scope of the project on the issues of *“Diversity Management in Higher Education: A South African Perspective in comparison to a Homogeneous and Monomorphous Society such as Germany”* includes a wide spectrum of issues related to Diversity Management (DM) in Higher Education e.g.

1. Internationalisation and its impact on diversity management.
2. Management of diversity in relation to institutional autonomy.
3. Governmental policies as steering mechanisms for diversity.
4. State funding of higher education as a steering mechanism for enhancing diversity.
5. Migration dynamics within a country and across national boundaries.
6. The numbers and preparedness of entering students from the schooling system.
7. Traditional vs. non-traditional students and appropriate admission requirements.
8. Selection and integration of students from socially disadvantaged families.
9. Integrating and accommodating working people in a higher education environment.
10. Gender/age/nationality/ethnicity/language/disability/religion/sexual orientation, and culture of staff and students as indices of diversity.
11. Assuring quality in relation to diversity management.
12. Design of study programmes as a means of managing diversity.

The broad theme of the project, as can be seen from the title, is “Diversity Management”. It is therefore necessary to give a short description of what is meant by Diversity Management so that the different aspects addressed in the report can be gauged. The International Society for Diversity Management (idm) gives the following background to the concept of Diversity management which is also applicable to the issues discussed in the report.

“Diversity Management is a (relatively) young discipline, which originated out of a maze of many different historical currents and social issues. In the USA Diversity Management is still associated (rightly or wrongly) with “affirmative action” and “equal opportunity” in multi-cultural (ethnicity, race, gender, sexual preference, etc.) contexts. In Europe the emphasis has been more on the management of language and national differences as well as equal opportunity for women (gender mainstreaming).

Both in Europe and in the USA there seems to be movement away from Equal Opportunity (or in German “Chancengleichheit”), which often, albeit sometimes unintentionally, leads to quotas and presupposes assimilation as the main adaptation principle, toward a more systematic, positive, organizational approach of diversity management, toward appreciation of diversity and the conscious striving toward a scientific as well as ethical and results-orientated approach. This approach, however, is not easy to put into practice. Conflicts and social issues obviously cannot be overlooked as they are embedded in their complexity and contexts.

This complexity entails the fine tuning and nimble use of different tools for dealing with it, and for describing each unique diversity constellation of any particular organization, community, region or country. For example, in South Africa diversity takes on a different form than in Germany. The different historical and social roots of South Africa and German diversities have to be respected and taken seriously. There are no simple recipes. As a consequence, in spite of difficulties in overcoming complexity, DM has to assume that people are able and willing to change themselves and their thinking, and thereby define and redefine diversity in a positive light.”

It soon became evident that a period of three months would be too short to carry out an in-depth study on all of the topics listed above, especially when it became clear that for comparison purposes the German higher education system is much more complicated due to the fact that, although there is a federal involvement in higher education, the jurisdiction of higher education falls within the ambit of the 16 federal *Bundesländer*. Higher education policies and the funding of higher education is therefore ultimately a *Land* responsibility. It was therefore decided to approach the project on the basis of a broad comparison, rather than a narrow (detailed) itemised list of differences and similarities of diversity management processes and the pros and cons of specific procedures to enhance diversity in higher education.

After discussions between and amongst the colleagues at the CHE-Consult and myself it further became clear that one has to be very clear in the understanding of what “Diversity Management” means in the context of Germany and South Africa. This issue will be discussed in more detail in the report. In spite of the perceived differences in this regard, it was recognised that some of the challenges and experiences that the South African Higher Education System had to (and still) face with regard to diversity management can be applicable to the German Higher Education System, if not in the short to medium term, but in the longer term when the population migration patterns within the country’s 16 *Bundesländer* and across international boundaries would compel more rigorous diversity management policies, procedures and processes.

The scope of the research project, as documented in this report, attempts to cover most of the topics listed above in the following chapters.

Chapter 1: Perspectives on Internationalisation and the impact on Diversity Management give a short overview of the history and current global trends of internationalisation of higher education. Internationalisation remains an important issue, especially in Europe, and is high on the agenda of the Ministers of Education in the European Union. The position of South Africa regarding the internationalisation issue is also discussed in this section.

Chapter 2: A perspective on Institutional Autonomy and Diversity Management, gives an outline of the concepts involved and how it is perceived by the institutions of higher education, the academia and administrators. The role of governmental higher education policies and how it affects institutional autonomy and diversity management are also briefly discussed. The evolvement and development of higher education policy in South Africa since the early 1990's and how it affects the governance and autonomy of institutions is also highlighted in this section.

Chapter 3: Population Dynamics as a driver of Diversity Management addresses the relation between migration patterns within a country and across its borders and the perceived impact it could have on diversity management. The diversity within a population of a country with regard to growth rates, age, gender, race, ethnicity, disability, level of education, religion, employment and economic status, etc. could contribute, not only to the management of diversity within the country, but will also affect diversity management in higher education.

Chapter 4: Diversity Management from a Student Perspective contains a discussion on the state of the diversity in the higher education sector in South Africa as an example of diversity management within a highly regulated environment. The South African higher education funding framework, as an instrument to encourage diversity at institutions for higher education, is also discussed in this section. The lessons learned from applying a funding framework which has equity and redress as an objective is also given. An attempt is made to determine the similarities and differences in student enrolment profiles in Germany and South Africa and the effect on diversity management at higher education institutions.

Chapter 5: Diversity Management from a Personnel Perspective reveals the current challenges faced by higher education institutions in South Africa with regard to diversity management of its staff. The impact of legislation regarding employment equity on all public and private enterprises in South Africa is also discussed. The main premise for introducing an Employment Equity Act in South Africa was to eliminate and rectify the discriminatory practices of the past. The "majority - minority" distinction in Germany is just about the opposite to South Africa's and therefore any comparison between the two countries is open for debate. The lessons learned in South Africa could, however, in certain instances, be extrapolated for Germany.

Chapter 6: Diversity Management from an Institutional Management Perspective addresses the responsibility of senior managers in a higher education institution to manage diversity within the institution and ensure compliance with government policies. The very important role that management information plays in empowering the senior managers to perform their obligation of managing diversity is highlighted in this section. The utilisation of a comprehensive institutional management information system as an instrument to support a diversity management process is proposed.

Chapter 7: Diversity Management: Developing Performance Measures. It is assumed that to manage diversity in any organisation, including the higher education system, a

number of instruments have to developed, instruments which will, over time, be able to measure the change in the profiles of staff (and students in the case of higher education). These performance measures (indicators) can be used to observe the trend of diversity management policies and against certain goals set by the management of a university.

Chapter 8: Conclusion: Comparison of Diversity Management between South Africa and Germany. In conclusion a short summary is given for the observations made in each of the previous chapters with regards to similarities and differences of the state of diversity management in each of these areas.

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Abbreviations used in the Report

ANC	African National Congress
AU	African Union
CEO	Chief Executive Officer
CHE	Council on Higher Education
CHE Consult	Centre for Higher Education Development - Consult
CHEPS	Centre for Higher Education Policy Studies
COMETT	Co-operation Programme in the Field of Technological Training
DoE	Department of Education
EAIR	European Association for Institutional Research
EAN	European Access Network
ECTS	European Community Course Credit Transfer System
EE	Employment Equity
ERASMUS	European Action Scheme for the Mobility of University Students
EPU	Education Policy Unit
EU	European Union
EUA	European University Association
FTE	Full-time Equivalent
GDP	Gross Domestic Product
HE	Higher Education
HEA	Higher Education Act
HEI	Higher Education Institution
HEQC	Higher Education Quality Committee
HIV/AIDS	Human Immune Virus/Acquired Immune Deficiency Syndrome
ICT	Information and Communication Technology
IDM	International Society for Diversity Management
ILO	International Labour Organisation
ISI	Institute of Scientific Information

JSP	Joint Study Programme
MoE	Ministry of Education
MIS	Management Information System
MTEF	Medium Term Expenditure Framework
NCHE	National Commission on Higher Education
NEPI	National Education Policy Initiative
NEPRU	Namibian Economic Policy Research Unit
NFF	New Funding Framework
NPHE	National Plan on Higher Education
NQF	National Qualification Framework
NSC	National Senior Certificate
NSFAS	National Student Financial Aid Scheme
PQM	Programme and Qualification Mix
RWTH	Rheinische-Westfälische Technische Hochschule (Aachen)
SADC	Southern African Development Community
SCIENCE	Human Capital and Mobility Programmes
SOCRATES	European Community Action Programme in the Field of Education
TEMPUS	Trans-European Mobility Scheme for University Studies
THES-QS	Times Higher Education Supplement – Quacquarelli Symonds
UK	United Kingdom
UNISA	University of South Africa
USA	United States of America
WP3	Education White Paper 3: A programme for the Transformation of Higher Education

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1 Perspectives on Internationalisation

1.1 International Perspectives

Higher education policies and agreements between countries and states in most countries of the world are only one of many important elements of any national government's commitment to enhance and promote the internationalisation of higher education. Higher education policies, however, encompass many more issues of which internationalisation is but one component. Internationalisation in its own right includes the following issues:

- (a) Co-operation
- (b) Compatibility
- (c) Competitiveness
- (d) Mobility of students and staff
- (e) Quality assurance
- (f) Integrated assurance (transferable credits)
- (g) Funding mechanisms

Higher education policy directives of governments also take into account the current trends in internationalisation that is so obvious in the European context. Europe has a dynamic history of declarations of intent by the European countries that concerns co-operation in higher education. It is difficult, however, to find any explicit references in the agreements to how such co-operational treaties in higher education will be financed by the participating countries.

Before reviewing and analysing the new higher education policies that emerged in South Africa since the new democratic order took effect in 1994, it is necessary, for comparative purposes, to refer to trends that are taking place internationally.

Europe has a long history of higher education mobility and co-operation. Internationalisation has always been an inherent feature of European higher education policy. Knowledge transfer took place from the earliest of years as scholars and students travelled (although slowly) across Europe and the world since the Middle Ages. Research has never been completely bounded by national borders. It is also known that certain disciplines and knowledge (i.e. mathematics and physics) are universal in nature. A main driving force in the modern age that gives the impetus to formulise internationalisation as a policy of higher education is the advancement in information and communication technologies (ICT) sector. The consequence was that the policies to address internationalisation at institutional, national, and international levels had to be developed to rationalise and regulate the transfer of knowledge, which may lead to the transfer of credits and the international recognition of qualifications.

Teichler (2004) noted that the debate on higher education issues usually focuses on a limited number of issues at a time and then only for a few years. The successes or failures of the

initiatives taken at that point in time are then debated and reflected upon afterward. Teichler mentions further that such periods existed in the past 30 to 40 years focusing on, for example, education and opportunity, improvement of teaching and staff development, links between higher education and the labour market, diversification and trends towards a knowledge society.

Internationalisation became the major topic of discussion in the 1990's and early 2000's. Teichler also states that in Europe a number of terms or (synonyms) are used to characterise the internationalisation process of which the following are examples:

- (a) Internationalisation can be defined as the totality of substantial changes in the context and soul of higher education relative to an increasing frequency of border crossing activities amidst a persistence of national system.
- (b) Europeanisation as a regional version of internationalisation (or globalisation). This implies that the academic relationships between Europe and many other regions of the world differ in terms of culture, horizontal communication, co-operation and the potential of integrating higher education systems.
- (c) Globalisation which can be seen as a total and substantial change in higher education which relates to growing interrelationships whereby national borders are blurred or even vanish. (Globalisation and internationalisation are often used interchangeably). Usually globalisation is also linked to market driven international competition for status and reputation as well as commercial knowledge transfer across borders.

Currie and Newson (1998) stated that globalisation (internationalisation) of higher education is viewed by some educationalists as being overridden by issues such as managerialism, competition and resource acquisition. The great visions of a knowledge society, a global higher education village and a global learning environment, no longer feature prominently in the internationalisation of higher education.

It can, however, be observed that higher education in Europe, with its history of developing and implementing multi-country co-operation agreements, is again focusing on Europeanisation of its higher education (i.e. only focussing on Europe). The Europeanisation issue was also advocated by Prof. Guy Neave, the keynote speaker at the Forum of the European Association of Institutional Research (EAIR) in Barcelona in September 2004.

The following brief historic overview of the Europeanisation of the higher education sector will show that the commitment of the countries in Europe to "internationalise" higher education in the European-region are taken seriously by the countries of the European Union (EU). The paper on which this synopsis is based was presented at the CHEPS Summer School on Higher Education Research, 9-13 July 2001, and was published in the journal, Higher Education Policy ((2003), 16, pp161-178).

The European Union's higher education policy can be presented as a development of three phases consisting of incentive programmes with increasing volumes and budgets.

Phase 1:

The first meeting of the Ministers of education of the then six countries of the European Community took place in 1971. A subsequent meeting in 1974 resulted in the establishment of a European Committee and the adoption of the *Action Programme in the Field of Education* (1976). This Action Programme was upheld until 1992.

The signing of the Treaty of Maastricht in 1992 laid the foundation for the second phase. The treaty provided for three priority areas regarding higher education:

- ➔ To increase co-operation between higher education institutions in Europe.
- ➔ To improve the possibilities for academic recognition of diplomas and the duration of study programmes.
- ➔ To encourage the freedom of movements and mobility of teachers, researchers and students.

A programme for the allocation of grants, the Joint Study Programme (JSP), was also established to support the treaty. The JSP supported student exchanges as part of the normal curriculum, teaching assignments for staff, and joint curricular development. The grants, however, were "modest".

Phase 2:

The second phase of the Europeanisation of the higher education started in 1983 with the broadening and enlargement of the scope and weight of the EU higher education programmes. The European Court of Justice played an important role in this phase by interpreting the basic treaty in much broader terms. From this broader perspective the Council of Europe and the Council of Ministers actively encouraged the co-operation in higher education, the promotion of free movement and the mobility of teachers, students and researchers. This broader vision instigated programmes that focused on education within the European Community. The following are examples of such programmes:

- ➔ COMETT (1986): Higher Education - Industry co-operation programmes in the field of technological training.

- ERASMUS (1987): European Action Scheme for the Mobility of University Students. This scheme provided for the mobility of students between higher education institutions and also included a pilot project, which was called the European Community Course Credit Transfer System (ECTS).
- Lingua (1989): A programme similar to ERASMUS but which concentrated on the teaching and instruction in different languages.

During the second phase, which ended in 1992, several other programmes were initiated over and above the main ones mentioned above. It consisted of research and development programmes such as SCIENCE, human capital and mobility programmes and TEMPUS, the student mobility scheme based on the ERASMUS programme and targeted at Eastern and Central European countries.

Phase 3:

The multitude of educational programmes that were supported by the European Union (EU) during Phase 2 required a significant proportion of the EU budget relative to the financial requirements of Phase 1. This position gave rise to the governments of the European Union to include education and training in the Treaty on European Union (the so-called Treaty of Maastricht) signed in 1992 and effective since 1 November 1993. This was the beginning of Phase 3. Many of the previous programmes were extended, but now in a coherent framework and supplemented with new programmes, e.g., in secondary education. The framework of the Maastricht treaty consisted of three tracks, namely:

- SOCRATES: In the field of education (relevant for higher education mainly through the ERASMUS and Lingua programmes).
- Leonardo da Vinci: Mainly vocational training up to and including higher education.
- Youth for Europe: Mainly focussed on activities outside the education system and specifically aimed at young people.

The framework was later adapted and extended to 2006. It now also includes and emphasises the importance of “virtual” mobility, in other words, providing a European experience for those who are unable to study abroad. This includes the development of new ICT technologies, multimedia material and computer networks to support it.

Phase 4: (Bologna)

This short account of internationalisation from a European perspective illustrates the commitment on the part of Europe to actively pursue the idea of an “international” higher education system. Although the structures created within the European Union served Europe best and were designed to enhance European higher education co-operation, Europe also extended the idea of “internationalisation” globally through entering into bi-lateral agreements between European countries and other countries outside Europe (e.g. Africa, Asia and the USA).

The effect and success of Europe’s extensive efforts to internationalise higher education, specifically in and across the EU countries, cannot be gauged by using a one-dimensional performance criterion. It will certainly be found that bi-lateral and multi-lateral co-operation agreements between two or more of the EU countries toward the exchange of students and staff and the development of more coherent study programmes were very successful while other similar agreements failed. The reasons for success or failure probably lie in the culture and commitment of the participating institutions.

Simultaneously other developments that concern higher education were implemented between two or more individual European countries; for instance, on 25 May 1998 the Education Ministers of Germany, France, the UK and Italy signed the Sorbonne Declaration. This declaration was an effort to harmonise the so-called bachelor-masters programmes between the four countries.

A year later, on 19 June 1999, all of the 29 Ministers of Education of the European Union and the associated countries signed the Bologna Declaration that was subsequently approved by the European rectors of the higher education institutions (European University Association).

The Bologna declaration set out the goals and actions that had to be achieved by 2010 and include the following according to De Wit (2003):

- ➔ *“Enhancing the comparability (this does not mean uniformization) of Europe’s higher education systems on the basis of a two-cycle system (undergraduate and graduate) supported by an European Community Course Credit Transfer System (ETCS), as a means of promoting the mobility of students.*
- ➔ *Enhancing the employability of Europe’s citizens.*
- ➔ *Improving the competitiveness of Europe’s higher education as a whole.*
- ➔ *Promoting European co-operation in quality assurance.”*

Amaral and Magalhães (2004) also included in the list the following:

- ➔ *“Promotion of mobility by overcoming obstacles to the effective exercise of free movement.*
- ➔ *Promotion of the necessary European dimensions in higher education, particularly with regard to curricular development, inter-institutional co-operation, mobility schemes and integrated programmes of study, training and research.”*

The Bologna declaration ends with the following phrase:

“We hereby undertake to attain these objectives (as summarized above) – within the framework of our institutional competences and taking full respect of the diversity of cultures, languages, national education systems and of university autonomy – to consolidate the European area of higher education. To that end, we will pursue the ways of intergovernmental co-operation, together with those of non-governmental European organizations with competence on higher education. We expect Universities again to respond promptly and positively and to contribute actively to the success of our endeavour. ”

On the broader, international (European) scale, however, this is not necessarily the case. De Wit (2003) for instance states:

“In reality, the development of the EU’s higher education policy went back and forth – a process closely related to the European integration process as a whole. This process can be described as a constant struggle to find a balance between the powers of the EU and the powers of the individual national member states. Governments of member states had to choose between the benefits of co-operation and the benefits of national sovereignty. The balance reached has never been definite and it differs between and even within the pillars of the EU (i.e. the European Communities, foreign and security policy and police judicial co-operation).”

To highlight the difficulties and intricacies of the concept of internationalisation from the European point of view, De Wit (2003), mentions that member states (of the EU) face an encroachment on their responsibilities from a number of angles, for instance:

- ♦ Individual citizens can invoke European rights that may run counter to national legislation.
- ♦ Higher education institutions can participate in European programmes at their own discretion.

- ♦ The European Commission has the right to develop incentive programmes without the assent of all the member states.
- ♦ Member states, nevertheless, at the same time retain strategic control in education. State funding is still the main funding base of higher education.
- ♦ National states still protect their sovereignty, even when supporting internationalisation.
- ♦ Education, as a part of national heritage, remains a key element in cultural sovereignty.
- ♦ National sensitivities play an important role in the higher education policy of the European Union”.

From the above viewpoints De Wit (2003) drew the conclusion that:

“There are no direct signs (certainly not in the short term) that point toward a small role for the national state. This is symbolised by the failure of the EU to create a common framework for academic recognition of diplomas throughout the Union. Strictly voluntary interstate co-operation remains still the rule here.”

At this stage, despite all the treaties, student mobility in Europe appears to be limited to a small percentage of total enrolment. Amaral and Magalhães (2004) states that:

“Despite all European funded mobility programmes the percentage of European-mobility students dragged ashamedly behind the same percentage in the early 17th century and it is very unlikely that the percentage will increase in the future due to the costs of international mobility.”

1.2 The South African Perspective

The short introduction on the internationalisation of higher education, especially as it relates to Europe, may seem to be disconnected from the overall objective of the report as stated in the title. Internationalisation, however, can have a direct impact on governmental policies on higher education and on the autonomy and governance of higher education institutions.

It is obvious from the overview on internationalisation that the governance and autonomy of institutions of higher education in the individual countries that form part of the international agreements may be threatened by such overarching agreements.

The analyses and findings of researchers in higher education with regard to internationalisation in the context of, for instance Europe, can in some respects be extrapolated to the higher education sector in Southern Africa through the Southern African Development Community (SADC) Protocol and even in Africa through the newly established African Union (AU). The same higher education programme diversity, management styles, cultures and languages (even more than in Europe) exist on the African Continent but with an additional restrictive component, namely that of the financing of such agreements and declarations. Africa, to a large extent, will most likely always be dependent on international donor funding if it wishes to be a partner in the internationalisation of higher education.

As far as South Africa and the Southern African Development Community (SADC) are concerned, an attempt was made to contribute towards globalisation (in its narrowest sense) of the higher education sector in the region by drafting a Protocol on Education and Training, which was signed by the twelve SADC countries on 18 September 1997. Similar attributes were addressed in this protocol as were contained in the declarations of the European Union.

A comprehensive and detailed report that analyses the evolution, scope, implementation and outcome of the protocol, was made by Hahn (2004).

The report emphasised that:

“The development of structural compatibilities of programmes and degrees, the harmonization of law, the formulation of common standards and procedures e.g. in quality assurance and access, relevant curricula and coordinated development of institutional profiles and programmes are challenging tasks for policy formulation and implementation on national level and an even more challenging tasks for policy formulation on the level of the higher education and research institutions. Regionalisation or “internationalisation” of higher education implies multidimensional processes of reform and innovation on all system levels of the sector”.

The report also indicated that processes and procedures for implementing that protocol (including the work done by technical committees and task teams) are constantly in flux and seem to operate in an incoherent manner. There seems to be a lack of commitment on the part of some of the SADC countries that signed the protocol. This lack-lustre approach to the implementation and actions on the protocol may, to some extent, be seen as being too “soft”. It contains no specific goals, aims and time frames that are needed to implement the protocol for its intended consequences.

Hahn addresses almost all of the issues in her report on the SADC protocol on Education and Training that are also issues within the agreements and declarations of the European Union. Similar problems are identified, but to some extent the SADC region’s problems are compounded by other dimensions that do not form part of the internationalisation process of European higher education. Such dimensions concern the academic standards, institutional

and political developments and structures, as well as social dimensions, which include access, diversity in the schooling system and HIV/AIDS, which could have a devastating effect on higher education within the next 5-20 years.

Hahn identified the following reasons for the relatively slow implementation process of the SADC protocol on Education and Training:

- ♦ Lack of financial and human resources.
- ♦ Heterogeneity and fragmentation of the higher education system.
- ♦ Uneven distribution of capacity at national and institutional level.
- ♦ Inconsistency of policy.
- ♦ Lack of instruments for sector co-ordination and integration.
- ♦ Lack of data and information.
- ♦ Lack of concreteness and operationalisation.
- ♦ Lack of ownership.

A conclusion that can be made on the SADC protocol, as far as education and training is concerned, is that the document is strong on policy but weak on implementation due to some of the above-mentioned reasons.

2 Perspectives on Institutional Autonomy

2.1 International Perspective

Although the main premise of this report is “Diversity Management in Higher Education” it may be argued that institutionalised diversity management policies may directly impact on the autonomy of institutions of higher education. It was therefore deemed appropriate to include a section on some perspectives of institutional autonomy that may be interpreted as being a “barrier” to the broadening diversity at some institutions.

In Chapter 1 it was shown that internationalisation (or globalisation) can also play a role in diversity management in higher education and can also affect the way institutions are governed. In addition, international treaties and declarations may also have an influence on the academic freedom in institutions of higher learning, which is seen by many academics as a fundamental right of academia.

To pursue the issue of institutional autonomy it will be necessary to define what is meant by the concept. Definitions given by various authors and academic scholars may have different nuances but, when analysed carefully, all of them express the same basic fundamental values.

Walter Kamba (2000) gives the following definitions:

“Academic autonomy applies to the institution. It may be defined as the right of academic institutions to decide freely and independently how to perform their tasks. In the presence of academic autonomy, together with its scope, the university must be treated as an independent body, capable of action”.

De Groof et al. (1998), defines institutional autonomy as follows:

“The concept of institutional autonomy implies that the university enjoys freedom from governmental regulation in respect of the internal organization of the university, its governance, the internal distribution of financial resources, the generation of income from non-public sources, the recruitment of its staff, conditions of study and finally, the freedom to conduct teaching and research”.

In short the authors state that in theory:

“Institutional autonomy is that condition which permits an institution of higher education to govern itself without external interference”.

but in practice:

"No higher education system is wholly free from external control. Furthermore, institutional autonomy is not constant over time. It is rather a boundary condition between university, government and society, which is capable of being modified, redefined and having new conditions enforced as a price of its continuation." (Tapper & Salter, 1995).

The literature also refers to the fact that, as implied in the quotation above, that institutional autonomy is "conditional". This may be interpreted to mean that an institution is autonomous as long as it fulfils certain previously defined criteria of cost, output or performance measures laid down by government, who provides the funding of the institution. In a sense this defines the link between institutional autonomy and accountability, performance assessment and auditing. Furthermore institutional autonomy can never be above the law and is always answerable to the legal instruments of a given country or state.

Institutional Autonomy and accountability are, therefore, two sides of the same coin. Institutions of higher education have to take this into account when they determine (or decide) whether gains in "process" autonomy are worth the losses in "product" autonomy. It becomes a real problem if and when national governments want to control both "the process" and "the product". This will lead to an erosion of institutional autonomy.

The literature on institutional autonomy is vast and diverse. It ranges from theoretical points of view of individuals to broader country specific perspectives.

Chiang (2004), for instance, defined Institutional autonomy simply as:

"... the university's power to govern its own affairs without external interference."

Such a definition, however, ignores the complicated nature of autonomy and Chiang further stated that:

"... the degree of university autonomy depends not only upon how much room for self-government is left to a university, but also upon how much ability a university has to fulfil its vision. Hence, imposing one set of criteria to measure university autonomy in different countries and claiming that the results are the reality of university autonomy may be a doubtful procedure."

2.2 The South African Perspective

Institutional autonomy in higher education is, to a large extent, determined by the way in which national policies on higher education are drafted and implemented. The driving forces that influence and determine higher education policies of a country are firstly dependent on the previous and current political dispensations of the country. Secondly, the global trends and developments in a changing higher education environment also play a part in the formulation of higher education policy. Thirdly, internal pressures from the different stakeholders within a country are also an influencing factor and may even in some sense be overriding the political agenda of the incumbent government.

National higher education policies and the global trends (that may contradict the priorities of the government) and the other stakeholders' views, may lead to policies that are dichotomous, incoherent and open for a number of different interpretations. These policies may have a direct (and also indirect) impact on the autonomy of higher education institutions. The interpretation of the higher education policies, as was pointed out, may be interpreted by governments, institutions and individuals (administrators and academics) in different ways that suit them best.

The formulation of the higher education policy in South Africa, after the apartheid era, has been rapid and sometimes tumultuous. Consultative engagement in higher education policy formulation commenced after the unbanning of the resistance organisations in 1990. The approach was not just to reform the old system through tinkering, but also to fundamentally restructure the system.

Several of the Education Policy Units (EPU) at various "progressive" universities in South Africa contributed to the so-called, NEPI (National Education Policy Initiative), documents which were published in 1991/92. The reports contained explicit views on how the higher education landscape should look like under a democratically elected government.

In Subotzky's paper in Eggins (ed.) (2002), he notes that at that point in time the tension between equity and development was already clear. Policy goals set out in the NEPI documents were directed towards a strict sense of equity, which was interpreted as parity and equality. This was then stated as *"a goal of a single, co-ordinated (higher education) system in terms of which the multiple historical advantages concentrated among white institutions would be dismantled and equally high black ones created."*

The policy formulation process continued in the period prior to the first democratic elections in 1994. The ANC government-in-waiting made use of the EPU's and policy think tanks to conceptualise and formulate a higher education policy to incorporate in ANC election manifesto. After the election the new minister of education identified two priorities in higher education, namely:

- ➔ To establish a consultative process for developing a comprehensive policy framework and legislative instruments for transforming the higher education system.
- ➔ To establish the required new bureaucratic and statutory structures for the transformation of higher education.

The first priority led to the setting up of the National Commission for Higher Education (NCHE), which produced its report in 1996 (NCHE ,1996). The report was highly regarded, both nationally and internationally, as a comprehensive engagement with the complexities of higher education transformation.

After much deliberation, consultations and reformulations the “*Education White Paper 3: A programme for the Transformation of Higher Education*” (WP3) was published in the Government Gazette in July 1997 (DoE ,1997). The White Paper outlines a comprehensive set of initiatives for the transformation of higher education through the development of a single co-ordinated system with new planning, governing and funding arrangements. The White Paper outlined the principles upon which the transformation of higher education sector would be based as follows:

“The ministry regarded the following as fundamental principles that should guide the process of transformation in the spirit of an open and democratic society based on human dignity, equality and freedom:

- ➔ *Equity and redress*
- ➔ *Democratisation*
- ➔ *Development*
- ➔ *Quality*
- ➔ *Effectiveness and efficiency*
- ➔ *Academic freedom*
- ➔ *Institutional autonomy*
- ➔ *Public accountability.”*

The WP3 is a well-written document and few would question the democratic legitimacy of the various values, principles and goals that are stated there. The broad framework, outlined in the document, tried to cover every aspect of higher education in 50 pages, which left the interpretation thereof wide open. The very breadth of the policy document allowed for diverse interpretations, which resulted in unanticipated outcomes that were contrary to national policy intentions and goals. Two examples are (i) the WP3's endorsement of a programme-based rather than a discipline-based system for qualifications and (ii) the funding framework that was expected to be the main steering mechanism, for the higher education system seems to produce an outcome that was not anticipated.

During the immediate post-election period (after 1994) the Government was determined to establish its ideological and political credentials. The Government had to demonstrate

immediate visible progress from the inherited apartheid system. The fact that a Tripartite Alliance was in effect for a two-year period after the election should also be taken into account when evaluating the rate of change of the higher education system. During this period the majority party had to take the other parties into account in its policy formulations.

In very few instances did educational policies indicate clear concrete implementation steps, with the result that the policy terrain has been characterised by dramatic policy announcements and the production of sophisticated policy documents, which, however, make no or very little reference to the modalities of implementation.

The Government's intent for higher education, as articulated in WP3, eventually culminated in the Higher Education Act of 1997 (HEA, 1997) with the first priority of establishing a Higher Education Branch within the Department of Education and instituting the Council on Higher Education (CHE) and its Higher Education Quality Committee (HEQC).

Immediately after the establishment of the Higher Education Branch they were confronted with a number of burning issues, for example:

- ➔ The sudden institutional crises in historically disadvantaged institutions, precipitated by an unanticipated drop in student numbers as well as management and financial problems.
- ➔ The incorporation of colleges of education into existing universities.
- ➔ Establishing the three-year rolling student enrolment planning process.

In 1999 a new minister took office and immediately revealed that his first priority would be the restructuring of the higher education system. The Minister constituted a National Working Group to report on the size and shape of the anticipated new higher education system. The recommendations of the National Working Group, contained in the "Size and Shape" document, were somewhat controversial and did not conform to the expectations of the Minister and of some of the other stakeholders in the higher education sector. The main thrust behind the National Working Group's brief was, according to the Minister, to arrive at an optimum number and range of institutions for the system to fulfil the obligations as set out in the WP3 and the Higher Education Act.

The Minister then requested the Council on Higher Education (CHE), as required by the Higher Education Act, advise him on a policy framework to implement the envisaged new higher education landscape.

Having taken into account the policy directives contained in the WP3, the Higher Education Act, as well as the report of the Ministerial Working Group and engagement with the higher education sector, the CHE issued their report "*Towards a New Higher Education Landscape*:"

Meeting the Equity, quality and Social Development Imperatives of South Africa in the 21st Century” in 2000. This report, again, was highly controversial in setting up a fairly rigid institutional typology that served to reinforce historically institutional advantages. The higher education sector strongly opposed some of the findings and recommendations in the CHE report.

It is clear that the process to devise and establish a new higher education landscape, since the early 1990's, was based on the new Government's desire to demonstrate to the electorate a radical and rapid change from an old geo-political apartheid-based system to a democratic and equitable dispensation. The desired system was seen as a single co-ordinated higher education system which would redress past discrimination, provide equal opportunities to students and staff, pursue excellence, respond to the needs of the country and contribute to the advancement of all forms of knowledge and scholarship, in keeping with international standards of academic quality (in reference to the preamble of the Higher Education Act).

The time lag between the formulation of policy in the form of “framework” documents, as was indicated above, and the implementation of well formulated strategies, left space for the higher education institutions to interpret and act on the available policy documents in different ways. Subotzky (2002) described this as an “implementation vacuum” caused by the absence of a comprehensive regulatory framework. Subotzky made the following comments with regard to the “implementation vacuum”:

“For the advantaged and capacitated institutions, this meant entrepreneurial seizing market opportunities (typically through satellite campuses, technology based distance education programmes and business ventures to commercialise knowledge and services) or positioning themselves strategically within the market by developing innovative inter-disciplinary programmes and undertaking academic restructuring. Some institutions also began to structure themselves on the entrepreneurial model (Clerk, 1998a)”.

“For some historically disadvantaged institutions, on the other hand the implementation vacuum carried negative consequences. The postponement of a proposed new funding formula (which was expected to incorporate a finer distribution of public funds and redress measures) and the absence of a substantive redress policy despite sustained ongoing symbolic commitment to this were particularly problematic in this regard.”

Changes in the higher education sector, however, have occurred over the past 16 years (1994-2009), despite the Government's policy framework documents that had been published since 1996/7. Analyses show that the student composition has changed radically with a high number of Black enrolments in the system as a whole, and especially at the historically advantaged institutions. Despite the high aggregated growth patterns of Black students, there still remained a somewhat skewed distribution as far as Black and female students were concerned, which was still clustered in the traditional social sciences fields of

study and in the lower qualification levels. It can also be observed that enrolments at some historically disadvantaged institutions dropped significantly, mainly as a result of student fee problems, but also to some extent as a result of the attractiveness of previously white universities to which academically able students were now gaining access.

Another interesting view by Subotzky (2002), which relates to the “vacuum”, is the following:

“In terms of national policy and planning, most of these initiatives and charges (by some entrepreneurial institutions) were unanticipated – bearing out the point that significant changes in the higher education system occurred in spite of policy and not because of it. The institutional initiatives were somewhat suspiciously regarded by the ministry in that they constituted an unregulated proliferation of programmes, delivery sites and partnerships driven by sectional institutional interests that threatened the coherence of the goal of a planned and co-ordinated system and in turn national interest. As a result, the policy and legislative framework has become fairly strongly regulative in character.”

The controversial CHE report and the actions of some of the higher education institutions during the period of perceived relative inactivity by the Ministry gave rise to a very strained relationship between the Minister and the higher education sector. The Minister was obliged to act to give impetus to the implementation of the vision for higher education as articulated in WP3 and which is contained in the Higher Education Act. The Minister subsequently published the definitive *National Plan for Higher Education* (NPHE) in February 2001 (DoE, 2001), four years after the visionary *Education White Paper 3: A Programme for the Transformation of Higher Education*. (DoE, 1997).

The NPHE describes the fundamental principles and framework for the transformation of the higher education sector. The document explicitly states that the principles and framework, as outlined in the NPHE, “are not open for further consultation.” Taking the last statement into account, the NPHE refers to institutional autonomy as follows:

“The Ministry anticipates that there are likely to be objections from some quarters on the ground that the National Plan infringes institutional autonomy.”

and further that:

“In terms of the Higher Education Act, 1997 (Act No 101 of 1997), higher education institutions are autonomous. However, the Act does not grant higher education institutions unfettered autonomy or independence. The preamble to the Act clearly spells out that autonomy must be coupled with accountability.”

Subotzky (2002), sees the NPHE as a strongly interventionist document, indicating stronger centralised control of the system. The interventionist character of the plan and the ministry is paradoxical in that it largely fosters market-like behaviour through the planning process, while transformation and equity – the goal of the “traditional” interventionist role - are not actively being promoted.

This interventionist role of the Ministry is further depicted by the following examples:

- ➔ The Programme and Qualification Mix (PQM) exercise which tries to address the proliferation of higher education programmes.
- ➔ The regulation of so-called “distance education” programmes, without taking into account the global advancements in the ICT environment.
- ➔ The non-voluntary merger and incorporation process without consulting the higher education sector. This process signals a shift from co-operative governance to coerced co-operation (Cloete et al., 2002).
- ➔ Stronger powers have been vested in the Minister through recent legislation and amendments to the Act (e.g. the new funding framework).
- ➔ Decisive operational steps are prescribed by the Minister e.g. it establishes targets for increased participation rates, graduation rates, research outputs, allocation of full-time equivalent (FTE) student places, etc.)

Viewpoints, highly critical of the interventionist role of the Minister, can be found in the literature. The following harsh view concerning the merger process, for instance, comes from Subotzky (2002):

“From the outset, however, it was never clear how this reduction (from 36 institutions to 22 (23) merged institutions) would necessarily advance the policy goals of efficiency (mergers are not a cheap option – cost was estimated at R3,6 billion), effectiveness and systematic equity (despite numerous mergers between previously advantaged and disadvantaged institutions). In the absence of a compelling rationale, the minister’s single-minded insistence on system pruning appears to be primarily motivated by the political need to achieve demonstrable change.”

The current higher education system is perceived by the higher education sector to be centrally driven and controlled and therefore infringes on the institutional autonomy of the higher education institutions. The institutions are confronted with a bewildering array of policy documents and planning initiatives, which causes a severe strain on an institution’s capacity to respond to the new imperatives. In addition, institutions are subjected to labour- and employment equity legislation, which are extremely difficult to comply with. In the absence of sensible and realistic policy co-ordination and prioritisation, institutions find that the multiple demands on them is exhausting capacity, which will contribute to a situation where

institutions will not be able to comply with all the demands. This may lead to institutional resistance to change and implementation of government policy.

In conclusion on the issue of institutional autonomy it can be observed that internationally there has been a decided shift away from central control and management of higher education systems by national governments to models that enhance the institutional autonomy. On the other hand the literature on the rapidly changing landscape of higher education in South Africa indicates a clear trail towards state control and significant new powers of control given to the Minister of Education. (Fehnel, 2002).

A few examples to illustrate some of the inconsistencies between policy directives and implementation and the response of the institutions are given below.

Size and Shape

NPHE: The National Plan establishes indicative targets for size and shape of the higher education system, including overall growth and participation rates, institutional and programme mix, and equity and efficiency goals. It also provides a framework and outlines the processes and mechanisms for the restructuring of this institutional landscape of the higher education system, as well as for the development of institutional three-year “rolling” plans.

Institutional perspectives: An increase in the participation rate of the 20-24 age group to 20% is set as a target in the WP3 to be accomplished over the next 10 to 15 years. The plan, however, states that financial constraints and claims on the fiscus to address a range of social priorities make it unlikely that there will be significant additional resources available for higher education which makes the implementation of the participation rate policy directive unlikely.

The DoE’s document “*Guidelines for Institutional Submissions on Proposed Programme and Qualification Mix (PQM) for 2002-2006*” (DoE, 2001a), required that institutions respond to the following guidelines in the document:

“Provide a broad overview of the institution’s mission in relation to its social economic and political context, in particular its location – urban/rural – associated human resource and labour market needs, the socio-economic background of its student mix and the community it serves. It should also take into account its current strengths and niche areas and its capacity in terms of staff, infrastructure and financial resources. Furthermore, the institution should highlight the role, function and contribution of the institution to the higher education system in general.”

Some institutions viewed this request as “mission impossible” due to the extremely broad and elaborate context of issues that had to be addressed. The broad guidelines also contributed to unstructured submissions by institutions and in some cases the quality of the data and projection methodology were inconsistent with reality.

One of the measures that are seen as a steering mechanism towards the desired size and shape configuration of the higher education system is the new funding framework. The new funding framework is no longer a formula to determine what the higher education system needs but a mechanism for dividing funds. Strong growth in student numbers will therefore further dilute the limited funds made available in the Medium Term Expenditure Framework (MTEF) by Treasury for higher education. The higher education sector is worried about the progressive introduction of controls on the higher education sector and the implications this will eventually have on institutional autonomy, academic freedom and the quality of higher education qualifications.

Another perception made by the higher education sector was that the changes in policy by the Department of Education are haphazard and not well planned. This also pertains to the size and shape principle. Institutional planning in a constantly changing policy environment becomes extremely difficult, especially if there are apparent contradictions between different aspects of policy. A complicating factor for institutions is the leads and lags that are an inherent feature in higher education institutions. This includes the processes of marketing of programmes, student applications and admissions, the number of potential first-time entering students, transfer students, the quality of entering students and the success and graduation rates.

Sudden changes in the policy environment undermine attempts by the higher education sector to assist Government in meeting its objectives. The higher education system is a complex non-linear dynamic system, characterised by positive and negative feedback, and loops which may lead to unexpected or counter-intuitive outcomes if policy is changed continuously and in some cases haphazardly.

Shift in Disciplines

NPHE: The National Plan proposes to shift the balance in enrolments over the next five to ten years between the humanities, business and commerce, and science, engineering and technology from the current ratio of 49%:26%:25% to 40%:30%:30%, respectively.

Institutional perspectives: The intended shift in the overall proportion of enrolled students away from the humanities over the next five to ten years, coupled with the acknowledged difficulty of achieving higher participation rates, left some institutions with a feeling of unease

about the future of the core disciplines within the human and social sciences. The proportion of students enrolled for degree courses in the humanities and social sciences at some institutions is already low. The fundamental social economic and political transformation in South Africa has left, and will continue to create, socio-political problems of a nature that will require the input of a strong cadre of intellectuals who can demonstrate qualities of leadership and a deep understanding of the essential elements of a sound functioning civil society.

Funding as steering mechanism

NPHE: In line with the WP3, the National Plan for Higher Education establishes indicative targets for the size and shape of higher education, including overall growth and participation rates, institutional programme and qualification mixes and equity and efficiency goals. The planning process in conjunction with funding and an appropriate regulatory framework will be the main levers through which the Ministry will ensure that targets and goals of the National Plan are realised.

The Ministry will link funding of higher education institutions to the approval of institutional three-year “rolling” plans. The Ministry will also use various earmarked funds to realise particular objectives, such as research capacity building, teaching development or student financial aid.

This combination of planning and funding levers to achieve policy objectives involves the establishment of incentives and sanctions to steer the system towards those goals.

Institutional perspectives: Although the above excerpts from the NPHE addresses more than funding as a steering mechanism, the inherent inconsistencies will be addressed only with regard to the funding principles.

The new funding framework (NFF), which was implemented for the first time for the financial year 2004/05, can be seen as centralising the planning of enrolments (MoE, 2003). This is because the NFF is not a formula based on the cost of higher education and student demand but a mechanism for dividing funds according to government policies and priorities. The NFF, however, also makes provisions for “redress” funding for teaching output - and research output development where deficiencies in this regard were observed at some institutions by using performance measures relative to an adjusted benchmark value specified in the NPHE.

International experience shows, however, that interventions of the kind introduced in the NFF tend to necessitate further control measures to regulate the system. This kind of extended control can already be observed in the enrolment planning process where, in the documents

that were made available to institutions for institutional planning purposes, the following statement was made:

“The proportions of African students in undergraduate intake should increase, and steps must be taken to close the gap between the success rates of African and white undergraduates. If its (the institution’s) student equity performance does not improve, consideration may have to be given to scaling down of the approved head count and FTE enrolled student totals.”

Institutions are worried about the progressive introduction of controls on the higher education sector and the implications that this will eventually have on institutional autonomy, academic freedom and the quality of teaching and research outputs.

On meeting the growth scenario stated in the WP3, and re-iterated in the NPHE, almost all higher education institutions have embarked on more aggressive recruitment programmes. Some institutions invested considerable sums of money to increase its physical capacity to admit more students to comply with the initial growth scenario advocated in the NPHE. Sudden changes in the higher education policy environment undermine such attempts to assist the Government in meeting its objectives. For the financial year 2005/06, for instance, the Department of Education indicated to some institutions that their funding allocation would be based on a zero growth scenario for their weighted FTE places. Such unsubstantiated and unilateral decisions by the Department of Education make the institutional budgeting process unbearable and unmanageable.

Furthermore, introducing growth restrictions in terms of weighted teaching inputs and outputs discriminates against enrolments in science, engineering and technology, and also against postgraduate enrolments. One of the policy goals stated in the NPHE is that these areas should be expanded. The DoE proposals for capping the weighted teaching input FTE’s for funding purposes is another example of how the aims of the NPHE are being contradicted.

Language Policy

NPHE: In accordance with Section 27(2) of the Higher Education Act, the Minister must determine language policy of higher education. The Minister of Education, in compliance with the Act, published the policy document, *“Language Policy for Higher Education”*, in November 2002 (MoE,2002a). Subject to the policy, the councils of public higher education institutions, with concurrence of their senates, must determine the language policy of a higher education institution and must publish and make such a policy available on request. The requirement of the Act takes into account the authority of institutions to determine their own language policy, provided that such determination is within the context of public accountability and the Ministry’s responsibility to establish the policy parameters.

In the language policy document the Minister acknowledges the current position of English and Afrikaans as the dominant languages of instruction in higher education's and believes that, in the light of practical and other considerations, it will be necessary to work within the confines of the *status quo* until such time as other South African languages have been developed to a level where they may be used in all higher education functions.

The policy document also states:

“The success of such a historic undertaking will depend on the injection, over a period of time, of substantial financial resources.”

In the case of the historically Afrikaans universities and technikons, the Ministry has acknowledged that Afrikaans, as a language of scholarship and science, should be respected as a national resource. The Ministry, therefore, fully supports the retention of Afrikaans as a medium of academic expression and communication in higher education and is committed to ensuring that the capacity of Afrikaans to function as such a medium is not eroded.

Institutional Perspectives: The Minister has, before finalising the language policy, consulted with the rectors of the historically Afrikaans universities. The Rectors have stressed the view, which the Minister agreed with, that the sustained development of Afrikaans should not be the responsibility of only some of the Universities (as was suggested by the Gerwel Committee, which was appointed by the Minister to investigate the future of Afrikaans as a higher education language). The Minister's concern was that the designation of one or more institutions in fostering the Afrikaans language could have unintended consequences of concentrating Afrikaans-speaking students in some institutions, and in doing so, undermine the transformation agendas of institutions that have embraced parallel or dual medium approaches as a means of promoting diversity. The Ministry has also indicated that it will consult with the historically Afrikaans medium institutions to examine the feasibility of different strategies, including the use of Afrikaans as a primary, but not the sole medium, of instruction.

The institutions which are affected by the language policy argue that the way the Department of Education is determining and analysing the parameter that measures “student equity” does not take the Department's own language policy into account. The affected institutions argue that no recognition is, for instance, given to the additional costs of this policy in the new funding framework.

In this regard it can be quoted from the language policy that the Department of Education will:

“...through various planning and funding initiatives, encourage the development of programmes in South African languages. Those include amending the funding grids for teaching inputs and outputs for selected languages, providing earmarked institutional development funds for research, and facilitating the offering of scholarships to students”.

Although the above excerpt from the language policy may be seen as only pertaining to the other official languages (excluding English and Afrikaans), in reality, it should be interpreted holistically according to the affected institutions.

Most of the historically Afrikaans universities and technikons use both Afrikaans and English as the languages of instruction. In the case of the institutions that are using parallel medium instruction or duplicating the educational instruction and teaching in the two “official” higher education languages, they claim that the policy has a direct impact on resources. More teaching and research staff, more physical facilities (laboratories and lecture rooms) and a complicated scheduling process are the consequences of implementing the Ministry’s language policy for higher education.

3 Population Dynamics as a Driver of Diversity Management

3.1 Introduction

No country in the world is completely isolated when the population dynamics in the world is considered. The boundaries of all countries are (to a more or lesser degree) porous. The population of a country is, *inter alia*, affected by immigration and emigration, and the birth and death rates of the population within a country. The diversity of the population with regards to the different distinguishing identifiers e.g. race, ethnicity, gender, age, religion, economic and social development levels, employability, level of education, etc. could also be factors that influence the composition of a country's population. These factors, and the impact that they have on the population composition of any one country are usually country specific. Some of these identifiers are closely linked to the historical legacy of a country and the political regimes that determined the movement and development of its population (e.g. South Africa). Other identifiers are determined by the current political and social environments and economic systems that are closely intertwined (e.g. the European Union).

Population dynamics, as a driver for diversity, therefore, should be analysed and interpreted from the viewpoint most applicable to a specific country. This was pointed out in a study by Uwe Brandenburg, et.al. from CHE Consult in Gütersloh, Germany, in a study of the diversity profile in higher education institutions in 6 neighbouring countries of Germany (Brandenburg, 2009). This comprehensive report highlights the position of the European Union as well as of the 6 countries with regard to a variety of diversity-related topics. The conclusions drawn from the study is more related to the higher education sector and will be referred to in some of the other chapters of this report.

This chapter addresses the issue of population dynamics and its potential impact on the diversity profile in the higher education system, especially the student diversity profile.

3.2 The Population Profile of South Africa

Mid-year population estimates of the size and shape of the South African population are carried out by Statistics South Africa (www.statssa.gov.za) on a yearly basis. The mid-year estimates are done between the official census dates which occur every 10 years. The next official census will be held in 2011. The numbers referred to in this report is based on the 2010 mid-year estimates or, where applicable, the official 2001 census.

Table 1 depicts the composition of the estimated population profile according to race and gender. It is important to point out that the racial classification is specifically applicable to South Africa and reflects the historical “discriminatory” classification. In the initial phases of the transfer of power from the Apartheid government to the “new” demographically elected government it was thought that, while the policy of the ANC was one of creating a non-racial

society, such a race-based classification should be terminated. Reality soon showed that implementing such a decision would be counter-productive in the Government's quest to eliminate the inequalities brought about by the previous regimes.

Table 1: Mid-year population estimates for South Africa by population group and gender (2010)

Table 1: Mid-year population estimates for South Africa by population group and gender (2010)						
Population group	Male		Female		Total	
	Number	Percentage of total population	Number	Percentage of total population	Number	Percentage of total population
African	19 314 500	79,4	20 368 100	79,4	39 682 600	79,4
Coloured	2 124 900	8,7	2 299 200	9,0	4 424 100	8,8
Indian/Asian	646 600	2,7	653 300	2,5	1 299 900	2,6
White	2 243 000	9,2	2 341 700	9,1	4 584 700	9,2
Total	24 329 000	100,0	25 662 300	100,0	49 991 300	100,0

Table 1 clearly demonstrates the extremely skewed racial composition of the South African population. It is important to note that the Coloured (mixed race) people are approximately the same size as the Whites (which constitutes only 9.2% of the total estimated population of nearly 50 million) and that the Indian/Asian group is quite small. The table also shows that of the total population, 51.3% are women, which more or less reflects the gender composition in the world.

One of the long-term goals of the current government is that the racial profile of the enrolled students in higher education should reflect the composition of the whole population. Reaching this objective in the long term (or even ever) remains to be seen. Other important statistics need to be taken into account when such a challenge is posed to higher education institutions. The distribution of the population across the 9 provinces and the migration between the regions also play a role in the recruiting process of students from the different provinces. Seven of the 9 provinces have an institution(s) for higher education (of which there are 23 in total).

The vast majority of students at an institution are usually recruited from the provinces which are the closest to the institution. In addition to this statement it can be observed that there

are huge disparities between the size of the population in the provinces and the migration between the provinces. Table 2 depicts the distribution of the population among the provinces and table 3 the migration patterns.

Table 2: Mid-year Population Estimates by Province (2010)

Table 2: Mid-year population estimates by province (2010)		
	Population estimate	Percentage share of the total population
Gauteng	11 191 700	22,4
KwaZulu-Natal	10 645 400	21,3
Eastern Cape	6 743 800	13,5
Western Cape	5 223 900	10,4
Limpopo	5 439 600	10,9
Mpumalanga	3 617 600	7,2
North West	3 200 900	6,4
Free State	2 824 500	5,7
Northern Cape	1 103 900	2,2
Total	49 991 300	100,0

It is clear from table 2 that Gauteng, which is the smallest (by area) of all the provinces, has the largest population. This can be ascribed to the fact that Gauteng is the economic hub of the country and contributes the most to the GDP. Gauteng is also the most diverse regarding racial composition. The Northern Cape province, for instance, has the largest land area and only 1.1 million people, the majority of which are Coloured and has Afrikaans as their home language.

The number of people migrating between the provinces since 2001 can be deduced from the trends in the percentages given in table 3. It is obvious from the table that, although the changes in the percentages are quite small, the increase in population size of the provinces that had a positive net migration could be substantial. It is also obvious from table 3 that only two of the provinces had net increases in population over that period, namely, Gauteng and Western Cape. These are also the two provinces where the economic activities are the greatest.

Table 3: Percentage Distribution of the Projected Provincial share of the Total Population (2001-2009)

Table 3: Percentage distribution of the projected provincial share of the total population, 2001–2009									
	2001	2002	2003	2004	2005	2006	2007	2008	2009
KwaZulu-Natal	21.3	21.3	21.3	21.3	21.4	21.4	21.4	21.4	21.3
Gauteng	21.0	21.2	21.3	21.5	21.7	21.8	21.9	22.1	22.2
Eastern Cape	14.3	14.2	14.1	14.0	13.9	13.9	13.8	13.7	13.6
Limpopo	11.1	11.0	11.0	11.0	10.9	10.9	10.9	10.9	10.9
Western Cape	9.8	9.8	9.9	10.0	10.1	10.2	10.2	10.3	10.4
Mpumalanga	7.4	7.4	7.4	7.4	7.4	7.3	7.3	7.3	7.3
North West	6.6	6.5	6.5	6.5	6.5	6.5	6.4	6.4	6.4
Free State	6.1	6.1	6.0	6.0	5.9	5.8	5.9	5.8	5.7
Northern Cape	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.2
Total	100	100	100	100	100	100	100	100	100

The racial composition of the population of the country (especially the distribution between provinces), as depicted in tables 1, 2 and 3 will certainly, in the longer term, have an effect on student enrolments at the 23 higher education institutions. Not only will the overall composition and distribution of the population have an effect on future student enrolments, but more importantly, the age distribution within the population groups.

The importance and magnitude of the differences in the age profiles of the population according to race is highlighted in table 4. The table shows that 33.2% of the African group falls in the 0-14 age group whereas the percentages of the Coloured, Indian/Asian and White groups are 27.5%, 22.4% and 18% respectively. Within the potential “economic active population” age group of 15-64 years the corresponding percentage are, 62.9% for African, 67.8% for Coloureds, 70.2% for Indian/Asians, and 68.2% for Whites. Similarly the percentages for older age groups of 65 and older are 3.9% for Africans, 4.7% for Coloureds, 7.4% of Indians/Asians and 13.6% for the White population group.

The long term effect (20 -50 year horizon) of such a distribution pattern, together with the projected fertility rates, life expectancies, infant mortality levels of the different population groups should be further investigated by, for instance, employing a system dynamic modelling approach (Meadows D, et.al., 1974). Included in such a model for South Africa the very important issue of HIV/AIDS should also be included as a variable. Table 5 illustrates the grave situation in which South Africa finds itself with regard to the people living with HIV (an estimated 10.3% in 2009), especially in the “economic active” age group.

Table 4: Mid-year Population Estimates by Population Group and Age (2009)

Table 4: Mid-year population estimates by population group and age (2009)										
Age	African		Coloured		Indian/Asian		White		South Africa	
	Total	%	Total	%	Total	%	Total	%	Total	%
0–4	4,355,700	11,0	403,600	9,1	101,200	7,8	260,200	5,7	5,120,700	10,2
5–9	4,412,900	11,1	408,500	9,2	91,700	7,1	268,100	5,8	5,181,200	10,4
10–14	4,402,300	11,1	406,400	9,2	98,700	7,6	294,900	6,4	5,202,300	10,4
15–19	4,394,900	11,1	401,700	9,1	108,200	8,3	321,400	7,0	5,226,200	10,5
20–24	4,212,000	10,6	376,100	8,5	119,500	9,2	310,900	6,8	5,018,500	10,0
25–29	3,735,000	9,4	364,400	8,2	127,200	9,8	292,200	6,4	4,518,800	9,0
30–34	3,263,400	8,2	377,600	8,5	114,300	8,8	280,400	6,1	4,035,700	8,1
35–39	2,714,500	6,8	371,000	8,4	93,500	7,2	286,200	6,2	3,465,200	6,9
40–44	1,791,700	4,5	310,800	7,0	83,500	6,4	338,200	7,4	2,524,200	5,0
45–49	1,536,800	3,9	273,000	6,1	78,500	6,0	342,300	7,5	2,230,600	4,5
50–54	1,376,500	3,5	224,400	5,1	71,900	5,5	346,300	7,6	2,019,100	4,0
55–59	1,105,700	2,8	171,700	3,9	63,800	4,9	312,500	6,8	1,653,700	3,3
60–64	844,000	2,1	127,700	2,9	52,200	4,0	295,800	6,5	1,319,700	2,6
65–69	617,400	1,6	83,500	1,9	39,300	3,0	245,000	5,3	985,200	2,0
70–74	439,700	1,1	60,700	1,4	26,800	2,1	167,700	3,7	694,900	1,4
75–79	279,200	0,7	37,300	0,8	16,800	1,3	108,100	2,4	441,400	0,9
80+	200,900	0,5	25,700	0,6	12,800	1,0	114,500	2,5	353,900	0,7
Total	39,682,600	100,0	4,424,100	100,0	1,299,900	100,0	4,584,700	100,0	49,991,300	100,0

Table 5: HIV Prevalence Estimates and the Number of People living with HIV (2001–2009)

Table 5: HIV prevalence estimates and the number of people living with HIV (2001–2009)				
Year	Population 15–49 years		Percentage of the total population	Total number of people living with HIV (in millions)
	Percentage of women	Percentage of the population 15–49		
2001	18.7	15.4	9.4	4.10
2002	19.2	15.8	9.6	4.38
2003	19.4	16.1	9.8	4.53
2004	19.6	16.3	9.9	4.64
2005	19.7	16.5	10.0	4.74
2006	19.7	16.6	10.1	4.85
2007	19.7	16.7	10.2	4.93
2008	19.7	16.9	10.3	5.02
2009	19.6	17.0	10.3	5.11

The current socio-economic and political system in South Africa cannot only be ascribed to the change of government from a minority ruled system to a democratically elected government in 1994. As is the case in most African countries, South Africa's (Eurocentric) history goes back to 1652 when the Dutch established a half-way station in Cape Town along their trading route to the East. Since then the country has evolved, with strong colonial influences, all of which have contributed to the country's evolution and development to the current state. The challenge for the future is how to steer the country towards a stable and sustainable future, socially, economically and politically. One of the basic requirements to meet the challenge is the strength of its higher education system and the system's ability to produce the required expertise for economic development.

3.3 The Population Profile of Germany

The previous paragraph depicted a brief but extensive outline of the demographic profile of South Africa. It will be difficult to reproduce a similar profile for Germany for comparable purposes. Some of the same arguments and observations with regard to the impact of the demographics of South Africa on the higher education system, however, can also be valid for Germany.

The current profile of the German population has also evolved over time, albeit, very much longer than that of South Africa. The history of Germany, along with the whole of Europe, goes back a number of centuries and is extremely complex. The observation that the current demographic profile should be the point of departure for planning for the future also holds true for Germany. It is from this premise that some demographical statistics from the "POCKETBOOK:GERMANY, 2009", issued by the Federal Statistical Office of Germany (www.destatis.de), will be quoted.

Table 6: The German Population on 31 December 2008

	Males	Females	Total	Percentage shares
	Thousands			
<i>Nordrhein-Westfalen</i>	8,746	9,187	17,933	21.9
<i>Bayern</i>	6,138	6,382	12,520	15.3
<i>Baden-Württemberg</i>	5,286	5,464	10,750	13.1
<i>Niedersachsen</i>	3,901	4,046	7,947	9.7
<i>Hessen</i>	2,970	3,095	6,065	7.4
<i>Sachsen</i>	2,049	2,144	4,193	5.1
<i>Rheinland-Pfalz</i>	1,977	2,051	4,028	4.9
<i>Berlin</i>	1,681	1,751	3,432	4.2
<i>Schleswig-Holstein</i>	1,388	1,446	2,834	3.5
<i>Brandenburg</i>	1,249	1,273	2,522	3.1
<i>Sachsen-Anhalt</i>	1,166	1,216	2,382	2.9
<i>Thüringen</i>	1,119	1,149	2,268	2.8
<i>Hamburg</i>	866	906	1,772	2.2
<i>Mecklenburg-Vorpommern</i>	825	839	1,664	2.0
<i>Saarland</i>	501	529	1,030	1.3
<i>Bremen</i>	322	340	662	0.8
<i>Germany</i>	40,184	41,818	82,002	100

In comparison to South Africa, which has 9 provinces, Germany has 16 *Bundesländer*. The total population of Germany is approximately 82 million spread across an area of 357,104 sq km resulting in an average population density of approximately 230 people per sq km. In comparison, South Africa's land area is about 1.214 million sq km, in which the population of approximately 50 million live, translating to an average population density of about 40 people per sq km, which is about 5.75 times less dense than Germany.

It is also interesting to note that, similar to South Africa, there are large variations in the population densities in the *Bundesländer*. In Germany the population density is the largest in the city state of Berlin, with a value of 3847 people per sq km., and the lowest in Brandenburg with a density value of just 86 people per sq km. The variation in South Africa varies between 467 people per sq km in Gauteng to 2 people per sq. km in Northern Cape Province.

As was shown in table 3 above, the migration between the provinces in South Africa demonstrates that there is a consistent movement of people to the provinces where the economic activities are the highest and where the potential for finding employment is the greatest. Experience has shown, however, that "unemployed" people in the poorer provinces who move to these provinces are often worse off than where they came from, and end up living in slums.

If the 16 *Bundesländer* of Germany are considered, the Pocketbook: Germany 2009 also shows certain migration patterns that may pose similar challenges to Germany as in South Africa. For instance, the largest influx of people in 2007 was to Bayern followed by Hamburg, Baden-Württemberg, Schleswig-Holstein, Berlin and Hessen. All of these 6 *Bundesländer* were part of former West Germany. The largest outflow of people are shown to be from 4 of the former East German States, with Sachsen-Anhalt having the highest number of people that emigrated from the region. This migration pattern from the "old" to the "new" *länder* in Germany may be for reasons different to those in the South African context, but it can be speculated that the main reason could be linked to the economic activities and the perceived prosperity associated with the dispensation prior to 1989.

The distinction between, for instance, nationality, race group or ethnicity of a person is difficult to determine if unambiguous definitions for such terms do not exist. In the case of South Africa, the concept of racial classification is embedded in some of the laws and associated regulations of the country to ensure that the violations of the human rights of individuals in the past do not occur any more. Ethnicity is also part of the South African society (especially in the African communities) in the sense that the people are classified according to their ancestry, for example, Zulu, Xhosa, Venda, Tswana, etc. Foreigners also do not pose a problem in the South African context because the distinction is only on foreigners with or without a permanent residence permit and is counted as such. Foreigners who have been nationalised and granted South African citizenship are deemed to be South Africans.

It is understood that such clear distinctions for the classification of the population in the case of Germany does not exist in the same classification structure as in South Africa, or are very difficult to determine (for example, the nationality of a person). Some citizens from foreign countries have not been naturalised but their children were born in Germany and are considered German citizens. Some of these families are already of the 2nd and 3rd generation. Restrictions also exist in the capturing of personalised information due to an act that protects the individual against the dissemination and use of personal information.

In spite of what was stated in the previous paragraph the Federal Statistical Office of Germany publishes useful information with regard to foreigners. In the Pocketbook: Germany, page 32, for instance, it says:

“Some 7.2 million foreigners live in Germany. Many of them come to Germany as guest workers and relatives. They enrich the country with their cultures and their knowledge. For many, Germany is a land of opportunities. Better earnings prospects, but also the general living standards make Germany attractive to immigrants. Staying in Germany as a visitor is desirable especially for younger people: at German universities, almost every eighth student comes from abroad.”

The information in the Pocketbook also gives a breakdown of the citizenship, age distribution and naturalisation of the foreigners as it was on 31 December 2008. Also useful is the percentage of foreign students enrolled at universities. It is confusing, however; on page 33, table 2.10, the breakdown of the citizenship indicates that only 3.94 million foreigners are listed. The “pocketbook” contains very useful information but is not always clear on what is meant by, for instance, “foreigner”, “immigrant”, “comes from abroad” and “asylum-seekers”. The lack of specific definitions of what is measured may lead to conclusions and deductions that are false.

It is also obvious from the population profiles of the two countries that in spite of some similarities there also great disparities between some of the indicators. Especially noteworthy is the huge variation between the average life expectancies, approximately 53 years in South Africa and around the 80-year mark in Germany, as indicated in figure 1. However, it should be pointed out that there are also large differences between the different racial groups in South Africa, with the Whites having a life expectancy just slightly less than that of Germany, and the Africans less than the South African average of 53 years. The low African life expectancy is partly the due to the high incidence of HIV/AIDS which is highest amongst the Africans.

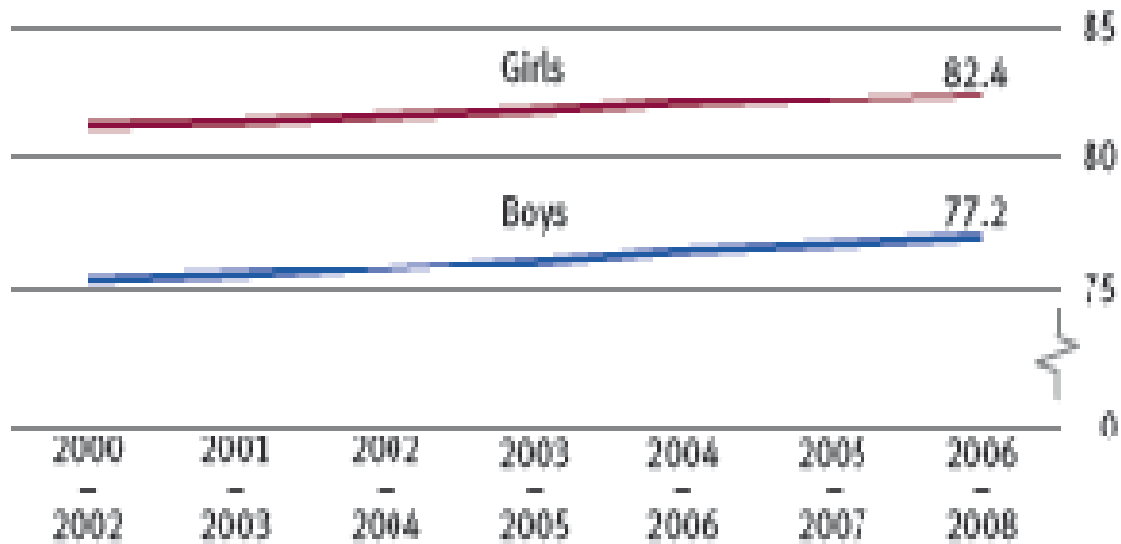
Figure 1: Life Expectancy for Newborn Children in Germany**Figure 2: Population Trends in Germany from 2008 to 2060**

Figure 2 shows the change in the age structure of the German population as predicted for 2060. The aging population profile will have to be taken into account when diversity management across all areas of life has to be considered (including higher education) for the future.

The comparison of the population profiles between the two countries is useful in the sense that the similarities and differences were noted. It is not claimed that all of the possible indicators were attended to in this chapter, but what is important is that the challenges that two countries face in exploring future scenarios are similar in magnitude although not necessarily in substance. Furthermore, the issues addressed in this chapter on the population dynamic is crucial for examining the higher education system in the following chapters because the population is one of the most important inputs of the education sector.

4 Diversity Management from a Student Perspective

4.1 Introduction

The diversity of the student population in any country at a specific point in time depends on numerous factors. One of the main ones, as was mentioned in the previous chapter, is the current state of the population profile of a country, in all its facets, and the way it will evolve in future. The dynamics of change within any country is extremely complex and involves a large number of variables (of which the population is but one) that have positive and negative feedback loops. The current and future state of the economy is also very important in such a dynamic system and has a direct and indirect impact on the population, and by implication also on the student population as a sub-system of the population. It was shown by Meadows, through his system dynamic model of the world (Meadows,D,et.al,1974), that the outcome of such models may sometime produce counter-intuitive results. The same conclusion might also be true when an attempt is made to project future student population profiles. The complexity of the problem, however, should not discourage any attempt to investigate a possible student diversity profile in the future. Projecting the future state of the diversity of the student population, using the current trends of a limited number of variables, may be sufficient to draw the attention of policy makers to the possible challenges that lie ahead. It is against this notion that this chapter should be viewed.

4.2 The Profile of the Student Population in South Africa

In the previous chapter it was argued that the current and future diversity profile of the student enrolments in higher education is highly dependent on the current and projected state of the diversity profile of a country's population. A number of socio-political, economic, and geographical variables play a role in the dynamic evolution of a country's population and the associated profile of its students. The influence and impact of the different variables of the diversity within the profiles of different countries may vary according to their own specific situation. In the case of South Africa, for instance, the student profile in the higher education sector is, *inter alia*, a function of:

the historical political dispensation,

the legislative changes that the Government has made since 1994,

the existing differences in the biographical and geographical according to race and gender,

the diverse birth and death rates between the different racial groups,

the effect of HIV/AIDS,

the disparity between the economic and educational development of the racial groups,

the level of provision of resources for the schooling system by the 9 provincial Governments,

the difference in the quality of teaching and learning in schools,

the availability of student financial aid to students,

the admission requirements of the various higher education institutions.

Internationalisation, as was referred to in Chapter 1 is not included in the list above because it does not, at this point in time, play a very significant role in the student profile of the county. It may become an important factor in future if the economic development of the county can be developed further and maintain its relative stable democracy. The similarities and differences that may apply to the Germany situation will be discussed later on in this chapter.

4.2.1 State of Diversity at South African Higher Education Institutions

The state of higher education in a country is hugely dependent on the state of its socio-economic development. In the case of South Africa it may be classified as “a developing economy”. It is well known that education plays a (extremely) predominantly important role in the development of a country. In this respect, therefore, it is important to observe the level of the Government’s spending on education in general, and on higher education specifically. In the case of South Africa the total education budget (which includes higher education) in 2009 was about R 110 billion, or 5.1% of the GDP. (the GDP in 2009 was estimated as R 2142 billion). Higher education received about R17 billion which translates to approximately 0.8% of GDP. This percentage is extremely modest compared to a developed country like Germany where the percentage of GDP spent on higher education alone is in the order of **4.4%** according to a report by the “Bundesministerium für Bildung und Forschung” in 2010. This percentage is declining over time, according to the report, which is also the case in South Africa.

Table 7 shows the flow of the population through the various levels of the education system. The table, which is a snap-shot in time, represents an approximation of a longitudinal process of the flow of people through the educational system.

Table 7 shows that 25.8% of the total estimated population of 49.3 million in 2008 was attending school (grades 0 to 12). Of those 12 million only 4.5%, or 554,663, were in grade 12, the final year of schooling. In the same year about 151,952 students entered higher education for the first time. This number of first-time entering students consists not only of the grade 12 learners from the previous year but also people who enter higher education

from the work place or another pre-higher education institution, like for example, a technical college. The table also indicates that about 25,000 students obtained a Bachelor degree, which is about 16 % of the first-time entering students. On a postgraduate level, the graduate output came to 7,514 Master degrees and only 1,182 Doctorates. Table 7 paints a rather dismal picture of the levels of education and the graduate outputs in South Africa. It can be argued that the education system is very inefficient in the sense that the “return on investment” is extremely low. The failure and drop-out rates in the schooling system are very high, even in comparison with other African countries. The drop-out and graduation rates in the higher education system vary widely across the 23 higher education institutions, with the “historically disadvantaged” institutions still below the system’s average rates. More detail will be given later in the chapter.

Table 7: Level of education of the population of South Africa (2008)

Population Cascaded down in Levels of Education						
Level	African	Coloured	Asian/Indian	White	Unspes	Total
Total Population (est 2009)	39 136 200	4 443 100	1 279 100	4 472 100		49 330 500
% of Total	79.33%	9.01%	2.59%	9.07%		100.00%
At School (2008?)						12,239,363
In Matric (2008)	460 828	38 213	14 137	40 753	732	554 663
% of Total	83.08%	6.89%	2.55%	7.35%	0.13%	100.00%
First-time Entrants (2008)	103 122	10 483	8 755	29 200	392	151 952
% of Total	67.86%	6.90%	5.76%	19.22%	0.26%	100.00%
B-graduates (2008)	12 588	1 938	2 047	8 581	31	25 185
% of Total	49.98%	7.70%	8.13%	34.07%	0.12%	100.00%
M-graduates (2008)	2 810	404	576	3 679	45	7 514
% of Total	37.40%	5.38%	7.67%	48.96%	0.60%	100.00%
D-graduates (2008)	383	55	96	644	4	1 182
% of Total	32.40%	4.65%	8.12%	54.48%	0.34%	100.00%

A first-time entering student into higher education is defined as a student who has had no previous exposure to higher education after leaving school. The main source of such students in South Africa consists of the students who enrol at an institution the year after completing his/her grade 12 with a National Senior Certificate (NSC). The certificate indicates the level of achievement of the learner in grade 12 with an endorsement identifying whether the learner may enter a higher education institution or not. Figure 3 shows the grade 12 results in South Africa from 2005 to 2009.

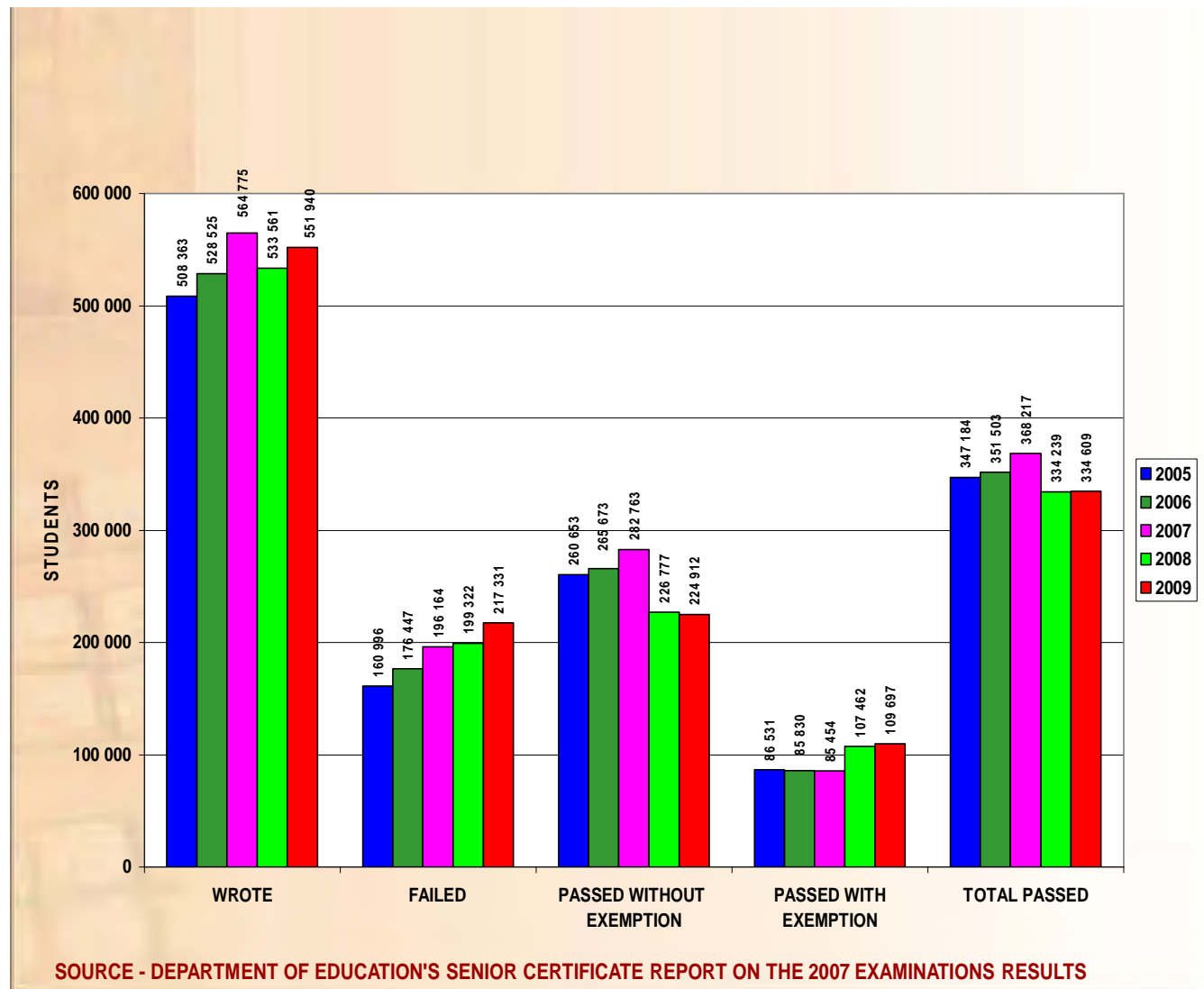
Figure 3: National Achievement in Grade 12 Examination in South Africa (2005-2009)

Figure 3 clearly shows that the number of learners that sat the grade 12 examinations and passed with exemption fall short of the expectations of a more efficient schooling system that should deliver an increasing number of learners obtaining an endorsement to enter higher education. Although the figure indicates an increase in the number of students who passed with exemption (endorsement) in 2008 and 2009, the increase has to be seen against the fact that a new “outcomes based education curriculum” had its first finalists in 2008, which has quite a different way of assessing the learners. More information on the NSC and the new curriculum can be found at <http://www.education.gov.za>.

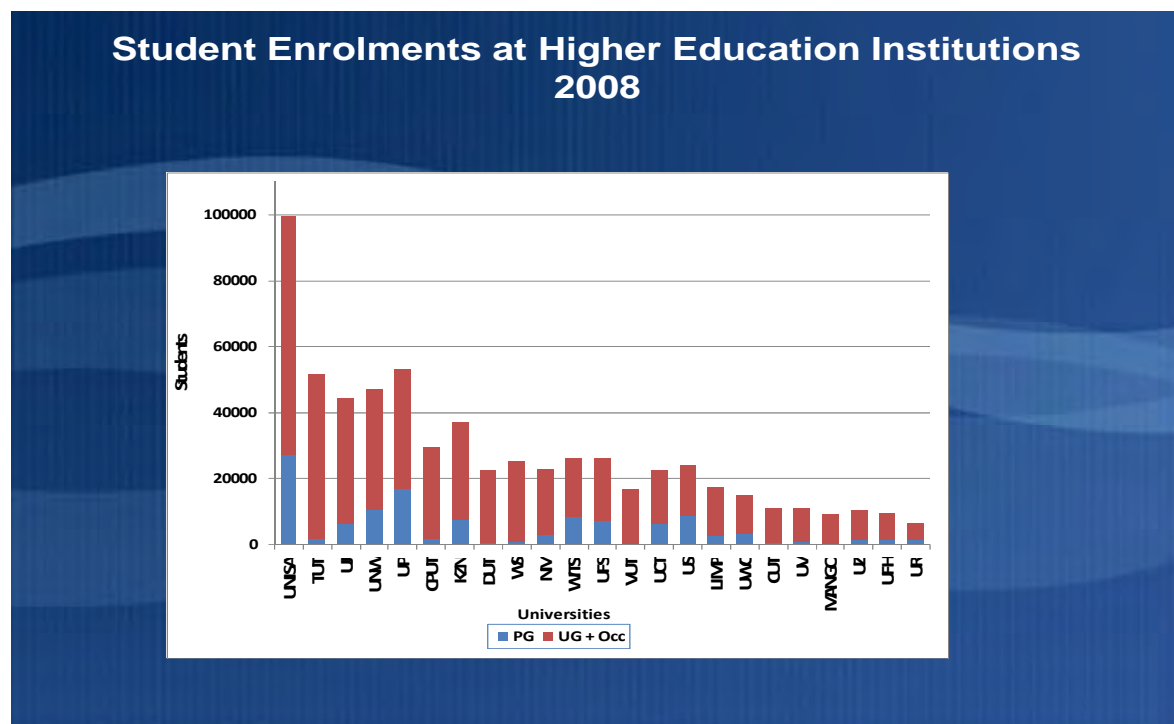
Analysing the grades obtained by the learners who passed the NSC with exemption gives rise to a more disturbing trend. It was found that the learners' performance in science and mathematics was not increasing but showed a declining trend. If this observation were to become a trend in the future it would have dire consequences for the economic development

of the country which needs graduates in the science, engineering and technology fields of study.

What is further important to note is that of the total number of learners who wrote the grade 12 examinations approximately 83% were Africans, 7% Coloured, 2,6% Indian/Asian and 7,4% White. Of the students who enter higher education institutions for the first time, however, approximately 68% are African, 7% are Coloured, 6% are Indian/Asian and 19% are White, thereby indicating that White students are still entering higher education at a higher rate. This may be partly attributed to the difference in the income distribution between the different population groups. Access to higher education is also a function of affordability and an ability to contribute to the tuition fees. The availability of bursaries and loans through a government funded National Financial Aid Scheme (NSFAS) for disadvantaged students make it possible for poor African and Coloured students to enter higher education institutions. (The NSFAS scheme will be discussed later in the chapter as one of the diversity management instruments)

The total student enrolments at the 23 higher education institutions in 2008 were approximately 800,000. Figure 4 indicates the enrolments at the 23 institutions according to the level of study. UNISA with the highest number of students (261,927) is limited in the figure to 100,000 to accommodate the scaling of the figure. Nearly all of the UNISA students are distance-education students and may distort the comparison with the other institutions.

Figure 4: Student Enrolments at Higher Education Institutions (2008)



The total number of higher education students in a country as a percentage of the total population is sometimes used as an indicator for the state of development of a country. This percentage for South Africa is 1.6% compared to 2.4% in Germany. What is more important however, are the student enrolment indicators that may be used to show the diversity profile of the students and possible future trends. Table 8 shows the diversity profile of the 800,000 higher education students in South Africa according to race.

Table 8: Student Enrolments according to race (2008)

Student Enrolments according to Race 2008						
Name	Total	White	Coloured	Indian	African	Black
UNISA	261927	21%	6%	9%	64%	79%
UP	53106	43%	2%	3%	52%	57%
TUT	51613	10%	1%	1%	88%	90%
UNW	47008	36%	3%	1%	59%	64%
UJ	44456	23%	3%	5%	69%	77%
KZN	37188	12%	3%	30%	56%	88%
CPUT	29367	18%	33%	1%	48%	82%
UFS	26193	35%	6%	2%	57%	65%
WITS	26096	31%	3%	15%	51%	69%
WS	25111	0%	0%	0%	99%	100%
US	23983	69%	16%	2%	13%	31%
NM	22661	25%	13%	3%	59%	75%
DUT	22381	5%	2%	18%	75%	95%
UCT	22317	41%	15%	8%	35%	59%
LIMP	17147	1%	0%	1%	98%	99%
VUT	16947	4%	1%	1%	94%	96%
UWC	15074	4%	47%	8%	42%	96%
UV	10912	0%	0%	0%	100%	100%
CUT	10894	15%	4%	0%	81%	85%
UZ	10316	1%	0%	1%	98%	99%
UFH	9338	5%	2%	1%	93%	95%
MANGO	9128	0%	0%	0%	100%	100%
UR	6327	45%	4%	5%	46%	55%

A number of observations can be made from table 8. From the table it can be deduced that of the total student enrolments of nearly 800,000 in 2008, the African students represent 64,7%, Coloured students 6,5%, Indian/Asians 6,6% and White students 22,3%. These ratios are still quite different from the racial distribution of the total population.

A second observation is the vast differences between the enrolments according to race at the different institutions. UNISA, the distance education institution, is the only institution that approximates the average enrolment ratios according to race of the system. This should be no surprise because UNISA contributes nearly 33% of the total enrolments in the system from which the ratios were calculated. The University of Stellenbosch is the institution with the highest percentage of White students, i.e. 69%, whereas three institutions have no White

students, namely, the Walter Sisulu University of Technology, the University of Venda and the Mangosuthu University of Technology.

The skewed enrolment ratios according to race at the different institutions can to a large extent be ascribed to the geographical locations of the institutions and the population diversity in the region within which the institutions are situated. For example, the University of Venda is situated in the far North of the Limpopo Province, in a rural area, with mainly African inhabitants from the Venda ethnic group. Another example is the University of the Western Cape, a university which was established under the Apartheid government as a “University for the Coloured people”. It is situated near Cape Town in the Western Cape Province in a geographical area where many Coloureds live. The historical legacy of this institution can still be observed in the racial distribution of the enrolments, with the majority of its students still being Coloured (47%). However, it is also clear, when the change in the racial profile over the last 16 years is observed, that the management of diversity is a high priority of the senior management of this institution.

Other issues that should be included when “student diversity management” is considered are the language of tuition, gender, disability, religion, sexual orientation, nationality and foreign students. Eventually the challenge will be to devise instruments that will promote diversity, in all its facets, and to identify measurements (indices) to measure the effect of these instruments.

4.2.2 The State of Diversity at German Higher Education Institutions

Many of the issues related to student diversity management in South Africa also applies to German higher education students, albeit, at different levels of importance and magnitude. Huge differences between the overall jurisdiction of higher education exist between the two countries in the sense that in South Africa higher education is a federal (national) affair and funded and administered by a single Minister of Higher Education and Training. On the other hand, basic education falls under the jurisdiction of the 9 provinces and are being administered by their own Departments of Education each with its own provincial Minister of Education. The provincial governments receive a block grant allocation from the Treasury (the central Department of Finance) to administer, for instance, the social, educational and health care systems in the province according to the priorities set by the provincial government. The delivery of basic education in the provinces is, however, subject to the national policies related to basic education. Basic education in the provinces is overseen by a separate (national) Minister of Basic Education. These dual and separate governance structures for Higher Education (and training) and Basic Education has the potential to lead to a divergence of the quality of basic teaching and learning across the provinces. In turn this will affect the level of preparation of first-time entering students at higher education institutions and may impact on the success and graduation rates of students.

The situation in Germany is probably more complicated than that of South Africa. The 16 *Bundesländer* in Germany are solely responsible for all the education in the individual state. They have complete jurisdiction over the delivery of the teaching and learning at school level.

The higher education institutions in the *länder* are today on their way to a higher rate of autonomy but are mostly funded by the **Land**. The federal government also partly contributes to the funding of higher education through a grant to the Länder in various forms of co-financing research programs. Today, there is also a co-financing of teaching in accordance with the special increase of student demand in the nearer future. With a largely federalised budgeting system in Germany, there are very few opportunities for central management approaches for the federal government in order to support a more diverse student body, or to support non-traditional students in their student experiences.

Germany has 350 institutions of higher education, consisting of 172 Universities of Applied Sciences, 81 Universities, 60 Colleges of Art, Music and Film, 14 Church-maintained Colleges, 6 Universities of Education, and 17 other universities and colleges which do not fall into any one of the afore-mentioned categories. The total number of students enrolled at these institutions is 1,932,355, 231,866 or 12% of which are foreign students. The largest proportion of these students is enrolled at the universities (1,330,493 or 69%) whilst the second largest proportion is enrolled at the Universities of Technology (543,799 or 28%). The other 3% of the students are enrolled at the other types of institutions.

It is obvious from these numbers that the higher education system in Germany, currently, does not show the same racial diversity profile of its students that exists in South Africa. The main difference is that, of the total number of higher education students, 88% are Germans, which generally speaking means that they are White, speak German, and are mostly from well educated families and with above average financial means. The other 12% are foreign students from diverse backgrounds. Table 10 indicates the enrolment of these students at the institutions of higher education in each of the 16 *länder*.

Table 9: Higher Education Institutions in Germany according to Bundesland

Land	Universities	Universities of Applies Sciences	Colleges of Art, Music and Film	Colleges of Education	Church- maintained Colleges	Other HEI	TOTAL
Baden-Württemberg	14	36	8	6		4	68
Bayern	12	25	8		3	1	49
Berlin	10	20	4				34
Brandenburg *	3	8	1			2	14
Bremen	2	3	1			1	7
Hamburg	5	9	2			2	18
Hessen	7	13	3		5	3	31
Mecklenburg-Vorpommern *	2	4	1			1	8
Niedersachsen	11	11	2			2	26
Nordrhein-Westfalen	16	34	8		5	4	67
Rheinland-Pfalz	6	8			2	3	19
Saarland	1	2	2			1	6
Sachsen *	7	11	6			2	26
Sachsen-Anhalt *	2	5	2		1	1	11
Schleswig-Holstein	3	7	2			1	13
Thüringen *	4	7	1			1	13
TOTAL	105	203	51	6	16	29	410

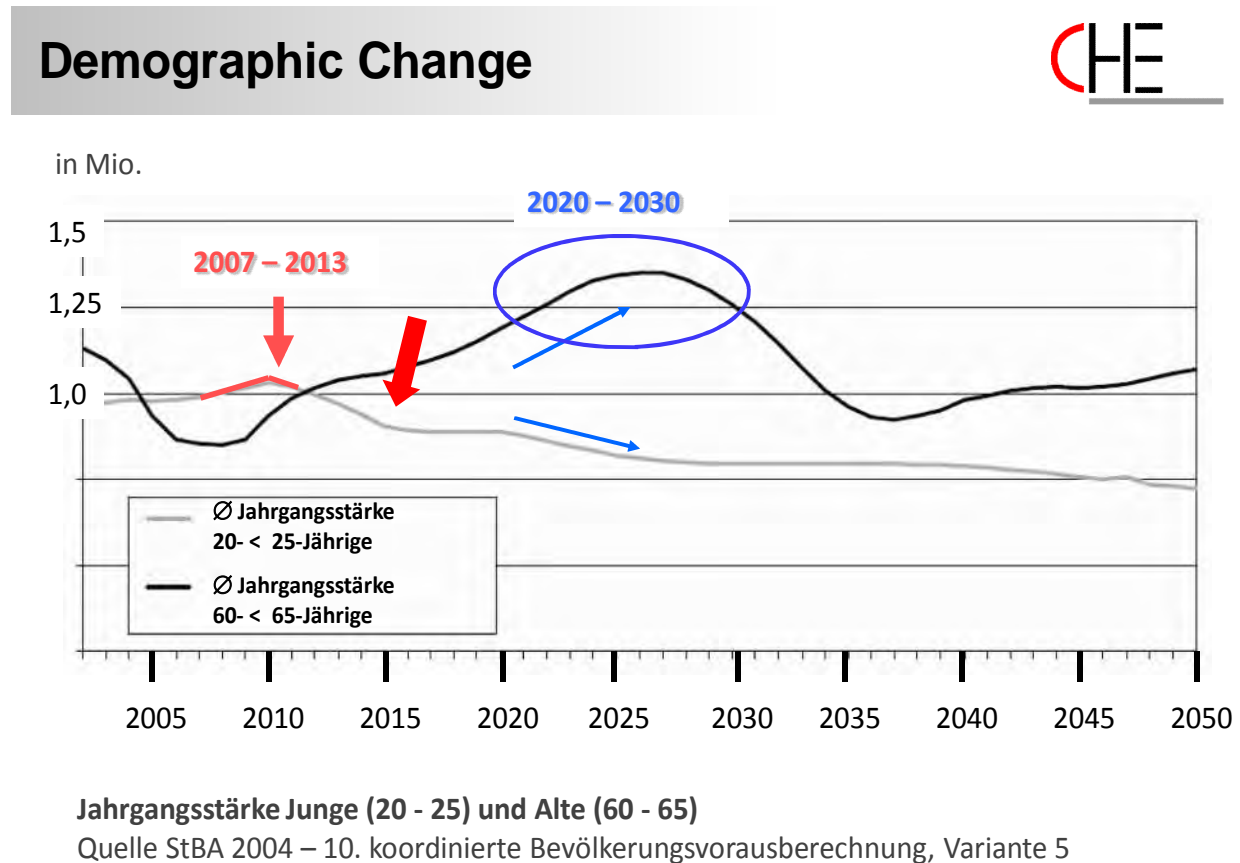
Table 9 shows the distribution of the higher education institutions across the 16 *Länder* in Germany. According to the table, 72 of the institutions are located within the “new” *Länder*, indicating a skewed distribution between the “old” and “new” *Länder*. Table 10 supports this observation in the sense that the average number of students in the “new” *Länder* per institution is much lower than in the “old” *Länder*. This point is made to demonstrate that a similar kind of skewed distribution of students per province and institution can be found in the case of South Africa, except that in South Africa the dimensions of race and language also have to be taken into account. Germany, on the other hand, has to take account of the difference in the levels of economic development that existed between the “old” and “new” *Länder* before the unification of Germany, and the impact of the migration of students between the *Länder*. Furthermore, cognisance should also be taken of the movement of foreign students between the *Länder*. A long-term view should be taken of the total number of student enrolments in Germany and the distribution of the students between the *länder*, the type of institution, as well as the demographic profile of the students that will play a role in the future development of the country.

Table 10: Student Enrolments in Germany according to Bundesland

Land	Number of Students	Student %	Number of Foreign Students	Foreign Student %	% Foreign Students in Land
Baden-Württemberg	277372	13.09%	35056	14.35%	12.64%
Bayern	272666	12.86%	27531	11.27%	10.10%
Berlin	139534	6.58%	22117	9.06%	15.85%
Brandenburg *	49572	2.34%	5603	2.29%	11.30%
Bremen	30880	1.46%	4903	2.01%	15.88%
Hamburg	75457	3.56%	8738	3.58%	11.58%
Hessen	184482	8.70%	24744	10.13%	13.41%
Mecklenburg-Vorpommern *	38843	1.83%	2261	0.93%	5.82%
Niedersachsen	144608	6.82%	15053	6.16%	10.41%
Nordrhein-Westfalen	508501	23.99%	59846	24.50%	11.77%
Rheinland-Pfalz	110079	5.19%	11987	4.91%	10.89%
Saarland	23071	1.09%	4187	1.71%	18.15%
Sachsen *	109213	5.15%	10150	4.16%	9.29%
Sachsen-Anhalt *	52606	2.48%	4501	1.84%	8.56%
Schleswig-Holstein	50079	2.36%	3803	1.56%	7.59%
Thüringen *	52522	2.48%	3749	1.54%	7.14%
TOTAL	2119485	100.00%	244229	100.00%	11.52%

A challenge for Germany is to recognise and promote diversity in the higher education environment in light of the future impact of a declining population growth rate in Germany, and an increasing immigration of people from other countries. Globalisation and internationalisation will definitely, in the longer term, change the profile of the inhabitants of Germany. This statement is underscored by a graph taken from a presentation by Hannah Leichsening at the EAN Conference in June 2010 and is included as Figure 5.

Figure 5: Prediction of the Demographic Change in Germany



Hannah Leichsenring | EAN Conference, June 16th 2010

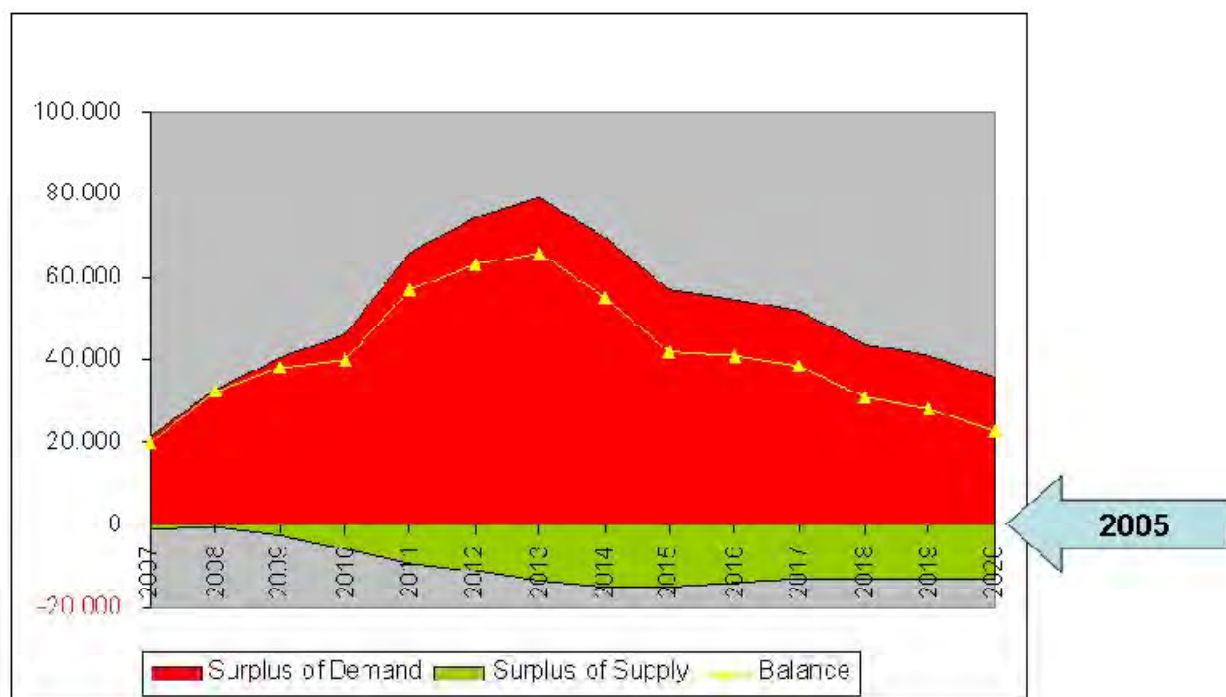
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A challenge that Germany faces with respect to diversity management in higher education is further highlighted in a research report by Uwe Brandenburg, et.al., (*Diversity in neighbouring countries of Germany, Working Paper No 121 June 2009*). The following figure (Figure 6) and quote from the research report are included here to illustrate the point made that Germany may be facing a dilemma in higher education that needs to be addressed sooner rather than later.

“... with respect to Germany, the emergence of diversity oriented programmes and strategies in HEIs are driven by very specific German problems, of which some are directly related to the overarching demographic change issue mentioned above. Among the various aspects concerned, the issue of a large number of high school graduates confronted with a very limited number of study places is one of the more dramatic and urgent ones. As the following graph shows, these numbers will climb continuously until 2013 and will show a surplus far beyond 2020. In other words, for the next decades Germany will have far more high school graduates than university places. However, this general development, which is essentially induced by the reduction of school years to achieve a HE entrance qualification in most of the German Bundesländer, is countered by a rapid demographic decline in especially most of the eastern regions in Germany. Hence, the German Higher Education Systems will experience an inconsistent situation

of demand for HE until the end of the 2020s, despite regional divergences, causing a considerable surplus of young people looking for higher education. Although various programmes have been initiated to compensate for this deficiency of opportunities, this situation creates an excellent basis for recruitment by HEIs from neighbouring countries. In addition, some of the neighbouring countries, in particular Poland and the Czech Republic, show a dramatic demographic change in the study-relevant age group in the upcoming decades (see Brandenburg et al. 2008a) and therefore must have an increased interest in entering the “next-door” market of Germany. This means that among the categories of analysis is the question whether these countries implemented or implement a specific recruitment strategy for German students in their diversity policies.”

Figure 6: Predicted Demand for Higher Education in Germany (2007-2010)



The quote also shows that diversity management in Germany in the nearer future is more a matter of fair access rather than of widening participation, in terms of filling the study places, which will be an additional point of pressure further down the line when the demographic change reaches all the regions. In the coming years, Germany will have to struggle with a huge increase of demand from more traditional students and will be particularly occupied with offering enough study places for these additional students. On the other hand, Germany is already facing a considerable lack of skilled workers, especially academics. This need for graduates will increase dramatically when the high birth rates of the 1950s and 60s (the baby boomers) will start to decline. In other words, from 2014 onwards, the gap between market demand for graduates and declining traditional applicants will grow and will increase the need for a diversity management.

4.3 Funding of Higher Education as an Instrument to Promote Diversity

The Higher Education Act, Act no 101 of 1997, makes provisions for the Funding of Higher Education (Chapter 5 of the Act). In the preamble to the Act it clearly states the intentions of the Government with regard to higher education, for example to redress past discrimination and ensure representivity and equal access and to provide optimal opportunities for learning and the creation of knowledge. It also states that the intention of the Act is to promote the values which underlie an open and democratic society based on dignity, equality and freedom, respect academic freedom and pursue excellence, promote the potential of every student and to appreciate diversity.

Chapter 5 of the Higher Education Act, which addresses the funding of higher education, states that:

“The Minister must, after consulting the CHE and with the concurrence of the Minister of Finance, determine the policy on the funding of public higher education, which must include appropriate measures for the redress of past inequalities, and publish such policy by notice in the Gazette.”

It is clear that one of the intensions of the Act is to distribute the annual higher education budget in such a way as to promote diversity in higher education to redress the (racial) inequalities of the past.

4.3.1 The New Funding Framework

The following short description of the funding of higher education in South Africa will indicate how funding can be utilised as an instrument to promote (racial) equality in higher education as declared in the Higher Education Act and the National Plan for Higher Education.

During the 1990s, the new government in South Africa argued that the higher education system was inefficient and that government should be able to ‘steer’ the higher education system through the funding mechanism; on the one hand, to encourage students to enrol on the courses considered by the Government as necessary for the economy, and on the other, to persuade the universities to implement government policy. This would be achieved through two instruments:

- 1) The first is a **New Funding Framework (NFF)** to provide financial incentives to students and institutions to do what the Government thinks best. Accordingly, the new funding framework has been designed to give the Minister of Education the ability to increase funding in the areas that the Minister wants to encourage, and to decrease funding in the areas that are believed not to be important.
- 2) The second is a new programme approval process. The Government will determine the programmes and qualifications that each institution may present,

and ultimately, also determine the numbers of students it will subsidise at different levels (undergraduate, postgraduate, etc.) for each of the approved programmes through the funding framework. This instrument is referred to as the **Programme and Qualification Mix (PQM)**, which will be approved for each institution.

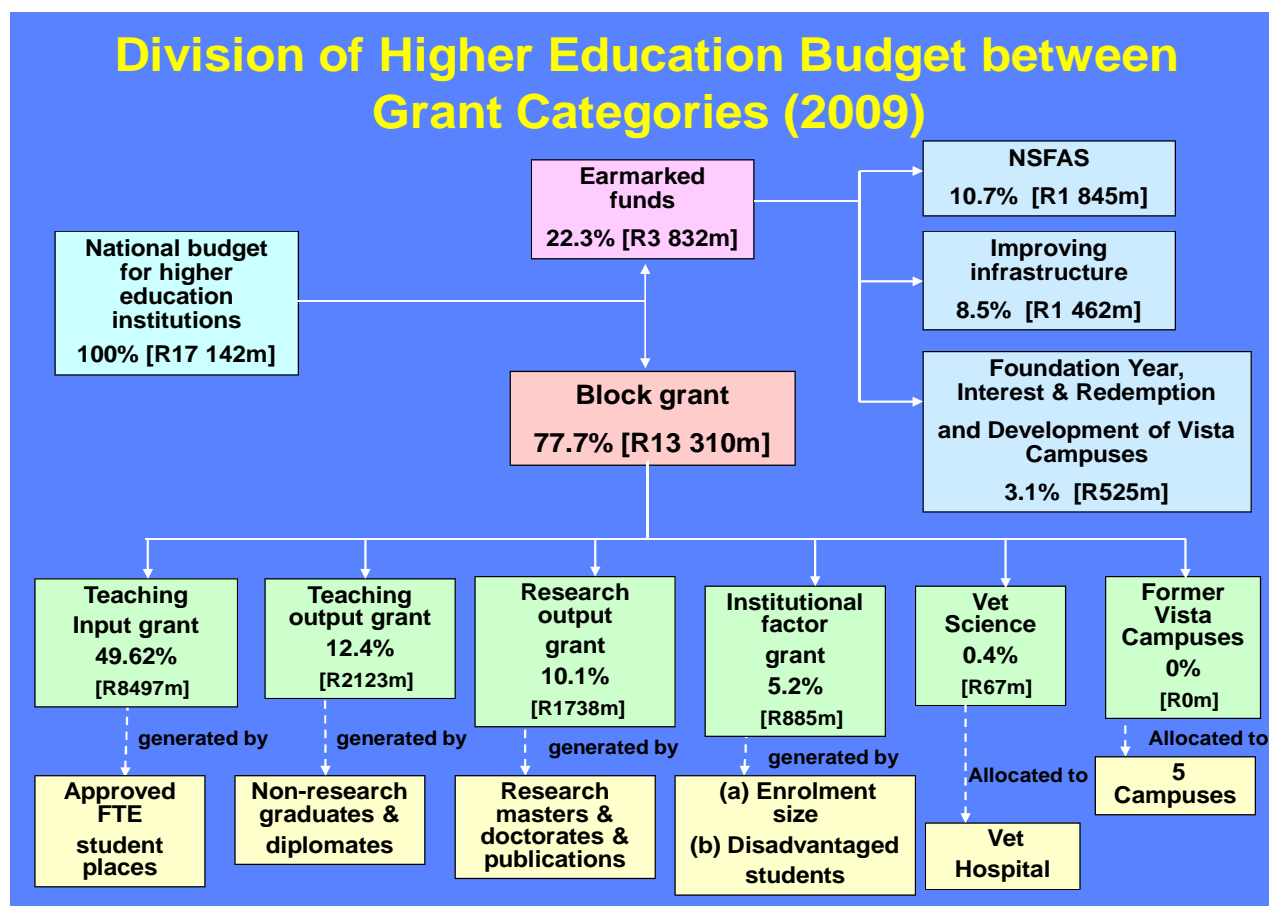
The New Funding Framework was implemented at the beginning of 2004. Investigations for rationalising the Programme and Qualification Mix of each institution began in 2003, but have not yet been completed.

The Funding Framework for higher education, as depicted in figure 7, has the following main features: as a first step, the total national budget for higher education (as appropriated by Parliament) is divided into two main categories – ‘earmarked funding’ and ‘block grants’.

Earmarked funding may only be used for the purposes that it was given. Examples are the money allocated for the National Student Financial Aid Scheme (NSFAS), i.e. student loans and bursaries, and the money allocated for the merging of universities and former technikons (now called universities of technology).

Block grants are funds that the institution may allocate internally at its own discretion after consultation with the Council of the institution, and which are generally referred to as a university’s ‘subsidy’. It is the details of these funds that are described further below.

Figure 7: Division of Higher Education Budget between Grant Categories (2009)



There are five categories of grants/subsidies, each a part of the total block grant, for which institutions may qualify. These are:

- 1) Teaching input grants
- 2) Teaching output grants
- 3) Research output grants
- 4) Institutional factor grants
- 5) Development grants

Teaching input grants are allocated according to the categories approved in terms of the PQM process described above, and the actual number of enrolments for each academic year. In terms of this, the FTE (full-time equivalent) values of each student's modules will be placed in a 'funding grid', i.e. a matrix with four subject groups and four levels.

It can be assumed that the groups in the funding grid generally reflect the costs of teaching different subjects. For example, group 1 consists of the 'cheapest' subjects such as law, psychology, and education. Group 2 consists of commerce, computer science, languages and social science, etc. Group 3 consists of architecture, engineering, mathematical sciences, etc. Group 4 - the most expensive - consists of agriculture, medical sciences, life and biological sciences, fine and performing arts. Table 11 shows the position of the 22 disciplines in the four funding groups. The four levels used in the funding grid are:

undergraduate, honours, masters and doctorates, with more funding provided for the higher levels. The weights applied to the groups and levels are shown in Table 12.

Table 11: Four Funding Groups

Four Funding Groups	
Funding group	CESM categories included in funding group
1	07 education
	13 law
	14 librarianship
	20 psychology
	21 social services/public administration
2	04 business/commerce
	05 communication
	06 computer science
	12 languages
	18 philosophy/religion
3	02 architecture/planning
	08 engineering
	10 home economics
	11 industrial arts
	16 mathematical sciences
4	19 physical education
	01 agriculture
	03 fine and performing arts
	09 health sciences
	15 life and physical sciences

Table 12: Weightings according to Funding Group and Study Level

Weightings according to Funding Group and Study Level				
(i) Contact Students (Distance Students)				
	Level			
Funding group	Undergraduate & equivalent	Honours & equivalent	Masters & equivalent	Doctoral & equivalent
1	1.0 (0.5)	2.0 (1.0)	3.0 (3.0)	4.0 (4.0)
2	1.5 (0.75)	3.0 (1.5)	4.5 (4.5)	6.0 (6.0)
3	2.5 (1.25)	5.0 (2.5)	7.5 (7.5)	10.0 (10.0)
4	3.5 (1.75)	7.0 (3.5)	10.5(10.5)	14.0 (14.0)

Each higher education institution calculates its total number of weighted teaching input units, after which its teaching input grant is calculated as its proportionate share of the funds allocated by the Minister to teaching inputs.

Teaching output grants are allocated according to the number of (non-research) degrees and diplomas awarded by an institution in a particular year (i.e. degrees up to and including 'taught' Masters). The Government has set a normative graduation rate, but if an institution does not meet the norm, it qualifies for a 'development grant' to enable it to improve its output.

Research output grants are allocated according to the numbers of research Masters degrees, doctoral degrees and accredited research publications that an institution produces each year (weighted 1:3:1). Once again, norms have been set, but institutions that do not meet the norm, qualify for development grants.

Institutional grants are divided into two elements. The first allocates additional funds on a sliding scale to small institutions, on the assumption that large institutions have economies of scale and therefore can make do with less. The second allocates additional funds on a sliding scale to institutions that have high percentages of students from 'disadvantaged groups', in the South African context, defined as Coloured and African students.

Development grants are allocated to institutions that do not meet the norms set for teaching and research outputs. The money available in this category is that which is 'left over' from the teaching output and research output categories when institutions do not 'earn' the available totals.

The amount of money available for each of the four categories of grant is determined annually by the Minister. Furthermore, the funding framework is a mechanism for dividing the funds available in each grant category rather than a formula that calculates what is required by the universities.

4.3.2 The Effect of the New Funding Framework on Higher Education Institutions

The new funding framework gives the Minister of Education unprecedented powers to change the way higher education institutions are funded. The higher education sector is concerned that these developments could erode universities' autonomy and academic freedom. Ironically, the reward system works inversely with the best universities receiving less the higher the norm is set. This is because more money is converted into development grants, which the best universities do not qualify for.

In principle, the higher education institutions believe that it is not in the interest of the country to try to turn every university and university of technology into a research university by allocating research development grants. Mission differentiation between universities, universities of technology and comprehensive institutions - as advocated in the National Plan for Higher Education policy document - as a distinguishing mechanism to differentiate between the different kinds of higher education institutions will be more beneficial in the long run. Government should be advised and encouraged to investigate this approach as a steering mechanism in the funding framework. Furthermore, the dispersion of research funds as it is done now is unlikely to lead to the development of efficient research practices.

Although the teaching input funding grid differentiates between the costs of different academic disciplines, its implementation has had unintended consequences. In the investigation that preceded the development of the new funding framework, some disciplines in the Humanities were identified as being more costly than previously provided for in the previous formula, and were accordingly placed in higher groups in the funding grid. However, this happened without any additional funding being provided, with the result that relatively less funding remained for the other disciplines, especially the natural sciences and related subjects.

The effect of the funding framework on its own as a steering mechanism to ensure greater student diversity within the higher education sector still has to be determined. The following incentives, however, are implicit in the funding framework.

Teaching input funding provides an opportunity for the higher education institutions to increase the number of students. Input funding which is determined by the weighting of disciplines and level of study encourages the institutions to redesign and re-examine the curriculums of the programmes they offer. Developing new programmes, which are locally relevant and specifically aim to address the challenges that the country faces, provides a further opportunity to attract students from more diverse backgrounds.

Teaching output funding which is based on the students that complete their studies (graduates) in the programmes that are being taught provides for an incentive which is, inter alia, dependent on throughput and graduation rates. This encourages institutions to provide an efficient student support system, to present Summer/Winter schools for the students at risk, to introduce more e-learning opportunities to the student and to improve the learning material. These incentives apply to all students but are mainly aimed at improving the success rates of the disadvantaged students. The teaching output component of the funding framework makes provision for additional funding to institutions that do not meet the norm (or benchmark) set by the Minister. These institutions are then allocated so-called “Teaching Development Funds” to assist the institutions in improving their throughput and graduation rates. The additional funding may be interpreted as a redress allocation to improve the quality of teaching at these institutions.

(c) The research output component of the funding framework encourages the institutions to improve on their share of outputs of the higher education system especially the Doctoral graduates which carry the largest weight. Institutions are encouraging and recruiting Black students to enrol for postgraduate, especially doctoral, studies by offering bursaries and other financial incentives. Students graduating with a Masters or Doctoral qualification from an institution, especially from the disadvantaged group, provide an opportunity to recruit them for a teaching and research position at the institution and thereby improve the diversity profile of the staff. A “research development” allocation is also given to institutions that do not meet the norm for research outputs set by the Minister. This allocation is made to improve their research outputs which are measured by publications in accredited journals, registered patents, academic books published, and the number of research Masters and Doctoral graduates.

The two components of the institutional factor grants are specifically aimed at promoting diversity in higher education. This first component takes the size of the institution into account. The smallest institution (the one with the least number of full-time equivalent (FTE) students) receives an additional amount of 15% of its teaching input grant. Institutions that have more than a specified number of FTE students (determined by the Minister) receive no additional funding. It can be seen as redress funding because most of the previous disadvantaged institutions do not have large numbers of students. The second component makes provision for an allocation based on the percentage of Black students enrolled at an institution. Institutions with 80% or more Black students enrolled receive an allocation of 10% of its teaching input grant. Institutions with less than 40% Black enrolments receive nothing. The Institutional Factor Grants, therefore, is a very important incentive for promoting (racial) diversity at all institutions.

The important question is whether funding as a driver to enhance and promote diversity in higher education is really effective. It will be very difficult to give a definitive answer because the appropriate indicators to measure diversity profiles usually involve a combination of a number of different drivers. It is clear, however, that the racial profile of the students in higher education has changed. The current diversity profile of the South African students, as was shown above, makes it clear that higher education in South Africa has still a long way to go before it can be considered to reflect the (racial) profile of the population. The higher education institutions could, on their part, argue that reflecting the country's racial diversity in higher education is a myth because higher education does not have to provide an education on post-secondary level for everyone in the broad society.

Table 13 below shows the overall change in the racial profile of the higher education students in South Africa between 2001 and 2008.

Table 13: Changes in the Racial Profile of Students in South Africa (all Institutions, 2001-2008)

Population Group	Number of Students		Percentage of Students		Growth Rate
	2001	2008	2001	2008	2001 - 2008
African	397901	517302	60.77%	64.70%	3.82%
Coloured	35632	51647	5.44%	6.46%	5.45%
Indian/Asian	44229	52401	6.75%	6.55%	2.45%
White	176998	178140	27.03%	22.28%	0.09%
Total	654760	799490	100.00%	100.00%	2.89%

The last column of table 13 indicates that the growth rate of the Coloured students was the highest, although from a very low base. The African student numbers from 2001 to 2008 increased by almost 120,000, which represents a growth rate of 3.82% per annum. The White students stayed nearly constant with a growth rate of only 0.09% per annum. This shift in the racial profile of the students in higher education from 2001 to 2008 cannot be attributed to a single policy intervention by the Government, like for instance the funding framework, but is a combination of a large number of the socio-economic variables as was discussed previously. This is a multi-variable dynamic system and the interaction between the variables and the impact that each one may have on the higher education system has to be determined by a statistical multi-variate analysis or a sensitivity analysis of the dynamic system.

In conclusion it can be stated that diversity management from the perspective of students in Germany and South Africa has some similar elements but differ vastly in scope and importance due to the differences in the historical, socio-political and cultural development of the countries over centuries. Some of these differences were alluded to in this chapter. A more elaborate exposition of the elements of student diversity in Germany is given by

Hannah Leichsenring in a presentation at the 19th EAN Annual Conference in Stockholm, 16 June 2010.

What is important, however, is to agree that managing student diversity will have an impact on the future development of the countries and that steering mechanisms have to be identified to promote student diversity in the most optimal way. The identification of the appropriate indicators to measure the effects of the diversity instruments remains a challenge that will be discussed in Chapter 7.

5 Diversity Management from a Personnel Perspective

5.1 Introduction

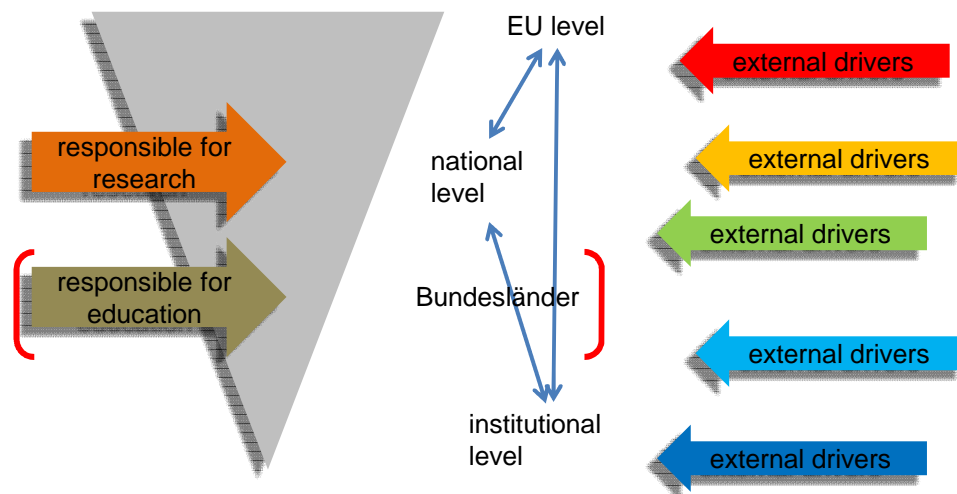
One of the more challenging aspects of diversity management facing German and South African higher education institutions is the enhancement of the diversity of the staff, especially academic staff. Again the perspective from Germany's point of view is quite different to that of South Africa, although some elements may seem to be of a similar nature. One of the main differences is the recruitment and appointment of academic staff at higher education institutions in the two countries which follow quite different routes. In the case of South Africa, the recruitment and appointment of staff, academic as well as support staff, are the responsibility of an institution and the appointments are made by the Council of the institution and therefore an employee of the institution. In the case of Germany, academic staff is appointed by the governments of each *Bundesland* and therefore government employees. The role of governmental policies on the national level and of the 16 *Bundesländer* individually has to be considered when a comparison between the countries with regard to personnel diversity in higher education has to be made. The different approaches in the appointment of staff will make a comparison very difficult. The interaction between the different levels of governance with regard to educational policies is given in figure 8 which formed part of the presentation by Hannah Leichsenring at the EAN Conference in June 2010. A further dimension identified in figure 8 is the role of the European Union (EU). This additional role player in the European higher education system should not be underestimated as it may have a major impact on diversity management in every country in the EU in the years to come. The possible effect of "internationalisation" and "globalisation" on higher education, which include the EU policies, was briefly discussed in Chapter 1.

A report by Uwe Brandenburg, et.al. (*Diversity in neighbouring countries of Germany, CHE Working paper No. 121, June 2009*) on the diversity profiles in higher education in Germany's neighbouring countries further highlights the role of the EU in European higher education. In the paper it is stated that (p12):

Throughout the European Union, diversity-related issues are part of national legislations and programmes. In particular, anti-discrimination is one important target within the work of the European Union. Article 13 of the Treaty establishing the European Community states:

"... the Council, [...] may take appropriate action to combat discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation."

European Union 2006

Figure 8: Levels of Governance in Higher Education in Germany

Hannah Leichsenring, EAN Conference June 16th 2010

The overarching conclusions drawn in the report by Brandenburg, after an analysis of the diversity policies in Germany's neighbouring countries, can be taken as generally acceptable (applicable) in the case of all the EU countries. The authors conclude that:

"...the approach to diversity policy is highly diversified even within a small geographical region. Moreover, we can confirm the hypothesis that, in some cases, EU-wide policies, national policies and institutional approaches might differ considerably, producing substantial scatter effects.

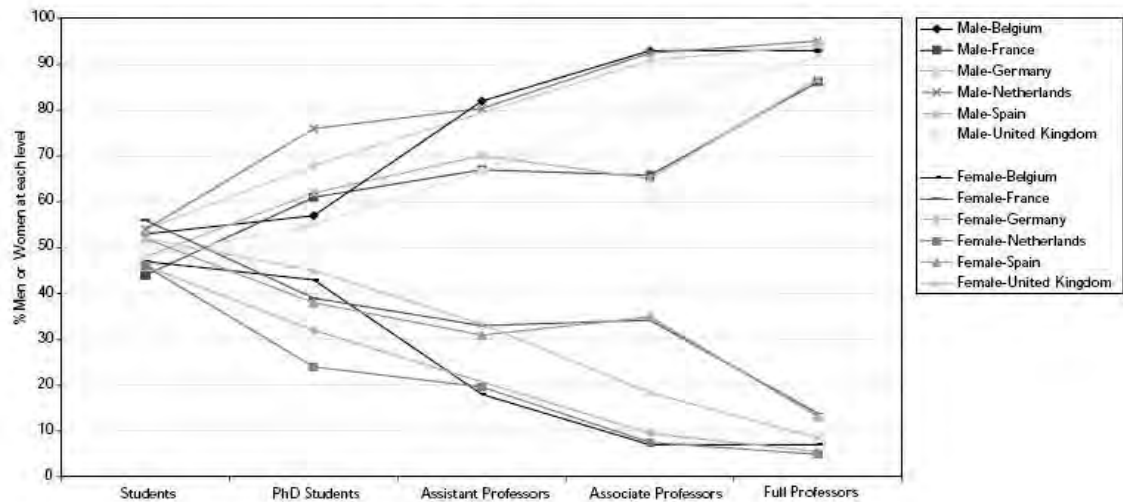
and

"Considering the variety of facets of diversity policy and equal opportunity in higher education, a side effect can be observed: the strong political will towards harmonisation and homogeneity (Bologna) at the macro-level is at the same time producing a jungle of diversity at the micro-level in the sense that each institution tries to interpret the policies differently while adapting them to their inner policies. Thus, at the national level, with diversity with respect to students and staff in higher education being ever increasing, we often do not yet see proper management systems installed to deal with this challenge".

To illustrate their conclusion, the authors included the following figure (figure 9) in their report. It is clear from figure 9 that more women participate in higher education than men. Additionally it is observed that women are under-represented in the fields of science, engineering, health and information technology. The same observation is made with regard to Doctoral graduates in the natural sciences. This, of course, is one of the reasons why women are under-represented in the academia.

Figure 9: A Representation of the Gender Diversity of Academics in 6 EU Member States

(The figure was extracted from the report by Uwe Brandenburg, mentioned in the previous paragraph)

Figure 2.4: Women and men in academia in six Member States (1997)

Although the study by Brandenburg and his colleagues only covered six of Germany's neighbouring countries, the conclusions drawn can be seen as universal. This statement is supported by the view of the International Society for Diversity Management (IDM) which on its home page (www.idm-diversity.org) states that:

"This complexity [of conflicts and social issues that are embedded in complexity and contexts] entails the fine tuning and nimble use of different tools for dealing with it, and for describing and assessing each unique diversity constellation of any particular organisation, community, region or country. For example, in South Africa diversity takes on a different form than in Germany. The different historical and social roots of South African and German diversities have to be deeply respected and taken seriously. There are no simple recipes. As a consequence, in spite of difficulties in overcoming complexities, DM has to assume that people are able and willing to change their thinking, and thereby define and redefine in a positive light."

Any organisation, including the higher education sector, is known to have some sort of "resistance to change" attitude towards diversity management. The organisational approaches and actions taken to address diversity issues (usually staffing) were usefully categorised by Thomas (Thomas, R. (1996), *Redefining diversity*, NY: AMACOM.) as follows:

- (a) *Denial.* Organisations deny that differences exist.
- (b) *Exclusion.* To decrease and even exclude people from diverse backgrounds.
- (c) *Building relationships.* Promote understanding and acceptance among diverse groups.
- (d) *Mutual adaptation.* Accommodation of diversity by recognising and accepting differences.

- (e) *Suppression. Differences are discouraged.*
- (f) *Isolation. Sets diverse people off to the side.*
- (g) *Tolerance. Differences are acknowledged but not accepted or valued.*
- (h) *Assimilation. Diverse people, through socialisation, learn to fit in and becomes like the dominant group.*

Some of these actions are particularly recognisable in the higher education sector, specifically among the academic staff. These actions, however, have to be adapted and/or adjusted by the higher education institutions. They have to take into account the current and evolving future dispensation of higher education in light of internationalisation and globalisation, which will affect all institutions world-wide.

5.2 Staff Diversity at South African Higher Education Institutions

Staff diversity within the higher education sector is a function of a large number of socio-economic and political variables and is mostly determined by the history and the developmental status of a country. As was mentioned previously the historical and developmental pathways of Germany and South Africa are vastly different but the fact remains that both countries have to deal with the challenge of creating a diverse staff complement in higher education - South Africa from the perspective of redressing past inequalities and developmental shortcomings, and Germany from a position of a changing population profile due to the diverse growth rates within the country, migration patterns between the *Bundesländer* and across its borders.

One of the main drivers (instruments) in promoting and changing the diversity profile of the staff at higher education institutions, was and still is, the Employment Equity Act, No 55 of 1998. The Act is applicable to all public and private enterprises, which includes the higher education institutions.

In general terms the act recognises that as a result of apartheid and other discriminatory laws and practices, there are disparities in employment, occupation and income within the national labour market, and that those disparities create such pronounced disadvantages for certain categories of people that they cannot be redressed simply by repealing discriminatory laws. The act, therefore, was enacted to (quoted from the Act):

- (1) *Promote the constitutional right of equality and the exercise of true democracy.*
- (2) *Eliminate unfair discrimination in employment.*
- (3) *Ensure the implementation of employment equity to redress the effects of discrimination.*
- (4) *Achieve a diverse workforce broadly representative of the people.*

(5) *Promote economic development and efficiency in the workplace.*

(6) *Give effect to the obligations of the Republic as a member of the ILO.*

The purpose of the act is clear in that it wants to promote equal opportunity and fair treatment in employment through the elimination of unfair discrimination. The Act also states that to enable Government to achieve equity in the workplace it should provide for the implementation of affirmative action measures to redress the disadvantages in employment experienced by “designated groups” in all occupational categories and levels in the workforce. “Designated groups” in the Act are defined as Black people, women, and people with disabilities. Black people means Africans, Coloureds and Indians/Asians.

The effect of the Act alone on the diversity profile of the staff at the higher education institutions is nearly impossible to determine because the change in the profile of the staff is dependent on a number of other factors, for example, the availability of suitably qualified academics; the salary offered by the institutions; the language proficiency of potential academics in the language of instruction at institutions; the competition among institutions (and also between the public sector and the institutions) to acquire academics in the scarce fields of study; etc.

Table 14 gives an indication of the difficulty that institutions face in recruiting staff for the designated groups with regard to the disparity in the remuneration being offered between the public sector and higher education institutions.

Table 14: Comparison of Remuneration between Public Sector and Higher Education Institutions

UP Remuneration 01/04/2009			Government SMS (top of scale) 01/01/2009	
Professor	1.36	R557 731	Director	R736 065
Associate Prof	1.17	R479 952	Chief Director	R905 538
Snr Lecturer	1	R410 448	Deputy DG	R1 037 571
Lecturer	0.9	R367 944	DG	R1 355 766
Jnr Lecturer	0.7	R286 860		

It can be seen from table 14 that the remuneration of a director in the public sector is approximately 32% higher than that of a professor at a university. The required qualifications for these two positions are vastly different. The recommended qualification for a director is only a Bachelor Honours degree (equivalent to a 4-yr Bachelor degree) whereas the minimum recommended requirements for a professor are a doctors degree with a proven research record. This illustrates the difficulty experienced by higher education institutions to recruit academics of high quality.

Table 15 shows the change in the racial profile of the total number of permanently employed staff at higher education institutions in South Africa from 2005 to 2008. The table distinguishes between academic and support staff. The table indicates that, although the total number of permanently employed staff stayed nearly constant from 2005, the percentage representation of the Africans, Coloureds and Indians/Asians increased whilst that of the Whites decreased. This shift can be observed for the academics as well as for support staff. This change in the racial profile may, to a large extent, be attributed to the effect of the Employment Equity Act, although the other factors mentioned above may have also contributed to the changing profile.

Table 15: Changes in the Racial Profile of Permanent Staff at Higher Education Institutions (2005-2008)

Population Group	Number of Staff		Percentage of Staff	
	2005	2008	2005	2008
Instruction/research				
African	3408	3704	24.62%	26.55%
Coloured	587	676	4.24%	4.85%
Indian/Asian	1125	1222	8.13%	8.76%
White	8722	8348	63.01%	59.84%
Total	13842	13950	100.00%	100.00%
Support staff				
African	10644	10954	50.67%	52.75%
Coloured	2757	2923	13.13%	14.08%
Indian/Asian	1343	1267	6.39%	6.10%
White	6261	5623	29.81%	27.08%
Total	21005	20767	100.00%	100.00%

The geographical location of the higher education institutions within the country, and their distribution between the 9 provinces, contribute to a racial profile of the staff at the 23 institutions that deviates to a very large extent from the overall profile given in table 15. Table 16 shows the racial and gender profile of the permanent appointments (academic as well as support staff) at 20 of the higher education institution in 2008 as percentages. It is interesting to note that at some institutions there is a very low percentage of White employees. For example, the Mangosuthu University of Technology (Mango) only have 7.7% White employees, which is partly due to the fact that it is situated in the outskirts of Durban in the Province of Kwazulu-Natal. The location of the University lends itself to attracting students and staff from that area, who are mainly African. Another example is the University of Cape

Town, with a Coloured staff complement of 35.8%. It is situated in Cape Town in Western Cape Province and recruits most of its staff from the large coloured community in and around Cape Town.

The racial and gender diversity of the permanent employees at the higher education institutions remains high on the agenda of the Councils of the institutions. The Executive Management of the institutions have to report annually to the Council of the institution on the progress made towards a set goal in the tri-annual Employment Equity (EE) Plan of the institution. Such a 3-year EE Plan is required from all public and private enterprises. A Schedule: Code of Good Practice, which describes the preparation, implementation and monitoring of the EE Plans, was published in a Government Notice on 23 November 1999.

The EE Act remains a very powerful diversity instrument in ensuring that higher education institutions adhere to the transformational agenda of the Government.

Table 16: Headcount of Personnel with Permanent Appointments according to Race and Gender

Headcount of Personnel with Permanent Appointments According to Race and Gender								
Institution	White	Coloured	Indian	African	All Other	Total	Male	Female
UP	63.7%	3.2%	3.2%	30.1%	0.1%	3591	46.2%	53.8%
UNW	62.6%	2.6%	0.8%	34.0%	0.0%	2753	45.1%	54.9%
UFS	62.6%	4.5%	0.9%	32.0%	0.0%	1942	44.2%	55.8%
US	61.9%	33.5%	0.8%	3.8%	0.0%	2577	48.4%	51.6%
NM	57.8%	15.0%	3.7%	23.6%	0.0%	1524	45.5%	54.5%
UJ	48.8%	6.1%	5.0%	40.2%	0.0%	2540	50.4%	49.6%
UNISA	48.1%	4.6%	3.2%	44.1%	0.0%	3981	45.7%	54.3%
CUT	45.3%	6.4%	1.4%	46.9%	0.0%	654	48.8%	51.2%
UR	42.4%	9.8%	1.6%	46.2%	0.0%	1280	49.4%	50.6%
TUT	39.5%	1.6%	2.1%	56.8%	0.0%	2356	51.7%	48.3%
UCT	36.6%	35.8%	4.0%	14.1%	9.5%	3101	43.9%	56.1%
VUT	32.2%	1.9%	3.0%	63.0%	0.0%	907	45.3%	54.7%
CPUT	30.0%	48.0%	2.2%	19.9%	0.0%	1682	51.5%	48.5%
KZN	24.3%	3.1%	28.1%	44.0%	0.6%	4666	43.8%	56.2%
DUT	18.8%	3.1%	42.7%	35.2%	0.2%	1361	53.0%	47.0%
UFH	18.3%	3.7%	2.2%	75.7%	0.1%	1037	51.0%	49.0%
LIMP	17.9%	0.4%	3.4%	78.2%	0.0%	1834	53.2%	46.8%
UZ	13.1%	0.5%	4.9%	81.5%	0.0%	740	56.2%	43.8%
WS	8.4%	2.0%	3.9%	85.7%	0.0%	1292	49.2%	50.8%
MANGO	7.7%	1.0%	8.0%	83.3%	0.0%	401	56.4%	43.6%
UV								
UWC								
WITS								
Totaal	16698	4107	2838	16245	331	40219	19152	21067
Total %	41.5%	10.2%	7.1%	40.4%	0.8%	100.0%	47.6%	52.4%

5.2.1 Diversity (transformation) at the University of Pretoria

The University's approach to the diversity management of staff is included in the Strategic Plan of the University of Pretoria: 2007 – 2011. (<http://www.up.ac.za>). The Strategic Plan consists of 8 chapters of which one is devoted to "Transformation". Transformation in the

plan addresses a number of transformational issues of which the diversification of staff and students are the most important. The other issues are community engagement, the appropriate delivery of education and the institutional culture. All of these issues will be discussed further on.

The journey embarked on by the University is by no means complete but continuing progress is being made. The University has transformed itself from a predominantly white Afrikaans university to a truly South African university in the sense that it is accessible to all South Africans. The University increasingly reflects the rich diversity of South African academic talent on its campuses, and supports and promotes national goals and priorities, including those of equity, access, equal opportunities, redress and diversity. Major transformation initiatives include the development of an inclusive and enabling value-driven organisational culture, the racial integration of campuses and facilities, a marked increase in student and staff diversity and a language policy that treats Afrikaans and English as languages of equal status.

Access

Being a people centred university (Chapter 2 of the Strategic Plan), the racial composition of the University's student body has changed dramatically over the past decade. In 2009, 40.5% of the undergraduate contact students were black; of the postgraduate contact students, 50.5% were black; and nearly all of the distance education students were black. Table 17 for the University's first-time entering students shows the same trend. From the table it can be seen that the number of African first-time entering students increased in 2009. Similarly, the number of Coloured students has been increasing, although from a low base. The figures for 2010 are preliminary, but reflect a small decrease in the numbers of first-time entering African students.

Table 17: First-time Entering Contact Student Profile by Race

Year	Number of first-time entering students									
	African		Coloured		Indian		White		Total	
	Total	% incr.	Total	% incr.	Total	% incr.	Total	% incr.	Total	% incr.
2008	2380	10.0	138	6.2	242	-6.9	4534	1.2	7294	3.7
2009	2750	15.5	160	15.9	346	43.0	5045	11.3	8301	13.8
2010	2720	-1.1	179	11.9	367	6.1	5076	0.6	8342	0.5

Employment Equity

The University constantly strives to achieve its strategic objective of transforming the university to be the intellectual home of the rich diversity of South African and international academic talent. A critical aspect of this is achieving a more demographically representative employee profile at all levels and in all occupational categories.

Table 18 reflects the situation in 2009 relative to goals set in the Employment Equity Plan of the University for 2009. It shows that although there have been modest positive changes in employee demographics, the University continues to fall short of complying with its own EE numerical goals, particularly at some of the more senior levels and in certain occupational categories.

Table 18: Employment Equity – Current Position and Goals for 2009 according to Occupational Level

Occupational levels	Current total – all demographic categories		Black Male		Black Female	
	Male	Female	Current	Goal 2009	Current	Goal 2009
Top Management	9	1	2	5	1	0
Senior Management	25	9	5	12	0	0
Professionally qualified specialists and Mid Management	390	211	43	57	21	26

1) Black = African + Coloured + Indian

2) Figures exclude Foreign Nationals and joint appointments

June 2009, was the end of the University's third Employment Equity Planning period. Since then, a detailed analysis of progress according to occupational level and of factors, both internal and external, that may be inhibiting progress, has taken place. A new Employment Equity Plan for the period 2009 to 2012 has been developed including strategies to address

identified problems. The next 3-year Employment Equity Plan was presented to Council late in 2009.

From table 19 it can be seen that the percentages of black academic and support staff have been increasing, albeit, slowly.

Table 19: Staff Profile – Staff Permanently Employed

Year	Academic staff (C1 staff) Permanently employed			Support staff (C2 and C3 staff) Permanently employed		
	Total*	% Black staff	% Female staff	Total	% Black staff	% Female staff
2004	1376	13.7	42.7	2052	39.3	57.4
2005	1356	14.9	44	2008	39.4	58.1
2006	1327	15.7	45.1	1985	41.0	58.3
2007	1385	18.3	45.1	1968	42.8	59.8
2008	1397	19.0	46.8	2001	44.7	59.2
2009	1398	21.4	47.4	1978	46.4	59.9

Appropriate delivery of education

“Delivery of education” as one of the transformational domains stated in the University’s Strategic Plan can be defined as follows: “*Transformation in the delivery of education has a number of dimensions, which include appropriate teaching, curricula and adequate student support to enable students to complete their academic programmes successfully*”. In the

University's mission statement, it is said that "... *the University encourages academically rigorous and socially meaningful research, particularly in fields relevant to emerging economies*".

A university's core functions of teaching and research include some of these aspects, for example, extended programmes with foundational modules, various forms of student support, some of it being electronic through clickUP, summer/winter schools are held to facilitate the throughput of students and important community-related research is being undertaken. The responsiveness of the University to new developments, both in an academic environment and those external to higher education, is reflected in the changes made to curricula.

Institutional culture

In the Strategic Plan the statement is made that "*Institutional culture is a term that embraces a range of issues relating to the 'way things are done', some in writing, but many simply "understood": manners, customs, traditions etc. that are passed on from generation to generation.*"

One of the most important aspects of changing the University's institutional culture is the language policy.

The University has accepted both English and Afrikaans as mediums of instruction and administration. The University's language policy promotes multilingualism, which is a characteristic of contemporary South Africa. It promotes the indigenous languages of the country, of which Afrikaans is one. In 2007, Sepedi was introduced as an additional language of communication on University campuses. Furthermore, the language policy facilitates access to the University by removing a perceived barrier that existed for students who were not familiar with Afrikaans.

In 2009 a ministerial committee, known as the Soudien Report, was released containing, *inter alia*, criticism of institutional cultures at universities in the higher education sector. In response to the Report, the University of Pretoria carried out a survey in 2010.

5.3 Staff Diversity at German Higher Education Institutions

Diversity management with respect to academic staff in the higher education sector in Germany (and in all of the EU Countries) seems to focus mainly on gender representation. The other dimensions of diversity of staff, for instance, race, age, nationality, disabilities, and language proficiency is not given a high priority in pursuing a more diverse profile for academics. Referring to figure 9 above, Brandenburg quoted from a European Union Report that:

“The key objective is to eliminate inequalities and promote gender equality throughout the European Community in accordance with Articles 2 and 3 of the EC Treaty (gender mainstreaming) as well as Article 141 (equality between women and men in matters of employment and occupation) and Article 13 (sex discrimination within and outside the work place).”

European Commission 2008

The fact is that higher education institutions in Germany, and all of the other EU countries, will have to adopt a strategy to address a wider range of staff diversity issues than just gender. Such a widening of perspective can already be observed in some academic journals. An example is a paper by Carmen Leicht-Scholten and colleagues from the RWTH in Aachen, Germany in the European Journal of Engineering Education, October 2009, Vol. 34, Issue 5, p447-454. The abstract of the paper summarises the essence of the challenge faced by the higher education with regard to academic staff diversity.

“Due to demographic changes, globalisation and increased migration processes, institutions of higher education are, in particular, assigned new responsibilities. The fight for the most qualified people demands new strategies and concepts. Technical universities that are traditionally male dominated and where women and minorities are under-represented in almost all areas are facing these challenges with an increasing urgency. For an excellent performance, these institutions need diverse people who are equally included and promoted within the educational system.”

Germany as a country, with its changing population and student profiles, has to adopt and develop strategies to manage the changing environment in an optimal way. This is also true for each of the 16 *Bundesländer*. In the publication “Intercultural Communication, ISSN 1404-1634, 2000, April, issue 3”, (edited by Prof Jens Allwood), a paper by Brian Norris appeared which quoted Jackson and Holvin’s research on the stages an organisation (higher education) goes through in the process of transforming into a multicultural organisation. This reference is quoted here because it may be relevant in the case of the German higher education system with its current “mono-cultural” academic staff profile.

1. *The mono-cultural stage which is characterised by either implicit or explicit exclusion of racial minorities or women.*
2. *The non-discriminatory stage which is characterised by a sincere desire to eliminate the majority group’s unfair advantage. However, this is done without the organisation significantly changing its dominant culture, but by ensuring that the climate of the organisation is not a hostile place for the new members of the workforce.*
3. *The multi-cultural phase which describes the organisation that is either in the process of becoming or has become diverse in the most visionary sense that reflects the*

contribution and interests of the diverse cultural and social groups in the organisation – (mission, operations, products, or services). The organisation commits to eradicate all forms of social discrimination and shares power and influence so that no one group is put at an exploitative advantage (or disadvantage).

It is not possible (or advisable) to link any of the stages to a fixed time-scale or to specify a timetable for the progression within any one of these stages. Transformation is a multi-dimensional process which will be dictated by the internal and external forces unique to a county and the organisations (and higher education sector) within the country.

6 Diversity Management from an Institutional Management Perspective

6.1 Introduction

The main premise of this chapter is to examine the role that the Executive and Senior management of an institution could, and should, play in managing diversity within the institution. To begin with, it is necessary to determine the framework within which the institution operates and to identify the duties, responsibilities and accountability of the Executive and Senior managers in managing the institution.

In this chapter the issue of the institutional management of diversity is discussed from a South African perspective, and specifically as to how it is managed at the University of Pretoria.

The overarching legal framework in the case of South Africa is the Higher Education Act, Act No.101 of 1997. According to a provision in the Act, the University of Pretoria uses a tricameral system of governance. The Council governs the University. Senate is accountable to Council for the University's academic functions. The Institutional Forum fulfils the functions as provided for in the Act. According to the Act, the Vice-Chancellor and Principal (Rector) (CEO) is responsible for the management and administration of the University. The Council delegates all the powers they deem necessary to the Principle to perform these duties.

The Council of the University is directly responsible for governance, policy-making and laying down guidelines for:

- Strategic and financial governance
- Staff and student matters
- Language policy
- Approval of the (annual) University budget

The Council is assisted by four sub-committees: The Standing Committee of Council (may act on behalf of Council); Audit Committee; Investment Committee; and the Human Resource Committee.

The Senate is chaired by the Vice-Chancellor and Principle and is responsible for the overall quality and integrity of the University's academic offerings. It is accountable to Council.

Faculty Boards are sub-committees of Senate. A Dean chairs the Faculty Board and is responsible for the overall running of the faculty in compliance with the vision and mission of

the University. Faculties make use of a number of committees which are aligned with those of Senate. Faculty Boards are responsible for managing the institutional academic agenda, the growth of the various academic disciplines within the faculty and aligning their strategies with those approved by Senate and Council.

The Executive of the University is chaired by the Vice-Chancellor and Principle and is responsible for the development and management of the University's strategic plan, co-ordination of its execution, and realisation of the goals expressed in the plan. With regard to planning, budgeting processes and quality assurance, the Executive also reviews and approves all major institutional strategic initiatives and documents prior to the formal approval by Council. The Executive comprises a Senior Vice-principle three Vice-principles, the Registrar, three Executive Directors and an Advisor to the Principle. (The composition and total number of executive members may vary from time to time).

It is important to take into account the management structures within an institution due to the very important role Executive and Senior Managers of an institution should and must play in formulating institutional policies with regard to diversity issues. These managers should also take responsibility in overseeing the processes and the implementation of any such policies.

6.2 Diversity Management linked to the Strategic Plan

One of the main tasks of the Council, as stated above, is overseeing the strategic and financial governance of the University. The responsibility of developing and managing a strategic plan are mandated by Council to the Vice-Chancellor and Principle, and the Executive of the University. The third five-year strategic plan with the central theme and primary goal of ***Innovation Generation: Creating the Future: 2007 -2011*** is the most comprehensive plan since the strategic planning process for the University started 1993. The document sets out the strategic intent of the University and articulates the interpretation of the vision and mission of the University in eight (8) key areas and strategic thrusts in light of the developments in the external environment as they are evident or foreseen. These eight strategic thrusts, depicted in figure 10 below, have detailed implementation plans and targets associated with them.

Figure 10: The Eight Strategic Thrusts of the University of Pretoria



Diversity, in one form or another, can be identified in all of the thrusts, but the most obvious key area where diversity plays a major role is in thrust 6, "Transformation". The objective stated in the Strategic Plan under this thrust is:

"Transforming the University to be the intellectual home of the rich diversity of South Africa and international academic talent."

The Plan states that this can be done by:

- *Ensuring that the University's institutional culture instils in its members the appreciation of diversity necessary for making all feel welcome at the University of Pretoria.*
- *Encouraging the best scholars and students from all communities in South Africa to join the University.*
- *Taking steps to achieve employment equity at the University.*
- *Ensuring fair student admission to the University.*
- *Providing appropriate support to students and staff, particularly those from disadvantaged communities, in order to increase students' academic success rates and staff retention.*
- *Encouraging community engagement and service learning.*

It is obvious that this thrust, and the associated objective, represent an extremely powerful position statement by the University on its position to promote and pursue a diversity agenda. What is important is that the Executive and Senior Management have to commit themselves to pursuing this objective. According to the governance structure, set out above, an important part of the function of Council is to assess the University's performance in relation to the institution's strategic plan and the objectives set out in the Plan. The Vice-Chancellor is obliged to present a performance report to Council annually, depicting the progress made toward the agreed upon goals set in the strategic plan.

The outline given above on the governance structure and the responsibilities of the various functionaries and the rigor with which an institution's diversity agenda can be managed could serve as an example of how diversity management within an institution can be pursued. Vision, mission and commitment are the essence in pursuing the diversity agenda at a higher education institution. It must be kept in mind, however, that this example is closely linked to a specific county's socio-economic and political circumstances.

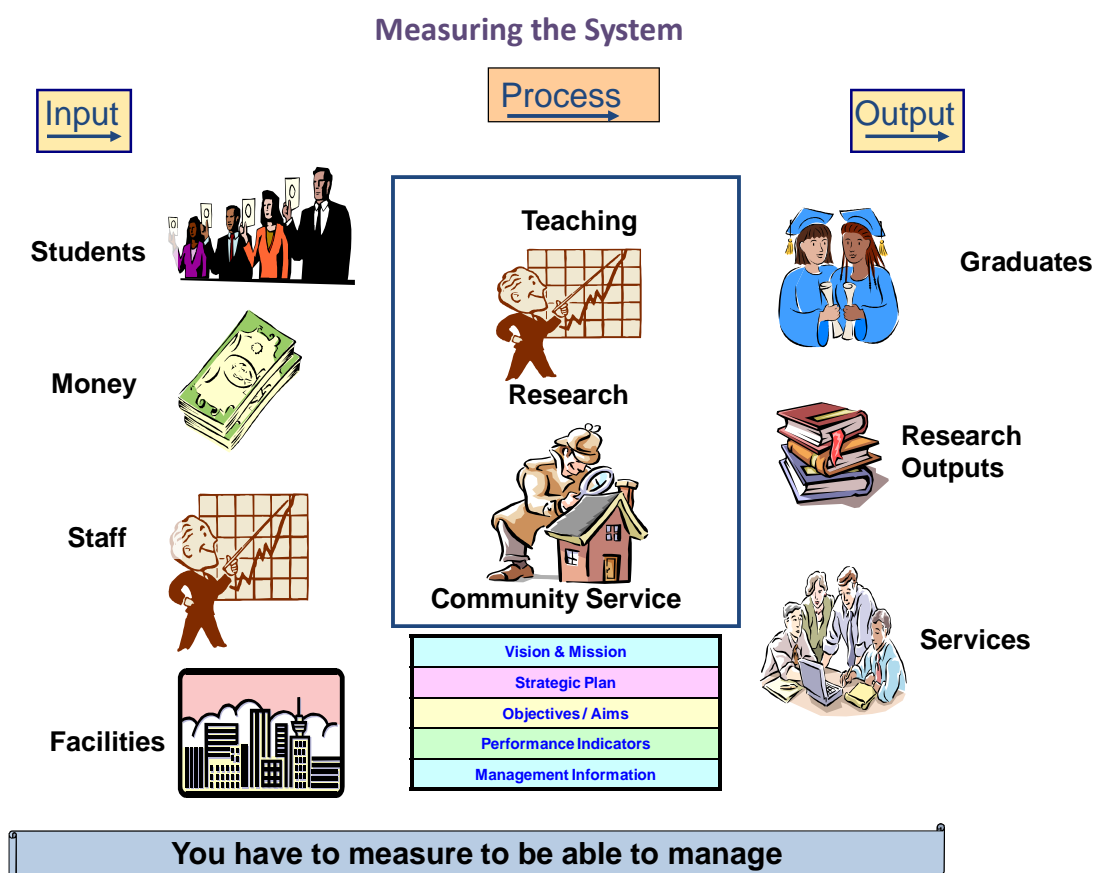
6.3 The Role of Management Information in Institutional Diversity Management

In performing their management obligations, the Executive and Senior Managers need to know what the trends of certain diversity indicators are. These indicators usually measure the performance of the internal processes of an institution. The effectiveness and efficiency of the internal processes depend to a large extent on the inputs to the system. The (quality of the) output of the system is, *inter alia*, dependent on the efficiency of the internal processes. Figure 11 illustrates an input–process–output approach applicable to a higher education institution.

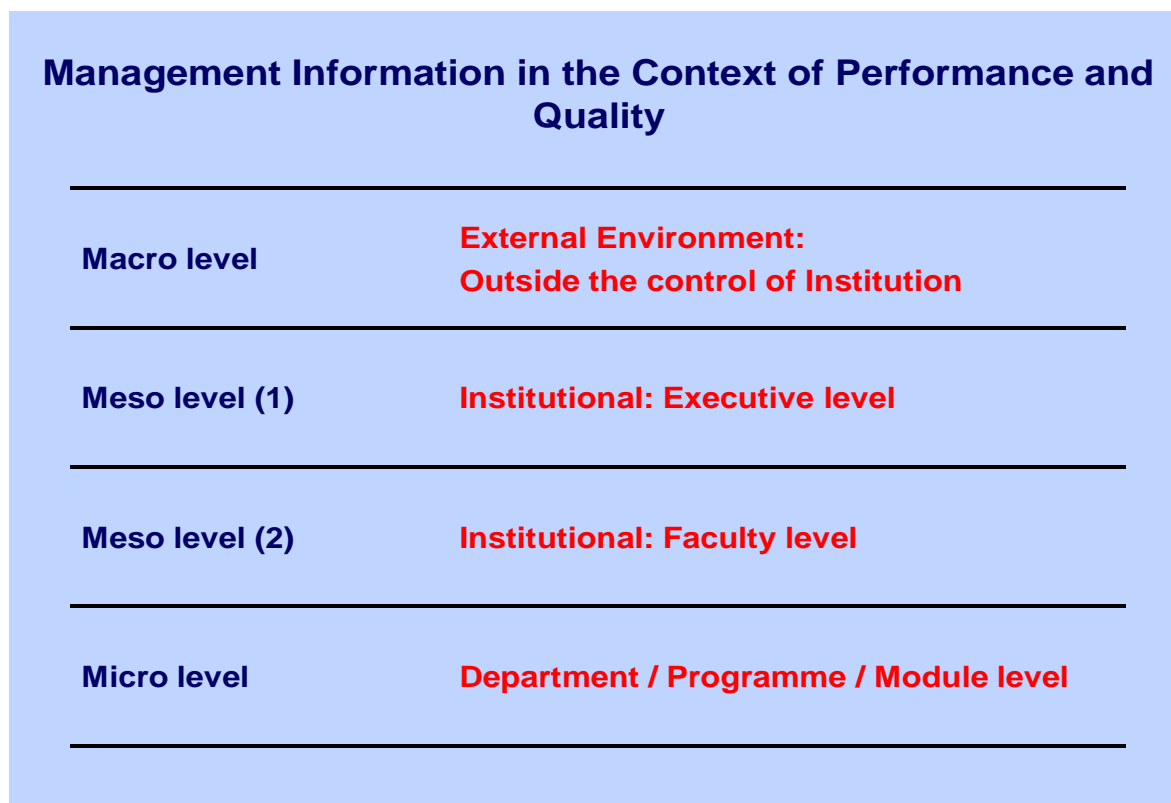
The figure indicates that the institutional processes are dependent on the inputs to the system. The important inputs which directly impact on the issues of diversity management that are being addressed in this report are mainly the students and staff, although the funding of an institution is paramount to ensure an efficient and sustainable enterprise. The performance of the system should be measured against the vision and mission of the institution and the strategic plan of the institution. As was indicated above, the strategic plan also contains the objectives, linked to the strategic thrusts that the institution is committed to pursue. To be able to comply with the directive from Council to report annually on the performance of the internal processes and the progress towards the agreed upon goals, the Executive and Senior Managers need to be able to have access to a comprehensive institutional Management Information System (MIS). The MIS should contain performance indicators that will enable the managers to evaluate and analyse the progress made toward the goals set for the objectives in the strategic plan. The important role of a MIS should therefore be recognised because “one needs to measure to be able to manage”.

Figure 11: A Systemy Approach applicable to Higher Education Institutions

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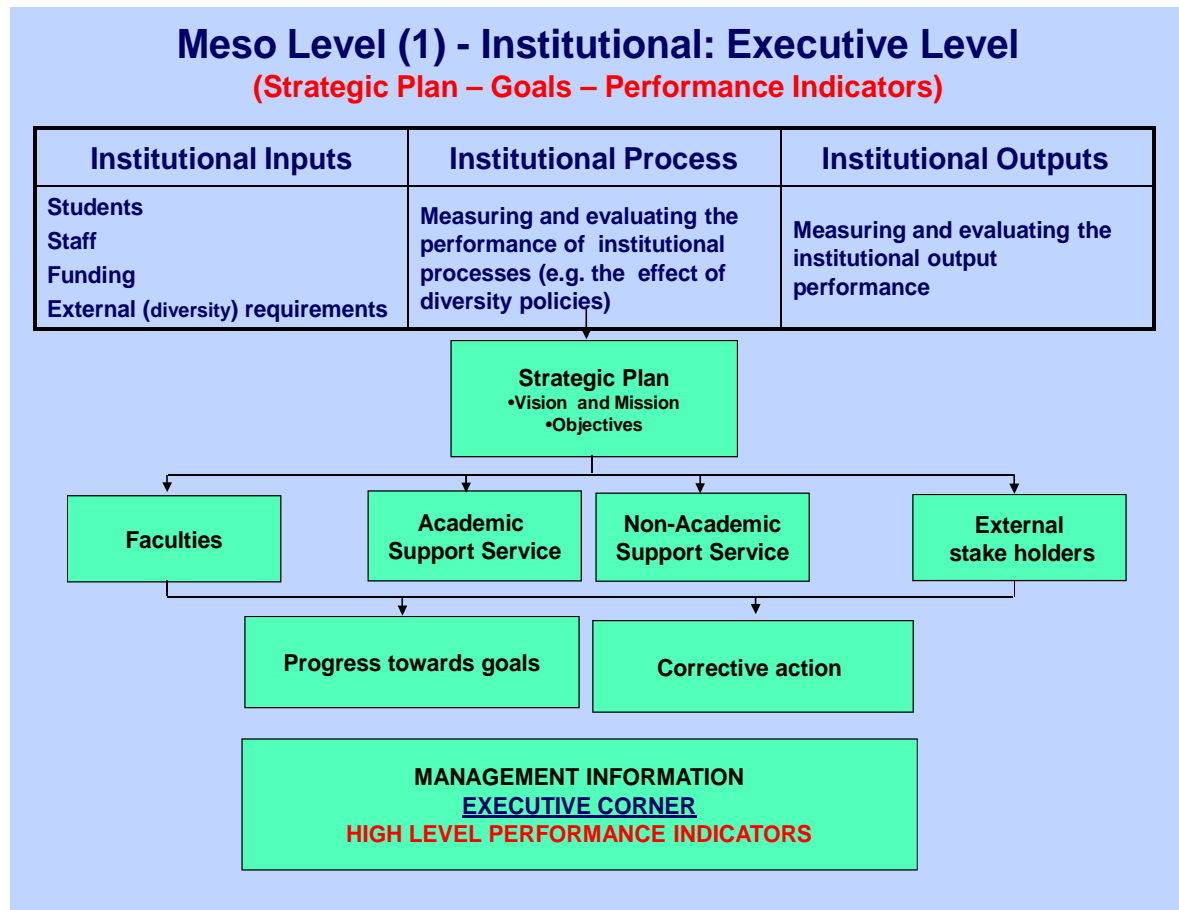


The important role of a Management Information System in managing an institution was alluded to in the previous paragraph. Management information, however, should be viewed from the purpose for which the information is to be used. For this purpose, management information can be categorised into different levels. Figure 10 shows a possible configuration of the different levels where management information can play an important role in managing a higher education institution. The information on the macro level provides insight into the exogenous variables that may impact on an institution but over which the institution has no control, e.g. the current state of the economy and projections for the future, the population forecasts, the future prospects of the schooling system, etc. The next level is categorised as a meso level (1) which should provide institutional information to the Executive on an aggregate level to enable them to meet their reporting responsibility to Council. It is at this level that the diversity indicators play a major role in the management of diversity in an institution by the Executive. The information contained in the meso level (2) is aimed at supporting the Deans of faculties to manage their faculty effectively. It is their obligation to report to the member of the Executive responsible for the different portfolios of Teaching and Learning, Research and Community engagement on the progress made toward the faculty goals which should be aligned to the institution's objectives in the strategic plan. The Deans are held responsible for their faculty's performance against the agreed upon goals. The last level is the micro level where information on a more operational plane is provided. This will include data and information on the departmental or discipline level, for example, study programmes and course enrolments, cost of courses, income statements of departments, staff and operational expenses, etc..

Figure 12: Levels of Management Information

In Figure 13 a flow chart is shown of meso level (1) to give an indication of the interaction between the strategic plan the goals set in the plan and the way in which the Executive could use management information to deliver their obligation to report to Council on the institution's performance. (Please keep in mind that in this report performance and management information is aimed at diversity management). Similar flow charts can be constructed for Meso level (2) and the Micro level to indicate the relationship between the Deans' need for management information and his management responsibilities and that of a Head of Department and his information requirements. It will suffice to say that the management information from the macro to the micro level becomes more disaggregated in much more detailed (the drill down effect).

Figure 13: Meso Level (1)



To conclude this chapter on “diversity management from an institutional management perspective” it can be stated that the institution should first of all commit to a programme for promoting diversity at the institution. The institution should clearly define what is meant by “diversity” within the context of the specific circumstances in which the institution finds itself. This could include the external environment (i.e. national and provincial legislation), the current profile of its students and staff, the constraints (financial or otherwise) faced by the institution, etc. The vision and mission of the institution and the strategic plan, should be the driving force to stimulate and guide the institution’s diversity agenda. Commitment and buy-in of all the role-players involved are prerequisites for attaining success in reaching the institutional diversity goals. It is further essential that the Executive of an institution takes the lead in the process and pursues the diversity agenda with rigor. To be able to do this the Executive and Senior Managers of an institution need access to a comprehensive institutional management information system, as was mentioned above.

7 Diversity Management: Developing Performance Measures

7.1 Introduction

A number of performance league tables are briefly discussed below in relation to the University of Pretoria to indicate the different approaches that are used to try to “rank” higher education institutions all over the world. Each one of these ranking methods have been criticised by many academic institutions and academic scholars from all over the world. It remains a challenge to find a universally acceptable ranking method for all higher education institutions. Until such time higher education institutions will have to accept the current league tables if they wish to compare themselves globally with other institutions.

(a) Shanghai ranking

In the era of globalisation, institutions of higher learning are increasingly competing in the same market and being judged by uniform standards the world over. Although there are several bodies that undertake regular assessments of the international higher education sector, one that has assumed authority in recent years is the ranking undertaken by the Jiao Tong University of Shanghai, China. This ‘Shanghai’ process is used to rank the world’s top 500 universities. Only four South African universities are presently included on the list.

(b) Scopus affiliation search results

The Scopus affiliation search results count the number of citations of publications and the number of international patents from the *Scopus* data base. *Scopus* is currently the largest abstract and citation database of research literature, covering twenty-nine million abstracts and fifteen thousand peer-reviewed titles from more than four thousand publishers. Table 20 below depicts the number of Scopus documents published accurately and the number of citations for the University of Pretoria over the period period 2005 to 2009. The number of patents for 2009 was obtained by using a search on the Dialog's databases, viz. Derwent and Inpadoc. 86 International patents were found.

Table 20: Scopus Affiliation Search Results – University of Pretoria

	2005	2006	2007	2008	2009
Scopus no. of documents published	8691	11246	12197	15707	15,496
Scopus no. of citations	6114	7327	8778	78291*	81,042
Scopus no. of international patents	26	32	32	36	
Dialog no. of international patents					86*

* The result of international patents on Scopus not trustworthy, therefore using Dialog's databases.

The Scopus database is becoming an increasingly important one. The Times Higher Education Supplement (THES) will in future rely on this database to assess a University's research output and impact. Table 20 indicates that the number of published documents is now above 15,000. The number of Scopus citations stands at just over 81,000.

(c) Institute of Scientific Information (ISI) Field Rankings

The ISI institutional rankings use a different approach. Scientific fields are identified in which an institution is prominent in research. The criterion is that an institution must be producing at least 1 percent of the research in the particular field on an international level. As may be seen from table 21 there are six such fields in which the University of Pretoria is prominent internationally: clinical medicine, plant and animal science, the environment and ecology, engineering and agricultural sciences, and the social sciences. The last of these categories (i.e. Social Sciences) was added to the University's list in 2008. The comparisons in table 21 between 2009 and 2010 indicate a marked increase in international citations of papers written by University of Pretoria authors, and thus the progress that the University is making in these fields.

Table 21: SI Institutional Rankings

	March 2009			April 2010		
FIELD	Papers	Citations	Citations per Paper	Papers	Citations	Citations per Paper
Plant and Animal Science	1943	9596	4.94	2030	11150	5.49
Clinical Medicine	585	5337	9.12	600	5390	8.98
Environment/Ecology	507	4141	8.17	523	4448	8.50
Engineering	561	1696	3.02	571	1855	3.25
Agricultural Sciences	199	941	4.73	208	1253	6.02
Social Sciences	294	567	1.93	349	790	2.26
ALL FIELDS	6436	35670	5.54	6725	39890	5.93

From these rankings, one may conclude that the University of Pretoria has moved into the range of internationally recognised universities. This is a fairly recent phenomenon, which should provide the inspiration for further improvements leading to higher rankings in the coming years.

(d) Times Higher Education Supplement's (THES) top 200 universities

Although only the first 200 universities are usually quoted, the THES actually publishes a ranking of up to 400. In 2009 the University of Cape Town achieved the 146th place. The University of the Witwatersrand is listed at number 319 (previously 282). The THES uses a company (QS) which performs the data gathering and statistical analysis. QS then publishes an alphabetical list of universities in the 401 to 500 range. The University of Pretoria is listed in the 401-500 range and the University of KwaZulu Natal in the range 501-600.

Given the University of Pretoria's strategic goal of entrenching itself as one of South Africa's world class universities, its performance in the league tables is important, even though the rankings are not perfect and are often criticised.

Some of the reservations and criticisms expressed against universal ranking of institutions are, for instance, that higher education institutions in different countries across the world have multiple missions and multiple "products". Furthermore, institutions do not have a single clearly defined production function, meaning they have ambiguous goals, which they can be compared against. The processes within institutions of higher education in which (multiple) inputs are transformed into (multiple) outputs are very complex and are very difficult to compare. The shift of higher education institutions towards a more hybrid managed environment (including public as well as private elements) could lead to incompatibilities in the ranking procedures.

The criticisms against the ranking methodologies mentioned above have lead to other agencies embarking on alternative ranking procedures. Two of the most important alternative ranking endeavours are that of the Centre for Higher Education Policy Studies (CHEPS), located at the School of Management and Governance of the University of Twente, in the Netherlands (www.utwente.nl/mb/cheps/research/), and the ranking project conducted by the Centre for Higher Education Development (CHE) in Gütersloh, Germany (www.che-ranking.de/). The CHE procedure is based on a multi-dimensional ranking across approximately 350 higher education institutions and is currently the most comprehensive ranking procedure available. The procedure includes 35 subjects or disciplines and includes facts about the study programmes, quality of teaching and equipment, and research. The data is assimilated through surveys conducted at each of the participating higher education institutions on various aspects of their activities. An evaluation is also carried out on the reputation of academic departments at a number of institutions by professors in specific fields of study. Additionally approximately 250,000 students are surveyed on their learning experiences at their respective institutions. The outcome of the procedure is not a league table - ranking the institutions from "best" to "worst" - but rather a listing of the different dimensions associated with an institution, e.g. research reputation, funding of research, student support, reputation of the professors, etc. These dimensions, individually, are then placed in a top, middle or low group. A similar procedure is followed for each of the 35 subjects or disciplines and categorised as top, middle or low. The argument behind this alternative ranking method of the CHE is that it is simply impossible to rank institutions using

the same performance criteria for all the institutions. The vision and mission statements (*leitmotiv*) of an institution determine the institution's internal processes and priorities accordingly and, therefore, aggregating the same indicators for all institutions would be meaningless.

7.2 Constructing a Performance Index for the University of Pretoria

The idea of developing a performance index for the University of Pretoria has no direct bearing on the notion of a ranking or a league table. The request for the development of a performance index for the University came directly from the Council of the University. Such an index should be an internal institutional measurement to assist the Council in evaluating the performance of the University and has no bearing on any other South African higher education institution.

As was mentioned above, an important part of its governance function, the Council of a University must assess the University's performance. Evaluating the performance of the University must be done in relation to an institution's Strategic Plan, which usually contains the objectives set for the University and the strategies foreseen for attaining those goals.

Performance Indicators

Performance indicators are statistical measures designed to provide empirical data on the degree to which an institution is achieving its goals. Performance indicators may be qualitative (descriptive) or quantitative and are often presented in the form of ratios that can be compared to internal targets to which the institution aspires, as well as to external benchmarks.

In principle, an institution's goals and strategies can be viewed as a pyramid, the apex of which is formed by its vision and mission, and from which more detailed plans cascade down to the lower levels. At the highest governance level, i.e. Council, the performance indicators must be comprehensive whilst avoiding detail, so as to provide an overview of the institution's total performance. Furthermore, performance indicators should be developed as a set because there are usually "trade-offs" between an institution's objectives, making it important to monitor the cross-cutting effects of attaining separate objectives on the other strategic goals.

Benchmarks

Benchmarks are norms or standards to which the performance indicators of an institution or university can be compared. They can be external to the university, for example comparable figures from a different higher education institution or an average for a group of universities; alternatively, they can be internal, for example the previous year's values. Nowadays, benchmarking also refers to comparing processes to determine how the successes of other institutions can be 'imported' into the home institution.

Targets

Targets indicate positions that an institution hopes to reach within a specific period of time and may be determined by referring to benchmarks.

Trends

When using indicators, benchmarks and targets, one should bear in mind that it is usually the trends that have emerged that are most important. Where a benchmark has not yet been reached, the trend may nevertheless indicate change in the right direction. It is therefore important that an institution's basic set of indicators should remain relatively stable to allow trends to be identified.

Constructing an index of performance

Although it would be possible to set separate benchmarks for most of the performance indicators chosen for the University of Pretoria, it would be most convenient for members of Council to be given a summary statistic that would indicate whether the University is developing in the desired overall direction chosen by Council. This could be done through constructing an index, the elements of which would be the selected performance indicators (or a sub-set thereof) applicable to the University. This procedure would have the advantage of dealing with the University's performance indicators as a set, with the concomitant advantage referred to above. Furthermore, as every indicator with its accompanying benchmark is not of equal importance, weights would be used in constructing the index, which would have the advantage of allowing fairly detailed indicator information to be provided without having detail skewing the evaluation of the University's overall performance.

After the construction of an index, it would be possible either to use the direction of change in the index as measure of performance or to set a specific target that the index should reach as benchmark.

7.3 Elements of the Performance Index for the University of Pretoria

The importance of a comprehensive management information system (MIS) in relation to diversity management was discussed in Chapter 6. Of particular importance is the role that the MIS could play in measuring and monitoring the indices associated with diversity. It was also advocated that the MIS should be directly aligned with the strategic plan of the university. Figure 10, in Chapter 6, identifies the eight strategic thrusts of the University's strategic plan, which are:

1. Academic excellence
2. A people centred university
 - 2a Staff
 - 2b Students
3. Excellent in its core functions of
 - 3a Teaching and learning
 - 3b Research
 - 3c Community engagement
4. Excellence in the support services
5. Local impact
6. Transformation
7. Interfaces
8. Sustainability

The Council and the Executive of the University have identified and approved the following indicators for each of the thrusts in the strategic plan and is shown in table 22.

Table 22: Indicators for each of the 8 Thrusts of the University's Strategic Plan

1. International academic stature

1	Shanghai Jiao Tong index	
2	Scopus number of citations	
3	Scopus number of international patents	
4	ISI Field rankings (number of fields wherein rankings are obtained)	

2. A people centred University

2a Staff

	Perm staff (headcounts fulltime and part time but excl joint appointments):	
5	Permanent academic staff to total permanent staff	

Temporary staff (headcounts fulltime but excl joint appointments):		
6	Temporary full-time academic staff to total temporary full-time staff	
Staff Ratios		
7	FTE C1 (Academic) staff to total FTE staff (including joint appointments)	
8	% Permanent fulltime C1 (Academic) staff to all fulltime C1 (Academic) staff (excluding joint appointments)	
9	% Permanent C1 (Academic) staff with masters/doctorates (excluding joint appointments)	
10	% C1 (Academic) staff turnover (perm staff excluding retirements and joint appointments)	
11	% C2 and C3 (Support) staff turnover (perm staff excluding retirements and joint appointments)	
12	% C1 (Academic) staff over 50 years (perm staff excluding joint appointments)	
13	% C2 and C3 (Support) staff over 50 years (perm staff excluding joint appointments)	

2b Students

14	Number of Teaching Input Units (Weighted, DHET definition)	
15	Contact students to total students	
16	UG - % International contact students to total contact students	
17	UG - % international contact students from SADC	
18	PG - % International contact students to total contact students	
19	PG - % international contact students from SADC	
Admission and registration ratios (contact students):		
20	Total Admissions to total applications	
21	Total Registrations to total admissions	
22	Business: Registrations to total registrations	
23	SET: Registrations to total registrations	

24	% Matriculants with 7 and more distinctions that choose UP	
25	Average M/AP-score	

3. Excellence in UP's core functions

3a Teaching and learning

26	% of contact graduates to total enrolled contact students	
27	% of distance graduates to total enrolled distance students	
28	% UG students completing a degree in minimum time (3 years degrees)	
29	% UG students completing a degree in minimum time (4 years degrees)	
30	% Successful FTE students to total FTE enrolments	
31	Drop-out: % UG contact students after 1 year	
32	% of UG modules with failure rates higher than 40%	
33	Percentage of UG contact modules with ClickUP	
34	Quality of learning (survey information)	
35	FTE contact students per FTE teaching staff member	
36	Training of C1 staff by Dept of Education Innovation to total perm C1 staff (excluding joint appointments)	

3b Research

37	New honours to total honours enrolments (contact students)	
38	New masters to total masters enrolments	
39	New doctoral to total doctoral enrolments	
40	Completion time index for research masters degree	
41	Completion time index for doctoral degree	
42	Accredited research units per C1 (Academic) FTE staff	
43	Number of NRF rated staff (all categories)	

44	% C1 (Academic) fulltime with NRF rating to total C1 (Academic) fulltime	
45	Number of competitive research grants from THRIP funding	
46	Value (Rm) of competitive research grants from THRIP funding	
47	Disclosure and patents: Invention disclosures to IP office	
48	Disclosure and patents: No of patents	

3c Community Engagement

49	Community engagement projects	
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4. Excellence in UP's support functions

50	Library: Budget as % of UP budget	
51	Library: Number of e-articles downloads and book loans (x'000)	
52	HR: Number of permanent posts vacant for 6 months or longer (excl approved vacancies)	
53	ITS: Number of PC-workstations available to UP students	
54	Facilities: Summary of available building space	
55	Number of students that participate in UP sport and cultural activities	

5. Local impact

56	New number student enrolment ratio: Business to total new number contact enrolments	
57	New number student enrolment ratio: SET to total new number contact enrolments	
58	Total financial aid relative to tuition income	
59	NSFAS loans to total financial aid	
60	Total bursaries to total financial aid	
61	UP funded aid (bursaries and loans) to total tuition fees	

6. Transformation

62	Student demographics: % Black contact	
63	Student demographics: % Female contact	
64	% Black staff (Permanent employed C1 (Academic) Staff)	
65	% Black staff (Permanent employed Support Staff)	
66	% Female staff (Permanent employed C1 (Academic) Staff)	
67	% Female staff (Permanent employed Support Staff)	

7. Interfaces

Client Service Centre statistics:		
68	Voice interactions to total interactions	
69	Walk-in interactions to total interactions	
Campus Companies - Revenue generated:		
70	CE at UP (R'000)	
71	BE at UP (R'000)	
Alumni statistics:		
72	Number of e-mail newsletters send to Alumni members (x'000)	
73	Number of Alumni members participating in 20200 fundraising	
74	Number of international agreements (excl. individual faculty agreements)	
75	Total donations (Rm) via fundraising actions (excl. sponsorships and contract research)	

8. Sustainability

76	Ratio of total liabilities to total financial resources available to the university	
77	Ratio of short term assets to short term obligations - Quick ratio	
78	Impairment of student debt to total student debt	
79	Total income of the university (x'000 000)	
80	Subsidy to total income	
81	Surplus after capital expenditure to total income	
82	Personnel academic expenditure to total subsidy and fee income	
83	Personnel other expenditure to total subsidy and fee income	

The need for developing a performance index was emphasised in the previous paragraph. A prerequisite for the development of a performance index is the availability of accurate and verifiable institutional management information. A performance index should also be able to determine a positive or negative trend in the thrusts of the strategic plan. Therefore, historical data for all the indicators should also be available on the institutional databases. The tracking of the indices should be done for the time span and duration of the strategic plan.

The first step in the development of an index for each thrust is to compile a list of the indicators that is appropriate for measuring the performance of each of the thrusts in the strategic plan. (A prerequisite is that the indicators should be unambiguously defined). In the case of the University of Pretoria, the indicators for the eight thrusts are indicated in table 22 and are institution specific and not generally applicable.

A second step should be to determine the benchmark against which the indicator should be measured.

Thirdly, a target should be determined (by the Executive and senior managers and approved by Council) for each of the indicators (with the help of the benchmark) towards which the institution aspires to develop.

Fourthly, a measure or metric, should be defined which determines the degree of deviation from the target for each of the indicators. The measurements should be done according to a fixed time scale (usually yearly) for the duration of the strategic plan. It is important to note that the agreed upon target should not be adjusted during the lifetime of the strategic plan, otherwise the measurement will be meaningless.

The fifth step in the development of the performance index for each of the thrusts is to establish the relative importance of each of the indicators within the thrust by assigning weights to the different indicators. This is probably the most difficult step in the process and reaching a unanimous decision between all the members of the Executive and senior managers is very difficult. A compromised decision is usually taken on the relative weights.

The performance index for a strategic thrust can then be calculated by adding the weighted deviation of each of the indicators within the thrust from their respective targets. The mathematical formulation for calculating the individual performance indicators and the index is such that magnitudes are expressed as a percentage. This formulation gives a measurement of the performance measured against a full score of 100%, which is the case when the target has been reached. Provision is made in the algorithm in case an indicator “overshoots” the target by allocating a “maximum” percentage of 100%. In exceptional circumstances, if the indicator complies with certain criteria, a performance of greater than 100% is possible. Figure 14 depicts the mathematical formula which can be used to calculate a performance index for a strategic thrust.

Figure 14: Mathematical Formula for calculating a Performance Index for a Strategic Thrust

The Algorithm

- **Calculate a Performance Index (PI) for each “thrust”**

$$PI_k = \sum_{i=1}^n \{ [T_{ik} - ABS(x_{ik} - T_{ik})] / T_{ik} \times W'_{ik} \} / \sum W'_{ik}$$

where $k = 1, 2 \dots m$ “thrusts”
 i = Indicator identifier
 n = Number of indicators in each “thrust”
 T_i = Targets for each indicator
 x_i = Value of indicator in a specific “thrust”
 W'_i = Weight assigned to each indicator in “thrust”

7.4 An Illustrative Example of a Performance Index for a Strategic Thrust

The formula shown in figure 14 is universal and can be applied to any higher education institution. The number of areas (thrusts) that the institution identifies as being strategically important according to their unique circumstances can be chosen by the institution. The same applies to the number of indicators within an area (thrust) which may also vary between the thrusts.

As indicated above, the University of Pretoria has identified 8 thrusts, ($k=1,2, \dots, 8$), which reflects the main focus areas in its strategic plan. As was shown in table 22, a total of 83 performance indicators were identified by the Council and the Executive, which, in their view, are important to evaluate the performance of the University over time. Table 22 also shows the number of indicators within each of the 8 thrusts. For example: Thrust 1 ($k=1$), the number of indicators are 4 ($k = 1 ; i = 1,2,3,4$); For Thrust 2 ($k=2$) the number of indicators are 21 ($k = 2 ; i = 1,2, \dots, 21$), etc.

For each of the 83 indicators a target (T_i) must be set by the institution - which may take into account its own current position - and which indicates the goal that the institution hopes to reach within a specified period of time. The target may also be informed by a benchmark set by other similar institutions or even benchmarks set by Government.

The deviation between the current value (x_i) (usually determined annually) of an indicator i , and the target of the indicator (T_i) is then determined and expressed as a value of achievement out of a score of 100%. As indicated above, the next step is to weigh the different values of achievements of the indicators within the thrust indicators by the assigned weights and add across all the weighted indicators. If this procedure is done annually for a number of years a trend in the performance index can be observed which will indicate an improvement or decline in the overall performance of the institution in that specific thrust. Corrective action may be taken by the Council and the Executive if it is deemed appropriate and necessary.

In view of the main objective of the report as being “diversity management”, and the approach described in developing a performance index in this chapter, a specific example will be used to illustrate the application of the formula to one of the thrusts of the University of Pretoria that is most relevant to diversity management.

7.4.1 Performance Index for Thrust 6 of the University of Pretoria: Transformation

Thrust 6 ($k = 6$) in the strategic plan of the University addresses the very important issue of “transformation” within the institution. The notion of transformation, as interpreted in the University’s strategic plan, was discussed in paragraph 5.2.1. Table 23 indicates that 6 indicators were identified to measure the performance and progress of “transformation” at the institution towards the targets set by management. The six indicators reflect the most important measures in the context of the University with regard to “transformation” and are based predominantly on the racial and gender diversity of students and staff. However, some of the indicators that are included under the other thrusts may just as well be considered as diversity measures. For instance, if the age of the academic staff is considered to be a diversity issue then indicator 10 may be included in transformation thrust. The percentage of international under- and postgraduate students (indicators 16 and 17) may also be taken as diversity indicators. The number and variety of indicators that can be included as a measure of diversity at an institution is solely the choice of the management of an institution and is not restricted by the formula presented in figure 14.

Table 23: Performance Index for Thrust 6 – Transformation

Performance Indicators	Percentage/Performance					Bench- mark	Target	PI Weight	Weighted progress towards target				
	2004	2005	2006	2007	2008				2004	2005	2006	2007	2008
62 Student demographics: % Black contact	41.0	40.0	40.0	40.0	41.5	48.4	45.0	30.0	27.3	26.7	26.7	26.7	27.6
63 Student demographics: % Female contact	53.0	53.0	53.0	53.0	53.5	50.8	54.0	10.0	9.8	9.8	9.8	9.8	9.9
64 % Black staff (Permanent) Academic Staff	13.7	14.9	15.7	18.3	19.5	21.4	25.0	30.0	16.4	17.9	18.9	21.9	23.4
65 % Black staff (Permanent) Support Staff	39.3	39.4	41.0	42.8	44.7	59.8	60.0	20.0	13.1	13.1	13.7	14.3	14.9
66 % Female staff (Permanent) Academic Staff	42.7	44.0	45.1	45.1	46.6	39.5	50.0	5.0	4.3	4.4	4.5	4.5	4.7
67 % Female staff (Permanent) Support Staff	57.4	58.1	58.3	59.8	59.2	58.6	68.0	5.0	4.2	4.3	4.3	4.4	4.4
Total for strategic thrust								100.0	75.1	76.2	77.8	81.6	84.9

Indicator 62 in table 23, for instance, depicts the percentage of the total number of Black (contact) students enrolled at the University. (Black = African, Coloured and Indian/Asian students). Contact students mean students attending classes on the campuses of the University and exclude distance education students. The value of 41.0% in 2004, for example, is derived from the total number of 16,220 Black students enrolled in 2004 relative to the total number of 39,563 enrolments. This actual annually calculated percentage is then measured against the target that the University strives to attain in 2011, namely 45%. The weight awarded to indicator 62 is 30%. Applying the performance index formula (figure 14) results in the following value for the weighted contribution of indicator 62 in 2004.

Weighted contribution of Indicator 62

$$= \{[\text{Target} - \text{ABSOLUTE (actual value of indicator} - \text{Target})] / \text{Target} \times \text{Weight}\}$$

$$= \{[45.0 - \text{ABSOLUTE (41.0 - 45.0)}] / 45.0 \times 30\%\}$$

$$= \{[45.0 - 4] / 45 \times 30\%\}$$

$$= 27.3$$

Similar calculations lead to the other 5 indicators having weighted contributions of 9.8, 16.4, 13.1, 4.3 and 4.2 respectively for 2004. By adding the weighted contributions of all 6 indicators for 2004, the value of the performance index for “transformation” for 2004 amounts to 75.1%. This represents the score out of a 100.

Figure 14 also depicts the individual weighted contributions of the six indicators for the following years as well as the final score for the thrust over time and shows that there was a gradual improvement in the area of transformation at the University from 2004 to 2008.

7.5 Overview

The important role that performance indicators can play in managing diversity has been highlighted in this chapter. The development of performance indices for focus areas or thrusts that an institution regards as being the most important for the advancement of the institution was also discussed using the University of Pretoria as an example.

It was also shown that the tracking of a performance index over time may play an important role in assisting the top management of an institution to take corrective action if the index is not moving in the right direction. Diversity management, with the focus mainly on racial and gender diversity, is one of the burning issues for many of the higher education institutions in South Africa. German higher education institutions on the other hand have other focuses with regards to diversity management.

The apparent incomparability between higher education institutions in the two countries should not discard the concept of performance indices outright as an important instrument in the management of diversity at any higher education institution. Performance indicators are not universal and can be defined by any institution in such a way that will suit their own requirements to effectively manage the institution. The availability and integrity of applicable data is a determining factor in defining an indicator and constructing a performance index. The perception is that institutional data at the higher education institutions at this stage lacks detail and dimensions, which includes historical data for students and staff.

8 Conclusion: Comparison of Diversity Management between South Africa and Germany

8.1 Final Conclusions

Undertaking a comparative study of diversity management in higher education between different countries is a daunting task. The definition of “diversity management” and the approaches to manage diversity in different countries depends, *inter alia*, on the history of a country, which in most cases goes back hundreds of years. The historical evolution of countries and the technological advances, especially during the last century, has impacted on the mobility and migration patterns of people across the world. In most of the developed countries the growth rates of the national inhabitants have started to decline. Some of these countries have had to employ foreign nationals from, and especially, the neighbouring countries, to support and extend the labour force of the country to sustain and grow their economies. The population migration patterns and the resulting consequences thereof, are being studied and debated in most of the countries affected by this phenomenon.

8.1.1 Perspectives on Internationalisation

The dynamics of the migration of people has an indirect impact on higher education and has contributed, to some extent, to the globalisation and internationalisation of higher education. The recent advancements in, and the progress made towards, internationalisation of higher education in the context of Europe and South Africa were discussed in Chapter 1. The similarities and differences in this context between Germany and South Africa were identified. Germany, as part of the EU, participates in the processes of higher education reforms according to multi-lateral agreements in Europe.

South Africa on the other hand has only the regional agreement (protocol) between the South African Development Community (SADC) countries with the aim to promote a coordinated approach towards regionalisation and internationalisation of the higher education systems in Southern Africa. This agreement, according to Hahn (2004), contains no specific goals, aims and time-frames, which are needed to implement the protocol. Hahn concludes that the “*document is strong on policy but weak on implementation*”. In contrast it can be stated that most of the higher education institutions in South Africa have bi-lateral agreements with some of the most prestigious higher education institutions abroad and in that sense are part of the international higher education community.

8.1.2 Perspectives on Institutional Autonomy

It was indicated in Chapter 2 that some of the definitions of institutional autonomy advocate the right of academic institutions to govern themselves without external interference. This represents an idealistic viewpoint and this concept is frequently extended to include the notion of academic freedom. The relationship between internationalisation, institutional autonomy and academic freedom cannot be ignored because in reality no higher education

system (or institution, or individual) is totally free from external influences. The literature also refers to the fact that institutional autonomy is “conditional” and links autonomy to accountability (to the state).

In the case of South Africa, institutional autonomy is to a large extent being diluted by the transformation agenda of Government since the ANC Government came to power. The formulation of higher education policy after the Apartheid era has been rapid and sometimes tumultuous and greatly affected the autonomy of the higher education institutions. The Government argued that such interventions were necessary to correct the inequalities of the past and steering mechanisms had to be introduced.

The situation with regard to institutional autonomy and academic freedom in Germany is being vigorously debated, but from a different perspective to South Africa. Higher education institutions in Germany have a long history of absolute autonomy and academic freedom of their professors and they are unlikely to relinquish these privileges easily. Attempting to introduce new laws to regulate (even marginally) the autonomy and academic freedom of higher education institutions and the academia will be met with great animosity. It is understood, for example, that the academics (professors) at higher education institutions in Germany have a huge amount of freedom in what and to whom they teach and do not want to take responsibility for the students who drop-out or are having difficulties with their studies.

It can be concluded, then, that the understanding of institutional autonomy is vastly different in South Africa and Germany. This may be partly due to the different environments that the higher education institutions are exposed to in the two countries. The South African institutions have been confronted with a rapidly changing political environment since 1994, with an agenda to transform the student and staff profiles in the higher education sector to be more racially equitable. This agenda is being pursued through a legislative process over which the higher education sector has little or no control. Germany, on the other hand, has a rather stable and rigorous higher education system with great inertia, which will be very difficult to change by imposing rules and regulations that will endanger their institutional autonomy.

8.1.3 Perspectives on Population Dynamics as a Driver of Diversity Management

The current and future profiles of the students and staff at higher education institutions in Germany and South Africa will to a large extent depend on the size and shape of the populations in the respective countries. The size of the population may refer to the number of inhabitants and the distribution according to age and gender. The shape on the other hand could refer to certain distinguishing features among the population like for instance, race, ethnicity, religion, level of education, economic status, level of education, disabilities, etc.

A long term view has to be taken of the changes in the profile of the population of a country if its impact on higher education is to be projected. Demographic change has a long time cycle and is one of many elements of a very complex non-linear dynamic system.

In spite of the complexities of the population dynamic system, an attempt was made in Chapter 3 to show the similarities and differences between Germany and South Africa with regard to their respective population profiles. Huge differences between the fabrics of the populations were identified.

South Africa has an extremely diverse population divided along the lines of race, economic and educational development, and age. The population is also unevenly distributed among the 9 provinces. Different mortality and life expectancy rates exist between the various racial groups and ethnicity also plays an important role in the social and economic spheres of life. In short the population profile in South Africa is extremely diverse and very volatile and forecasting the future profile of the population and its impact on the higher education system will remain a huge challenge.

In the case of Germany it was shown that its population profile is changing at a relatively slow rate. The population consists of a large majority of German nationals. Foreign nationals represent approximately 9% of the population. The differentiation between poor and rich in Germany is not nearly as large as in South Africa but is nonetheless also seen as a distinguishing element of diversity. It was indicated that a decline in the German population is projected together with a shift towards the older age groups. A declining birthrate and rising life expectancy will also change German society in the long term and will have far-reaching consequences for the economy and social security. The migration from the eastern to the western part of Germany since Unification is also a trend that will play a role in the future profile of the population and impact on the enrolments in higher education institutions. The migration of people among European states and across continents will also impact on the profile of the German population and will be very difficult to control. The unpredictable consequences of such a dynamic system (e.g. the size and shape of the population), over which a country has limited control, will remain a challenge to all countries, especially Germany and South Africa, each with their own unique socio-political and economic circumstances.

8.1.4 Diversity Management from a Student Perspective

Managing student diversity at higher education institutions is multi-dimensional and multi-faceted. The number and type of higher education institutions in each country, and the position of the institutions within and among the provinces is but one of the many dimensions that impact on the diversity of the students at the institutions. The diversity profile of the students enrolled in the South African higher education institutions displays the effect of a historically divided society of the past and the changes that occurred since the new democratically elected government came to office in 1994. There is still a huge difference between the student racial profiles at the institutions mainly due to the location of the institutions in the 9 provinces which attracts most of the students from the area it is situated. At some institutions the language of instruction is also a deciding factor for the prospective students.

Whilst the racial diversity of students is one of the most important diversity issues for higher education in South Africa, the focus area of diversity in Germany is on another sphere. Germany also has to take note of the current locations of its large number of higher education institutions. It is also, in some respects, still unevenly distributed between the “old” and “new” *Bundesländer*. The forecast of the demographic change and its impact on higher education focuses mainly on the number of potential students that will have to be accommodated in the higher education sector. Dimensions of student diversity that are receiving a great deal of attention are, for example, the effect of the rapidly changing demographic profile and its effect on gender and age, the number and quality of foreign students and foreign nationals, changing of the entry requirements, etc.

The rapid change in the racial diversity profile of the South African student population over the past 15 years is probably unprecedented in the world. This change did not happen without the intervention by the state. A number of “steering mechanisms” were introduced as part of the new Government’s transformation agenda for higher education. The Higher Education Act made the implementation of a new funding framework for higher education, as a major driving force for a more racial diversity, possible. The funding framework, for instance, makes provision for financial incentives to institutions that increase the proportion of Black students. Another very important mechanism (instrument) employed by government to accelerate the racial diversity of the students in higher education was the introduction of a National Student Financial Aid Scheme (NSFAS). The scheme provides the disadvantaged and financially deprived students (mainly African and Coloured) with financial resources to study at a higher education institution. A large proportion of the financial aid to a student is converted to bursary if the student completes his/her study programme successfully.

A rapid change in the diversity profile of the students, racially or otherwise, in higher education is only possible through an (radical) external intervention by policy makers. The leverage of the politicians with the electorate is a determining factor. In the case of South Africa, where the national government nearly has a 66% majority vote, legislation on transformational issues is usually introduced unopposed. In the case of Germany, with a federal governing system and more equal political representation, the passing of legislation that promotes diversity within higher education would be extremely problematic. This does not even take into account the thread of infringement on institutional autonomy and academic freedom that underpins the notion of what a “University” is all about.

8.1.5 Diversity Management from a Personnel Perspective

The diversity of staff within public and private organisations originated in the United States of America (USA) in the middle of the previous century. The discussions at that stage centred around the issue of “affirmative action” which followed on the demands of the civil rights movement for equal opportunities for all in the USA. The Civil Rights Act of 1964 became the benchmark for companies in their endeavour to enhance the representation of minorities in their workforce. Since then the emphasis has shifted towards diversity management, which now includes other dimensions of diversity in addition to the racial issue. The concept was

also extended to include other public and private organisations such as institutions of higher education.

The discussion on the issue of diversity management of staff at higher education institutions in South Africa and Germany follows in the same vein as the discussion on student diversity in the previous paragraph. The emphasis in South Africa on this issue also focuses on the racial representation of staff within the higher education sector. In this sense it can be equated to affirmative action. The government, in its endeavours to promote equal opportunity and fair treatment in employment through the elimination of unfair discrimination, introduced the Employment Equity Act in 1998 with the aim to “*achieve a diverse workforce broadly representative of the people*”. This act applies to all public and private enterprises.

This Act can be seen as a steering mechanism to ensure that the racial composition of staff at the higher education institutions will change. The Act has had a major impact on the racial composition of staff across all enterprises but especially in higher education. Certain constraints and bounds, which prohibit the rate of change of the staff profile at higher education institutions, however do exist.

It is highly unlikely that a similar steering mechanism will be enacted in Germany, or in one of the *Bundesländer*, even if it only addressed one of the staff diversity issues applicable to Germany, like, for instance, gender representation in higher education and in particular management positions.

It is important, however, for Germany (and the *Bundesländer* individually) to take cognisance of the long-term demographic changes that are predicted for the country and Europe, and the possible impact it will have on the future of higher education in the country.

8.1.6 Diversity Management from an Institutional Management Perspective

The main premise advocated in this area of diversity management is that the people in the management positions of an institution (in the case of South Africa this means the Council, Executive and Senior Managers (Deans of faculties and Directors of support services)) should take responsibility to ensure that the transformational (diversity) objectives and goals in the strategic plan of the University are being adhered to. This implies a serious commitment on the part of the top management of the institution to pursue the diversity agenda with vigour and enthusiasm.

The vigour with which the diversity (of students and staff) within an institution is managed could depend on internal and external pressures being imposed on the institution. The internal pressure could come from the management's own view and commitment to pursue and enhance a more diverse student and staff profile. External pressures, over which the institutions have limited control, could come from the federal or provincial legislators in the country. The number and quality of the potential entrants into higher education are additional

external factors that can compel the management of an institution to manage the consequences of a more diverse student intake.

These external pressures on the higher education institutions in South Africa are mainly driven by the political agenda of Government through the Higher Education Act and the Employment Equity Act (and other associated Acts). These Acts, to a large extent, define the boundaries within which the institutional managers are allowed to execute their diversity agendas. The impression is that the same kinds of legislation that can affect the higher education system in Germany are currently not as prescriptive as in South Africa. The long-term demographic change that is predicted for Germany could lead to a situation where certain steps will have to be taken (in the future) to steer the predicted diversity in certain directions.

The management of diversity in an institution is usually driven by the transformational objectives in the strategic plan. To enable the managers to steer the system towards the goals set in the strategic plan they need to have access to an institutional management information system that provides them with all the necessary and applicable transformational data that concern students and staff. Such a management information system should be comprehensive enough to provide the information concisely and in the format needed by each of the management layers in the institution.

The structure and use of the MIS at the University of Pretoria, and its link to the strategic plan, was discussed in Chapter 6. The data elements in the information system were defined specifically to address the management issues that the University deemed appropriate and necessary for measuring diversity.

A comprehensive institutional management information system, which meets the requirements of management to assist them to steer the institution in the right direction, is an absolute prerequisite. It was very difficult to establish the current status with regard to the existence and availability of comprehensive institutional management information systems to manage student and staff diversity at the higher education institutions in Germany. The impression, however, is that although management information is available on centralised databases at the institution, the information is not readily available to the different management layers in the institution. This situation may have to change in future as the issue of diversity management becomes more relevant.

8.1.7 Diversity Management: Developing Performance Measures

Performance indicators play a major role in all spheres of life. The indicators may be one dimensional, such as the number of disabled students or the GDP of a country. Two-dimensional indicators usually express a ratio between two one-dimensional values, for example, the number of disabled students as a percentage of the total number students, or the percentage of the GDP spent on higher education. A further expansion of the use of performance indicators is to define a distinctive indicator that is a combination of a number of

indicators. A number of such singular indices that apply to higher education can be found in the literature, for example, the Shanghai index, the Times Higher Education Supplement index, and the Institute of Scientific Information index for certain fields of study. All of these indices are then used in a ranking procedure to determine the relative academic standing of the participating institutions. The Centre for Higher Education Development (a non-profit organisation) in Gütersloh, Germany, has developed a ranking procedure, not with the aim of ranking individual institutions in Germany, but rather to inform prospective students and other interested parties of the quality and scope of an institution with regard to the academic disciplines being offered by the institution.

The development of a performance index for the University of Pretoria followed an appeal by the Council and the Executive of the University to construct an instrument that will measure the performance of the University against the goals that were formulated in the strategic plan. The approach and methodology devised for the construction of the performance index was not aimed to determine the position of the University relative to any of the other institutions in South Africa (or internationally). The indices represent a measurement of the performance of the University in each of the eight strategic thrusts of the University's strategic plan measured against the goals that the Executive of the University have set themselves. The change in the values of the indices over time give an indication of the progress made towards reaching the goals.

The development of appropriate performance indicators that measure the state of "diversity" at higher education institutions (nationally, provincially or institutionally) should be a priority if diversity is to be managed in a meaningful way at each level of governance.

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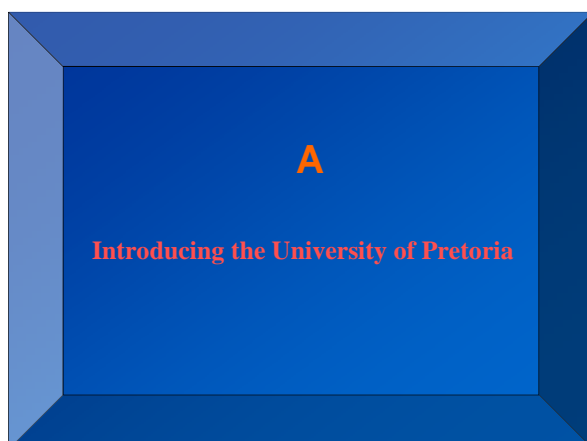
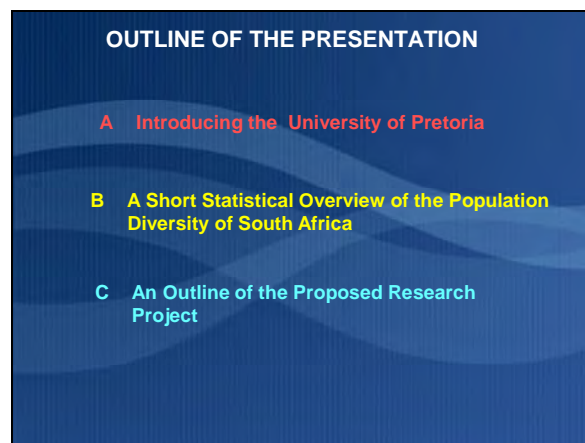
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Appendix A

Slides of the presentations given at CHE Consult during the period July to September 2010

Presentation 1: 13 July 2010

A Short Introduction to Diversity Management at the University of Pretoria



Students (2009)

- CAMPUS STUDENTS
 - 41 751 campus students (contact)
 - 38% are Afrikaans speaking
 - 71% are undergraduates and 29% post-graduates
 - 41% of undergraduates and 51% are black (44% of total contact students are Black)
- DISTANCE EDUCATION
 - 21 401 distance education students
 - 99% of DE students are Black

Faculties

• Humanities	5639	: 13,5%
• Economics and Management	9375	: 22,4%
• Law	2108	: 5,1%
• Education	3804	: 9,1%
• Theology	738	: 1,8%
• Natural and Agricultural Sciences	5323	: 12,8%
• Engineering, Built Environment & IT	8960	: 21,5%
• Health Sciences	4905	: 11,7%
• Veterinary Sciences	899	: 2,2%



The University of Pretoria



Faculty of Engineering, the Built Environment and Information Technology



Faculty of Humanities



Faculty of Education (Groenkloof Campus)



Faculty of Natural and Agricultural Sciences



Faculty of Veterinary Science



Faculty of Theology



RESIDENCES



ARTS AND CULTURE



Old Arts building



Old Merensky library



New Merensky Library



Client Service Centre



Student Centre



SPORT



Student Life



B

A Short Statistical Overview of the Population Diversity of South Africa

Mid-year population estimates, 2009

Table 1: Mid-year population estimates for South Africa by population group and gender (2009)

Population group	Male		Female		Total	
	Number	Percentage of total population	Number	Percentage of total population	Number	Percentage of total population
African	18 901 000	79,2	20 235 200	79,5	39 136 200	79,3
Coloured	2 137 300	9,0	2 295 800	9,0	4 433 100	9,0
Indian/Asian	635 700	2,6	643 400	2,5	1 279 100	2,6
White	2 194 700	9,2	2 277 400	9,0	4 472 100	9,1
Total	23 868 700	100,0	25 451 800	100,0	49 320 500	100,0

Table 2: Mid-year population estimates by province (2009)

	Population estimate	Percentage share of the total population
Gauteng	10 531 300	13,5
KwaZulu-Natal	10 449 300	5,9
Eastern Cape	6 648 600	21,4
Western Cape	5 356 900	21,2
Limpopo	5 227 200	10,6
Mpumalanga	3 606 800	7,3
North West	3 450 400	2,3
Free State	2 902 400	7,0
Northern Cape	1 147 600	10,9
Total	49 320 500	100,0

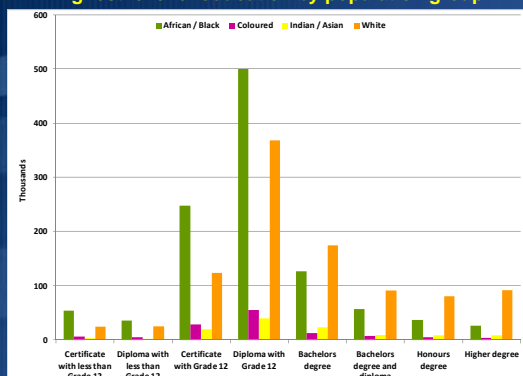
Table 4: HIV prevalence estimates and the number of people living with HIV (2001–2009)

Year	Population 15–49 years		Percentage of the total population	Total number of people living with HIV (in millions)
	Percentage of women	Percentage of the population 15–49		
2001	18.5	15.3	9.3	4.19
2002	18.9	15.6	9.6	4.35
2003	19.1	15.9	9.7	4.49
2004	19.3	16.1	9.9	4.61
2005	19.4	16.2	10	4.72
2006	19.4	16.4	10.1	4.83
2007	19.5	16.5	10.2	4.94
2008	19.5	16.7	10.4	5.06
2009	19.7	17.0	10.6	5.21

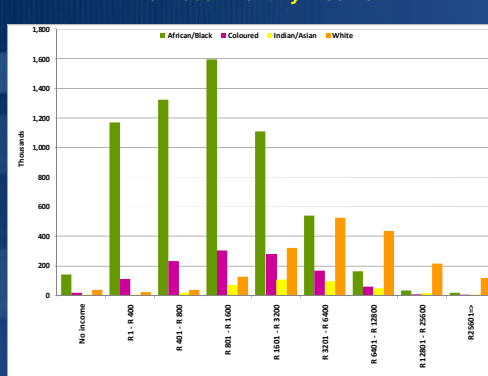
Table 8: Estimated annual population growth rates, 2001–2009

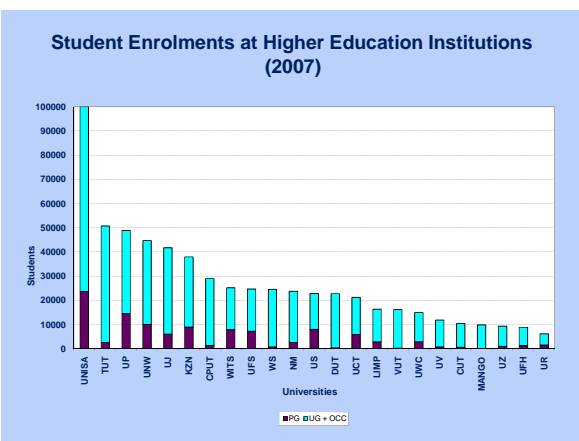
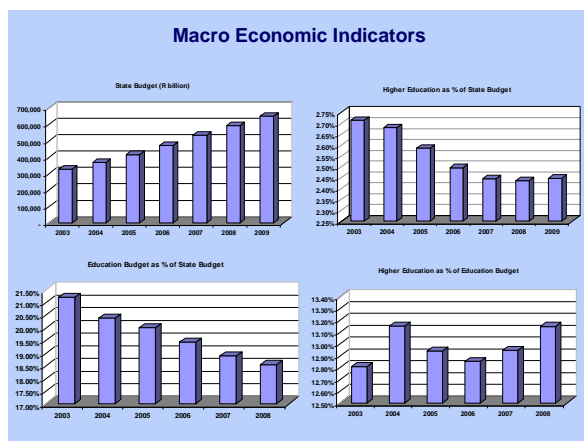
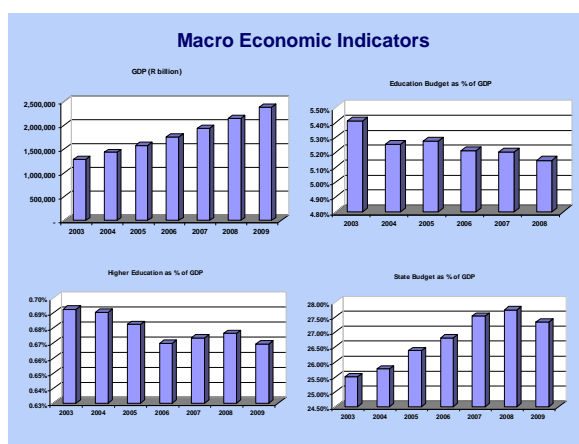
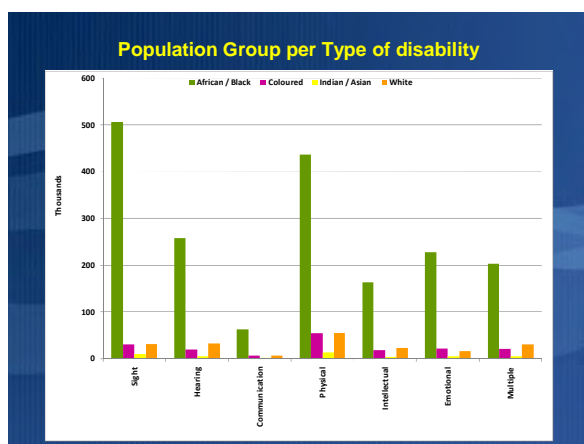
	2001–2002	2002–2003	2003–2004	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009
Male	1.47	1.36	1.27	1.23	1.22	1.19	1.20	1.17
Female	1.30	1.19	1.10	1.05	1.03	1.01	1.02	0.99
Total	1.38	1.27	1.18	1.14	1.12	1.10	1.10	1.07

Highest level of education by population group



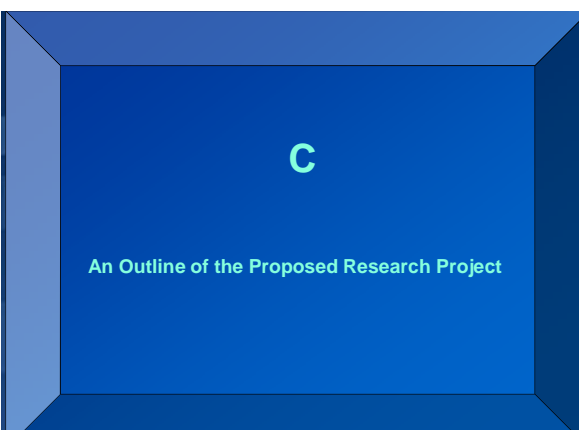
Individual monthly income





Headcount Enrolments according to Race - 2007

Name	Total	White	Coloured	Indian	African	Black
UNISA	239581	24%	6%	9%	61%	76%
TUT	50726	12%	1%	1%	86%	88%
UP	48854	47%	2%	3%	48%	53%
UNW	44726	36%	3%	2%	59%	64%
UJ	41740	26%	3%	5%	66%	74%
KZN	37943	14%	3%	31%	53%	86%
CPUT	28953	19%	32%	1%	47%	81%
WITS	25156	33%	3%	15%	48%	67%
UFS	24684	39%	6%	2%	53%	61%
WIS	24497	0%	0%	0%	99%	100%
NM	23718	25%	12%	3%	61%	75%
US	22799	71%	15%	2%	12%	29%
DUT	22782	6%	2%	19%	74%	94%
UCT	21188	43%	14%	8%	34%	57%
LIMP	16345	1%	0%	1%	97%	99%
VUT	16146	4%	1%	1%	94%	96%
UWC	14927	5%	48%	8%	39%	95%
UV	11770	0%	0%	0%	100%	100%
CUT	10477	17%	4%	0%	79%	83%
MANGO	9828	0%	0%	0%	100%	100%
UZ	9318	1%	0%	1%	98%	99%
UFH	8857	6%	2%	1%	92%	94%
UR	6075	49%	4%	5%	42%	51%



1. Project Title

Diversity Management in Higher Education:

A South African Perspective in Comparison to a Homogenous and Monomorphous Society such as Germany

Section 1.

Introduction

A Legislative Perspective

Determine and analyse the current higher education policy imperatives with regard to diversity management between Germany and South Africa and attempt to identify the similarities and differences.

Section 2

Diversity Management: A Student Perspective

Investigate the effects of enrolling students of different cultural, educational and financial (poor and disadvantaged) backgrounds at HE institutions, e.g.

- Drop-out rates
- Success rates
- Graduation rates
- Financial Aid
- Defining Performance Measures
- Enrolment Management under certain constraints
- Amendment of programme curricula (providing foundation courses)

Section 3

Diversity Management : A Staff Perspective

Employment in South African Society is highly regulated by an Employment Equity Act. Each and every public enterprise and private company has to adhere to the Act. This places a great responsibility on HEI to ensure that they comply with the Act.

The prevailing situation (and possible future policy changes) pertaining to diversity management at German HEI could form part of a comparative study.

Section 4

Diversity Management : An Institutional Management Perspective

Diversity is high on the agenda of the current South African Government. This poses a huge challenge for HEIs to deliver the required numbers and quality graduates and academia that is needed in the economy to meet the diversity expectations of Government.

This section will focus on the role and importance of a comprehensive Management Information System and the development of performance measures to enable the management of an institution to monitor and evaluate the rate of change in the diversity in students and staff.

Section 5

Diversity Management : Developing Performance Measures

This section will be devoted to explore and identify possible performance measures to evaluate the progress made towards the meeting of set goals for "diversity" at an institution. The indicators should be able to measure the efficiency, effectiveness and success of policy decisions that were made by Government and/or individual institutions.

Section 6

Diversity Management : Comparative Analysis

Status of Diversity Management in German Higher Education
vs.
Transformation in South African Higher Education

This section will conclude the investigation, analyses and lessons learned with regard to diversity management of students, staff and institutional management between Germany and South Africa.

FINIS



Presentation 2: 27 July 2010*The Use of KPI in Managing an Institution: A University of Pretoria Perspective***OUTLINE OF THE PRESENTATION**

- A Performance Indicators in Perspective**
- B Performance Indicators in relation to an Institution's Strategic Plan**
- C Constructing a Performance Index**

**A. Performance Indicators in Perspective**

- International League Tables, based on performance indicators, becoming important
- For example:
 - The Shanghai Jiao Tong University's ranking of the world's top 500 universities
 - The Times Higher Education Supplement (THES) top 200 universities
 - The Institute of Scientific Information (ISI) Field Rankings

Shanghai Indicators

Indicator	Weight
Alumni with Nobel prizes & Fields medals	10%
Staff with Nobel Prizes & Fields medals	20%
Highly cited staff	20%
Articles in Nature & Science	20%
Articles in SCI & SSCI	20%
Sum of 5 indicators/FTE academic staff	10%

**ISI Institutional Rankings
(University of Pretoria's indicators)**

FIELD	2008		
	Papers	Citations	Citations Per paper
Plant and Animal Science	1921	9141	4.76
Clinical Medicine	574	5116	8.91
Environment/ Ecology	497	3955	7.96
Engineering	544	1599	2.94
Agricultural Sciences	199	907	4.56
Social Sciences, General	283	534	1.89
ALL FIELDS	6311	34018	5.39

Performance Indicators

- Performance indicators are statistical measures to provide empirical data on the degree to which an institution is achieving its goals
 - Quantitative,
 - Qualitative or
 - Descriptive

Benchmarks

- Benchmarks are norms, standards or reference points to which performance indicators can be compared
- To improve the performance and productivity of a system or institution
- Possible benchmarks
 - National Working Group benchmarks
 - International benchmarks
 - Average set of comparable universities for financial indicators
 - Institution's own benchmarks

Targets

- Targets indicate positions that an institution hopes to reach within a specific period
- Targets may or may not be determined by referring to benchmarks
- Targets must take institutional circumstances into account, e.g.
 - starting points, direction of change, speed of change, culture, etc. and
 - must be agreed upon by each institution

B

Performance Indicators in Relation to an Institution's Strategic Plan

Identifying Performance Indicators Linked to the Strategic Plan



Identifying Performance Indicators Linked to the Strategic Plan



1. International Academic Stature

1	Shanghai index
2	Scopus number of citations
3	Scopus number of international patents
4	ISI Field rankings

2(a). A People Centred University (staff)

5	% Permanent academic staff to total permanent staff
6	% Temporary academic staff to total temporary staff
7	FTE Academic staff to total FTE staff
8	% Permanent fulltime Academic staff to all fulltime Academic staff
9	% Permanent Academic staff with masters/doctorates
10	% Academic staff turnover (perm staff excl retirements)
11	% Support staff turnover (perm staff excl retirements)
12	% Academic staff over 50 years (perm staff)
13	% Support staff over 50 years (perm staff)

2(b). A People Centred University (students)

14	Number of Teaching Input Units (Weighted, DoE definition)
15	Contact students to total students
16	UG - % International contact students to total contact students
17	UG - % international contact students from SADC
18	PG - % International contact students to total contact students
19	PG - % international contact students from SADC
Admission and registration ratios (contact students):	
20	Total Admissions to total applications
21	Total Registrations to total admissions
22	Business: Registrations to total registrations
23	SET: Registrations to total registrations
24	% Matriculants with 6+ distinctions that choose UP
25	Average M-score (PTP – score)

3(a). Teaching and Learning

26	% of contact graduates to total enrolled contact students
27	% of distance graduates to total enrolled distance students
28	% UG students completing a degree in minimum time (3 years degrees)
29	% UG students completing a degree in minimum time (4 years degrees)
30	% Successful FTE students to total FTE enrolments
31	Drop-out: % UG contact students after 1 year
32	% of UG modules with failure rates higher than 40%
33	Percentage of UG contact modules with ClickUP
34	Quality of learning (survey information)
35	FTE contact students per FTE teaching staff member
36	% of Academic staff trained by Dept of EI to total staff

3(b). Research

37	New honours students to total honours enrolments
38	New masters students to total masters enrolments
39	New doctoral students to total doctoral enrolments
40	Completion time index for research masters degree
41	Completion time index for doctoral degree
42	Accredited research units per Academic staff member (FTE)
43	Number of NRF rated staff (all categories)
44	% Academic staff with NRF rating to total Academic staff (fulltime)
45	Number of competitive research grants
46	Value (Rm) of competitive research grants
47	Disclosure and patents: Invention disclosures to IP office
48	Disclosure and patents: No of patents

3(c). Community Engagement

28 Community engagement projects

4. Excellence in UP's Support Functions

50	Library: Budget as % of UP budget
51	Library: Number of e-articles downloads and book loans (x'000)
52	HR: Number of permanent posts vacant for 6 months or longer (excl approved vacancies)
53	ITS: Number of PC-workstations per student
54	Facilities: Summary of available building space
55	Number of students that participate in UP sport and cultural activities

5. Local Impact

56	New number student enrolment ratio: Business to total new number contact enrolments
57	New number student enrolment ratio: SET to total new number contact enrolments
58	Total financial aid relative to tuition income
59	NSFAS loans to total financial aid
60	Total bursaries to total financial aid
61	UP funded aid (bursaries and loans) to total tuition fees

6. Transformation

62	Student demographics: % Black contact students
63	Student demographics: % Female contact students
64	% Black staff (Permanent employed Academic Staff)
65	% Black staff (Permanent employed Support Staff)
66	% Female staff (Permanent employed Academic Staff)
67	% Female staff (Permanent employed Support Staff)

7. Interfaces

Client Service Centre statistics:	
68	Voice interactions to total interactions
69	Walk-in interactions to total interactions
Campus Companies - Revenue generated:	
70	CE at UP (R'000)
71	BE at UP (R'000)
Alumni statistics:	
72	Number of e-mail newsletters send to Alumni members (x'000)
73	Number of Alumni members participating in fundraising
74	No of international agreements (excl. individual faculty agreements)
75	Total donations (Rm) via fundraising actions (excl. sponsorships and contract research)

8. Sustainability

76	Ratio of total liabilities to total financial resources
77	Ratio of short term assets to short term obligations - Quick ratio
78	Impairment of student debt to total student debt
79	Total income of the university (x'000 000)
80	Subsidy to total income
81	Surplus after capital expenditure to total income
82	Academic staff expenditure to total subsidy and fee income
83	Personnel (other) expenditure to total subsidy and fee income

C

Constructing a Performance Index

The Method [step1]

- Compile a list of indicators appropriate for university's strategies
- Determine benchmarks by using HEMIS information of peer institutions
- Determine a target (with the help of the benchmark) for each of the indicators
- Measure the degree of deviation from the target for each of the indicators
- Weight the deviation of each of the indicators according to agreed-upon values

A Possible Method (step 1 continue)

- Cluster the indicators according to the main "thrusts" of the Strategic Plan
- Determine the weighted deviation from the benchmark or target of the indicators in each "thrust"
- Calculate a "thrust" index

Step 2 (still under consideration)

- Assign an agreed-upon weight to each "thrust"
- Weigh the "thrust indices" and add to determine the institutional "Overall Performance Index"

The Algorithm

- Step 1: Calculate a Performance Index (PI) for each "thrust"

$$PI_k = \sum_{i=1}^n \{ [T_{ik} - ABS(x_{ik} - T_{ik})] / T_{ik} \times W'_{ik} \} / \sum W'_{ik}$$

where $k = 1, 2 \dots m$ "thrusts"
 i = Number of indicators in each "thrust"
 T_i = Targets for each indicator
 x_i = Value of indicator in a specific "thrust"
 W_i = Weight assigned to each indicator in "thrust"

- Step 2 (still to be investigated): Calculate the Overall Performance Index by weighing and adding the Performance Indices across the "thrusts"

Overall Performance Index =

$$\sum_{k=1}^m (PI_k \times W_k) / \sum_{k=1}^m W_k$$

where W_k = Weight assigned to each "thrust"

An Illustrative Example

An Illustrative Example

$$PI_k = \sum_{i=1}^n \{ [T_{ik} - ABS(X_{ik} - T_{ik}) / T_{ik} \times W'_{ik}] / \sum W'_{ik}$$

Step 1-

Thrust $k = 1$ [Thrust weight = 30]

Thrust, $\kappa = 1$ (Thrust weight = 30)				
PI f	X f	T f	W f	Weighted PI f
f = 1	63.3	60.0	2.4	2.3
	$\frac{60}{60}$ [60 – ABS(63.3 – 60)]/60.0 = 0.945			
f = 2	80.5	85.0	6.1	5.8
	$\frac{85}{85}$ [85 – ABS(80.5 – 85)]/85 = 0.947			
			8.5	8.1
			0.95	

Thrust $k = 2$ [Thrust weight = 70]

PI <i>f</i>	X <i>f</i>	T <i>f</i>	W <i>f</i>	Weighted PI <i>f</i>
f = 1	15.2	10.0	12.2	5.9
	$\frac{10}{10}$ [10 – ABS(15.2 – 10)]/10.0 = 0.48			
	38.8	50		
f = 2	$\frac{50}{50}$ [50 – ABS(38.8 – 50)]/50 = 0.78		8.1	4.7
			18.3	10.6
			0.95	

Step 2 (still under consideration):

$$\begin{aligned} \text{Performance Index} &= [(\text{Weighted Thrust Index 1}) \times 30] \\ &+ [(\text{Weighted Thrust Index 2}) \times 70] \\ &= 69.1 \end{aligned}$$

Example for Thrust (6) - Transformation [Thrust Weight = 10]

Performance Indicators	Percentage/Performance			Bench mark	Target	PI Weight	Weighted progress towards target		
	'05	'06	'07				'05	'06	'07
62. Student demographics: % Black contact	40.0	40.0	40.0	48.4	45.0	30.0	26.7	26.7	26.7
63. Student demographics: % Female contact	53.0	53.0	53.0	50.8	54.0	10.0	9.8	9.8	9.8
64. % Black staff (permanent academic staff)	14.9	15.7	18.3	21.4	25.0	30.0	17.9	18.9	21.9
65. % Black staff (permanent support staff)	39.4	41.0	42.8	59.8	40.0	20.0	19.7	20.0	20.0
66. % Female staff (permanent academic staff)	44.0	45.1	45.1	39.5	50.0	5.0	4.4	4.5	4.5
67. % Female staff (permanent support staff)	58.1	58.3	59.8	58.6	68.0	5.0	4.3	4.3	4.4
							82.8	84.2	87.3

Indices per Strategic Thrust (and Overall Performance Index)

STRATEGIC THRUST	Thrust weight	Index (unweighted)			Index (weighted)		
		2005	2006	2007	2005	2006	2007
1. International Academic Excellence	5	54.6	60.6	72.9	2.7	3.0	3.6
2. A People Centred University							
2(i) Staff	7.5	89.6	89.3	79.1	6.7	6.7	5.9
2(ii) Students	7.5	86.3	88.6	88.9	6.5	6.6	6.7
3. Excellence in the University's core functions:							
3(i) Teaching and Learning	15	77.8	78.7	78.8	11.7	11.8	11.8
3(ii) Research	15	68.0	72.5	71.4	10.2	10.9	10.7
3(iii) Community engagement	5	0.0	0.0	0.0	0.0	0.0	0.0
4. Excellence in UP's support functions	10	82.6	86.4	84.2	8.3	8.6	8.4
5. Local impact	5	86.8	86.2	84.6	4.3	4.3	4.2
6. Transformation	10	82.7	84.2	87.3	8.3	8.4	8.7
7. Interfaces	5	71.5	77.2	83.7	3.6	3.9	4.2
8. Sustainability	15	87.0	88.2	89.1	13.1	13.2	13.4
UP TOTAL(still to be investigated)	100				79.3	81.6	81.8

THE WAY FORWARD

- Reach agreement and consensus on the targets as well as the weightings of the indicators and thrusts.
- Determine whether indicators should be included or excluded (i.e. weight = 0) in the calculation of the Performance Index.
- Perform a sensitivity analysis of the weightings and values of the performance indicators on the Performance Index.
- Investigate the clustering of performance indicators in the calculation of the Overall Performance Index.

Whatch this Space



Presentation 3: 11 August 2010

Steering Mechanisms in Higher Education in South Africa: A Diversity Management Perspective

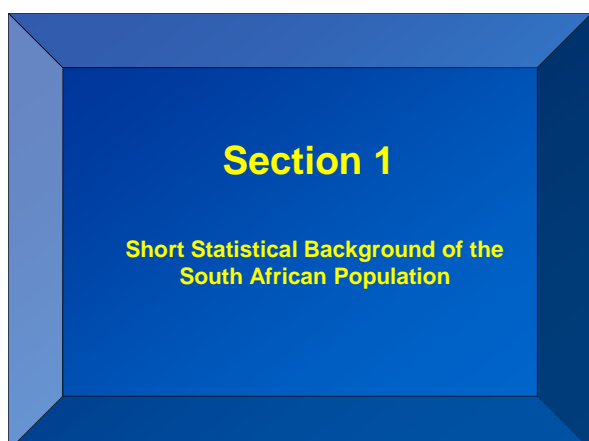
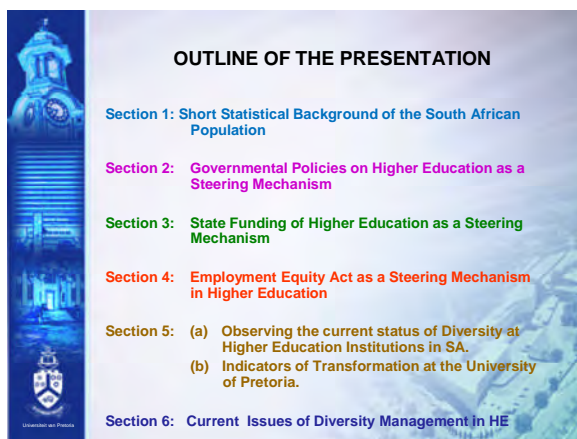


Table 1: Mid-year population estimates for South Africa by population group and gender (2010)

Population group	Male		Female		Total	
	Number	Percentage of total population	Number	Percentage of total population	Number	Percentage of total population
African	19 314 500	79,4	20 368 100	79,4	39 682 600	79,4
Coloured	2 124 900	8,7	2 299 200	9,0	4 424 100	8,8
Indian/Asian	646 600	2,7	653 300	2,5	1 299 900	2,6
White	2 243 000	9,2	2 341 700	9,1	4 584 700	9,2
Total	24 329 000	100,0	25 662 300	100,0	49 991 300	100,0

Table 2: Mid-year population estimates by province (2010)

	Population estimate	Percentage share of the total population
Gauteng	11 191 700	22,4
KwaZulu-Natal	10 645 400	21,3
Eastern Cape	6 743 800	13,5
Western Cape	5 223 900	10,4
Limpopo	5 439 600	10,9
Mpumalanga	3 617 600	7,2
North West	3 200 900	6,4
Free State	2 824 500	5,7
Northern Cape	1 103 900	2,2
Total	49 991 300	100,0

Table 3: Percentage distribution of the projected provincial share of the total population, 2001–2009

	2001	2002	2003	2004	2005	2006	2007	2008	2009
KwaZulu-Natal	21,3	21,3	21,3	21,3	21,4	21,4	21,4	21,4	21,3
Gauteng	21,0	21,2	21,3	21,5	21,7	21,8	21,9	22,1	22,2
Eastern Cape	14,3	14,2	14,1	14,0	13,9	13,9	13,8	13,7	13,6
Limpopo	11,1	11,0	11,0	11,0	10,9	10,9	10,9	10,9	10,9
Western Cape	9,8	9,8	9,9	10,0	10,1	10,2	10,2	10,3	10,4
Mpumalanga	7,4	7,4	7,4	7,4	7,4	7,3	7,3	7,3	7,3
North West	6,6	6,5	6,5	6,5	6,5	6,5	6,4	6,4	6,4
Free State	6,1	6,1	6,0	6,0	5,9	5,8	5,9	5,8	5,7
Northern Cape	2,4	2,4	2,4	2,3	2,3	2,3	2,3	2,2	2,2
Total	100	100	100	100	100	100	100	100	100

Table 4: HIV prevalence estimates and the number of people living with HIV (2001–2009)

Year	Population 15–49 years		Percentage of the total population	Total number of people living with HIV (in millions)
	Percentage of women	Percentage of the population 15–49		
2001	18.7	15.4	9.4	4.10
2002	19.2	15.8	9.6	4.38
2003	19.4	16.1	9.8	4.53
2004	19.6	16.3	9.9	4.64
2005	19.7	16.5	10.0	4.74
2006	19.7	16.6	10.1	4.85
2007	19.7	16.7	10.2	4.93
2008	19.7	16.9	10.3	5.02
2009	19.6	17.0	10.3	5.11

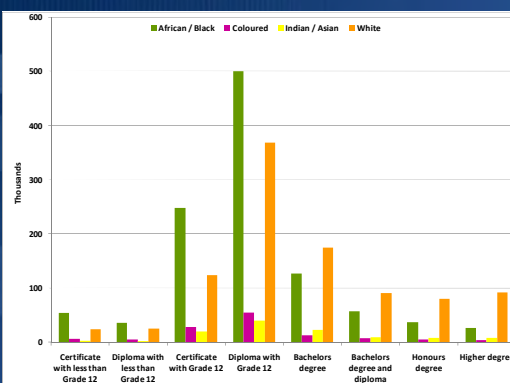
Table 5: Assumptions about fertility, life expectancy and infant mortality levels (2001–2009)

	Total fertility rate (TFR)	Male life expectancy at birth	Female life expectancy at birth	Infant mortality rate (IMR)
2001	2.86	52.7	56.6	56.9
2002	2.81	51.6	55.0	56.4
2003	2.75	50.9	53.8	56.0
2004	2.70	50.3	52.8	55.4
2005	2.65	50.3	52.6	54.6
2006	2.59	50.8	52.9	52.4
2007	2.54	51.4	53.4	51.3
2008	2.48	52.5	54.6	49.3
2009	2.43	53.2	55.3	48.2

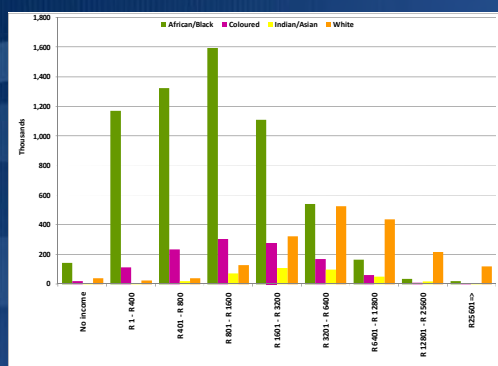
Table 6: Mid-year population estimates by population group and age (2009)

Age	African		Coloured		Indian/Asian		White		South Africa	
	Total	%	Total	%	Total	%	Total	%	Total	%
0–4	4,355,700	11.0	403,600	9.1	101,200	7.8	260,200	5.7	5,120,700	10.2
5–9	4,412,900	11.1	408,500	9.2	91,700	7.1	268,100	5.8	5,181,200	10.4
10–14	4,402,300	11.1	406,400	9.2	98,700	7.6	294,900	6.4	5,202,300	10.4
15–19	4,394,900	11.1	401,700	9.1	108,200	8.3	321,400	7.0	5,226,200	10.5
20–24	4,212,000	10.6	376,100	8.5	115,500	9.2	310,900	6.8	5,018,500	10.0
25–29	3,735,000	9.4	364,400	8.2	127,200	9.8	292,200	6.4	4,518,800	9.0
30–34	3,263,400	8.2	377,600	8.5	114,300	8.8	280,400	6.1	4,035,700	8.1
35–39	2,714,500	6.8	371,000	8.4	93,500	7.2	286,200	6.2	3,465,200	6.9
40–44	1,791,700	4.5	310,800	7.0	83,500	6.4	338,200	7.4	2,524,200	5.0
45–49	1,536,800	3.9	273,000	6.1	78,500	6.0	342,300	7.5	2,230,600	4.5
50–54	1,376,500	3.5	224,400	5.1	71,900	5.5	346,300	7.6	2,019,100	4.0
55–59	1,105,700	2.8	171,700	3.9	63,800	4.9	312,500	6.8	1,653,700	3.3
60–64	844,000	2.1	127,700	2.9	52,200	4.0	295,800	6.5	1,319,700	2.6
65–69	617,400	1.6	83,500	1.9	39,300	3.0	245,000	5.3	985,200	2.0
70–74	439,700	1.1	60,700	1.4	26,800	2.1	167,700	3.7	694,900	1.4
75–79	279,200	0.7	37,300	0.8	16,800	1.3	108,100	2.4	441,400	0.9
80+	200,900	0.5	25,700	0.6	12,800	1.0	114,500	2.5	353,900	0.7
Total	39,682,600	100.0	4,424,100	100.0	1,299,900	100.0	4,584,700	100.0	49,991,300	100.0

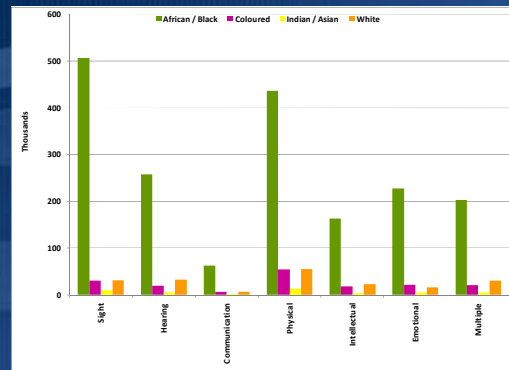
Highest qualification level by population group



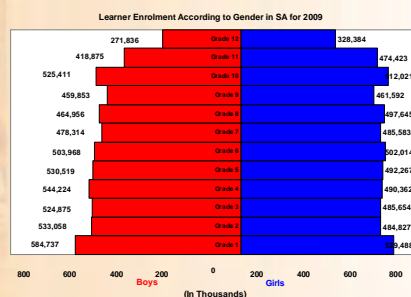
Individual monthly income according to race



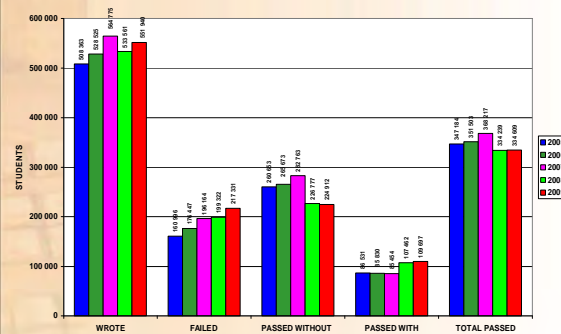
Population Group according to type of disability



Learner Enrolment according to Gender in SA for 2009



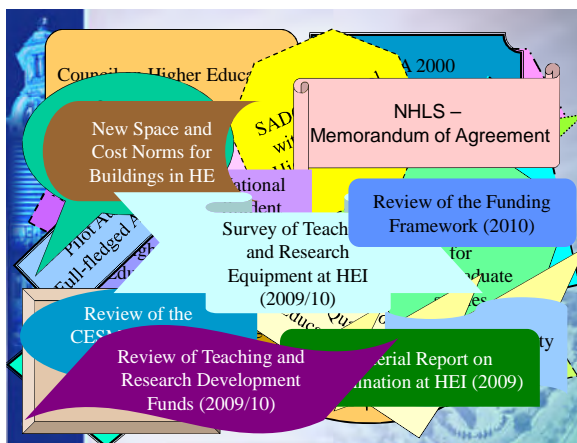
National achievement in the grade 12 exams (2005 – 2009)



SOURCE - DEPARTMENT OF EDUCATION'S SENIOR CERTIFICATE REPORT ON THE 2007 EXAMINATIONS RESULTS

Section 2

Governmental Policies on Higher Education as a Steering Mechanism



SECTION 2

- **“OLD” Dispensation - 1980 to 1993**
 - Framework autonomy – SAPSE formula
- **Unbanning of all resistance organisations (1990)**
 - National Education Policy Initiative (NEPI)
- **ANC government-in-waiting initiated higher education policy formulation (1990-1994)**
 - Consultative process in developing a comprehensive framework and legislative instruments for HE
 - Ways and means to establish the required and statutory structures

SECTION 2 (Continued...1)

- **Establishment of the National Commission on Higher Education (NCHE) (Report 1996)**
- **Education White Paper 3: A Programme for the Transformation of Higher Education (1997)**
 - Equity and redress
 - Democratisation
 - Development
 - Quality
 - Effectiveness and efficiency
 - Academic freedom
 - Institutional autonomy
 - Public accountability

SECTION 2 (Continued...2)

- **Higher Education Act of 1997**
 - Definitions
 - Council on Higher Education – Juristic Person – Advice
 - Establishment of public higher education institutions – mergers and closures
 - Governance of public higher education institutions
 - Funding of public higher education – in consultation with minister of finance and the CHE
 - Independent assessor
 - Regulate private higher education
 - General issues (name changes, delegations, etc.)
 - Transitional arrangements
- **Subject to Constitution and other laws e.g. labour relations law and employment equity law**

SECTION 2 (Continued...3)

- **SADC Protocol (1997)**
- **South African Qualification Authority (SAQA)**
 - Registration of qualifications on the NQF
 - Development of level descriptors for the NQF
 - First discussion document on NQF (24 October 2000)
 - Department of Education draft document on NQF (January 2002)
 - Ministry of Education draft document on the Higher Education Qualification Framework (HEQF) which forms part of the NQF (July 2004)

SECTION 1 (Continued...4)

- **The Higher Education Qualification Framework**
 - Number of Levels and Level Descriptors (1-10)

Higher education:	Undergraduate (5-7)
	Postgraduate (8-10)
 - Undergraduate:

Higher Certificate
Advanced Certificate
Diploma
Advanced Diploma
Bachelors Degree
 - Postgraduate:

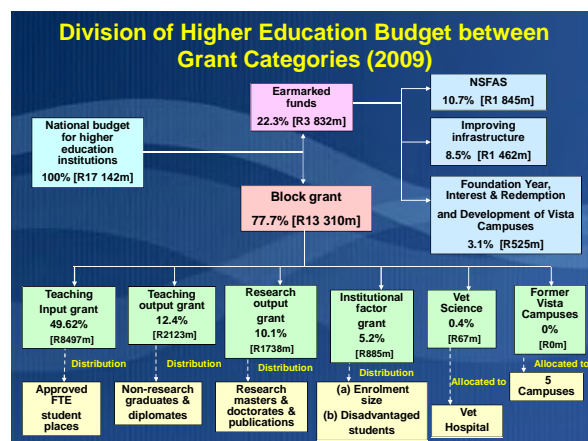
Postgraduate Diploma
Bachelor Honours Degree
Masters Degree
Doctoral Degree

Section 3

State Funding of Higher Education as a Steering Mechanism

GDP, Total State Finance and State Finance on Education for 2009		
1	GDP	R 2 141 747 million
2	Total State Budget	R 594 198 million = 27.7% of GDP
3	Total Education Budget	R 110 160 million = 18.5% of State Budget = 5.1% of GDP
3.1	Dept of Education	R 810 million = 0.74% of Educ Budget
3.2	Higher Education Sector	R 13 310 million = 12.1% of Educ Budget
3.3	Ad Hoc Funding for HE	R 3 832 million = 3.5% of Educ Budget
4.	Higher Education	0.8% of GDP

Distribution of Budget Totals For 2009 - 2011				
	Distribution of actual budget for 2009 (R' million)	Provisional distribution of MTEF budgets		
		2010 (R' million)	2011 (R' million)	
1. Block Grants	13310	77.7%	15344	78.6%
1.1 Teaching inputs	8497	49.6%	9795	50.1%
1.2 Institutional Factors	885	5.2%	1020	5.2%
1.3 Teaching Outputs	2123	12.4%	2448	12.5%
1.4 Research Outputs	1738	10.1%	2004	10.3%
1.5 Veterinary Sciences	67	0.4%	77	0.4%
2. Earmarked Grants	3832	22.3%	4188	21.4%
2.1 NSFAS	1845	10.8%	2015	10.3%
2.2 Interest & Redemption on loans	41	0.2%	34	0.2%
2.3 National Institutes	35	0.2%	39	0.2%
2.4 Infrastructure funding linked to output agreements	1462	8.5%	1585	8.1%
2.5 Foundation Programmes	146	0.9%	185	0.9%
2.6 African Inst for Math Studies	3	0%	0	0%
2.7 Clinical Train for Health Prof	300	1.8%	330	1.7%
TOTAL	17142	100%	19532	100%



Ministerial Prerogative

- The division of funds between the grant categories is annually determined by the Minister of Education
- The division may vary between years, subject to the MTEF three year projections

Teaching Input Grants

Based on approved FTE student places as determined in the Programme and Qualification Mix (PQM) process:

- Four funding groups
- Four study levels
- Weighted according to funding group and study level

Four Funding Groups	
Funding group	CESM categories included in funding group
1	07 education 13 law 14 librarianship 20 psychology 21 social services/public administration
2	04 business/commerce 05 communication 06 computer science 12 languages 18 philosophy/religion 22 social sciences
3	02 architecture/planning 08 engineering 10 home economics 11 industrial arts 16 mathematical sciences 19 physical education
4	01 agriculture 03 fine and performing arts 09 health sciences 15 life and physical sciences

Weightings according to Funding Group and Study Level				
(i) Contact Students (Distance Students)				
Funding group	Level			
	Undergraduate & equivalent	Honours & equivalent	Masters & equivalent	Doctoral & equivalent
1	1.0 (0.5)	2.0 (1.0)	3.0 (3.0)	4.0 (4.0)
2	1.5 (0.75)	3.0 (1.5)	4.5 (4.5)	6.0 (6.0)
3	2.5 (1.25)	5.0 (2.5)	7.5 (7.5)	10.0 (10.0)
4	3.5 (1.75)	7.0 (3.5)	10.5 (10.5)	14.0 (14.0)

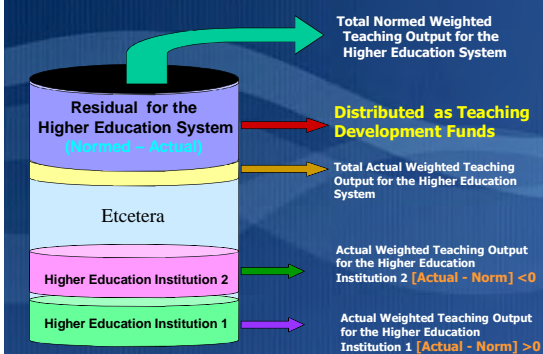
Teaching Output Grant	
(a) Non-research output measured by non-research graduates and diplomates and weighted	
And	
(b) Measured against output norms (benchmarks)	
(a) Weighting factors for teaching outputs: universities & technikons	
1 st certificates and diplomas of 2 years or less	0.5
1 st diplomas and bachelors degrees: 3 years	1.0
Professional 1 st bachelors degrees: 4 years and more	1.5
Postgraduate and postdiploma diplomas	0.5
Postgraduate bachelors degrees	1.0
Honours degrees/higher diplomas	0.5
Non-research masters degrees	0.5

Teaching Output Grant (continued)

(b) Graduation benchmarks for contact and distance programmes
(Graduates as % of head count enrolments)

	Contact	Distance
	2004/05	2004/05
Undergraduate: up to three years	22.5%	13.5%
Undergraduate: four years and more	18%	9%
Postgraduate: up to honours	54%	27%
Postgraduate: up to masters (non-research)	30%	22.5%

Teaching Output "Capping"



Research Outputs

(a) Research outputs measured by publications in accredited journals, research masters and doctoral graduates (weighted)

And

(b) Measured against a research output norm benchmark

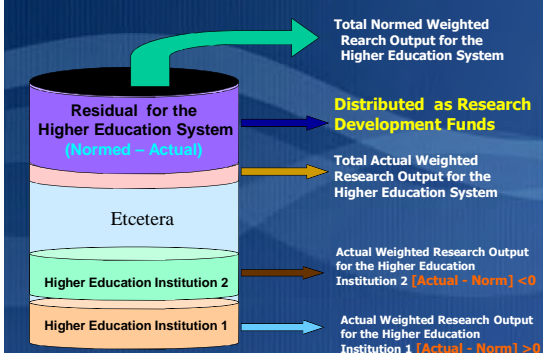
(a) Weightings for research outputs

Publication units	1
Research masters graduates	1
Doctoral graduates	3

(b) Ratios of weighted research output units to permanently appointed instruction/research staff

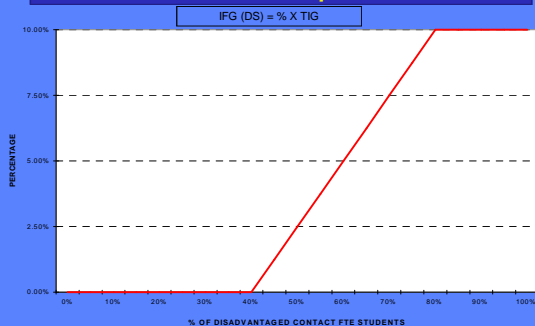
Universities	1.25
Technikons	0.5

Research Output "Capping"



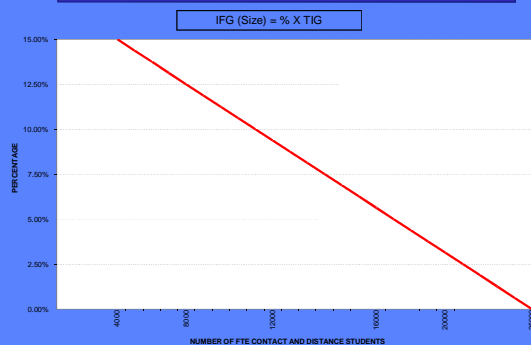
Institutional Factor Grants

2.1 Measured by the proportion of disadvantaged students [Contact African & Coloured students who are SA citizens]



Institutional Factor Grants

3.2 Size of the institution



Earmarked Funding

- National Student Financial Aid Scheme (NSFAS)
- Interest and redemption on loans approved before 1999
- New capital projects
- Institutional restructuring

What are the (Diversity) Incentives in the New Funding Framework ?

Planning Orientation

Minister has discretionary powers

Teaching Input and Output Funds

Increased Enrolments vs throughput

- (a) Increase student academic support
- (b) Summer/Winter Schools and tutorials
- (c) Enhanced learning material
- (d) Introduce more e-learning

Funding Grid (CESM groups)

Study Programmes and the curriculum's should be re-examined

Funding Grid (Levels)

Greater emphasis on postgraduate studies and graduation rates

Funding Grid (Enrolments)

Student Enrolment Plans should be realistic and comply with the PQM as approved by DoE

Teaching Outputs

Improve graduation rates without compromising quality

Research Outputs

Promote research outputs to ensure a greater proportion of total RO funds (concentrate on "research" M&D students)

Institutional Factor Grants (Disadvantaged Students)

Increase proportion of disadvantaged students by attracting especially postgraduate students

Foundation Programmes

- Total available – 15% of first-time entering, contact, undergraduate students.

Apply for Funding for Foundational Programmes

Section 4

Employment Equity Act as a Steering Mechanism in
Higher Education

Employment Equity Act, No. 55 of 1998

The Act Recognises-

- that as a result of apartheid and other discriminatory laws and practices, there are disparities in employment, occupation and income within the national labour market; and
- that those disparities create such pronounced disadvantages for certain categories of people that they cannot be redressed simply by repealing discriminatory laws.

Employment Equity Act, No. 55 of 1998 (continue)

Therefore, the Act has to be enacted in order to-

- promote the constitutional right of equality and the exercise of true democracy;
- eliminate unfair discrimination in employment;
- ensure the implementation of employment equity to redress the effects of discrimination
- achieve a diverse workforce broadly representative of the people;
- promote economic development and efficiency in the workplace; and
- give effect to the obligations of the Republic as a member of the ILO

Employment Equity Act, No. 55 of 1998 (continue)

Purpose of the Act is to achieve equity in the workplace by-

- promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination; and
- implementing affirmative action measures to redress the disadvantages in employment experienced by **designated groups**, in order to ensure their equitable representation in all occupational categories and levels in the workforce.

* Designated group means: black people, women, and people with disabilities.

* Black people means: Africans, Coloureds and Indians/Asians.

Developing Scenarios for Institutional EE Goals for 2012

1. Perspective/Context

- Statutory Framework and Compliance
- Broader Strategy has to be taken into account
 - Internationalization
 - Diversity (Staff, Student, Ideas)
- Alignment with (the University's) Strategic Plan
- Opportunities for Change / Quality/ Impact and Status of Institution

2. Constraints (Limited University Control)

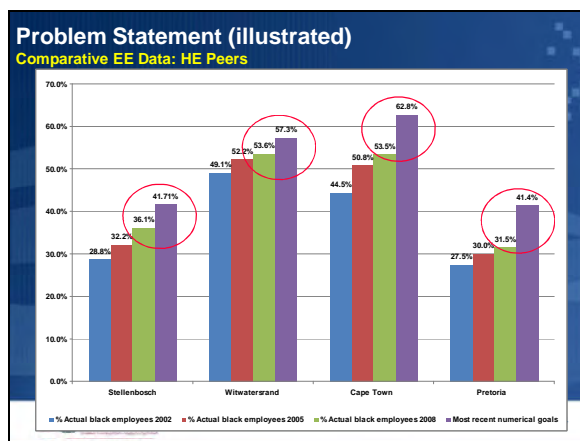
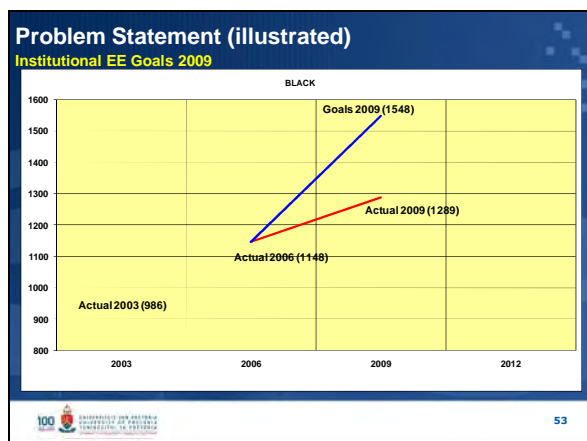
- Economically Active Population (EAP)
- Inability to pay salaries comparable to private and in some cases private sector
- Minimum qualifications for many Government job levels and at some other HEIs are lower than those for comparable levels at UP
- Limited supply of established scholars from under-represented designated groups (many competitors for small pool)
- Requirement for bilingualism in many UP jobs further diminishes the available labour pool
- Many positions at UP fall within the scarce skills categories

3. Challenges facing the University (1)

- Black candidates more difficult to recruit than white female candidates
- Insufficient networking for recruiting black candidates
- Attrition rate for black employees that the University succeeds in attracting, approximates the attrition rate for all employees (and needs to be smaller)
- All staff are under (time) pressure leading to limited time available to assist in the development of employees which were appointed on the basis of "capacity to acquire, within a reasonable time, the capability to do the job"

3. Challenges facing the University (2)

- Much time and often bursary resources required to produce a scholar
- Aspects of institutional culture do not yet fully accommodate diversity
- Limited knowledge/skills in managing diversity on the part of many managers
- New EE compliant policies and procedures not yet entrenched in actual practices
- EE competes with many other institutional change initiatives currently being implemented simultaneously.



Constraints (illustrated) Economically Active Population

	Black (millions)			White (millions)			Total (millions)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total EAP	8.159	7.058	15.217	1.175	0.941	2.116	9.334	7.999	17.333
Row %	47.07%	40.72%	87.79%	6.78%	5.43%	12.21%	53.85%	46.15%	100%
Total EAP with grade 12	2.137	1.962	4.099	0.421	0.394	0.815	2.558	2.356	4.914
Row %	43.49%	39.92%	83.41%	8.57%	8.02%	16.59%	52.06%	47.94%	100%
Total EAP with 3 year degree and higher (x1000)	220	245	465	270	201	471	490	446	936
Row %	23.50%	26.18%	49.68%	28.85%	21.47%	50.32%	52.35%	47.65%	100%
Master PhD (x1000)	35	20	55 (0.36%)	63	29	92 (4.3%)	98	49	147 (0.85%)
Row %	23.8%	13.6%	37.4%	42.8%	19.8%	62.6%	66.7%	33.3%	100%



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UP Remuneration 01/04/2009

Professor	1.36	R557 731
Associate Prof	1.17	R479 952
Snr Lecturer	1	R410 448
Lecturer	0.9	R367 944
Jnr Lecturer	0.7	R286 860

Government SMS (top of scale) 01/01/2009

Director	R736 065
Chief Director	R905 538
Deputy DG	R1 037 571
DG	R1 355 766

Constraints (illustrated) Masters Graduates at all Universities

	Black				White			
	Female	Male	Total	% of Total	Female	Male	Total	% of Total
1999	677	1003	1680	34%	1367	1837	3204	66%
2000	920	1397	2317	39%	2000	1522	3522	61%
2001	1087	1611	2698	41%	2001	1734	3735	59%
2002	1219	1790	3009	43%	2002	1878	3957	57%
2003	1477	1982	3459	46%	2003	1841	4057	54%
2004	1599	2224	3823	49%	2004	1842	4059	51%
2005	1576	2230	3806	48%	2005	2019	4200	52%
2006	1725	2187	3912	50%	2006	1879	3957	50%
2007	1657	2136	3793	51%	2007	1794	3862	49%
2008	1687	2102	3789	51%	2008	1856	3823	49%

Total			
Female	Male	Total	% of Total
1999	2044	2840	4884
2000	2442	3472	5914
2001	2821	3702	6523
2002	3097	3855	6952
2003	3318	4198	7516
2004	3441	4441	7882
2005	3595	4411	8006
2006	3604	4265	7869
2007	3451	4024	7475
2008	3543	3925	7468



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Constraints (illustrated) Doctoral Graduates at all Universities

	Female	Male	Total	% of Total
1999	56	116	172	24%
2000	72	178	250	30%
2001	80	188	268	32%
2002	102	250	352	36%
2003	128	265	393	37%
2004	136	313	449	41%
2005	169	323	492	41%
2006	176	303	479	44%
2007	194	386	580	46%
2008	195	339	534	45%

	Female	Male	Total
1999	292	431	723
2000	339	490	829
2001	312	536	848
2002	382	606	988
2003	409	643	1052
2004	420	683	1103
2005	524	663	1187
2006	474	623	1097
2007	529	742	1271
2008	518	660	1178



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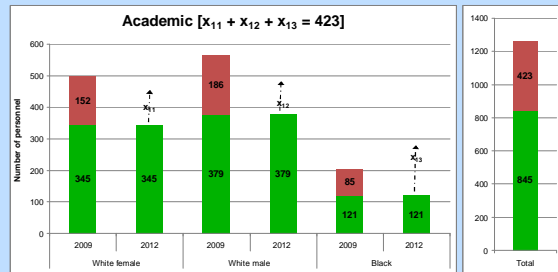
4. Targets (1 July 2009 – 30 June 2012)

Institutional Assumptions

- A 0% growth rate in the overall staff complement of the University.
- Vacancies through natural attrition, the prime mechanism for increasing representation by under-represented designated groups.
- The "new opportunities" (that may become available in the period 2009 – 2012 through terminations) will be utilised more effectively to assist in reaching the 2012 EE goals.
- If growth does take place, new posts will provide an additional mechanism for increasing representation by under-represented designated groups.



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Setting EE Goals for 2012

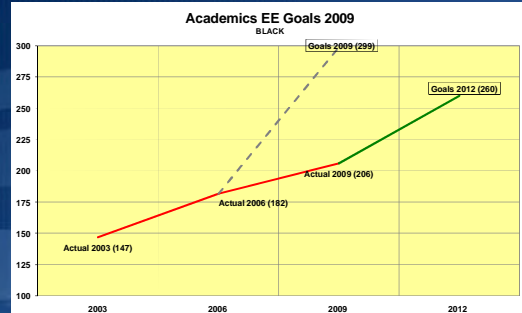
	PERCENTAGES			SCENARIO 2012		
	2003 (Act)	2006 (Act)	2009 (Act)	1	2	2(a)
ACADEMICS						
Blacks	12.0%	15.0%	16.2%	23.7%	19.7%	20.5%
White Male	51.8%	47.7%	44.6%	42.3%	43.6%	43.2%
White Female	36.2%	37.3%	39.2%	34.0%	36.7%	36.3%
Sub Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
ACADEMIC SUPPORT						
Blacks	35.8%	37.2%	40.4%	50.6%	46.5%	46.5%
White Male	13.2%	13.0%	12.0%	10.9%	10.7%	10.7%
White Female	50.9%	49.8%	47.6%	38.5%	42.8%	42.8%
Sub Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SUPPORT SERVICES						
Blacks	37.3%	41.6%	45.2%	50.6%	53.5%	52.7%
White Male	21.8%	20.5%	17.7%	16.5%	12.1%	14.1%
White Female	40.9%	37.9%	37.1%	32.9%	34.4%	33.2%
Sub Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
TOTAL						
Blacks	28.0%	31.3%	33.9%	41.6%	39.9%	39.9%
White Male	29.5%	27.0%	24.8%	23.3%	22.1%	22.7%
White Female	42.5%	41.7%	41.3%	35.1%	37.9%	37.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Setting EE Goals for 2012 (Continue 1)

	NUMBERS				SCENARIO 2012		
	2003 (Act)	2006 (Act)	2009 (Act)	2009 (Goals)	1	2	2(a)
ACADEMICS							
Blacks	147	182	206	299	300	259	260
White Male	636	580	565	536	536	553	548
White Female	445	454	497	432	432	465	460
Sub Total	1228	1216	1268	1267	1268	1268	1268
ACADEMIC SUPPORT							
Blacks	403	455	504	624	631	589	589
White Male	149	159	150	135	136	133	133
White Female	573	608	593	475	490	534	534
Sub Total	1125	1222	1247	1234	1247	1247	1247
SUPPORT SERVICES							
Blacks	436	511	579	625	649	686	676
White Male	255	251	227	204	212	155	180
White Female	478	465	476	406	421	441	426
Sub Total	1169	1227	1282	1235	1282	1282	1282
TOTAL							
Blacks	986	1148	1289	1548	1580	1516	1516
White Male	1040	990	942	875	884	841	861
White Female	1496	1527	1566	1313	1333	1449	1420
Total	3522	3625	3797	3736	3797	3797	3797

Problem Statement

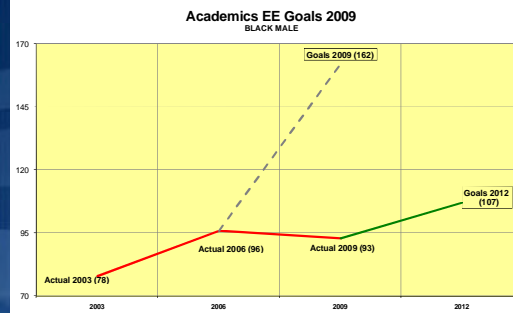
Academic EE Goals 2012



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Problem Statement (continued)

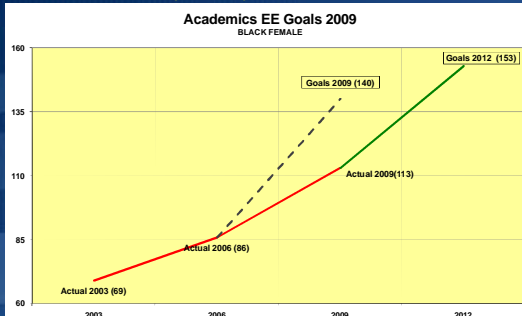
Academic EE Goals 2012 (Continue)



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Problem Statement (continued)

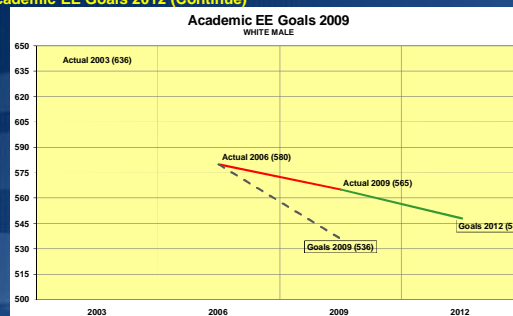
Academic EE Goals 2012 (Continue)



65

Problem Statement (continued)

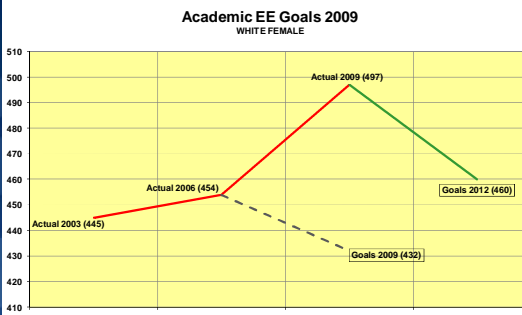
Academic EE Goals 2012 (Continue)



66

Problem Statement (continued)

Academic EE Goals 2012 (Continue)



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**Cascading the Scenario
down to Faculties
and Support Departments**

Section 5 (a)

Observing the State of Diversity at
Higher Education Institutions

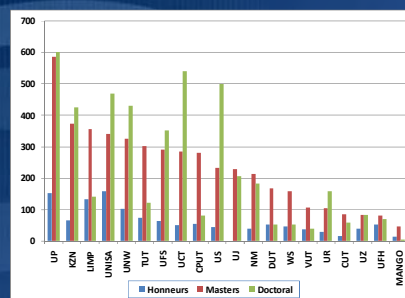
Population Cascaded down in Levels of Education

Level	African	Coloured	Asian/Indian	White	Unspes	Total
Total Population (est 2009)	39 136 200	4 443 100	1 279 100	4 472 100		49 330 500
% of Total	79.33%	9.01%	2.59%	9.07%		100.00%
At School (2008?)						12,239,363
In Matric (2008)	460 828	38 213	14 137	40 753	732	554 663
% of Total	83.08%	6.89%	2.55%	7.35%	0.13%	100.00%
First-time Entrants (2008)	103 122	10 483	8 755	29 200	392	151 952
% of Total	67.86%	6.90%	5.76%	19.22%	0.26%	100.00%
B-graduates (2008)	12 588	1 938	2 047	8 581	31	25 185
% of Total	49.98%	7.70%	8.13%	34.07%	0.12%	100.00%
M-graduates (2008)	2 810	404	576	3 679	45	7 514
% of Total	37.40%	5.38%	7.67%	48.96%	0.60%	100.00%
D-graduates (2008)	383	55	96	644	4	1 182
% of Total	32.40%	4.65%	8.12%	54.48%	0.34%	100.00%

Headcount of Instruction/Research Professionals with Permanent Appointments According to Highest Qualification - 2008

Institution	Honours	Masters	Doctoral
UP	152	586	601
KZN	65	372	425
LIMP	132	355	141
UNISA	158	340	469
UNW	102	325	429
TUT	74	301	121
UFS	62	291	352
UCT	49	284	540
CPUT	55	279	81
US	44	231	499
UJ	0	228	206
NM	39	212	183
DUT	52	167	52
WS	45	158	52
VUT	36	107	39
UR	29	103	159
CUT	16	84	59
UZ	38	83	83
UFH	52	81	70
MANGO	14	45	5
UV	0	0	0
UWC	0	0	0
WITS	0	0	0
Total	1214	4632	4566

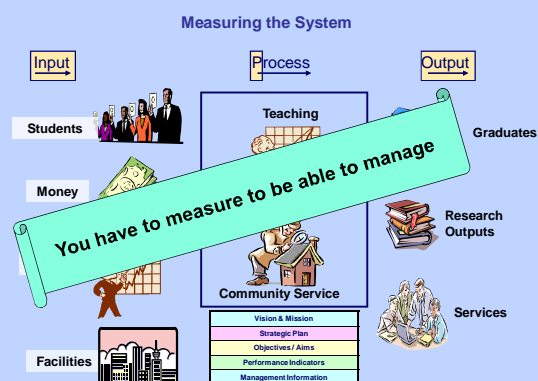
Headcount of Instruction/Research Professionals with Permanent Appointments According to Highest Most Relevant Qualification 2008



Section 5 (b)

Some Indicators of Transformation at the University of Pretoria

1



Identifying Performance Indicators Linked to the Strategic Plan



2(a). A People Centred University (Staff) (according to race and gender)

5	% Permanent academic staff to total permanent staff
6	% Temporary academic staff to total temporary staff
7	FTE Academic staff to total FTE staff
8	% Permanent fulltime Academic staff to all fulltime Academic staff
9	% Permanent Academic staff with masters/doctorates
10	% Academic staff turnover (perm staff excl retirements)
11	% Support staff turnover (perm staff excl retirements)
12	% Academic staff over 50 years (perm staff)
13	% Support staff over 50 years (perm staff)

2(b). A People Centred University (Students) (according to race and gender)

14	Number of Teaching Input Units (Weighted, DoE definition)
15	Contact students to total students
16	UG - % International contact students to total contact students
17	UG - % international contact students from SADC
18	PG - % International contact students to total contact students
19	PG - % international contact students from SADC
<u>Admission and registration ratios (contact students):</u>	
20	Total Admissions to total applications
21	Total Registrations to total admissions
22	Business: Registrations to total registrations
23	SET: Registrations to total registrations
24	% Matriculants with 6+ distinctions that choose UP
25	Average M-score (Admission Point - score)

3(a). Teaching and Learning (according to race and gender)

26	% of contact graduates to total enrolled contact students
27	% of distance graduates to total enrolled distance students
28	% UG students completing a degree in minimum time (3 years degrees)
29	% UG students completing a degree in minimum time (4 years degrees)
30	% Successful FTE students to total FTE enrolments
31	Drop-out: % UG contact students after 1 year
32	% of UG modules with failure rates higher than 40%
33	Percentage of UG contact modules with ClickUP
34	Quality of learning (survey information)
35	FTE contact students per FTE teaching staff member
36	% of Academic staff trained by Dept of EI to total staff

3(b). Research

37	New honours students to total honours enrolments
38	New masters students to total masters enrolments
39	New doctoral students to total doctoral enrolments
40	Completion time index for research masters degree
41	Completion time index for doctoral degree
42	Accredited research units per Academic staff member (FTE)
43	Number of NRF rated staff (all categories)
44	% Academic staff with NRF rating to total Academic staff (fulltime)
45	Number of competitive research grants
46	Value (Rm) of competitive research grants
47	Disclosure and patents: Invention disclosures to IP office
48	Disclosure and patents: No of patents

6. Transformation

62	Student demographics: % Black contact students
63	Student demographics: % Female contact students
64	% Black staff (Permanent employed Academic Staff)
65	% Black staff (Permanent employed Support Staff)
66	% Female staff (Permanent employed Academic Staff)
67	% Female staff (Permanent employed Support Staff)

Section 6

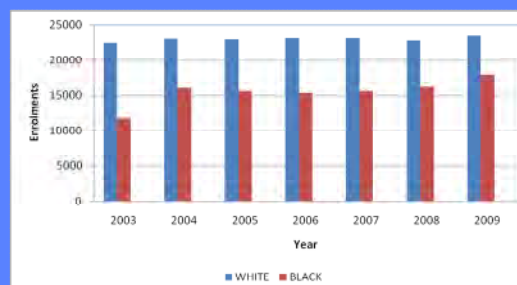
Current Issues of Diversity Management in Higher Education

Current Issues of Diversity Management in Higher Education

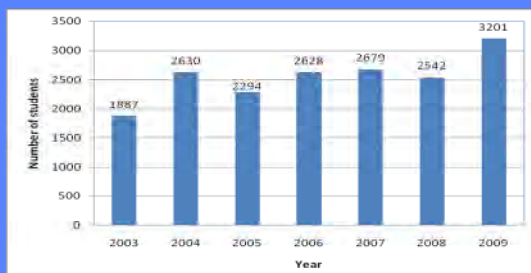
1	Population Dynamics (migration of students and staff within and across countries)
2	Political landscape (laws affecting DM strategies)
3	Financing of Higher Education to enhance Diversity Management
4	Schooling System (number and preparedness of "new" students)
5	Traditional vs Non-traditional students (Admission requirements)(e.g. RPL)
6	Integration of working (older) people (e.g. LLL and continuing education)
7	Selection and integration of students from socially disadvantaged families
8	Gender/ age/nationality/ethnicity/language/disability/religion/sexual orientation /culture of staff and students
9	Throughput and graduation rates of the diverse groups
10	Design of study programmes to accommodate diversity
11	Management of diversity to ensure quality
12	Developing indicators to measure "the performance of diversity management"

FINIS

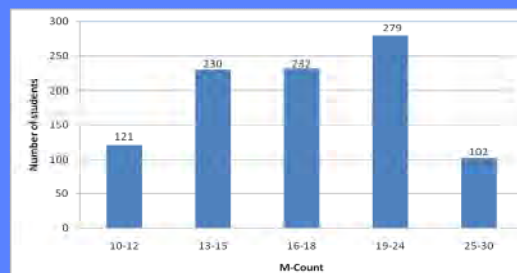
HEADCOUNT ENROLMENTS AT THE UNIVERSITY OF PRETORIA ACCORDING TO RACE 2003-2009



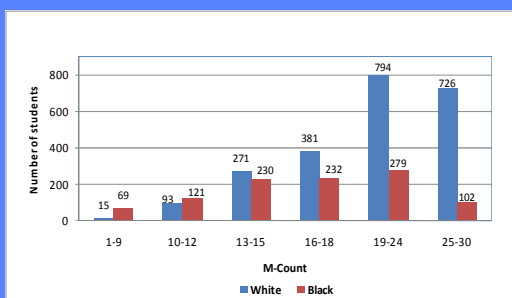
NUMBER OF FIRST TIME ENTERING BLACK STUDENTS 2003-2009



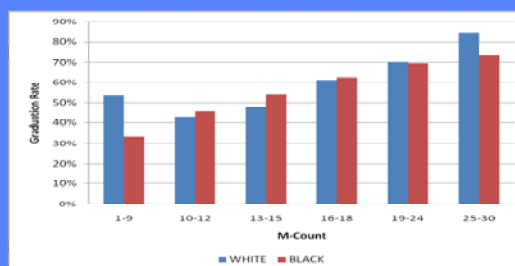
NUMBER OF FIRST-TIME ENTERING BLACK STUDENTS FOR 3-YEAR PROGRAMMES: 2005



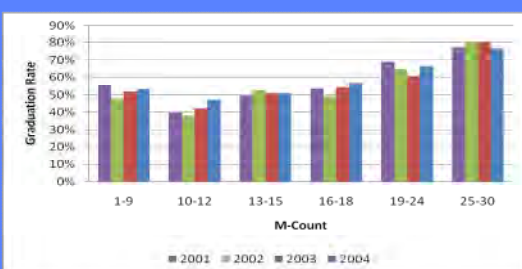
NUMBER OF FIRST-TIME ENTERING STUDENTS PER RACE FOR 3-YEAR PROGRAMMES: 2005



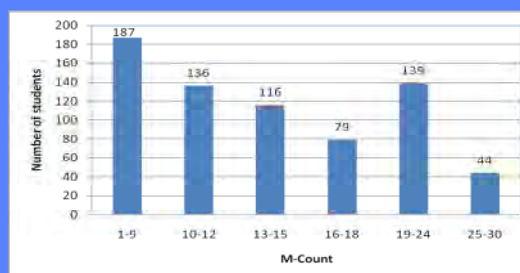
GRADUATION RATES FOR 3-YEAR PROGRAMMES AFTER (3+2) YEARS ACCORDING TO M-COUNT FOR BLACK AND WHITE STUDENTS FOR THE INTAKE OF 2005



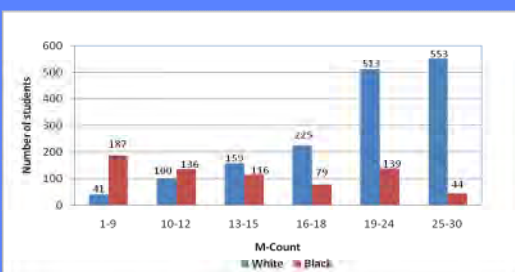
GRADUATION RATES FOR 3-YEAR PROGRAMMES AFTER (3+2) YEARS FOR BLACK STUDENTS ACCORDING TO M-COUNT FOR THE INTAKE OF 2001-2004



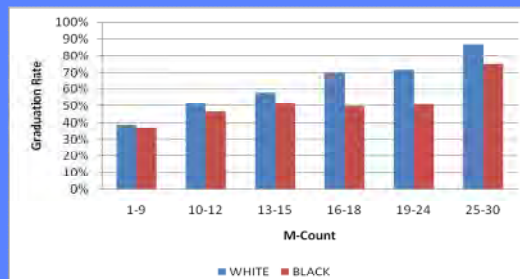
NUMBER OF FIRST-TIME ENTERING BLACK STUDENTS FOR 4-YEAR PROGRAMMES 2004



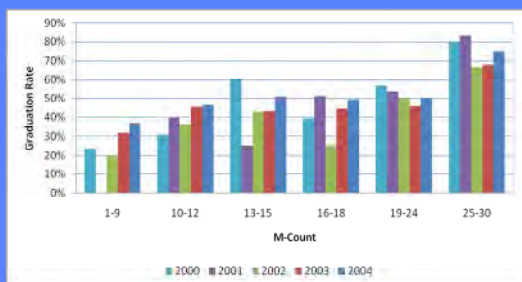
NUMBER OF FIRST-TIME ENTERING STUDENTS PER RACE FOR 4-YEAR PROGRAMMES: 2004



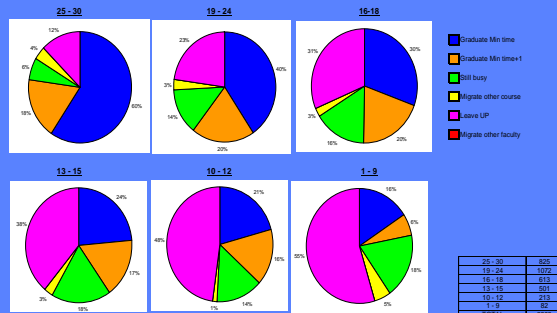
GRADUATION RATES FOR 4-YEAR PROGRAMMES AFTER (4+2) YEARS ACCORDING TO M-COUNT FOR BLACK AND WHITE STUDENTS FOR THE INTAKE OF 2004

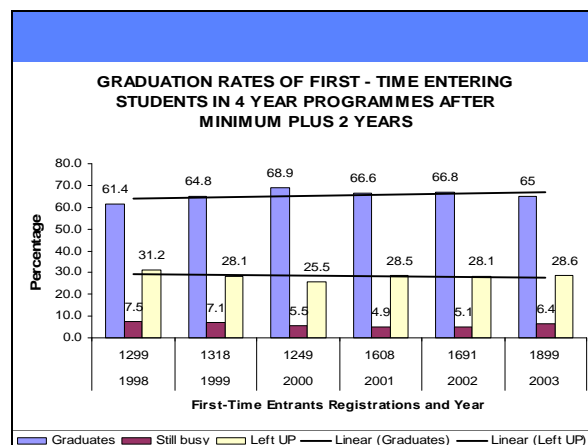
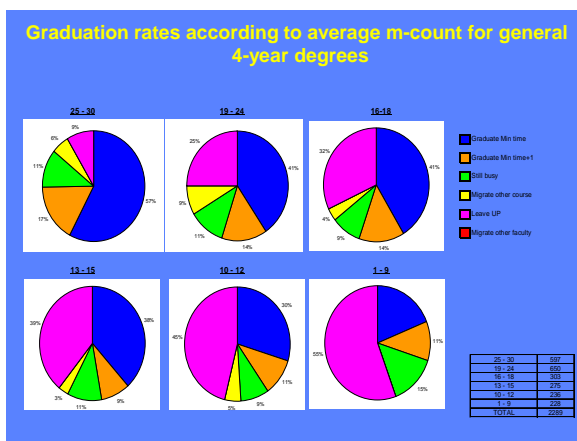
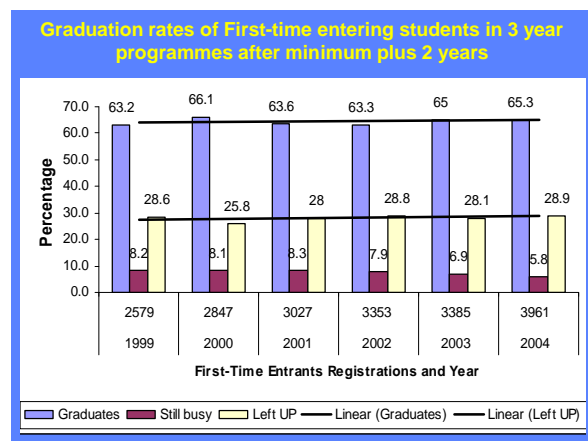


GRADUATION RATES FOR 4-YEAR PROGRAMMES AFTER (4+2) YEARS FOR BLACK STUDENTS ACCORDING TO M-COUNT FOR THE INTAKE OF 2000-2004



Graduation rates according to average m-count for general 3-year degrees





Presentation 4: 25 August 2010

Funding Higher Education: A South African Perspective

**Funding Higher Education:
A South African Perspective**

CHE Consult
Presentation 4

25 August 2010
(4 months to Christmas)

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA

Pieter Vermeulen
University of Pretoria

Division 1

**Overview of the
New Funding Framework**

GDP, Total State Finance and State Finance on Education for 2009

1	GDP	R 2 141 747 million
2	Total State Budget	R 594 198 million = 27.7% of GDP
3	Total Education Budget	R 110 160 million = 18.5% of State Budget = 5.1% of GDP
3.1	Dept of Education	R 810 million = 0.74% of Educ Budget
3.2	Higher Education Sector	R 13 310 million = 12.1% of Educ Budget
3.3	Ad Hoc Funding for HE	R 3 832 million = 3.5% of Educ Budget
4.	Higher Education	0.8% of GDP

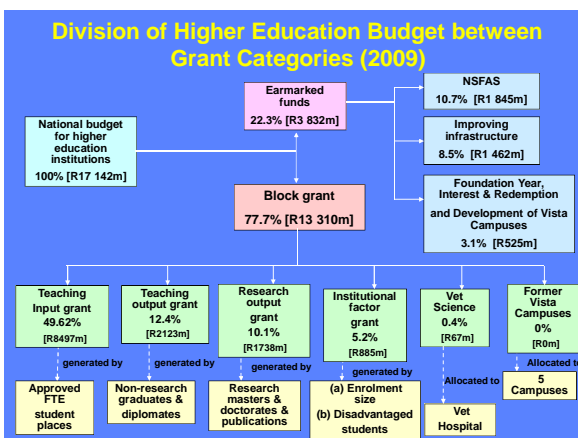
Funding of Higher Education

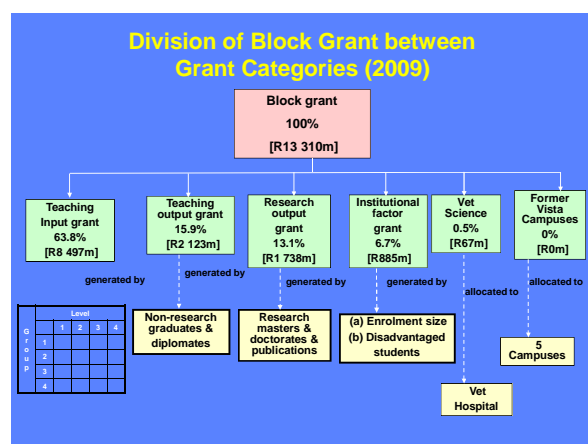
The MTEF Process

- Medium Term Expenditure Framework – 3 year rolling estimates
- Department of Education (DoE) interacts with Higher Education Institutions (student enrolment plans) and educational environment
- DoE interacts with National Treasury
- Treasury make allocation to HE Branch of the DoE, taking into account national policy and fiscal conditions
- DoE divides allocation amongst HE institutions

Distribution of Budget Totals For 2009 - 2011

	Distribution of actual budget for 2009 (R'million)		Provisional distribution of MTEF budgets			
			2010 (R'million)		2011 (R'million)	
1. Block Grants	13310	77.7%	15344	78.6%	16776	78.5%
1.1 Teaching Inputs	8497	49.6%	9795	50.1%	10710	50.1%
1.2 Institutional Factors	885	5.2%	1020	5.2%	1115	5.2%
1.3 Teaching Outputs	2123	12.4%	2448	12.5%	2676	12.5%
1.4 Research Outputs	1738	10.1%	2004	10.3%	2190	10.2%
1.5 Veterinary Sciences	67	0.4%	77	0.4%	84	0.4%
2. Earmarked Grants	3832	22.3%	4188	21.4%	4600	21.5%
2.1 NSFAS	1845	10.8%	2015	10.3%	2373	11.1%
2.2 Interest & Redemption on loans	41	0.2%	34	0.2%	28	0.1%
2.3 National Institutes	35	0.2%	39	0.2%	41	0.2%
2.4 Infrastructure and output of finances	1462	8.5%	1585	8.1%	1615	7.6%
2.5 Foundation Programmes	146	0.9%	185	0.9%	193	0.9%
2.6 African Inst for Math Studies	3	0%	0	0%	0	0%
2.7 Clinical Train for Health Prof	300	1.8%	330	1.7%	350	1.6%
TOTAL	17142	100%	19532	100%	21376	100%





Ministerial Prerogative



- The division of funds between the grant categories is annually determined by the Minister of Education
- The division may vary between years, subject to the MTEF three year projections

Teaching Input Grants



Based on approved FTE student places as determined in the Programme and Qualification Mix (PQM) process:

- Four funding groups
- Four study levels
- Weighted according to funding group and study level

Four Funding Groups

Funding group	CESM categories included in funding group
1	07 education
	13 law
	14 librarianship
	20 psychology
	21 social services/public administration
2	04 business/commerce
	05 communication
	06 computer science
	12 languages
	18 philosophy/religion
3	22 social sciences
	02 architecture/planning
	08 engineering
	10 home economics
	11 industrial arts
4	16 mathematical sciences
	19 physical education
	01 agriculture
	03 fine and performing arts
	09 health sciences
	15 life and physical sciences

Weightings according to Funding Group and Study Level

(i) Contact Students (Distance Students)

Funding group	Level			
	Undergraduate & equivalent	Honours & equivalent	Masters & equivalent	Doctoral & equivalent
1	1.0 (0.5)	2.0 (1.0)	3.0 (3.0)	4.0 (4.0)
2	1.5 (0.75)	3.0 (1.5)	4.5 (4.5)	6.0 (6.0)
3	2.5 (1.25)	5.0 (2.5)	7.5 (7.5)	10.0 (10.0)
4	3.5 (1.75)	7.0 (3.5)	10.5 (10.5)	14.0 (14.0)

Determining Teaching Input "price"

- Passing institution's adjusted FTE enrolled student total through funding grid => weighted teaching input = **a**
- Equivalent figure for sector = **A**
- Available funds for teaching input = **I**
- Institution's portions = $[a/A] \cdot I$
- Proportionate allocation; not 'price' in the economic sense.

Estimated TI Unit "price" ± R

Teaching Output Grant

(a) Non-research output measured by non-research graduates and diplomates and weighted

And

(b) Measured against output norms (benchmarks)

(a) Weighting factors for teaching outputs: universities & technikons

1 st certificates and diplomas of 2 years or less	0.5
1 st diplomas and bachelors degrees: 3 years	1.0
Professional 1 st bachelors degrees: 4 years and more	1.5
Postgraduate and postdiploma diplomas	0.5
Postgraduate bachelors degrees	1.0
Honours degrees/higher diplomas	0.5
Non-research masters degrees	0.5

Teaching Output Grant (continued)

(b) Graduation benchmarks for contact and distance programmes (Graduates as % of head count enrolments)

	Contact	Distance
	2004/05	2004/05
Undergraduate: up to three years	22.5%	13.5%
Undergraduate: four years and more	18%	9%
Postgraduate: up to honours	54%	27%
Postgraduate: up to masters (non-research)	30%	22.5%

Teaching Output Allocation

- Calculate institution's actual weighted total graduates/diplomates = **c**
- Actual weighted total teaching output for system = **C**
- Normative total teaching output for the institution (using benchmarks) = **d**
- Normative total teaching output for system = **D**
- Available funds for teaching outputs = **O**
- Institutional allocation, $o = [c/D]*O$

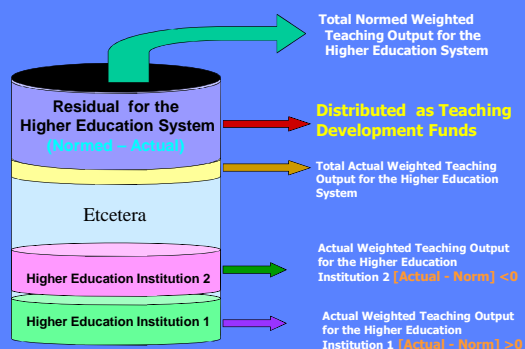
Estimated TO Unit "price" $\pm R$

Teaching Development Grant



- If $D > C$, then $\Sigma o < O$
- Amount not disbursed = **S**; => 'teaching development grant'
- For all institutions where $c < d$, total teaching output shortfall = **E**
- For single institution, grant = $[e/E]*S$
- Grants allocated for 3 year cycles

Teaching Output "Capping"



Research Outputs

- (a) Research outputs measured by publications in accredited journals, research masters and doctoral graduates (weighted)
- And
- (b) Measured against a research output norm benchmark

(a) Weightings for research outputs

Publication units	1
Research masters graduates	1
Doctoral graduates	3

(b) Ratios of weighted research output units to permanently appointed instruction/research staff

Universities	1.25
Technikons	0.5

Research Output Allocation



- Determine institution's **actual** total weighted research output = **f**
- Calculate the institution's **normative** total weighted research output (applying the benchmarks) = **g**
- Normative weighted total research output for system (Σg) = **G**
- Available funds for research output = **Q**
- Institution's research output allocation, $r = [f/G]*Q$

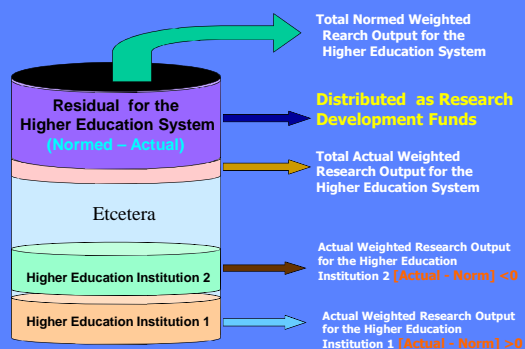
Estimated RO Unit "price" $\pm R$

Research Development Grant



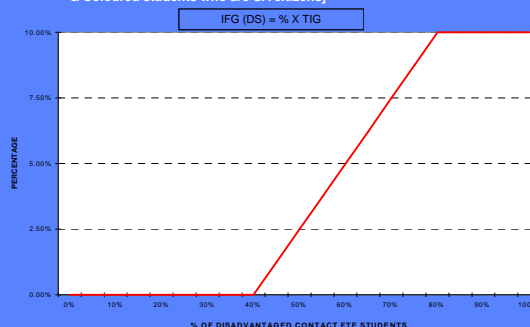
- If $G > (\Sigma f)$ then $(\Sigma r) < Q$
- Amount not distributed (surplus) = **U**
- For all institutions where $f < g$ will receive research development funds
- Calculated the research output shortfall for the system = **H**
- Institutions research development funds = $[(g-f) / H]*U$

Research Output "Capping"



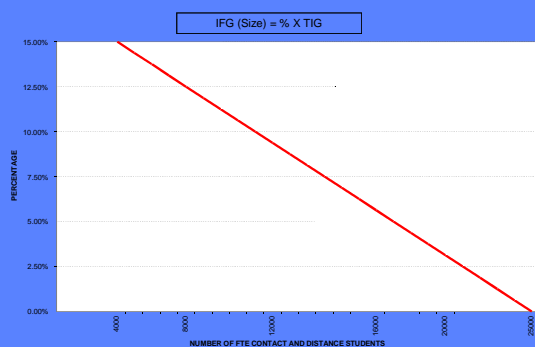
Institutional Factor Grants

2.1 Measured by the proportion of disadvantaged students [Contact African & Coloured students who are SA citizens]



Institutional Factor Grants

3.2 Size of the institution



Earmarked Funding



- National Student Financial Aid Scheme (NSFAS)
- Interest and redemption on loans approved before 1999
- New capital projects
- Institutional restructuring

Division 2

Incentives in the New Funding Framework

Planning Orientation

Minister has discretionary powers

Teaching Input and Output Funds

Increased Enrolments vs throughput

Funding Grid (CESM groups)

Study Programmes and the curriculum's should be re-examined

Funding Grid (Levels)

Greater emphasis on postgraduate studies and graduation rates

Funding Grid (Enrolments)

Student Enrolment Plans should be realistic and comply with the PQM as approved by DoE

Teaching Outputs

Improve graduation rates without compromising quality

Research Outputs

Promote research outputs to ensure a greater proportion of total RO funds

Institutional Factor Grants (Disadvantaged Students)

Increase proportion of disadvantaged students by attracting especially postgraduate students

Intervention



- ⇒ Discussion Document of DoE "Student Enrolment Planning (2005 – 2010): March 2005"
- ⇒ Ministerial Statement of Higher Education Funding: 2009 to 2011 (September 2009)

Major Issues to be Addressed

- ASGISA – JIPSA initiatives
- Allocating HE grant to the different funding categories
- Ending of migration period
- Reviewing of the CESM categories
- Stabilising institutional input units totals (Capping)
[Capping: Will be reconsidered after Enrolment Plans 2005 – 2010 were analysed]
- Re-examining the Teaching and Research Development Grants
- Multi-Campus Grant to be considered
- Foundational Provision allocation
- Tuition Fee Investigation
- Health Sciences Review
- Revision of the Building and Space norms

Continue.....

Continued

The 2004 and 2005 Ministerial Statement advised institutions that the Minister would consider the practice of adding the Teaching and Research Development Grants to the block grants at the end of the migration period. (DoE to develop a Teaching and Research Development Policy)

- Development Grants will be earmarked funds
- Institutions must submit proposals on how these funds will be used for developmental purposes

FINIS

Not Yet



ACADEMIC STAFF ALLOCATION MODEL (SAM)

Informed by the NFF

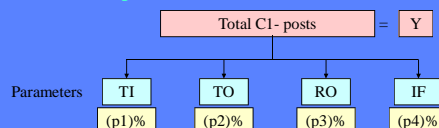
NEW FUNDING FRAMEWORK (NFF)

Academic Staff Allocation Model (SAM)

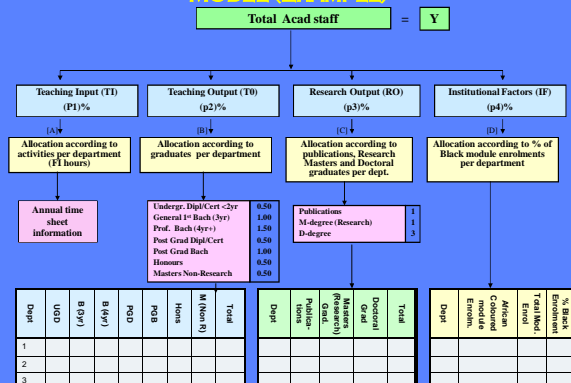
1. Based on Subsidy generated by NFF
2. Distribution according to and informed by the elements (parameters) in the new funding framework (TI, TO, RO, IF)
3. Utilisation of time sheet information (Formal scheduled instruction activities)
4. Based on the actual budget for academic staff

ADAPTED SAM

1. Determine amount to be allocated for C1 staff:
 $X = \text{Budget for C1 staff}$
2. Calculate number of academic (cu) posts : $\left[\frac{X}{CI(\text{cost unit})} = Y \right]$
3. Determine parameters for the distribution of the academic posts



ADAPTED ACADEMIC STAFF ALLOCATION MODEL (EXAMPLE)



TOTAL ACADEMIC STAFF

Total C1 staff budget (2005):		Acad (cu) posts	
❖ UP budget	= R 402,349 m	= 1356,016	1383,138
❖ PUNIV Funds	= R 8,047 m	= 27,122	
❖ External Funds	= R 4,150 m	= 13,986	

$$\text{Total number C1 (cu) posts (UP money)} - \text{Number of Practice posts} - \text{Number of Scarcity posts} = \text{Posts to be allocated}$$

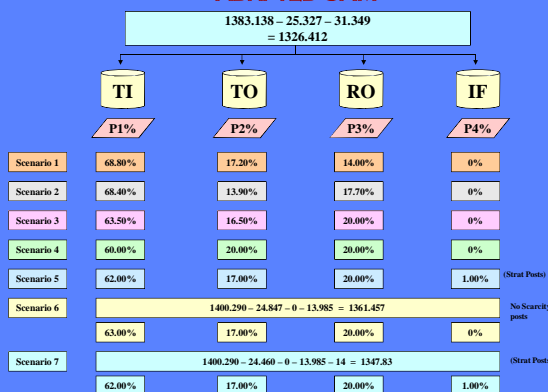
$$1383,138 - 25,327 - 31,349 = 1326,412$$

ADAPTED SAM

Ministerial Distribution (2005)			
Teaching Input	Teaching Output	Research Output	IF
64.2%	16.0%	13.1%	6.7%

UP – Subsidy (2005) = R815 000 (Actual)			
Teaching Input	Teaching Output	Research Output	IF
R539,085m + R18,555m = R557,640m	R113,309m	R144,046m	-
68.4%	13.9%	17.7%	0%

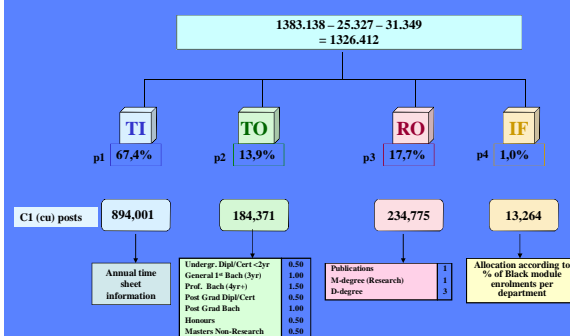
ADAPTED SAM



ADAPTED SAM

Sc 1	Mirror: Ministerial Distribution (Allocate IF = 6.7% pro-rata to TI, TO, RO)			
	Teaching Input	Teaching Output	Research Output	IF
	68.8%	17.2%	14.0%	0%
Sc 2	Distribution according to actual Subsidy generation			
	Teaching Input	Teaching Output	Research Output	IF
	68.4%	13.9%	17.7%	0%
Sc 3a	Strategic shift towards TO, RO and EE [Scenario 2 + (TO + 10%) + (RO + 10%)]			
	Teaching Input	Teaching Output	Research Output	EE posts for C1
	64.24%	15.29%	19.47%	1%
Sc 3b	Greater strategic shift towards TO than Scenario 3a [Scenario 2 + (TO + 15%) + (RO + 10%)]			
	Teaching Input	Teaching Output	Research Output	EE posts for C1
	63.55%	15.99%	19.47%	1.0%
Sc 3c	Greater strategic shift towards TO than Scenario 3b [Scenario 2 + (TO + 20%) + (RO + 10%)]			
	Teaching Input	Teaching Output	Research Output	EE posts for C1
	62.85%	16.68%	19.47%	1.0%

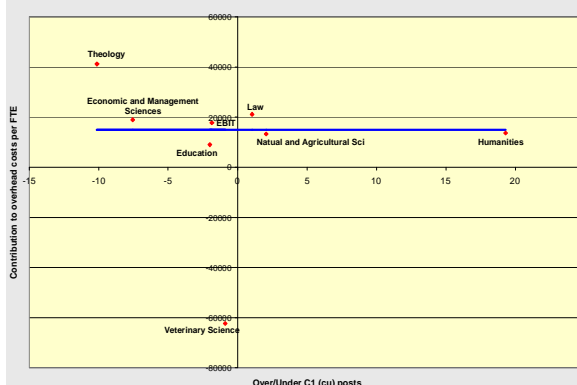
ADAPTED SAM - PREFERRED SCENARIO (2005)



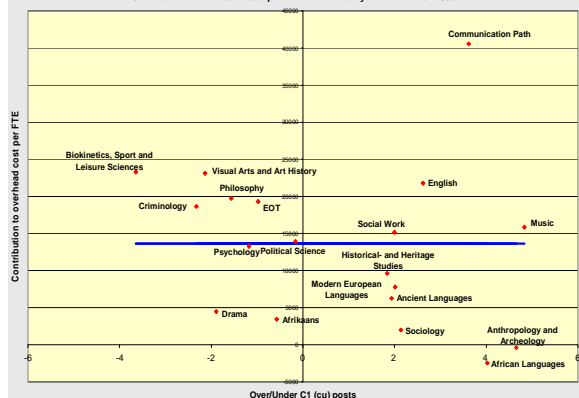
RELATIVE MEASURE OF OVER/UNDER SUPPLY OF C1 STAFF (2005)

Faculty	Budget for C1 staff (2005)		Number of C1 (cu) posts (2005)		New SAM (C1 posts)	Over/Under And (%)
	UP + PUNIV funds (R'000)	External funds (R'000)	UP + PUNIV Posts	External funds posts		
Humanities	72,693	0,026	245,0	0,1	225,7	19,3 (7,9%)
N&A Sciences	86,344	0,490	291,0	1,6	288,9	2,1 (+0,7%)
Law	24,905	-	83,9	-	82,9	1,0 (+1,2%)
Theology	5,751	2,220	19,4	7,48	29,5	-10,1 (-9,0%)
E&M Sciences	62,833	0,195	211,8	0,66	219,3	-7,5 (-3,6%)
Vet Science	36,976	-	124,6	-	125,5	-0,9 (-0,7%)
Education	34,144	-	115,0	-	117,0	-2,0 (-1,7%)
EBIT	86,751	1,219	292,4	4,11	294,2	-1,8 (-0,6%)
Total	410,667	4,150	1383,1	13,95	1383,1	- -

Contribution to overhead costs per FTE - 2005



Contribution to overhead costs per FTE for the Faculty of Humanities - 2005



FIRIS



INTERACTION MATRIX

	Faculty presenting modules									
Faculty programmes	1	2	4	5	7	8	9	10	12	
1	85.1%	0.7%	1.5%	0.5%	3.0%	0.0%	2.7%	0.8%	5.7%	
2	8.3%	70.4%	0.5%	0.0%	10.2%	0.6%	0.2%	0.9%	8.8%	
4	13.7%	0.1%	80.9%	0.1%	0.5%	0.0%	0.2%	0.0%	4.5%	
5	25.7%	0.0%	0.0%	70.7%	0.2%	0.0%	0.3%	0.0%	3.2%	
7	13.7%	8.0%	9.6%	0.0%	59.0%	0.0%	0.0%	0.0%	9.8%	
8	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	
9	9.1%	0.1%	0.2%	0.2%	2.3%	0.0%	81.3%	0.0%	6.8%	
10	8.6%	8.3%	0.0%	0.0%	1.8%	0.0%	0.0%	79.1%	2.2%	
12	7.9%	21.3%	1.0%	0.0%	7.4%	0.0%	0.0%	0.0%	62.4%	

Example of SAQA Credits

Presentation 5: 7 September 2010*Developing Scenarios for Institutional Employment Equity Goals for 2012***Employment Equity Act, No. 55 of 1998****The Act Recognises-**

- that as a result of apartheid and other discriminatory laws and practices, there are disparities in employment, occupation and income within the national labour market; and
- that those disparities create such pronounced disadvantages for certain categories of people that they cannot be redressed simply by repealing discriminatory laws.

Employment Equity Act, No. 55 of 1998 (continue)**Therefore, the Act has to be enacted in order to-**

- promote the constitutional right of equality and the exercise of true democracy;
- eliminate unfair discrimination in employment;
- ensure the implementation of employment equity to redress the effects of discrimination
- achieve a diverse workforce broadly representative of the people;
- promote economic development and efficiency in the workplace; and
- give effect to the obligations of the Republic as a member of the ILO

Employment Equity Act, No. 55 of 1998 (continue)**Purpose of the Act is to achieve equity in the workplace by-**

- promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination; and
- implementing affirmative action measures to redress the disadvantages in employment experienced by **designated groups**, in order to ensure their equitable representation in all occupational categories and levels in the workforce.

* Designated group means: black people, women, and people with disabilities.

* Black people means: Africans, Coloureds and Indians/Asians.

**Constraints (Limited University Control)**

- Economically Active Population (EAP)
- Inability to pay salaries comparable to private and in some cases private sector
- Minimum qualifications for many Government job levels and at some other HEIs are lower than those for comparable levels at UP
- Limited supply of established scholars from under-represented designated groups (many competitors for small pool)
- Requirement for bilingualism in many UP jobs further diminishes the available labour pool
- Many positions at UP fall within the scarce skills categories

Challenges facing the University (1)

- Black candidates more difficult to recruit than white female candidates
- Insufficient networking for recruiting black candidates
- Attrition rate for black employees that the University succeeds in attracting, approximates the attrition rate for all employees (and needs to be smaller)
- All staff are under (time) pressure leading to limited time available to assist in the development of employees which were appointed on the basis of "capacity to acquire, within a reasonable time, the capability to do the job"



Challenges facing the University (2)

- Much time and often bursary resources required to produce a scholar
- Aspects of institutional culture do not yet fully accommodate diversity
- Limited knowledge/skills in managing diversity on the part of many managers
- New EE compliant policies and procedures not yet entrenched in actual practices
- EE competes with many other institutional change initiatives currently being implemented simultaneously.



Constraints (illustrated)

Economically Active Population

	Black (millions)			White (millions)			Total (millions)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total EAP	8.159	7.058	15.217	1.175	0.941	2.116	9.334	7.999	17.333
Row %	47.07%	40.72%	87.79%	6.78%	5.43%	12.21%	53.85%	46.15%	100%
Total EAP with grade 12	2.137	1.962	4.099	0.421	0.394	0.815	2.558	2.356	4.914
Row %	43.49%	39.92%	83.41%	8.57%	8.02%	16.59%	52.06%	47.94%	100%
Total EAP with 3 year degree and higher (x1000)	220	245	465	270	201	471	490	446	936
Row %	23.50%	26.18%	49.68%	28.85%	21.47%	50.32%	52.35%	47.65%	100%
Master PhD (x1000)	35	20	55 (9.36%)	63	29	92 (4.3%)	98	49	147 (0.85%)
Row %	23.8%	13.6%	37.4%	42.8%	19.8%	62.6%	66.7%	33.3%	100%



9

Remuneration Comparison (example)

UP Remuneration 01/04/2009			Government SMS (top of scale) 01/01/2009	
Professor	1.36	R557 731	Director	R736 065
Associate Prof	1.17	R479 952	Chief Director	R905 538
Snr Lecturer	1	R410 448	Deputy DG	R1 037 571
Lecturer	0.9	R367 944	DG	R1 355 766
Jnr Lecturer	0.7	R286 860		

Constraints (illustrated)

Masters Graduates at all Universities

	Black				White			
	Female	Male	Total	% of Total	Female	Male	Total	% of Total
1999	677	1003	1680	34%	1367	1837	3204	66%
2000	920	1397	2317	39%	1522	2075	3597	61%
2001	1087	1611	2698	41%	1734	2091	3825	59%
2002	1219	1790	3009	43%	1878	2095	3973	57%
2003	1477	1982	3459	46%	1841	2216	4057	54%
2004	1599	2224	3823	49%	1842	2217	4059	51%
2005	1576	2230	3806	48%	2019	2181	4200	52%
2006	1725	2187	3912	50%	1879	2078	3957	50%
2007	1657	2136	3793	51%	1794	1888	3682	49%
2008	1687	2102	3789	51%	1856	1823	3679	49%



11

Constraints (illustrated)

Doctoral Graduates at all Universities

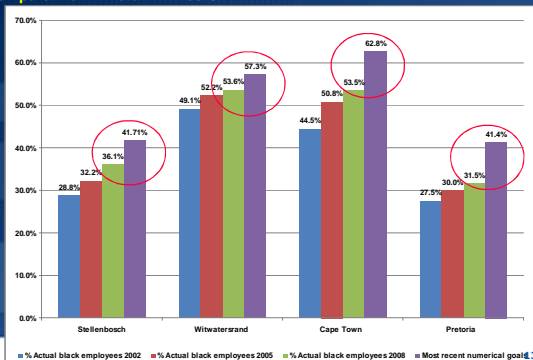
	Female	Male	Total	% of Total		Female	Male	Total	% of Total
1999	56	116	172	24%	1999	236	315	551	76%
2000	72	178	250	30%	2000	267	312	579	70%
2001	80	188	268	32%	2001	232	348	580	68%
2002	102	250	352	36%	2002	280	356	636	64%
2003	128	265	393	37%	2003	281	378	659	63%
2004	136	313	449	41%	2004	284	370	654	59%
2005	169	323	492	41%	2005	355	340	695	59%
2006	176	303	479	44%	2006	298	320	618	56%
2007	194	386	580	46%	2007	335	356	691	54%
2008	195	339	534	45%	2008	323	321	644	55%



12

Problem Statement (illustrated)

Comparative EE Data: HE Peers



Targets (1 July 2009 – 30 June 2012)

Institutional Assumptions

- A 0% growth rate in the overall staff complement of the University.
- Vacancies through natural attrition, the prime mechanism for increasing representation by under-represented designated groups.
- The "new opportunities" (that may become available in the period 2009 – 2012 through terminations) will be utilised more effectively to assist in reaching the 2012 EE goals.
- If growth does take place, new posts will provide an additional mechanism for increasing representation by under-represented designated groups.



14

Points of Departure

- Utilising the EE Profile that was submitted to the DoL in 2003 and 2006 with the goals for 2009.
- Determine the progress made towards the goals set for 2009, using the actual EE profile of 2009.
- Make provision for the exclusion of Foreign Nationals in the projected 2012 EE goals.



Institutional Assumptions (2)

- Approximately the same rate of natural attrition as from 2006 to 2009
- Commitment to increasing representation by under- represented designated groups through, e.g.:
 - greater compliance with order of preference
 - goals again set for new appointments of specifically black employees as % of all new appointments
 - certain posts to be earmarked exclusively for filling specifically by black employees.

Procedure Followed to Determine Institutional Goals for 2012 (1)

- Step 1
 - Analyse the 2003, 2006 and 2009 actual EE profiles of the institution taking into account:
 - Academic, Academic Support and Support Service Staff;
 - South African citizens;
 - Designated Groups (Black, White Female); and
 - Race and Gender in the different categories.

Procedure Followed to Determine Institutional Goals for 2012 (2)

- Step 2
 - Evaluate the 2009 EE Goals that the institution submitted to the DoL in 2006. Determine the variance between the set 2009 EE Goals and the 2009 Actual EE profile.



Procedure Followed to Determine Institutional Goals for 2012 (3)

- Step 3
 - Identify the “constraints” that should be taken into account, for instance:
 - The economically active population
 - The large variance in remuneration structures
 - The trends in Masters and Doctoral Graduates
 - The 0% growth rate in the number of staff from 2009 to 2012
 - The historical data pertaining to the “terminations” for the period 2006 – 2009
 - The potential utilisation of the opportunities (through “terminations”)

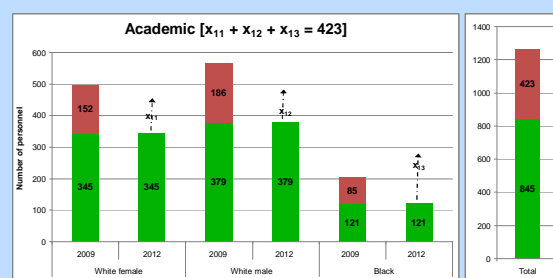
Procedure Followed to Determine Institutional Goals for 2012 (4)

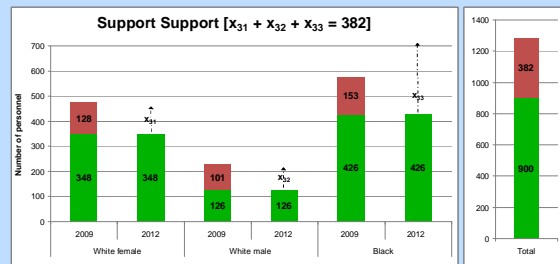
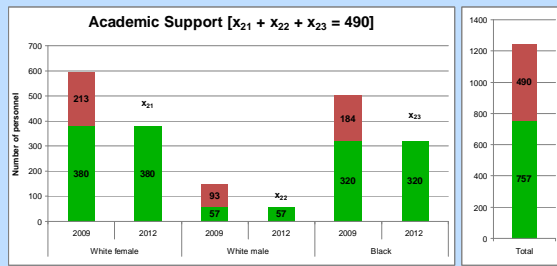
- Step 4
 - Define a number of scenarios for the 2012 Goals for the EE profile.
- Step 5
 - A Task Team, nominated by the Executive, analysed the available information and evaluated the different scenarios.
- Step 6
 - The Task Team recommended that the Executive consider a preferred scenario as an input to the EE Plan for submission to the Department of Labour (after a number of iterations with Executive).
- Step 7
 - Translate the preferred scenario into the prescribed DoL tables



Matrix (example)

	White female	White male	Black	Total (Row)
Academic	x_{11}	x_{12}	x_{13}	= 423
Academic Support	x_{21}	x_{22}	x_{23}	= 490
Support Support	x_{31}	x_{32}	x_{33}	= 382
Total (Col)	376	265	654	1295





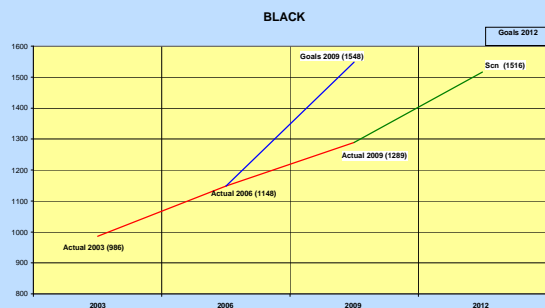
Setting EE Goals for 2012

PERCENTAGES				SCENARIO 2012		
	2003 (Act)	2006 (Act)	2009 (Act)	1	2	2(a)
ACADEMICS						
Blacks	12.0%	15.0%	16.2%	23.7%	19.7%	20.5%
White Male	51.8%	47.7%	44.6%	42.3%	43.6%	43.2%
White Female	36.2%	37.3%	39.2%	34.0%	36.7%	36.3%
Sub Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
ACADEMIC SUPPORT						
Blacks	35.8%	37.2%	40.4%	50.6%	46.5%	46.5%
White Male	13.2%	13.0%	12.0%	10.9%	10.7%	10.7%
White Female	50.9%	49.8%	47.6%	38.5%	42.8%	42.8%
Sub Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SUPPORT SERVICES						
Blacks	37.3%	41.6%	45.2%	50.6%	53.5%	52.7%
White Male	21.8%	20.5%	17.7%	16.5%	12.1%	14.1%
White Female	40.9%	37.9%	37.1%	32.9%	34.4%	33.2%
Sub Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
TOTAL						
Blacks	28.0%	31.3%	33.9%	41.6%	39.9%	39.9%
White Male	29.5%	27.0%	24.8%	23.3%	22.1%	22.7%
White Female	42.5%	41.7%	41.3%	35.1%	37.9%	37.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

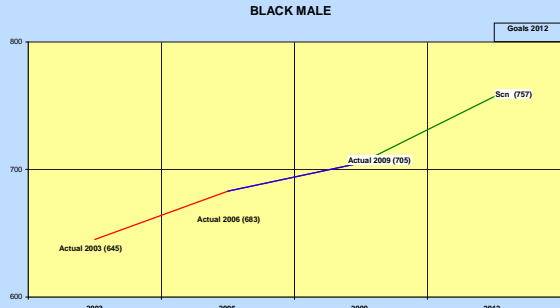
Setting EE Goals for 2012 (Continue 1)

NUMBERS					SCENARIO 2012		
	2003 (Act)	2006 (Act)	2009 (Act)	2009 (Goals)	1	2	2(a)
ACADEMICS							
Blacks	147	182	206	299	300	250	260
White Male	636	580	565	536	536	553	548
White Female	445	454	497	432	432	465	460
Sub Total	1228	1216	1268	1267	1268	1268	1268
ACADEMIC SUPPORT							
Blacks	403	455	504	624	631	580	580
White Male	149	159	150	135	136	133	133
White Female	573	608	593	475	480	534	534
Sub Total	1125	1222	1247	1234	1247	1247	1247
SUPPORT SERVICES							
Blacks	436	511	579	625	649	686	676
White Male	255	251	227	204	212	155	180
White Female	478	465	476	406	421	441	426
Sub Total	1169	1227	1282	1235	1282	1282	1282
TOTAL							
Blacks	986	1148	1289	1548	1580	1516	1516
White Male	1040	990	942	875	884	841	861
White Female	1496	1527	1566	1313	1333	1440	1420
Total	3522	3625	3797	3736	3797	3797	3797

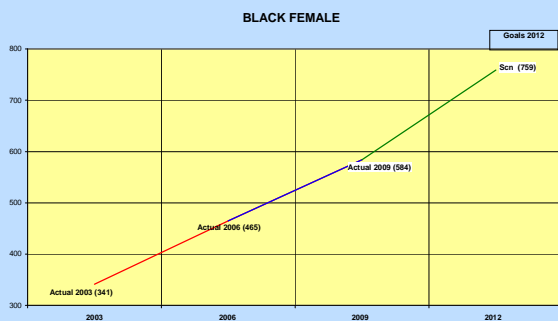
Total EE Goals 2012



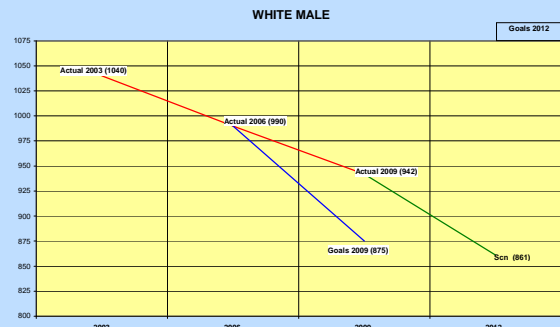
Total EE Goals 2012 (Continue)



Total EE Goals 2012 (Continue)



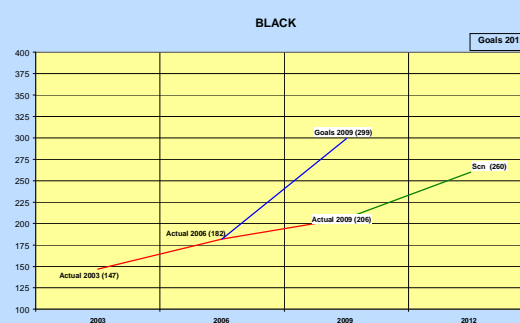
Total EE Goals 2012 (Continue)



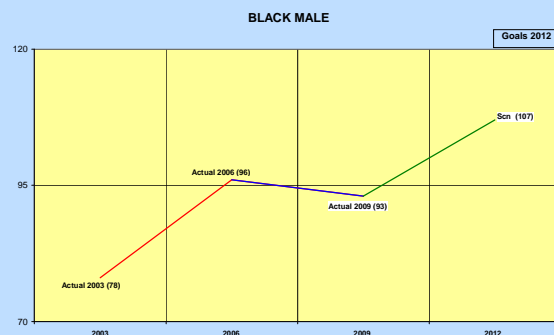
Total EE Goals 2012 (Continue)



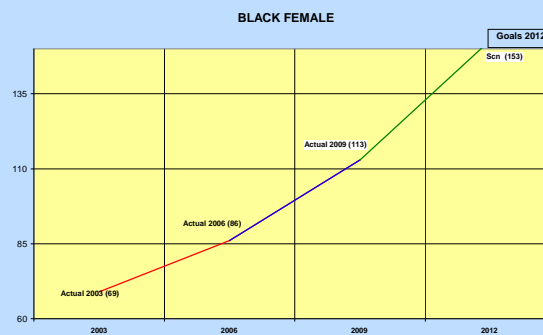
Academic EE Goals 2012



Academic EE Goals 2012 (Continue)



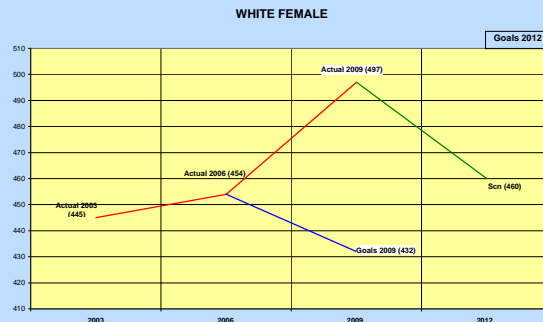
Academic EE Goals 2012 (Continue)



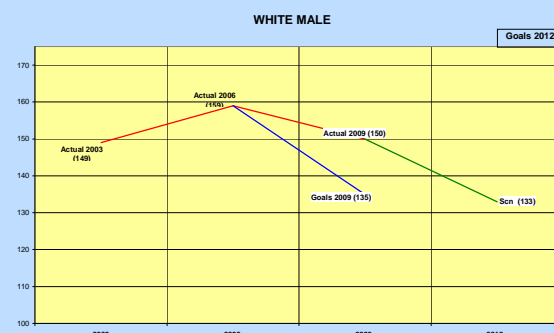
Academic EE Goals 2012 (Continue)



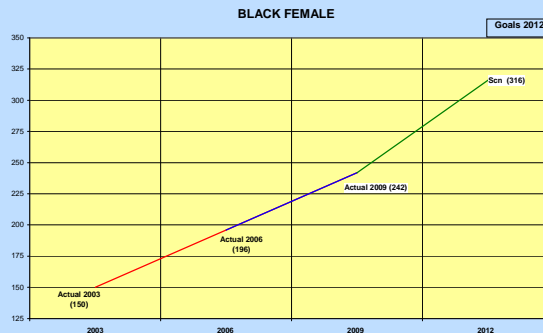
Academic EE Goals 2012 (Continue)



Academic Support EE Goals 2012 (Continue)



Support Services EE Goals 2012 (Continue)



Cascading the Scenario down to Faculties and Support Departments

A

Assumptions Guiding in Setting of EE Numerical Goals for 2012 in Faculties & Support Departments

- Approximately the same rate of natural attrition as from 2006 to 2009
- Vacancies through natural attrition are the prime mechanism for increasing representation of under represented designated groups (DGs)
- 0% growth in staff numbers, but where growth does take place it is a bonus in terms of EE opportunities
- Greater compliance with the order of preference for new appointments based on degree of under representation of specific designated groups **at each job level**

B

Guiding Principles in Setting of EE Numerical Goals for 2012 in Faculties & Support Departments

- Black representation to increase at a moderately greater rate than actually achieved from 2006 to 2009
- White female representation to stop increasing and begin to decrease
- White male representation to decrease at a moderately greater rate than actually achieved 2006 to 2009

C(1)

Cascading Institutional EE Numerical Goals Down to Faculties & Support Departments

- Faculties set goals for
 - academic staff per department
 - support staff for Faculty as a whole
- Support Departments set goals
 - for the Department as a whole
- Goals take into account challenges and opportunities specific to the discipline or department
- Goals are set according to **race, gender and job level**
- Separate goals are set for staff with disabilities
 - academic
 - support
 - totals - not per race, gender and job level

C(2)

Cascading Institutional EE Numerical Goals Down to Faculties & Support Departments

EE Division provides support:

Information re institutional goal setting assumptions and principles

- contextual data (e.g. profile of the Economically Active Population)
- previous period's EE performance data **per race, gender and job level**, specific the information relevant to the Faculty or Support Dept e.g.
 - EE progress data
 - data on utilization of EE opportunities (new appointments)
 - data on retention (terminations)
- retirements due during new planning period, and the vacancies at start
- templates to ensure new EE goals set are
 - challenging but realistic
 - formatted per the requirements of the Dept of Labour

C(3)

Cascading Institutional EE Numerical Goals Down to Faculties & Support Departments

EE Division-

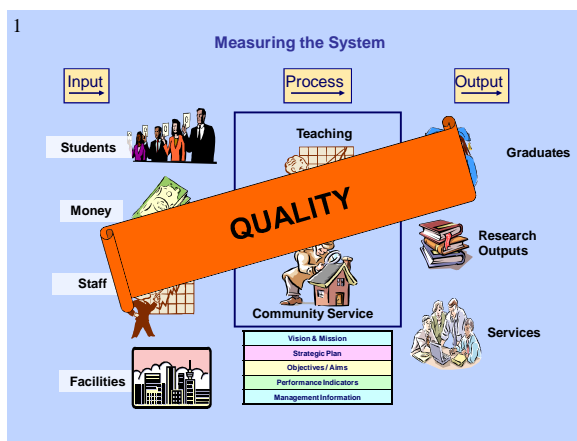
- checks incoming goals for completeness and compliance with assumptions and principles
- discusses apparent anomalies with specific Deans/Directors and if appropriate refers them to relevant member of the Executive
- aggregates goals
- compares aggregated Faculty/Support Department goals totals per race, gender and job level with institutional EE goals

**The Scenario was cascaded
down to Faculties
and Support Departments**

THE END

Presentation 6: 7 September 2010

Aligning Quality and Information Management



2

Area 1

Area	Sub-Areas	Criterion
Institutional mission; links between planning, resource allocation and quality management	Fitness of purpose of the mission of the institution in response to local, national and international context (including transformation issues)	1
	Links between planning, resource allocation and quality management	2

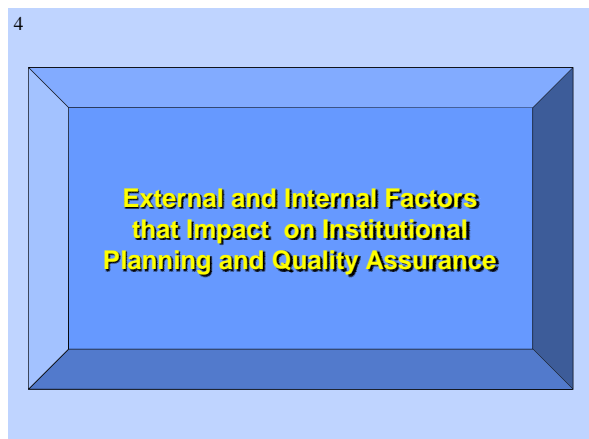
3

Criterion 1

The institution has a clearly stated mission and purpose with goals and priorities which are responsive to its local, national and international context and which provide for transformational issues. There are effective strategies in place for the realisation and monitoring of these goals and priorities. Human, financial and infrastructural resources are available to give effect to these goals and priorities.

Criterion 2

Objectives and mechanisms for quality management are integrated into institutional planning. Financial planning ensures adequate resource allocation for the development, improvement and monitoring of quality in the core activities of teaching and learning, research and community engagement.



5

External and Internal Drivers

External Drivers	Internal Drivers
<ul style="list-style-type: none"> ASGI-SA Human Resources needs/skills JIPSA Economic growth expectations Population growth/migration HIV/AIDS Funding of Higher Education DoE – Student Enrolment Plan Schooling System New FETC (2009) 	<ul style="list-style-type: none"> Admission requirements Bursaries Quality of teaching/learning Academic Support (e.g. Tutoring) AIS and IT infrastructure Success, throughput and graduation rates Facilities (lecture rooms, labs, equipment) Staff (Qualification, age, EE profile, over/under provision) Academic Enterprise/Programme offerings

GROWTH STRATEGY

Tip 1:

Read the instructions(guidelines)

Tip 2:

Determine the information/data requirements

Tip 3:

Establish the data source

Tip 4:

(Try to) Verify the data integrity/quality in collaboration with institutional/faculty/departmental functionaries

Tip 5:

Interpret the data to support the propositions

Tip 6:

Collate the data/information in the required format

Tip 7:

Ensure that the quality portfolio of the Institution / Faculty / Support Services / School / Department / Programmes contains unambiguous, accurate and timeous management information

Tip 8:

Identify measurable indicators which can be used to determine the performance (or non-performance) of the Institution / Faculty / Support Service / etc.

Tip 9:

Illustrative example and more tips

6

Performance Indicators in Relation to an Institution's Strategic Plan

7 Identifying Performance Indicators Linked to the Strategic Plan



8. Management Information in the Context of Performance and Quality

Macro level

External Environment:
Outside the control of Institution

Meso level (1)

Institutional: Executive level

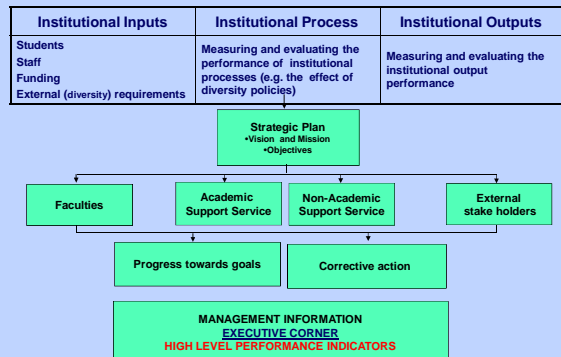
Meso level (2)

Institutional: Faculty level

Micro level

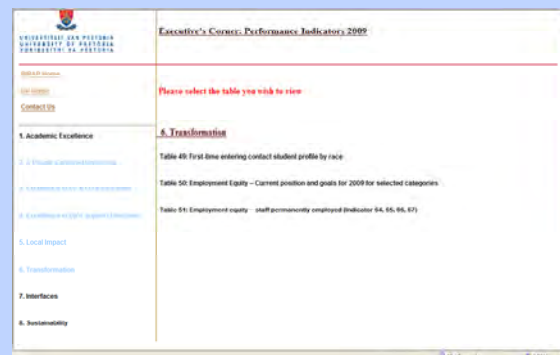
Department / Programme / Module level

Meso Level (1) - Institutional: Executive Level (Strategic Plan – Goals – Performance Indicators)



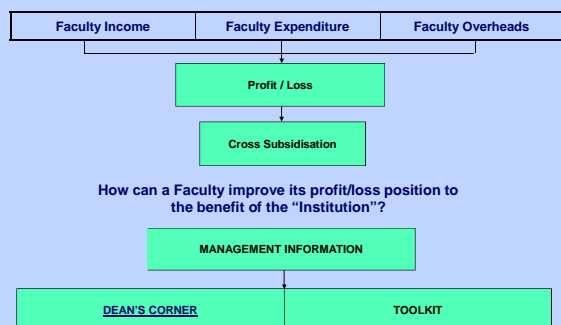
8.1.1

Executive corner



[Link to Executive Corner.html](#)

8.2.1. Meso Level (2) - Institutional: Faculty/Support Service Level (Strategic Plan – Faculty Plan – Faculty Agreement) (Goals – Performance Indicators)



8.2.1.

Dean's corner



[Link to Dean's Corner.html](#)

8.3. Micro Level – Department / Programme / Module

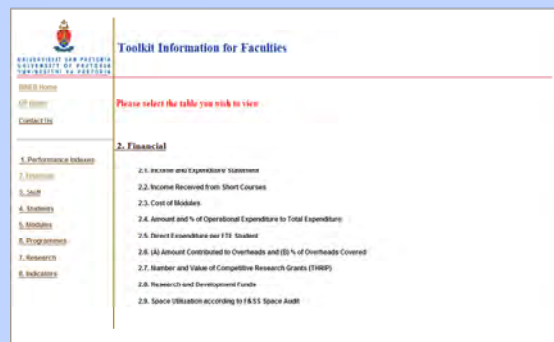
Departmental Income	Departmental Expenditure	Direct Departmental Overheads
Study programmes (UG & PG)	Salaries of staff	Books
Curriculum (modules)	Capital expenditure	Journals
Research (academic)	Supplies & services	IT infrastructure
Contract research Student enrolment	Travel expenses	Renewal infrastructure
Student enrolment	Etc.	Bursaries
"Own" income (sponsorships)		

MANAGEMENT INFORMATION

TOOLKIT



8.3.1 Toolkit

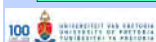


[Link to Toolkit.html](#)

9. Constraints and Boundaries

- Restrictive State Allocation – MTEF
- Tuition Fees – "Restricted"
- Schooling System – "Small numbers", "Relatively poor quality"
- Qualified and skilled labour force
- State of the Economy – Inflation (HE Inflation), low economic growth rate
- Ageing academic staff
- Ageing physical facilities (and in some instances limited space)
- Ageing laboratory equipment (expensive to replace)
- Limited Financial Resources (declining subsidy per FTE)
- Planning capacity

INNOVATIVE SOLUTIONS REQUIRED, BUT SHOULD ENSURE QUALITY



10. Factors Impacting on Institutional Academic Planning

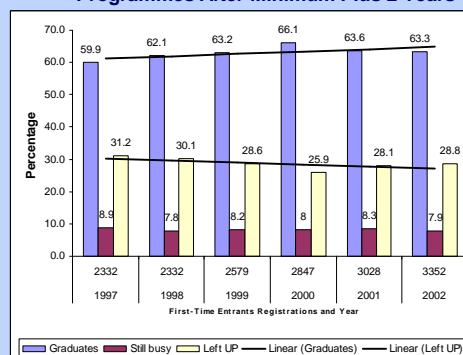
- Potential Students from the Schooling System
- Recruitment, Applications, Admissions and Registration of Students
- Retention Rates ([example 5](#))
- Success- and Graduation Rates ([example 6](#))
- Perception of Quality
- Graduates
- Growth Policy:
 - Programme Enrolments vs Course/Enrolments
 - Perceptions of Students and Parents
 - Financial Factors
 - Market Forces driven by Cyclic Nature of the Economy
 - Matric Results
 - Entry Requirements
 - More matriculants temporarily leaving South Africa

10.1. Example 5 Example of Attrition Rates for Students

	First year cohort group	1 st Year		2 nd Year		3 rd Year		4 th Year		5 th Year		6 th Year	
Year	Drop-out before 1 Aug	Additional drop-out before examination	Drop-out with registration	Drop-out with registration	Drop-out with registration	Drop-out with registration	Drop-out with registration	Drop-out with registration	Drop-out with registration	Drop-out with registration	Drop-out with registration	Drop-out with registration	Drop-out with registration
2007	1898	92	4.8%	10	0.5%								
			5.4%										
2006	1868	62	3.3%	11	0.6%	153	8.2%						
			3.9%				12.1%						
2005	1728	77	4.5%	14	0.8%	144	8.3%	105	6.1%				
			5.3%				13.6%						
2004	1990	84	4.2%	11	0.6%	155	7.8%	100	5.0%	82	4.1%		
			4.8%				12.6%		17.6%		21.7%		
2003	1511	57	3.8%	8	0.5%	105	6.9%	89	5.9%	60	4.0%	52	3.4%
			4.3%				11.3%		17.1%		21.1%		24.6%
2002	1503	50	3.3%	8	0.5%	100	6.7%	106	7.1%	60	4.0%	38	2.5%
			3.9%				10.5%		17.6%		21.6%		24.1%
2001	1437	66	4.6%	12	0.8%	91	6.3%	82	5.7%	77	5.4%	27	1.9%
			5.4%				11.8%		17.5%		22.8%		21.8%
2000	1325	59	4.5%	13	1.0%	62	4.7%	72	5.4%	54	4.1%	27	2.0%
							11.5%		15.5%		20.7%		22
													1.7%
													1.3%
													1.7%
													26.0%
													24.7%
													22
													1.7%



10.2. Example 6 Graduation Rates Of First - Time Entering Students In 3 Year Programmes After Minimum Plus 2 Years



The End

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