

**AN ANALYSIS OF THE FINANCIAL MANAGEMENT SYSTEMS, COST
MANAGEMENT SYSTEMS AND DECISION MAKING SYSTEMS OF
PRIVATE HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA
FROM 1990 TO 2005.**

by

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Yours sincerely

Trevor Hanekom(signed)
Member

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M. Naidoo
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ABSTRACT

The changing higher education environment has created a sense of urgency within private higher education institutions to change or else to perish. The latest legislation by the government compelling private higher education institutions to register with the Department of Education, coupled with the creation of mega-public higher education institutions by mergers, has made it imperative for private institutions to re-examine their financial management systems, cost management systems and decision-making systems.

Private higher education institutions do not receive any funding from government, unlike their public counter-parts. They depend totally on private funds from student fees, investors and donors. In order to compete with the State subsidized public institutions, private institutions must minimize costs and maximize profits. This means that the cost of their courses must be comparable to those of public institutions, while at the same time offering quality teaching and learning.

This study examines the cost management system, the financial management system and the decision-making system of private higher education institutions. The research is supported by a detailed literary study of these issues within the higher education sector, as well as an empirical study of cost management in private higher education institutions in South Africa.

The literature review focuses on the role of private higher education as well as higher education systems in South Africa. The issues surrounding cost management, especially budgeting and decision-making, were examined closely in relation to private higher education institutions.

DECLARATION

I declare that:

“ An Analysis of the Financial Management Systems, Cost and Management Systems and Decision Making Systems of Private Higher Education Institutions in South Africa from 1990 to 2005”

is my own work, that all sources used or quoted have been indicated and acknowledged by means of completed references, and that this thesis has not previously been submitted by me for a degree at any other university.



M. Naidoo

October 2006

The empirical study was done by sending out a research questionnaire to forty-five registered private higher education institutions in South Africa. The primary objective of the questionnaire was to analyse and compare the financial management systems, cost management systems and decision-making systems of private higher education systems in South Africa from 1990 to 2005 in order to equip administrators of private higher education institutions to make more informed and relevant decisions at their institutions.

The research findings clearly indicate although private higher education institutions, are applying the cost management principles and cost management systems at their institutions, they must still modify their systems to cater for their limited size in terms of student numbers. When compared to mega public higher education institutions it was found that at private institutions the cost of designing and implementing a system far outweighs the benefits.

The study also makes specific recommendations which can help to improve the levels of cost management within private higher education institutions.

OPSOMMING

Die veranderinge in die hoër onderwys omgewing het gelei tot toenemende druk op private hoër onderwys instellings om daarby aan te pas of onder te gaan. Die nuutste wetgewing deur die regering, wat private hoër onderwys instellings verplig om by die Departement van onderwys te registreer, tesame met die totstandkoming van mega instellings, as gevolg van samesmeltings, het dit vir private hoër onderwys instellings noodsaaklik gemaak om hulle finansiële bestuur-, kostebestuur- en besluitnemingstelsels te herevalueer.

Private hoër onderwys instellings ontvang geen befondsing vanaf die regering, soos hulle publieke ewekniëe nie. Hulle is totaal afhanklik van privaatfondse, in die vorm van studentegelde, asook finansiële hulp van beleggers en skenkers. Om hulle in staat te stel om met staatsgesubsidieerde publieke instellings mee te ding, moet hul winste maksimaal wees en uitgawes moet tot die been gesny word. Dit beteken dat die koste van kursusse by private hoër onderwys instellings vergelykbaar moet wees met die van publieke instellings, terwyl daar terselfertyd kwaliteit onderrig verskaf moet word.

Hierdie studie ondersoek die kostebestuurstelsel, die finansiële bestuurstelsel en die besluitnemingsbestuurstelsel van private hoër onderwys instellings. Die navorsing word ondersteun deur 'n omvattende literatuurstudie van hierdie aangeleenthede in die hoër onderwys instellings in Suid-Afrika.

Die literatuuroorsig fokus op die rol van private hoër onderwys instellings sowel as hoër onderwys stelsels in Suid Afrika. Die aangeleenthede rakende kostebestuur, veral in terme van begrotings en besluitneming, is in diepte geëvalueer in verhouding tot private hoër onderwys instellings.

Die empiriese studie is uitgevoer deur die uitstuur van 'n navorsingsvraelys aan vyf en veertig geregistreerde private hoër onderwys instellings in Suid-Afrika. Die hoofdoelwit van die vraelys was om die kostebestuurstelsel, die finansiële bestuurstelsel en die besluitnemingsbestuurstelsel van private hoër onderwys instellings in Suid-Afrika vanaf 1990 tot 2005 te analiseer en te vergelyk sodat die administrateurs van private hoër onderwys instellings in staat gestel kan word om meer ingeligte en toepaslike besluite rakende hulle instellings te kan neem.

Die navorsingsbevindings toon duidelik dat, alhoewel private hoër onderwys instellings die kostebestuursbeginsel toepas by die instellings, hulle stelsels kan aanpas om die beperkte hoeveelheid in terme van studentegetalle in ag te neem. As daar 'n vergelyking getref word met mega publieke hoër onderwys instellings, is daar gevind dat by private instellings, die koste verbonde aan die ontwerp en implementering van so 'n stelsel die voordele daaraan verbonde oorskadu.

Die studie maak ook spesifieke aanbevelings wat gebruik kan word om die vlakke van kostebestuur binne private hoër onderwys instellings te verbeter.

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CHAPTER ONE

INTRODUCTION AND SCOPE OF STUDY

1.1 Background

It is expected that private higher education institutions in South Africa will face a financial crisis in the near future. The latest legislation by the Education Department to limit these institutions, coupled with the merger of public institutions into mega-institutions, have made it imperative for private institutions to re-examine their financial management systems and adopt new strategies. This study focuses on this area, which has so far been neglected by researchers. Only a limited number of similar studies exist on this area of financial management of private higher education institutions.

To add to the problems outlined above, private higher education institutions are perceived to be placing profits before the education and training of learners. Private higher education institutions in South Africa, similar to their counterparts in other countries around the world, have generally pursued the profit motive as the reason for their existence, although their mission statements may not openly declare this (Kruss, 2004:15, Mabizela, 2002:48, Vergnani, 2001:2, Froneman, 2002:39, and Levy, 2002:2).

Private higher education institutions have generally had a negative stigma attached to their existence. Many critics view private higher education as 'bad', and public higher education as a 'public good' that the government must regulate and provide for (Kruss, 2004:1). The government and students are frequently sceptical of private provider's promises and tend to focus on their ulterior motives, which are their profit making intentions (Kruss, 2004:1). The White Paper on Higher Education states that private higher education should not allow "poor quality, unsustainable 'fly by night' operators into the higher education market" (South Africa ¹⁷, 1997:255).

According to article 29(3) of the constitution, “everyone has the right to establish and maintain, at their own expense, independent educational institutions”, provided that they do not discriminate on the basis of race, that they register with the government and that their standards are in keeping with those of similar institutions in the country (Bitzer, 2002:24). Private higher education should not be labelled ‘evil’ since it has a vital role to play. Private providers should be seen as playing a complementary and competitive role with regard to public providers.

The clampdown on private higher education by strict government regulations has resulted in numerous institutions closing down. To add to the woes of the sector, the regulations and increased responsibilities of private higher education institutions has led to increased costs. This in turn has led to a drop in income and profits for institutions that pursue the profit motive and run as a business enterprise, with shareholders requiring high returns.

One of the major factors in looking at this reconfiguration is the question of managing costs and funds to finance these costs. In order to survive, it is obvious that most institutions will have to acquire more funds from every possible source. Funds that cannot be obtained from shareholders and sponsors will have to come from students. In trying to balance a decreasing income side to their budgets, institutions may consider further sources of income rather than trying to manage the cost side of the budget. The proper management of costs is pivotal to the survival of private higher education institutions.

There are no current studies on financial management of private higher education institutions. According to the National Research Foundation (NRF), related studies in this field over the past 16 years are:

- Financial management competencies of rectors/principals at technical

colleges in the North West Province, by TS Mashongoane, in respect of an MTech degree, commenced in 2002 and still incomplete.

- Mapping of the private higher education sector in South Africa, by GI Subotzky and C Mabizela, completed in 2000.
- Marketing strategies in higher education with specific reference to public and private educational institutions within Gauteng, South Africa, by J Storm, in respect of an MBA study completed in 2001.
- A strategic marketing planning framework for a private educational institution, by MJ Scheepers, in respect of a MComm degree completed in 2001.
- Towards a contextual analysis of structural patterns of private-public higher education in South Africa, by M Mabizela, in respect of an MEd degree completed in 2002.
- The implementation of the Department of Education's policy on regulating private higher education, by TS Naicker, for a DAdmin degree completed in 2003.
- Developing a financial performance measurement framework for South African higher education systems, by TG Leo, in respect of an MBA study.

1.2 Review of the related literature

No studies on financial management of private higher education institutions in South Africa currently exist. This is the first comprehensive study undertaken.

Education in South Africa is divided into three bands, namely, General Education and Training (GET), Further Education and Training (FET), and Higher Education and Training (HET). Each band is pitched at a National Qualifications Framework (NQF) level. Thus, all General Education and

Training (GET) is pitched at NQF level 1. This includes Grades R to 9 and Adult Basic Education and Training (ABET) at level 1.

Further Education and Training (FET), which is pitched at NQF levels 2 to 4, refers to Grades 10 to 12, and includes all certificates and diplomas from technical colleges, community colleges and private colleges. Higher Education and Training (HET) is pitched from NQF levels 5 and 8. This level requires a Grade 12 pass or a Grade 12 pass with exemption. Qualifications at this level include certificates, diplomas, degrees, postgraduate degrees, Master's degrees, Honours degrees and Doctorates. Quite frequently, private higher education (HET) is confused with private further education institutions (FET) since private higher education institutions focus on offering programmes at NQF levels 5 to 8 and FET's at levels 2 to 4.

It was found that 84.5% of private higher education institutions offered programmes that belong to the FET band (NQF level 4), even though these institutions had applied for accreditation for these programmes to be pitched at levels 5 and 6. (South Africa ²⁰, 2003:1, South Africa ²³, 2004:48).

The National Commission on Higher Education estimated that, by 1995, enrolments at private higher education institutions had reached approximately 150 000 (National Commission on Higher Education, 1996:159). By November 2000, there were approximately 323 private and trans-national institutions operating in South Africa, with many having collaboration agreements with public higher education institutions. By 2004, it was estimated that enrolments at private higher education institutions were between 30 000 and 35 000, with the number of private higher institutions drastically reduced from 323 in 2000 to 93 in 2004 (South Africa²³, 2004:48).

On 23rd February 2005, 91 private higher education institutions were granted registration by the CHE. Five institutions were granted provisional

registration and in another five institutions, the lapse of their provisional registration was pending (South Africa²¹, 2005:9, 27, 30, and 32). A total of 22 institutions had their registrations cancelled. One institution's registration was on appeal.

Four categories of private higher education providers can be found in the literature (Kruss, 2004:19). Foreign universities that offer programmes directly, either through distance education or through franchising with local institutions, are termed 'trans-national' institutions. A second category of private higher education is so-called 'franchising colleges', which offer contact tuition to students of public distance education institutions. A third category are termed 'technical and vocational education and training' (TVET) institutions, which include correspondence colleges and professional institutes. The final category, 'corporate classrooms', was developed by large corporations using their existing premises to provide their staff with higher education training, and, more recently, to provide other corporations with their programmes.

Private higher education institutions are currently facing a dilemma. They are not only facing the problem of strict government regulation, but also the "scorn" of public higher education. During the mid-1990s, private higher education institutions increased substantially on the back of students' interest in the types of programmes offered, the declining quality of public education, and the instability of public higher education institutions (South Africa²³, 2004:48). The Higher Education Amendment Act (Act no. 54 of 2000), amended a number of sections of the Higher Education Act 101 of 1997, and, in particular, four aspects relating to private institutions:

- The Minister of Education was given the power to determine the scope and range of both individual and public and private higher education

institutions.

- The registrar of private higher education institutions could at its discretion grant registration to private institutions in terms of the Companies Act (61 of 1973).
- The registrar also was given the discretion to determine whether private higher education institutions could use the term “university” or “technikon”.
- The registrar was given the discretion to differentiate between local and foreign providers.

In order to regulate the private higher education institutions, the Regulations for the Registration of private Higher Education Institutions were published in the Government Gazette No. 24143. This was promulgated on 13 December 2002 and came into effect on 1 April 2003. These regulations were only applicable to private higher education institutions, and not to public institutions (South Africa²¹, 2005:5-6). In terms of the regulations, three important requirements had to be met by the institutions:

- The institution must meet the requirements of quality assurance as laid down by the Higher Education Quality Committee (HEQC) of the Council of Higher Education (CHE). The quality assessment of the HEQC is referred to as the accreditation evaluation, whereby the capacity of the institution to provide the programmes, whether the programmes belong to the higher education level, and whether they meet South African professional practice are evaluated.
- The second requirement is that of financial sustainability. The institution must be able to financially sustain its programme offerings, maintain operational continuity and meet its financial obligations to

students. Furthermore, it must submit proof of financial surety and guarantees.

- The institution must finally comply with the health and safety regulations for all those on its delivery site.
- In addition to the initial registration requirements above, the institution has to be responsible for the following (South Africa²¹, 2005:7):
- Displaying the registration certificate conspicuously on the premises.
- Publishing a prospectus, calendars or brochures with the manager's details, details of the academic staff, admission requirements, assessment practice, fees, etc.
- Ensuring accurate advertising.
- Maintaining academic records.
- Sending an annual report to the registrar before 30 April each year. .

The increased state regulations and lack of state funding for private higher education makes it increasingly difficult for these institutions to survive. The recent merger of public higher education has further compounded the survival problem for private higher education institutions. In 2005, public higher education institutions were reduced from 36 to 22, of which 11 are universities, five are "universities of technology" and six "comprehensive institutions" (South Africa²³, 2004:49). Private higher education institutions now have to compete with mega public institutions not only in terms of student enrolments but also for quality academics and appropriate programmes.

Increasing student fees may be an option, but probably not a good solution since higher fees may turn away prospective students. Furthermore, the fees of private education institutions are already significantly higher than those of public institutions. In fact, it has been estimated that fees at private institutions are about three times more than those that at public institutions

(Vergnani, 2001:2). To increase fees any more may further reduce enrolments and thus income levels.

Private higher education institutions have always adopted efficient costing systems in order to survive in the higher education market. They have used ingenious marketing strategies in order to sell their programmes, so that they can compete with public higher education institutions. They have established partnerships and collaboration agreements with local public institutions and those overseas. Private higher education institutions began by researching the market and targeting different groups of students (Kruss, 2004:75-90):

- Privileged students by offering them “better” education.
- Non-traditional constituency for those students who could not access the higher education market due to racial, socio-economic and educational barriers.
- Students who sought mobility and international qualifications were able to progress further with their qualifications and have their qualifications recognised world-wide.

1.3 Problem Statement

The emerging higher education scenario in South Africa has great financial implications for private higher education institutions. The decrease in enrolments at tertiary institutions must be of concern not only to the private institution but also the government since it will have a far-reaching negative socio-economic impact. This is coupled with the state’s attempt to achieve a high skills growth rate of around five percent (South Africa², 1999: iv).

The government’s attitude to private higher education institutions has been contradictory. On one hand they want private institutions to create the complementary and competitive role in higher education. On the other hand

it has created regulations to restrict or curb their development. From student recruitment to the programmes of study, private institutions have limited room to manoeuvre in the face of relevant government policies.

Private higher education institutions have greater autonomy because they are financially independent and do not receive any subsidies or grants from the Government (Vergnani, 2001:1). However, they are subject to the same government policies that public institutions are subjected to. Private higher education institutions are effectively made to compete on an unequal footing since public institutions are subsidised by between 50 and 60 percent per student by the government (South Africa²³, 2004:196).

By far the greatest problem facing private higher institutions is the issue of proper financial management. This is crucial to their existence and to the further development of private higher education. This study investigates this issue by focussing on a sample of private higher education institutions and their financial management systems.

This study examines financial management systems, cost management systems, and decision-making systems at private higher education institutions in South Africa. It assesses long-term financing decisions of private institutions with regard to sources of funds, costs of funds and their impact on capital structure. Further, an analysis of long-term investing decisions on investment in fixed assets, acquisition of other businesses, mergers and disinvestment will be assessed. Finally liquidity decisions concerning the day-to-day management of the institutions' short-term assets and liabilities will be considered (Ross, Westerfield and Jaffer, 1996:3-4).

The findings of this study will be of benefit to private higher education institutions as the study:

- evaluates financial management systems used in private higher education institutions in South Africa;
- evaluates, on the basis of a literature review, the developments in financial management; and
- makes recommendations on the financial management approaches and techniques that will benefit private higher education institutions.

1.4 Objectives of the Study

Primary Objective

To analyse and compare the financial management systems, cost management systems and decision-making systems of private higher education systems in South Africa from 1990 to 2005 in order to equip administrators of private higher education institutions to make more informed and relevant decisions at their institutions.

Secondary Objectives

Attaining the following three secondary objectives is important to support the achievement of the primary objective:

- To investigate the key issues and trends in the policy and practice of financial management systems of private higher education institutions in South Africa.
- To describe and evaluate the different cost management systems that is relevant to private higher education institutions.
- To establish the types of decision-making systems relevant in private higher education.

1.5 Research Methodology

Two research methods will be used to achieve the objectives. A major factor in undertaking postgraduate academic research is a thorough review of literature relevant to the area of study. A literature review will be undertaken to research recorded practices of financial management in private higher education. The literature review will also focus on:

- the historical structure of higher education, with special reference to the government's recent plan for higher education in South Africa;
- financial management systems;
- budgeting;
- decision-making; and
- the government's funding proposals for higher education in South Africa.

The literature review will be conducted mainly by means of journal articles, textbooks and reports.

The second part of the research is an empirical study that will investigate financial management practices at South African private higher education institutions. This survey research will be for the purpose of achieving the primary objective developed in this study. The survey research will be implemented by means of a questionnaire survey.

A structured questionnaire will be administered. It will be made up of a set of questions that are designed to generate information necessary to achieve the objectives. Close-ended questions will be used to ensure fixed responses to choices that are equally favourable or unfavourable. The use of this "force choice" scale will attempt to smooth out interpretation difficulties that may be experienced by institutions operating at different levels.

The structure of the questionnaire will consist of the following five sections:

- Section One** Institutional Structure
- Section Two** Cost Analysis
- Section Three** Budgetary Control and Reporting
- Section Four** Capital Investments
- Section Five** Financing Decisions
- Section Six** Management Accounting Systems

1.6 Expected outputs and benefits of the study

The purpose of this study is to investigate the key issues and trends in the policy and practice of financial management systems, cost management systems and decision-making systems at private higher education institutions in South Africa.

The results of this study will not only be both relevant and useful to private higher education institutions, but also to the national education department, public higher education institutions, prospective students, shareholders or sponsors of private higher education institutions and various related role players.

The uniqueness of this study makes it one of the forerunners in financial management of private higher education.

1.7 Hypothesis in respect of the research

In order to achieve the objectives of the study, the following hypothesis will be tested:

Private higher education institutions that do not have a separate costing department are unaware of the different financial management systems, cost management systems and decision-making systems that exist at the various higher education institutions.

1.8 Structure of the study

The study comprises six chapters, which are described as follows:

CHAPTER ONE: INTRODUCTION

This chapter will deal with the background on private higher education in South Africa and the significant changes in enrolment and funding. In addition, the benefits of this research, the problem statement, the objectives, and the research methodology are developed and described. The structure of the study is also outlined.

CHAPTER TWO: THE ROLE OF PRIVATE HIGHER EDUCATION INSTITUTIONS

Chapter two describes the role of private higher institutions, focusing on the South African education system. This chapter will highlight the complementary and competitive importance of private higher education. The different categories and marketing strategies will also be analysed in this chapter. The major part of this chapter deals with an overview and analysis of the regulations and responsibilities of private higher education institutions.

CHAPTER THREE: COST MANAGEMENT SYSTEMS AND BUDGETING

This chapter describes and evaluates different cost management systems that are relevant in higher education institutions viz., cost centre systems and profit centre systems. The aspects of budgeting systems that are in place at higher education institutions are discussed and the advantages and disadvantages of using the different types of systems are assessed. This section also describes in detail the use of zero-based budgets in institutions of higher education and similar organisations. A major aspect of the success of budgeting involves performance evaluation, which is discussed in this chapter in relation to budgeting.

CHAPTER FOUR: DECISION-MAKING

This chapter reflects on the management decision-making process and its relevance to higher education institutions. The three major areas of decision-making relevant to higher educational institutions, viz. capital investment decisions, budgetary allocation and student fee pricing are discussed.

CHAPTER FIVE: RESEARCH DESIGN AND METHODOLOGY

In this chapter the methodology employed in the research is described. This chapter, in addition to providing an overview of the objectives, explains the rationale behind the development of the objectives set in this study. Details relating to the population as well as aspects relevant to the implementation of the survey research will also be provided.

CHAPTER SIX: RESEARCH FINDINGS

The results of the questionnaire survey will be analysed, interpreted and evaluated. A description of the statistical tests used to analyse the research data and the findings of the study will be presented. The conclusions drawn from the study will be indicated in this chapter.

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS

The contents of the previous chapters are reviewed and the research findings and its implications will be discussed. Recommendations will be made which private higher education institutions and other education bodies could possibly implement, or investigate for areas of further research.

1.9 Reference Techniques

The Harvard method of reference is used throughout this study to indicate the sources consulted. A detailed list of all sources used and consulted in this thesis is attached at the end of this study.

1.10 List of Acronyms

ABC	:	Activity Based Costing
CE	:	Capital employed
CESM	:	Classification of Education Subject Matter
CHE	:	Council of Higher Education (in South Africa)
CIMA	:	Chartered Institute of Management Accountants
CP	:	Cost of Production
CTP	:	Committee of Technikon Principals (in South Africa)
CVP	:	Cost-Volume-Profit (analysis)
DOE	:	Department of Education
ESS	:	Effective Subsidy Student
FTE	:	Full Time Equivalent
GAC	:	Government Accounting Conventions (in the United Kingdom)
HBI	:	Historically Black Institution
HEI	:	Higher Education Institution
HEMIS	:	Higher Education Management Information System
HWI	:	Historically White Institution
IRR	:	Internal Rate of Return
JSPSG	:	Joint Costing and Pricing Steering Group
MADM	:	Multiattribute Decision Model
MBO	:	Management by Objectives
MIS	:	Management Information Systems
NCHE	:	National Commission on Higher Education (in South Africa)
NPV	:	Net Present Value
PPBES	:	Programme, Planning, Budgeting and Evaluation Systems
RSA	:	Republic of South Africa
SADC	:	Southern African Development Community
SAPSE	:	South African Post Secondary Education System
SAUVCA	:	South African Universities Vice-Chancellors Association

UK	:	United Kingdom
USD	:	United States Dollar
VFM	:	Value for Money
ZBB	:	Zero-based Budgets

1.11 Terminology

Academic Department	A department that focuses on the core business of teaching and research within a higher education institution
Budget	This is a quantitative statement for a defined period of time which may include planned income, costs, assets, liabilities and cash flows
Capital Investment	The investment of funds in fixed or long-term assets
Cash Flow	A receipt or disbursement of cash
Commercial Organisation	These are business organisations which mainly aims at making a profit
Decision-making	This is the process of choosing amongst alternative solutions available to a course of action
Effective Subsidy students	This is the basis on which the subsidy of an institution is calculated through differentiation in subsidies for Human Sciences and for Natural Sciences
Financial Information	This represents the information in currency values
Financial Management	This is the management of all processes associated with the efficient acquisition and deployment of both short- and long-term financial resources
Forecast	This is a prediction of future events and their quantification for planning purposes

Full Time Equivalent	This is the equivalent of a student taking all and only the courses involved in a standard full-time curriculum as a unit
Higher Education	This relates to education beyond schools grade 12 (standard ten) in South Africa)
Instructional programme	This programme includes all those activities that are carried out for the express purpose of eliciting some measure of educational change in a learner or group of learners
Long-term	A period that normally exceeds one year
Management Accounting	A division of accounting that provides information for management decision-making
Non-academic department	A department that performs a service or support for a department that provides academic tuition etc.
Non-financial information	This is information that is not stated in terms of currency values but relevant information in statistical and non-statistical forms
Objective	This is a desired quantifiable achievement for a period of time
Payback Period	The time it takes an investor to recover the outlay in a project
Performance evaluation	This represents the assessment of proficiency between planned and actual outcomes
Pricing	The determination of a sales value for a product or service
Risk	This is a condition where there exists a quantifiable dispersion in possible outcomes from any activity
Short-term	A period that is normally less than one year
Subsidy formula	The formula used by the State to fund public higher

	education institutions in South Africa
Technikons	A higher education institution in South Africa offering qualifications beyond secondary schools levels
Tertiary Institutions	These are higher education institutions in South Africa that comprise mainly Universities, Technikons and Colleges of Education
Three-year rolling plan	These are enrolment and graduate projections for a three year period which are submitted by higher education institutions to the Ministry of Education every year
Universities	A higher education institution offering qualifications beyond secondary levels

CHAPTER TWO

THE ROLE OF PRIVATE HIGHER EDUCATION INSTITUTIONS

2.1 Introduction

Private higher education institutions have an increasingly important and difficult role to play in South African higher education. The global changes in technology, the economy and social sciences have made their role increasingly more important in South Africa today. These global changes have created a greater demand for knowledge and information by today's society, which is continuously changing.

Higher education in South Africa has seen considerable changes since the first democratic elections in South Africa in April 1994. By 2005, after several draft papers, green papers, white papers and amendments to the Higher Education Act, a new Higher Education policy was formulated. In addition to this, a major re-shuffling occurred in public higher education institutions. These were reduced from 36 to 22 institutions, thereby creating mega-higher education institutions.

These mega institutions receive full financial benefit from the government. The government firmly believes that it is responsible for furthering higher education due to the inequalities that existed in the past in the South African education system. The State believes that only via public higher education institutions can this responsibility can be achieved.

A negative stigma has been attached to private higher education institutions. This negative perception was created by the government and students who view private higher education institutions as inferior, and as primarily concerned with making profits at the expense of students and the quality of education.

However, private higher education institutions must be seen as playing an equally important, if not complementary role, to that of public higher education institutions. It is not possible for public higher education to meet the higher education demands alone. There is a need for private higher education to assist public higher education institutions in meeting the demands created by higher education.

This chapter briefly traces the history of higher education in South Africa in general. It then focuses on matters relating to private higher education, including related legislation, until April 2005.

2.2 Higher Education Systems

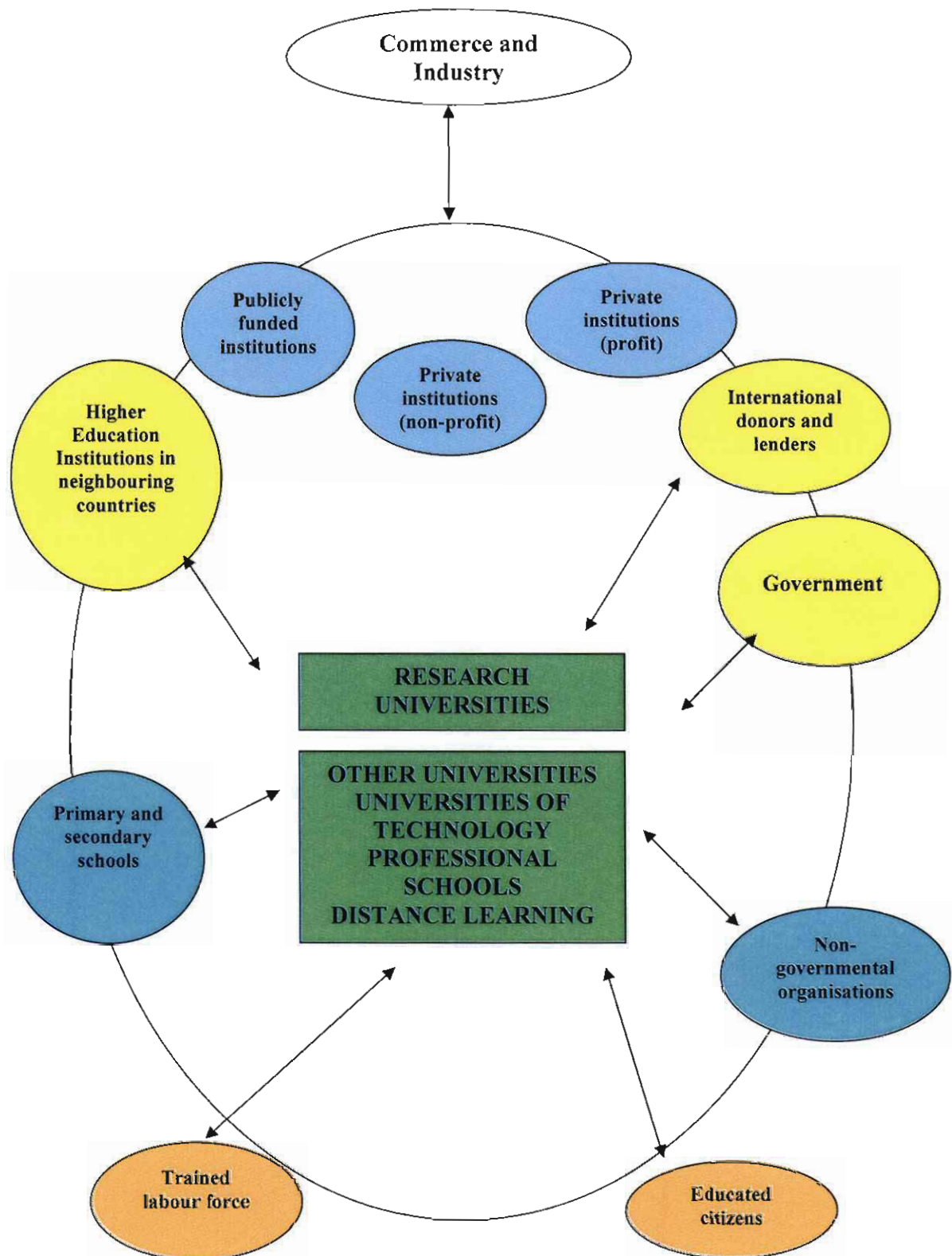
A higher education system is made up of institutions and its stakeholders, the financers and management bodies of higher education and the rules that guide the functioning of institutions. In South Africa the Higher Education Act Number 101 of 1997 (with its amendments) guides higher education institutions. Annexure B contains details of this Act.

The above three elements form part of a system that is linked to numerous public and private entities that have or may have an effect on the input and output of the higher education system. This effect is illustrated in Figure 2.1 on page 21.

Research universities aim at achieving research across a range of fields, with few teaching programmes. The emphasis of these institutions is research targets in order to achieve international standards. They are very selective of the students admitted.

Other institutions focus on producing large numbers of graduates through the emphasis on teaching and training for careers. These institutions take the

Figure 2.1: Elements in a higher education system



Adapted from The Task Force on Higher Education and Society (2000:47).

form of universities, universities of technology, professional schools, distance learning institutions and virtual universities.

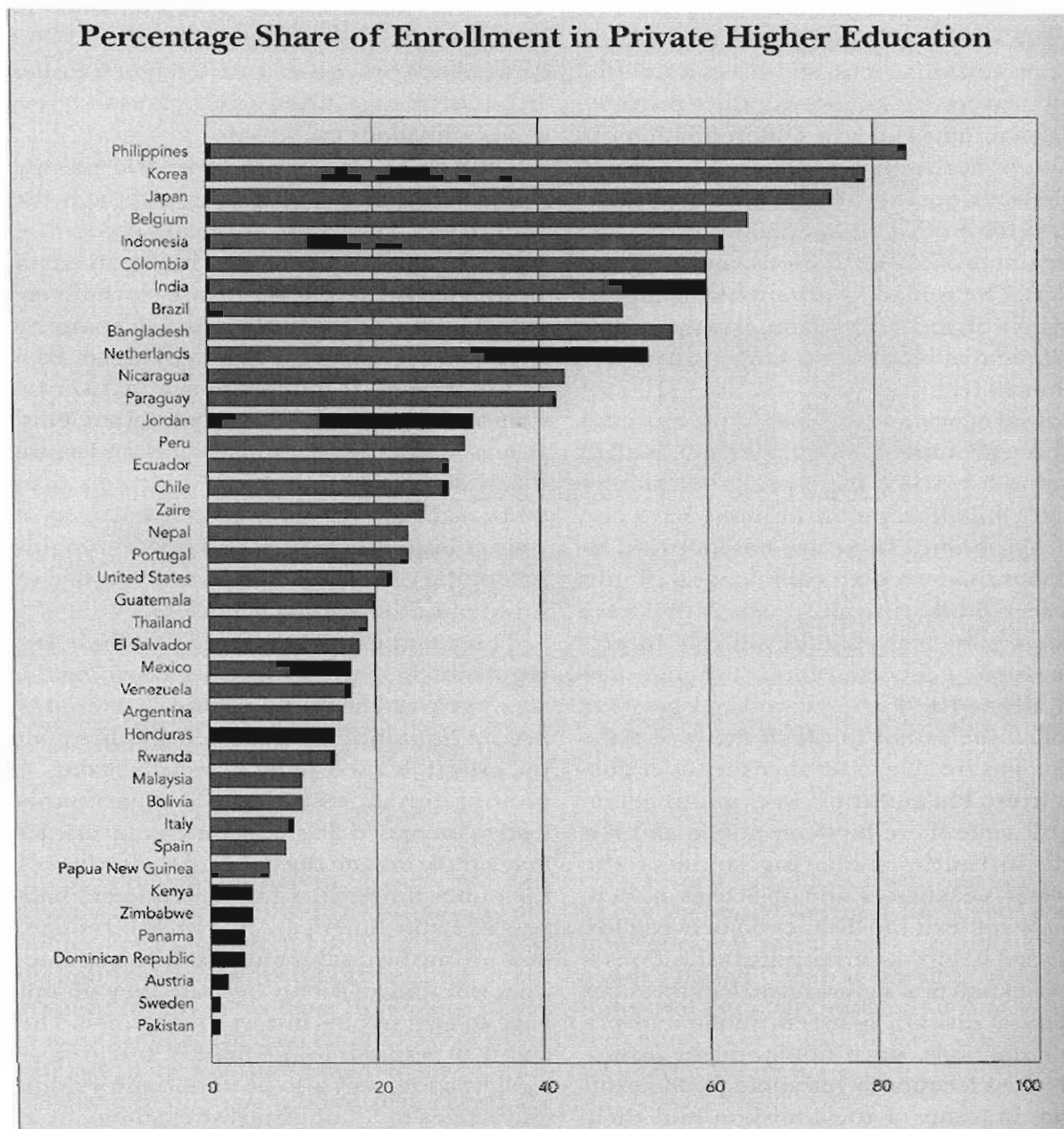
The nature of systems within higher education has shifted through differentiation, which has occurred both horizontally and vertically. Horizontal differentiation has been seen through the growth of private and for-profit institutions. According to the Taskforce on Higher Education and Society (2000:29), there are more than 800 private higher education institutions in China and more than 1 200 private universities in Indonesia.

Figure 2.2 on page 23 reflects the percentage share of private higher education institutions in the world. It is interesting to note from the figure that less developed countries have a greater percentage of private higher education institutions. In South Korea the state encourages the development of private higher education institutions by providing incentives. The Korean government grants tax exemptions for the purchase and sale of land as well as subsidies for salaries and other operating shortfalls (Korea, 2001:50). This has been one of the reasons why South Korea has been able to significantly increase its higher education participation rate in the last decade.

In South Africa there are currently 82 private higher education institutions registered with the ministry of education (SAQA, 2005:1-11).

Distance learning, in which students are reached via correspondence, radio, television and the Internet, has had a huge impact on higher education. Table 2.1 on page 24 reflects the number of students enrolled at the ten largest distance-learning institutions in the world. The figures are based on enrolments between 1994 and 1996, and illustrate the important role played by higher education institutions in providing access to millions that cannot reach residential institutions and those that cannot engage in full time studies due to the employment commitments.

Figure 2.2: Percentage share of enrolment in private higher education



Note: In Japan and the few Western European countries that have a high proportion of enrollments in private institutions (for example, Belgium and the Netherlands), higher education continues to be almost entirely financed by the state, which subsidizes both public and private higher education institutions. Source: World Bank, *Higher Education: The Lessons of Experience*, 1994.

Adapted from the World Bank, *Higher Education: The Lessons of Experience* (1994) in The Task Force on Higher Education and Society (2000).

**Table 2.1: Enrolment at the ten largest distance-learning institutions
in the world**

INSTITUTION	STUDENTS	BUDGET (millions US\$)
Anadolu University, Turkey	578 000	30
China TV University	530 000	1
Universitas Terbuka, Indonesia	353 000	21
Indira Gandhi National Open University, India	242 000	10
Sukhothai Thammathirat Open University, Thailand	217 000	46
Korean National Open University	211 000	79
National Centre for Distance Learning, France	185 000	56
The Open University, Britain	157 000	300
University of South Africa	130 000	128
Payame Noor University, Iran	117 000	13

Adapted from Normile (1997:277).

Horizontal differentiation concentrates on satisfying the increased demand for higher education. Vertical differentiation, on the other hand, reacts to the need to provide a greater diversity of graduates than is demanded by the economy.

Diversity in this context refers to graduates for different fields within Science, Engineering and Technology, Economic Sciences, Social Sciences and the Arts. The job market specifies a demand for different types of graduates who are trained differently, e.g. in South Africa universities provide training and education for accountants who are, in many respects, targeted for a different market from accounting graduates from universities of technology.

Some of these issues are noted in the National Plan for Higher Education in South Africa, which is discussed later in this chapter.

The public interest in higher education is pivotal to the development of nations. The macroeconomic impact can be seen with the successes of the labour market. Higher education institutions are able to provide a catalyst for economic, social, scientific and technological change, assisting nations in the following:

- Providing advanced training in diverse fields.
- Providing a critical mass of trained national resources.
- Providing a forum for the exchange of ideas and research development.
- Encouraging competition so that higher standards are achieved.
- Providing a link with international institutions.

Against the backdrop of the provision of higher education, by both public and private initiatives, the effect of globalisation has had a major impact on the development of higher education in societies.

Annexure C reflects the global tertiary enrolment.

Moja and Cloete (2001:244) suggest that globalisation can have the following effects on higher education:

- Restructuring either through state restructuring, institutional restructuring or market restructuring.
- Changing the role of knowledge, information and information technology.

2.3 A brief history of higher education in South Africa

Major changes have taken place in higher education since the first democratic

elections in 1994. South Africa's "apartheid" policies of the past kept the four major race groups, Whites, Blacks, Indians and Coloureds, separate in all spheres of life, including education. Each population group was not allowed to attend "mixed" schools or "mixed" higher education institutions. By 2005, most of the restrictive policies of the past had been removed.

2.3.1 Higher education prior to 1994

By 1968, African education was decentralised into eight regions, six self-governing territories and, in 1976, four Bantustans or TBVC (Transkei, Bophututswana, Venda and Ciskei) states. With the exception of the Bantustans, all African education was administered by the Minister of Education and Training. By 1988, 11 African institutions had been created.

By 1983, education for Indians and Coloureds was considered an "own affairs" matter and administered by the House of Delegates and House of Representatives respectively. African education was still considered part of general affairs, and was administered by the Minister of Education and Training.

All higher education institutions were designated for a particular race, and special permits were necessary for students who wanted to study at a higher education institution not designated for their race. Higher education institutions were autonomous of the government, but could not interfere with the government's policies regarding race.

2.3.2 Developments after 1994

The African National Congress (ANC)-led government appointed a national commission on education to explore the following five principles: non-racialism, non-sexism, democracy, redress and a unitary education system.

The national commission was faced with various challenges:

- There was a problem of inequality of access, participation, and success within higher education; this was due to inequalities between higher education institutions in terms of resources, staff and student bodies.
- The higher education system had to work effectively and efficiently, with limited resources, to improve the range of graduates, amount of research and service output.

2.3.2.1 The National Commission on Higher Education (NCHE), 1996

The NCHE produced a report entitled, *A framework for Transformation*, which was based on three important areas of policy change for Higher Education:

- “increased participation” – “massification” of higher education rather than producing elite higher education systems. It proposed a single consolidated higher education system.
- “greater responsiveness” – this required changes in content, focus and delivery modes of academic programmes, and research applicable to the needs of the market and society.
- “increased cooperation and partnerships” – this entailed the State in a supervisory role in governance of the institutions and intermediary bodies.

2.3.2.2 The Education White Paper 3: A programme for the transformation of Higher Education (July 1997)

The Education White Paper 3, recommended the following:

- Develop a programme-based higher education system that is planned, funded and governed as a single coordinated system.
- Discard the notion of “massification” for one of planned expansion.

- Offer a number of programmes through a variety of institutions and centres, using different methods of delivery. In this way higher education would be accessible to a diverse group of learners, meeting their varying needs.
- Detail the planning, funding and governance required to develop a single coordinated system for universities, technikons, and colleges of education, nursing, agriculture as well as private higher education.
- The State plays a steering and coordinating role while the higher education institutions retain authority over their resources but are publicly accountable for them.
- The establishment of a single body, The Council on Higher Education (CHE), to provide advice to the Minister on policy and to undertake the quality assurance function of higher education institutions.

2.3.2.3 The National Plan for Higher Education (NPHE) , 2001

The following problems were experienced in the course of implementing the White paper:

- The absence of regulatory instruments.
- The higher education institutions seized the market opportunities.

Historically Advantaged Institutions (HAIs) repositioned themselves advantageously by creating partnerships with private providers, using “telematics” delivery for correspondence courses and increasing market shares of contract research and consultancies.

- Many African and female students began enrolling at HAIs due to the elite “image” of these institutions. Historically Disadvantaged Institutions (HDIs) offered their programmes at a cheaper rate than HAIs under the misconception that the government would offer them redress for past inequalities. This did not materialise and resulted in HDIs becoming bankrupt.

- Making higher education accessible to everyone from the 1990s gave students a greater choice of institutions.
- The perception of students and parents of the declining quality of Historically Black Universities (HBUs) led to a reduction in enrolments at these institutions.
- Increased competition from private providers accredited by international institutions caused a reduction in student enrolments at public institutions.

As a result of these and other problems, the Minister of Education sought the advice of the Council of Higher Education (CHE) on the optimal size and shape of the higher education system. This led to proposals for institutional mergers and incorporation to be implemented in 2004 and 2005.

The NPHE outlines five goals and strategic objectives that relate to:

- Access
- Equity
- Diversity
- Research
- Reorganisation of past structures.

These goals and strategic objectives on table 2.2 on page 30.

The following indicative targets were established by the NPHE:

- Medium term increase in participation rates from 15% to 20%.
- Graduation rate benchmarks to ensure greater access and success.
- Ensure that the ratio between humanities, business, science, engineering and technology (SET) shifts from 49:26:25 to 40:30:30 respectively.
- Student and staff equity targets.

The NPHE had two main concerns:

- There was too much emphasis on system and educational efficiency; this was in conflict with expanding participation rates.
- There was too much State interference in the restructuring of the higher education system.

Table 2.2: Goals and strategic objectives

	GOAL	STRATEGIC OBJECTIVE
1	To provide a full spectrum of advanced educational opportunities for an expanding range of population irrespective of race, gender, age, creed or class or other forms of discrimination (South Africa ¹⁷ ,1997:1.27).	To produce graduates with skills and competencies to meet the human resource needs of the country.
2	To promote equity of access and a fair chance of success to all who are seeking to realise their potential through higher education, while eradicating all forms of unfair discrimination and advancing redress for past inequities (South Africa ¹⁷ , 1997:1.14).	To ensure that student and staff profiles progressively reflect the demographic realities of the society. To ensure that the race and gender profiles of graduates reflect the profile of student enrolments.
3	To diversify the system of the mix of institutional missions and programmes that will be required to meet national and regional needs	To ensure diversity in the organisational form and institutional landscape of the higher education

	in social, cultural and economic development (South Africa ¹⁷ , 1997: 1:27).	system through mission and programme differentiation.
4	To secure and advance high level research capacity which can ensure both the continuation of self-initiated, open-ended intellectual inquiry, and the sustained application of research activities to technological improvement and social development (South Africa ¹⁷ , 1997:27)	To sustain current research strengths and to promote the kinds of research and other knowledge outputs required to meet national development needs, and which will enable the country to become competitive in a new global context.
5	To build new institutional and organisational forms as well as new institutional identities and cultures as integral components of a single co-ordinated national higher education system (South Africa ¹⁷ , 1997:2.42-2.45).	To promote and foster collaboration between institutions at regional level. To restructure the institutional landscape of higher education.

South Africa¹⁷ (1997).

2.3.2.4 The Higher Education Act

The Higher Education Act of 1997 gave legal form to the values, principles and core concepts of policy, and made provision for:

- System-level governance – The CHE would advise the Minister of Education on matters of higher education and through its Higher

Education Quality Committee (HEQC) carry out the Quality Assurance (QA) functions of the system.

- HEIs – In consultation with the CHE the Minister can establish, declare, merge or close public HEIs.
- Institutional governance – sets out the statutory roles, responsibilities and composition of institutional forums.
- Funding – In consultation with the CHE, the Minister decides on funding, including redress.
- Language – the Minister determines the language policy.
- Private HEIs – registration of private institutions.
- The abolition of previous Councils, to be replaced by the CHE.

Various amendments have taken place. The key amendments are:

- that the Minister is able to appoint an administrator where maladministration has taken place.
- the appointment of the Director-General as the registrar for private HEIs.
- the approval of Council, and in some cases the Minister, for loans and overdrafts.
- the HEQC and ETQA as primarily responsible for higher education.
- the Minister determines the physical location of an institution.
- the provision for mergers and incorporations.
- the provision for change in size of councils and institutional forums.
- the establishment of Boards of National Institutes of Higher Education in Mpumalanga and the Northern Cape.

2.3.3 Developments after 2004

After 1994, the following developments took place:

- Higher education restructuring – mergers and incorporation of public HEIs.
- New higher education funding framework.

- National frameworks and criteria for quality promotion and Quality
- Assurance.
- Academic policy in terms of the South African Qualifications Authority
- (SAQA) and the National Qualifications Framework (NQF).
- Quality, leadership and management – improve the efficiency,
- effectiveness and accountability of higher education governance.

2.4 A brief history of private higher education in South Africa

Private higher education in South Africa is unfortunately not well documented. There is virtually no single source that traces the history of private higher education. In this context certain inferences with regard to statistics and the history of private higher education may be drawn from the existing literature. The reason for the non-documentation of the history of private higher education stems from the fact that only recently, as late as 1995, did the State begin the process of legislation and compulsory registration of all private higher education institutions. Currently (2005), the Council of Higher Education (CHE) still has very limited information on enrolments, programmes on offer and the number of private higher education institutions in the country. The CHE is at present compiling a database of private higher education institutions.

2.4.1 Stages in the development of the private higher education process

Mabizela (2002:41) divides the history of private higher education into four historical phases, namely, 1829 to 1917; 1918 to 1947; 1948 to 1990 and post 1990.

2.4.1.1 The period 1829 to 1917

During this period private university colleges offered matriculation and post-secondary education (higher education). One of the pioneering private

institutions was the South African College founded in Cape Town in 1829. These colleges gradually became public higher education institutions, and by 1917 and 1918, the first group of public universities was established.

The trend during this period was characterized by the fact that the College was privately founded and had its own Board of Directors. Gradually, the Cape government provided financial support and shared control over the College, before eventually taking complete control of it.

In 1873, the University Incorporation Act, resulted in the College being transformed into the University of the Cape of Good Hope (UCGH). In 1916 it was renamed the University of South Africa (UNISA), and modelled on the University of London (Mabizela, 2002:42).

Table 2.3 on page 35 indicates the origins and fate of pioneering institutions. During this period most university colleges combined secondary and post-secondary work, and the development of mining influenced the establishment of vocational and technical institutions. The need for professional associations arose as existing institutions awarded degrees and diplomas to artisans and professionals. The Institute of Bankers (1898), the Institute of Chartered Secretaries and Administrators (1909), and the Building Societies Institute (1919) were privately established during this period to provide training and membership to qualified professionals.

2.4.1.2 The second period: 1918 to 1947

The Financial Relations Act of 1922 defined higher education as including education provided by university colleges, technical institutions and the South African Native College (later called the University of Fort Hare). In 1928 the Van der Horst Commission recommended that higher education should only include “university education”. In 1923 the Higher Education Act was passed. This provided a clearer definition of higher education as it included

post-secondary and higher education, but further entrenched racial and class segregation at technical institutions, vocational institutions and university colleges.

Table 2.3: The origins and fate of the pioneering higher education institutions in South Africa

College	Founders	Year founded	Year Incorporated	Year granted university status	Current status
South African College	Private initiative	1829	1837	1918	University of Cape Town
Diocesan College	Church of England	1848	—	Subsumed by the University of Cape Town in 1911	
St. Andrew's College (which later became Rhodes University College)	Church of England	1856	1916	1951	Rhodes University
Pietermaritzburg High School (which became University College and later Natal University College)	Natal government	1863	1916	1949	University of Natal
Theological School of Burgersdorp	Dutch Reformed Church	1869	1921	1951	University of Potchefstroom for Christian Higher Education
Huguenot Seminary at Wellington	Dutch Reformed Church	1874	1916	Became part of the Theology Faculty at the University of Stellenbosch	

Transvaal Technical Institute (which became the Transvaal University College)	Witwatersrand Council of education (an independent body)	1904	1916	1921	University of Witwatersrand
				1930	University of Pretoria
South African Native College (which became the University of Fort Hare)	Missionaries and other individuals	1916	1923	1970	University of Fort Hare

Mabizela (2002:43).

The skilled trades were reserved for the Whites, while unskilled trades were left to the non-Whites (especially the Bantu). A private initiative by the Indian community led to the formation of the ML Sultan College in 1940, which was only recognised by the Higher Education Act in 1957. The training of Coloureds was mainly via private correspondence through Colleges like Lyceum College (1917), Rapid Results College (1928), Success College (1940) and Damelin (1945). These private institutions provided mainly vocational and technical education.

2.4.1.3 The third period: 1948 to 1990

In 1951 the Eiselen Commission resulted in the Extension of the University Education Act of 1959, which created university colleges for Africans, Coloureds and Indians. However, these institutions were not only racially segregated but were also segregated by funding, as White universities received substantial funding to reproduce skills for the top levels of the labour market, while Non-White institutions were to produce semi-skilled

labour. Table 2.4 below shows the establishment of universities during the apartheid period.

The third period also saw the emergence of Technikons (1979). During this period private providers established collaboration agreements with public institutions. The Eiselen Commission of 1951 found that there was an undetermined number of private providers and large number of students, especially African students, enrolled at these institutions. There was uncertainty about the quality of their programmes and thus the Commission recommended the government intervene and regulate private institutions by regulating registrations.

The Correspondence Colleges Act of 1965 prohibited the maintenance, management or provision of correspondence tuition for reward unless the institution was registered in accordance with the Act. Private institutions remained inferior since they lacked resources and offered lower level qualifications.

Table 2.4: Universities established during the apartheid years

Institution	Designated population group	Year founded	Year granted university status	Current status
University College for Coloured People	Coloured	1959	1970	University of the Western Cape
University College for Indians (later University College of Durban Westville)	Indian	1961	1970	University of Kwa-Zulu Natal
University College of the North	Sotho	1959	1970	University of the North

University of Port Elizabeth	Afrikaner(though bilingual)	1965	1965	University of Port Elizabeth
Rand Afrikaans University	Afrikaner	1966	1966	University of Johannesburg
University College of Zululand	Zulu	1959	1970	University of Zululand
South African Native College	Xhosa	1916	1970	University of Fort Hare
University of Transkei	Xhosa	1976	1977	University of Transkei
University of Bophutshatswana	Tswana	1980	1980	University of the North West
University of Venda	Venda	1982	1982	University of Venda
Vista University (correspondence)	Blacks in general	1982	1982	UNISA

Mabizela (2002:46).

2.4.1.4 The fourth period: post 1990

The lack of policy to regulate private providers led to a marked growth of 'for-profit' private providers and trans-nationals. To add to this was the doubt created with the overhaul of the public higher education system during the democracy years after 1994. According to the Higher Education Act of 1997, a higher education institution is any institution that provides higher education on a full time, part-time and distance basis.

There are various reasons why private higher education institutions are now being recognised by the government:

- Public institutions do not offer sufficient undergraduate diplomas and certificates.

- Correspondence institutions are relying on open learning with increased tutorial support and face-to-face contact. Private providers can close this gap since correspondence institutions do not have sufficient staff or resources to cater for the geographically diverse students.
- Private institutions provide vocational and technical education which is lacking at public institutions.
- Internationally the trend is to franchise the institutions' programmes and private higher education institutions have followed this route. This attracts students who want global qualifications as well as corporate clients who train their employees accordingly.

2.4.2 Some statistical data on private higher education institutions in South Africa, as of November 2005

In this section we examine some of the data related to private higher education institutions as at 23 November 2005.

2.4.2.1 Major private higher education institutions and their ownership

Table 2.5 below shows the ownership structure of private higher institutions as at 23 November 2005.

Table 2.5: Some of the major private higher education institutions operating in South Africa

Institution	Date Founded	Type of institution	Qualifications and programmes offered	Collaborating institutions	Ownership
Lyceum College	1928	Correspondence and distance education	Certificates and diplomas in education; programmes of	Rand Afrikaans University, Stellenbosch	Educor (owned by Naspers and listed on the JSE)

			professional institutes	University, IAC, ICB, CIS	
Damelin Education Group	1945	Face-to-face, corresponde nce and distance education	Certificates and diplomas in technical and vocational education programmes; tuition for transnational and local public institutions	IMM,IAC, UNISA, Oxford Brookes University (UK)	Educor
Institute of Marketing Management (IMM)	1949	Professional Institute	Marketing and management certificates and diplomas; membership of IMM	Outsources courses to several institutions	Independent
Midrand Graduate Institute (formerly Midrand University)	1989	Face-to-face campus	Diplomas and degrees for transnational and local public institutions	London City College (UK), Thames Valley University (UK), University of North London (UK), Santa Monica Community College (USA), UNISA	Educor
Boston City Campus	1991	Face-to-face campus	Diplomas and degrees for transnational and local public institutions.	UNISA, Rand Afrikaans University, Public Relations Institute of South Africa	Adcorp (listed on the JSE)

				(PRISA), IMM, Charles Stuart University (Australia)	
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Mabizela (2002:48).

Table 2.5 above reflects two dominant listed companies that control a major share in the private higher education market, namely, Educor and Adcorp. Various minor companies also exist but do not command as large a student population as these two groups. Institutions tend to change hands on a regular basis, controlled by various groups who seek to gain a share in this lucrative market.

2.4.2.2 Registered Private Higher Education Institutions as of November 2005

The Department of Education regularly publishes the names of all registered private higher education institutions in South Africa. Below is a list of all registered institutions as at 23 November 2005.

Table 2.6 on page 42 lists all the legally registered private higher education institutions in terms of the amended Higher Education Act of 1997. No institution in South Africa may provide higher education programmes if they are not registered with SAQA, a wing of the Council of Higher Education (CHE). Table 2.6 shows the various private institutions, the number of programmes registered with SAQA, the types of programmes and the province in which they are offered.

Table 2.6: Registered private higher education institutions in South Africa as on 23 November 2005

Name of Private Institution	Owned by	Programmes	Main field of specialisation	Type of qualifications offered	Main province operating in/ Head office
AAA School of Advertising		5	Advertising	Diplomas, Higher diplomas and degrees	Gauteng
Afrikaanse Protestante Akademie		2	Religion	Degrees	Gauteng
Allenby Campus	Educor	2	Communication and media	Certificates and degrees	Gauteng
Baptist Theological College		2	Religion	Licentiate	Western Cape
Baptist Theological College of Southern Africa		3	Religion	Certificates and diplomas	Gauteng
Beautiko Academy of Beauty		1	Health and skin care	Diplomas	Gauteng
Bible Institute East		2	Religion	Certificates and diplomas	Eastern Cape
Boston City Campus and Business College (Pty) Ltd	Adcorp	2	Primarily business administration	Certificates	Gauteng
Business school of the Netherlands (South Africa)		1	Business administration	Certificates	Western Cape
Camelot International	Educor	2	Health and skin Care	Diplomas	Gauteng
Centre for Creative Education/Iziko		3	Education and Training	Certificates and degrees	Western Cape

Labantu be Afrika					
Centre for Logistics Excellence		3	Business administration	Certificates and diplomas	Gauteng
Centurion Akademie		14	Various	Degrees, diplomas and advanced diplomas	Gauteng
Christian Reformed Theological Seminary		1	Religion	Diplomas	Gauteng
City Varsity	Educor	14	Communications and media	Certificates, diplomas and advanced diplomas	Western Cape
College Campus	Advtech	6	Tourism, graphic design, information technology, advertising	Certificates, and diplomas	Gauteng
College of Vocational Studies		6	Business management, marketing and public relations	Higher certificates and diplomas	Gauteng
College of production technology		3	Manufacturing	Certificates, higher certificates and Diplomas	Gauteng
Complementary Health Centre		2	Aromatherapy	Certificates and Diplomas	Gauteng
Computer College of South Africa		2	Information technology	Certificates and diplomas	Kwa-Zulu Natal

Cornerstone Christian College		5	Religion	Certificates, diplomas and degrees	Western Cape
Cranefield College of Project Management		3	Business administration	Diplomas, postgraduate diplomas and Masters degrees	Western Cape
Damelin Education Group	Educor	25	Information technology, communication and media, business administration	Certificates, diplomas, degrees and Masters degrees	Gauteng
Design school of Southern Africa		4	Graphic and fashion design	Diplomas and higher diplomas	Gauteng
Durban Computer College		12	Information technology and business administration	Certificates and diplomas	Kwa-Zulu Natal
Durbanville College		1	Information technology	Certificates	Western Cape
Ed-U-City Campus		1	Information technology	Diplomas	Eastern Cape
Evangeliese Gereformeerde Bybel-kollege (Die)		1	Religion	Diplomas	Eastern Cape
Exercise Teachers Academy		9	Health and Sports	Certificates, higher certificates, diplomas and higher diplomas	Western Cape

Full Gospel Church of God in Southern Africa		2	Religion	Certificates and Diplomas	Gauteng
Gauteng School of Management Training (Pty) Ltd.		2	Business administration	Diplomas	Gauteng
Global School of Theology (External company incorporated in mission, USA)		3	Religion	Diplomas, degrees, and masters degrees	Gauteng
Graduate Institute of Management and Technology		4	Business management	Certificates and diplomas	Gauteng
Design centre College of Design		6	Graphic and fashion design	Degrees, and Honours degrees	Gauteng
Health and Fitness Professionals Association		2	Health and sports	Certificates and Diplomas	Gauteng
Hebron Theological College		6	Religion	Certificates, diplomas, post graduate and Masters	Gauteng
Helderberg College		11	Business management	Diplomas and degrees	Western Cape
Henley Management College (The) (Incorporated in the United Kingdom)		1	Business management	Master of Business Administration	Gauteng
ICESA City Campus		11	Information technology, business management,	Certificates and diplomas	Kwa-Zulu Natal

			journalism, tourism and marketing		
IMM Graduate School of Marketing		10	Business management and marketing	Certificates, diplomas and degrees	Gauteng
Inscape Design College		2	Graphic design	Diplomas	Gauteng
International Academy of Health and Skin Care		2	Health and skin care	Certificates and diplomas	Western Cape
International Hotel School (Pty) Ltd (The)		2	Hospitality	Diplomas and higher diplomas	Gauteng
International School of Reflexology and Meridian Therapy cc		1	Health	Diplomas	Gauteng
International Trade Institute of Southern Africa		3	Trade management	Certificates and Diplomas	Gauteng
Jill Farquharson College of Physical and Beauty Therapy		1	Beauty and health	Certificates	Kwa- Zulu Natal
LISOF (Pty) Ltd		1	Fashion design	Diplomas	Gauteng
Lyceum College (Pty) Ltd.		13	Business management	Certificates	Gauteng
Madge Wallace College of Beauty Therapy cc		2	Beauty and health	Certificates and diplomas	Gauteng
Management College of Southern Africa (MANCOSA)		8	Business administration and management	Certificates, diplomas and MBAs	Kwa- Zulu Natal
Midrand Campus (Pty) Ltd t/a Midrand Graduate Institute	Educator	30	Business management, tourism,	Certificates, diplomas, degrees and	Gauteng

			journalism, fashion and graphic design, information technology	MBAs	
Monash South Africa		7	Business	Degrees and Masters degrees	Gauteng
MSC Private College		3	Business and computers	Certificates and diplomas	Eastern Cape
National Electronic Media Institute of South Africa		2	Radio and TV	Diplomas	Gauteng
Natural Health and Beauty College cc		1	Health and Beauty	Diplomas	Kwa- Zulu Natal
Nazarene Theological College		3	Religion	Certificates, Diplomas and advanced diplomas	Gauteng
New Africa Theatre Association		1	Performing Arts	Certificates	Western Cape
Open Window (Pty) Ltd t/a The Open Window		2	Visual communication	Diplomas and degrees	Gauteng
Oval International Computer Education cc		6	Business management	Certificates, diplomas and degrees	Kwa- Zulu Natal
PC Training and Business College (Pty) Ltd		3	Business and information technology	Diplomas and degrees	Kwa- Zulu Natal
Potchefstroom Akademie (Pty) Ltd		12	Beauty and health care	Certificates, diplomas and higher diplomas	North West

Prestige College		6	Computers	Certificates and diplomas	Western Cape
PRISA Education and Training Centre		3	Public relations	Certificates and diplomas	Gauteng
Production Management Institute of Southern Africa (Pty) Ltd		2	Business management	Diplomas and degrees	Kwa-Zulu Natal
Regenesys School of Public Management		3	Business management	Certificates, postgraduate degrees and Masters degrees	Gauteng
Regent Business School (Pty) Ltd t/a Regent Business School		2	Business management	Diplomas and degrees	Kwa-Zulu Natal
Rosebank College		7	Business management	Certificates and diplomas	Gauteng
SA Theological Seminary		6	Religion	Certificates, diplomas, degrees and Masters	Gauteng
School of Hand and Foot Reflexology (Pty) Ltd		1	Health Care	Certificates	Gauteng
Sonett Skoonheidsakademie		1	Health Care	Diplomas	North West
South African College of Complementary Therapies cc		2	Health Care	Diplomas	Kwa-Zulu Natal
South African School of Motion Picture Medium and Live Performance (Pty)		4	Performing Arts	Degrees	Gauteng

Ltd t/a AFDA [Previous name: South African School of Film, Television and Dramatic Arts]					
Southern Africa Bible College		3	Religion	Certificates, diplomas and higher diplomas	Gauteng
Southern Business School		3	Business management	Certificates and diplomas	Gauteng
St. Augustine College of South Africa		9	Philosophy and religion	Certificates, Masters and Doctoral degrees	Gauteng
Stellenbosch Academy of Health and Skin Care Therapy (Pty) Ltd		2	Health and Beauty	Diplomas	Western Cape
St John Vianney Seminary		2	Religion	Diplomas and degrees	Gauteng
St Joseph's Theological Institute		6	Religion	Diplomas and degrees	Kwa- Zulu Natal
Train-A-Child		2	Child care	Certificates and diplomas	Kwa- Zulu Natal
Varsity College		9	Business, journalism and information technology	Certificates and diplomas	Kwa- Zulu Natal
Vega, The School of Brand Communications		5	Business management	Diplomas and degrees	Gauteng
Yaraka School of Holistic Therapies		1	Health care	Diplomas	Kwa- Zulu

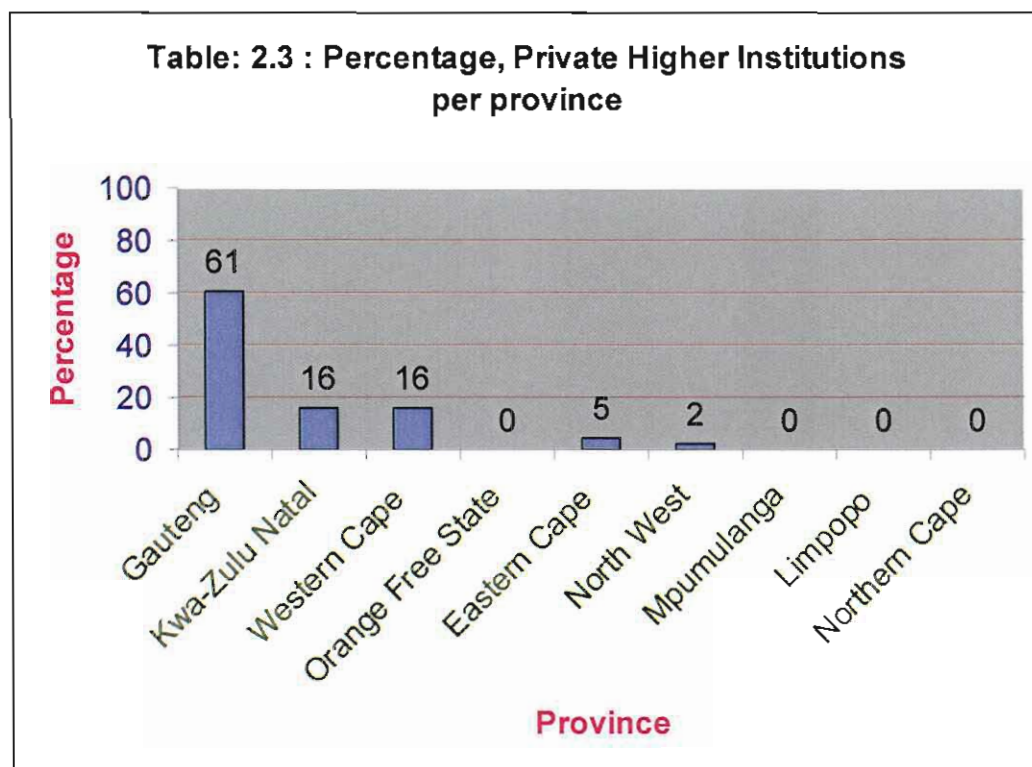
					Natal
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South African Qualifications Authority (2005:1-11).

2.4.2.3 Distribution of private higher education institutions per province

Figure 2.3 below shows the distribution of registered private higher education institutions with SAQA as of 23 November 2005. It is quite evident from the figures given that over 60% of these institutions are in the Gauteng province. Only 16% of these institutions are located in the Western Cape and Kwa-Zulu Natal. The Free State province, Mpumulanga, Limpopo and the Northern Cape,

Figure 2.3 : Percentage of private higher institutions per province



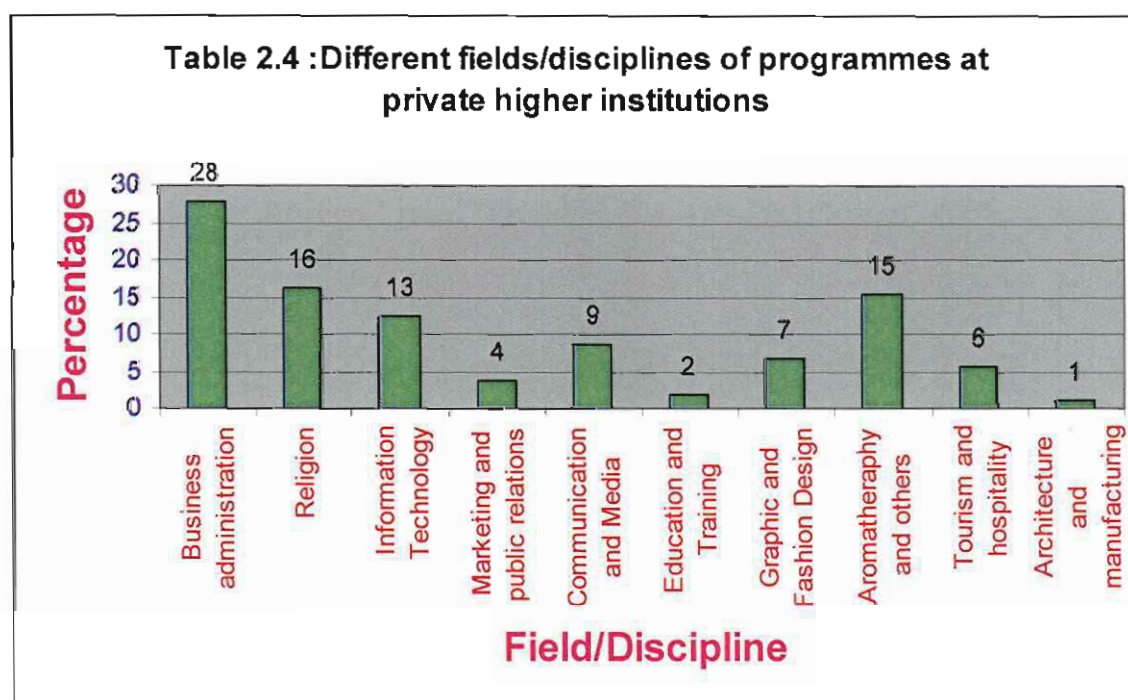
do not have a single registered private higher education institution. One of the main reasons for such a large concentration of institutions in Gauteng is

the fact that Gauteng is the economic hub of the country; it produces about 60% of the country's Gross Domestic Product (GDP).

2.4.2.4 Different fields/disciplines of programmes at private higher education institutions

Figure 2.4 below reveals the different disciplines/fields of programmes offered by private higher education institutions. It may be noted from this figure that religious programmes are the second most popular area of study to Business administration. Information technology, the sciences, architecture and manufacturing are sadly lacking in this analysis. One of the reasons for this could be that public higher institutions do not focus on religious programmes, as well as the fact that certain programmes in a particular discipline are more profitable.

Figure 2.4 : Different fields/disciplines of programmes at private higher institutions



2.4.2.5 Programmes offered per province

Figure 2.5 on page 52, in keeping with the results of Table 2.4 above, shows that 61% of the programmes in the different disciplines are offered in Gauteng, while the remaining 39% are shared by institutions in Kwa-Zulu Natal, the Eastern Cape, Western Cape and the North West provinces.

2.4.2.6 Different programmes/disciplines per province

Table 2.6 on page 53 gives a more detailed distribution of the different disciplines per programme in the different provinces:

Figure 2.5 : Percentage of programmes offered per province

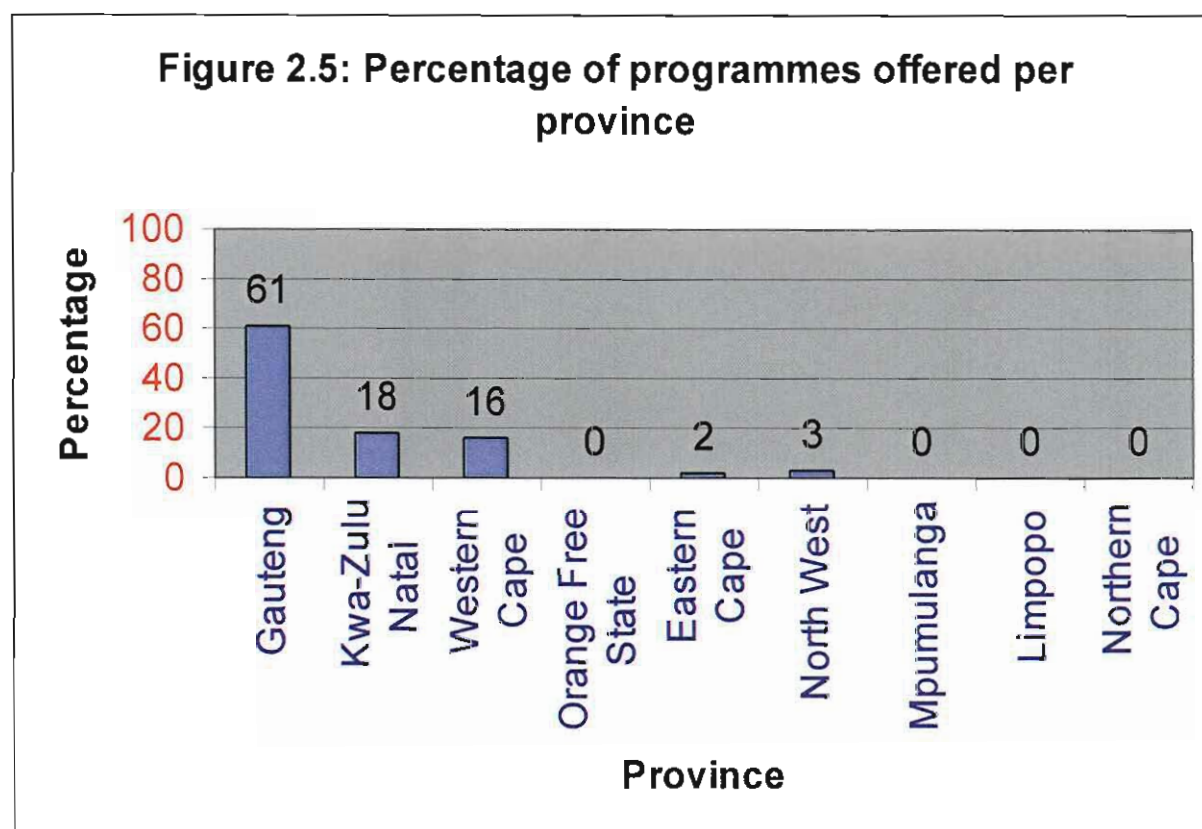
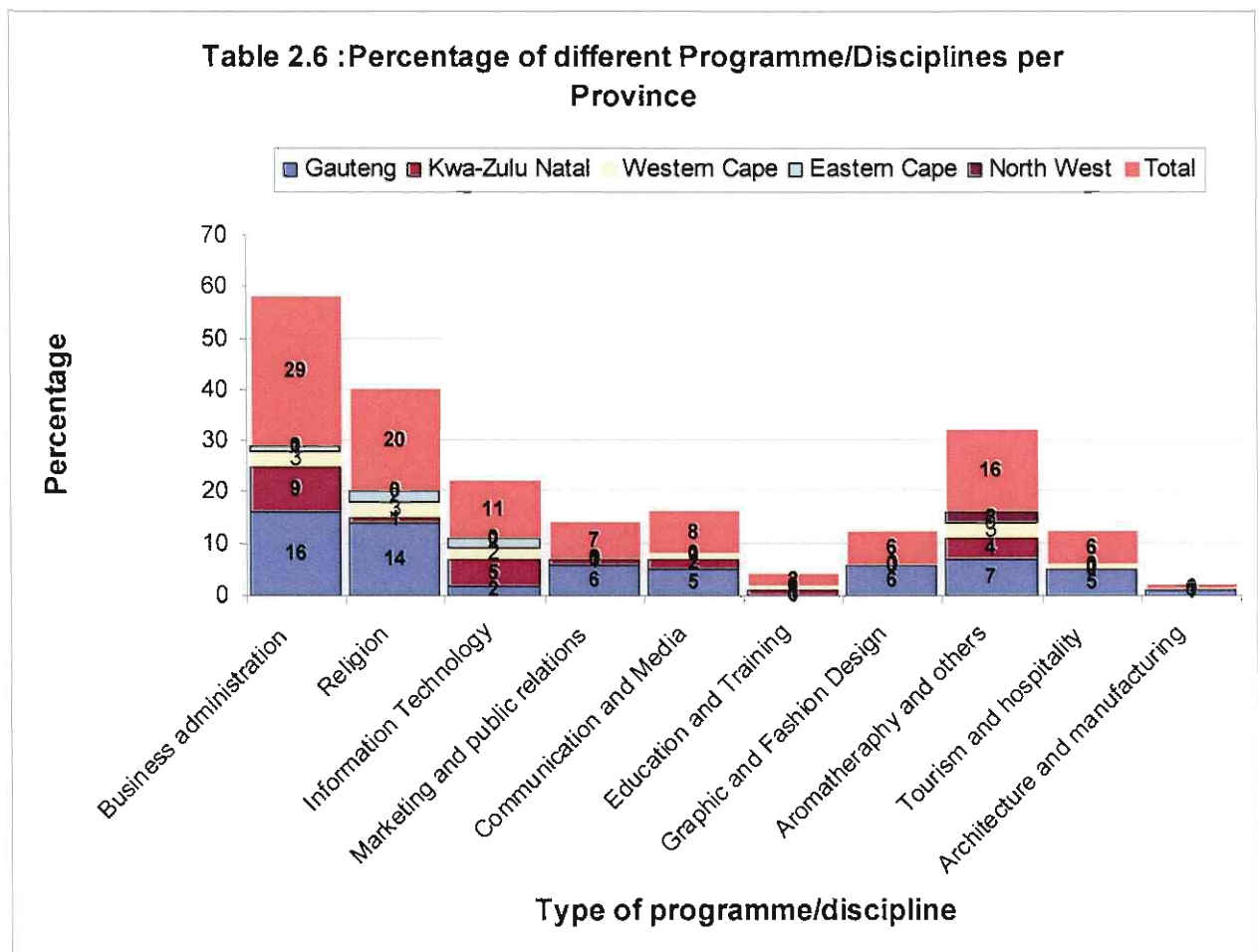


Figure 2.6 : Percentage of different programme/disciplines per province



2.5 The financing of higher education

According to the Taskforce on Higher Education and Society (2000:54), global spending on higher education is approximately 300 million US dollars (USD) or one percent of the global gross domestic product. It is also estimated that about USD 100 million of this global spending is in developing countries, which are hugely government subsidized with low tuition fees. The

implication is that funding levels for higher education fluctuate with the availability of government resources.

The lack of sustainable public financing can limit enrolment at higher education institutions unless there are private funds available. These possibilities are illustrated in Table 2.7 on below.

Private financing of higher education could:

- lead to quality improvements in higher education.
- reduce the burden of the state to provide higher education.

In contrast public financing is:

- necessary to provide higher education where there are deserving students who cannot afford to pay.
- necessary in developing countries where the investment by private providers is not possible.

Table 2.7: Possibilities for higher education

Financing	Public	Private
PUBLIC	Free or low fees; institutions relying on government funds to cover major expenses.	A voucher system could be used where the government pays a preset amount to students to attend private institutions.
PUBLIC	Tuition fees, foundation grants, industry support and privately generated endowment cover full costs.	

Adapted from: Task Force on Higher Education and Society (2000:56).

A worldwide comparison of tertiary expenditure on education is reflected in Annexure E.

2.5.1 The financing of public higher education in South Africa: The subsidy formula

At the end of March 2001, the Minister of Education released a discussion document on a new framework for higher education funding. The basis of this document is the principles and policies outlined in the White Paper 3 in July 1997 (South Africa¹⁷, 1997). These principles and policies are listed as follows:

- The funding formula to be effective as a steering mechanism will be goal orientated. Effectiveness will depend on appropriate incentives that can be introduced to steer the system in accordance with national development goals as well as ensuring the close alignment with national and institutional planning processes.
- The formula will comprise of an allocation of general purpose grants and earmarked funds for specific purposes.
- The alignment in planning processes will result from block grants paid to institutions in terms of their planned full time equivalent (FTE) student enrolments in different fields and levels of study, as well as the three year “rolling” plans of institutions.
- Provision is made for funds for teaching and support activities, academic development, foundation programmes and research.
- A funding grid will be developed to take into account subsidy prices per FTE student and fields of study, and rand values will be attached to different cells in the funding grid.
- Research funding will be based on masters, doctorates and research outputs, as well as research funding for research development and capacity building.

In terms of section 39 of the Higher Education Act Number 101 of 1997, the legislative provisions of the funding of public higher education are stated.

The new funding proposals differ from the previous funding formula as the formula now only comes into effect once the government has determined the total public funds that should be spent in a given year on higher education. For 2001/2002, the amount budgeted was approximately R6 620 million (South Africa¹⁹, 2001:B10).

The new framework suggests that higher education institutions will be funded as indicated in the following section.

2.5.1.1 Block grants

Institutions will receive a set-up subsidy for basic running costs. The size of the institution will not determine the amount of the subsidy. The amount is expected to be approximately the same percentage (8%) as in the existing formula.

In terms of teaching input subsidies, a cost-based funding grid and a detailed planning grid based on the Classification of Educational Subject Matter (CESM) categories used in the higher education management information system (HEMIS) are applied.

2.5.1.2 Earmarked funding

The ministry proposes to hold earmarked funding at approximately current levels over the next few years. Currently the rate is about 12% p.a. of total higher education funds. Earmarked funds will be used for the following purposes over the next 10-15 years:

- A national student financial aid scheme
- Institutional development and redress

- Interest and redemption payments on approved loans
- Approved capital projects
- Research development
- Other development projects identified in the national higher education plan.

In 2001/2002, approximately 56% of the total earmarked funds were available for the National Student Financial Aid Scheme.

The ministry will also provide institutional development funds to assist affected institutions to meet the requirements of the new restructured institutional landscape.

Earmarked funds for research development will be divided into the following categories:

- Research capacity development
- The facilitating of research collaboration at regional and national levels
- Research student scholarship.

The discussions of this section are illustrated in Figure 2.7 on page 61.

2.5.2 The financing of private higher education

Private higher education institutions do not receive any government grants or subsidies. Most institutions interviewed (see Annexure F) indicated that they rely solely on student fees. Hence, the cost of a programme at a private higher institution is substantially higher when compared with that of a public institution where 50% of the cost of a programme is generally subsidised.

The cost of a programme ranges between R25 000 to R55 000 per year at private higher education institutions. Some non-profit private institutions receive grants and subsidies from their donors, for example, the Baptist

Union. Large companies often provide their staff with bursaries to study at private higher education institutions.

In order to carry out its operations, costs are incurred which must be financed by student fees. These costs relate to the following areas:

- The instructional programme, which includes all activities that are carried out for achieving educational change in a learner or group of learners.
- The research programme, intended to produce research outcomes.
- The public service programme, that makes available to the public the various unique resources and capabilities of the institution.
- The academic support programme, which comprises the activities that provide direct support for the instruction, research and public service programmes.
- The student services programme, comprising sub programmes for student services administration, social and cultural development, counselling and career guidance.
- The institutional support programme, for those activities carried out to provide for both the day-to-day functioning as well as the long term viability of the institution.
- The operation and maintenance of plant programme, which includes activities related to the administration and maintenance of existing grounds and facilities, utilities, and future expansion plans.
- The bursaries programme, for all forms of financial assistance to students.

- The auxiliary enterprises programme, for services to maintain the campus student body and staff needs.
- The hospitals programme, for the administration and maintenance required for a teaching hospital, clinic or health science centre.
- The independent operations programme, for classifying activities that are independent and unrelated to the main aims of the institution.

2.6 Summary

No discussion of higher education is complete without reflecting on the financing and funds available for the operation of institutions of higher learning. We have seen that private higher education institutions were totally independent of the State, but are now regulated by the Higher Education Act of 1997. This ensured that there are no 'fly by night' operators, and that all programmes offered to students are of a consistent standard to ensure easy mobility of students from private institutions to public institutions.

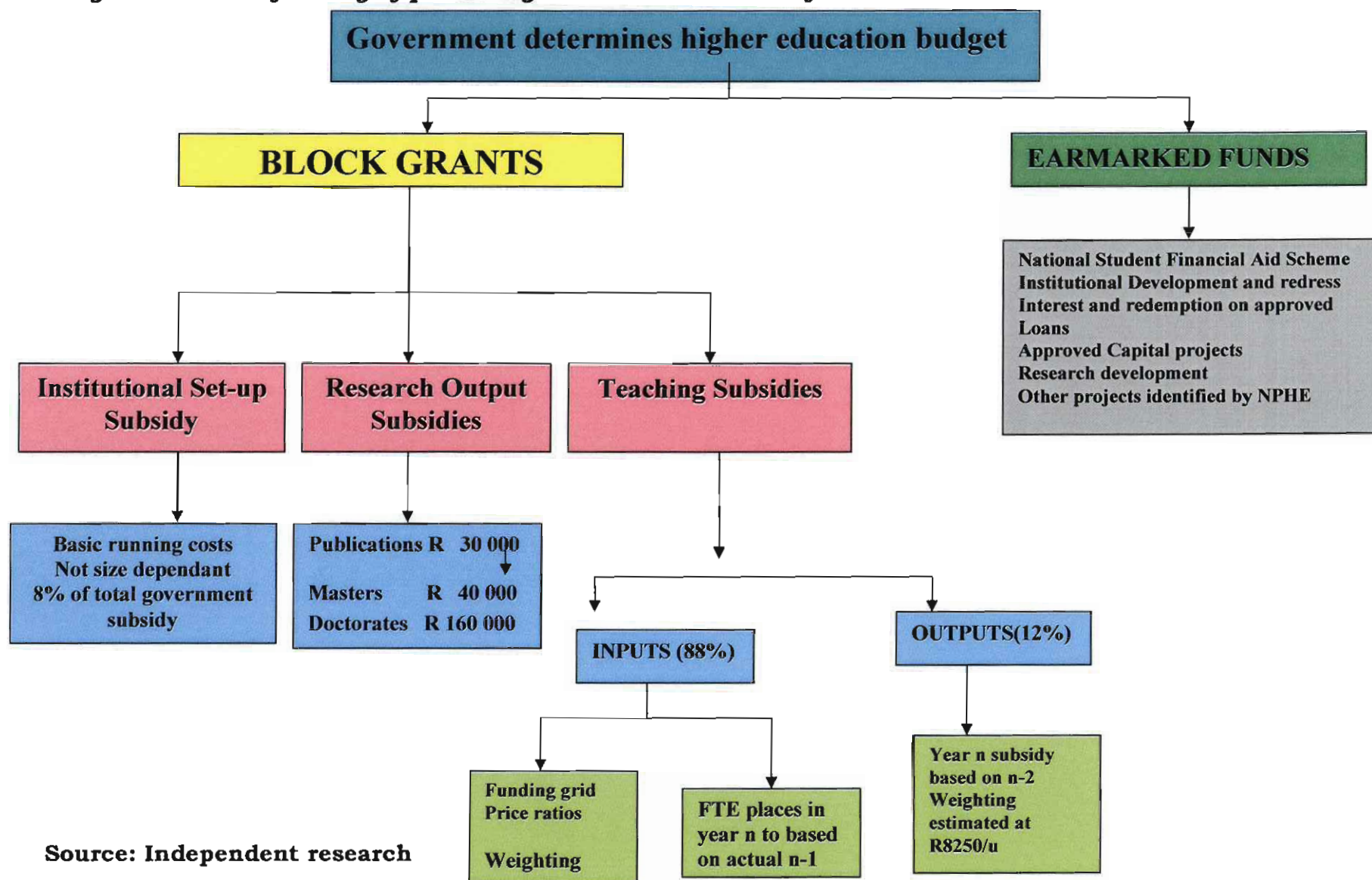
This chapter also has shown that private higher education was the pioneer of all higher education in this country. However, the government is still not prepared to fund private higher education as is the trend in most of the world's leading countries

Higher education institutions need, however, to be responsible and accountable to those who provide funds. The current transformation in higher education through the non-negotiable National Plan for Higher Education put forward by the Ministry of Education and the proposals for the new funding framework for higher education, call for greater accountability by higher education managers. There is a compelling need for managers to look at new and better ways of financially operating higher education institutions, not only in South Africa, but also elsewhere in the world (Canovan, 2001:6).

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The following two chapters looks at aspects of cost management that are relevant to higher education institutions, and consider whether these aspects, if not already applied, can be effectively utilized for the benefit of assisting higher education institutions to face a future of decreasing state subsidies and scarce private sponsorship.

Figure 2.7: The funding of public higher education: a new framework



Source: Independent research

CHAPTER THREE

FINANCIAL MANAGEMENT AND COST MANAGEMENT AT HIGHER EDUCATION INSTITUTIONS

3.1 Introduction

Although the structure of educational and business enterprises differs, their financial activities are common in many respects (Berry, 1994:002).

Different forms of business like sole traders, partnerships, close corporations and companies, seek to make a profit. This makes their financial accountability even more important. This is also true of private higher education institutions since they are financed by shareholders and investors from the private sector. Financial management is just as important in higher education institutions as it is in business organisations.

Management of tertiary institutions is becoming increasingly difficult due to the continued use of outdated systems of financial management. Some of the following problems occur:

- Inability to acquire details on expenses incurred.
- Lack of control over income and expenses.
- Too many records or duplication of records.
- No meaningful financial feedback to heads of department.
- The accounting system is always behind time.
- The required information is not available when required.
- The required information is not in the form required.

Anon (198:001-003).

These problems are sufficient to suggest the need for an investigation into the financial management systems and cost management systems at private higher education institutions. Financial management in private higher education institutions is an all-embracing function and encompasses the functional area of management accounting.

3.2 The difference between cost and management accounting

Various definitions of the concept of management accounting are found in the literature. Horngren, Bhimani, Forster and Datar(1999:5), Kaplan and Atkinson (1998:6), and Garrison and Noreen (2000:4) suggest that accounting is concerned with the use of financial information within organisations for strategic, organisational and operational decisions. This implies that cost and management accounting provides factual information for management to analyse and use in their decision-making process. The crux of this definition is supported by Hansen and Mowen¹ (2000:2), who synthesise this further by suggesting that management accounting enables internal users to plan, control and make decisions by identifying, collecting, measuring, classifying and reporting information.

Managerial accounting is one of the branches of accounting that meets manager's needs (Sollenberger and Schneider, 1996:16). This is true in the sense that the information needs are based on the plans of management, and accounting information (especially cost and management accounting information) will be directed towards providing the information necessary to execute these plans. This is a view that is also supported by Drury (2000:15). Many other authors have similar views of cost or management accounting .

The Chartered Institute of Management Accountants (2000), in its official terminology, describes management accounting as:

The application of the principles of accounting and financial management to create, protect, preserve and increase value so as to deliver that value to the stakeholders of profit and not-for-profit enterprises, both public and private. Management accounting is an integral part of management, requiring the identification, generation, presentation, interpretation and use of information relevant to:

- formulating business strategy
- planning and controlling activities
- decision-making
- efficient resource usage
- performance improvement and value enhancement
- safeguarding tangible and intangible assets
- corporate governance and internal control.

The Chartered Institute of Management Accountants (2000:15).

The essence of management accounting is that it provides the vital information needed for decision-making. In most cases information is necessary to allow financial managers to make internal decisions that have consequences on the total outlook of the organisation. It is clear that management accounting information can enhance the decision-making process. Decisions eventually impact on all aspects of the firm viz., research and development, product, design, marketing, distribution and customer service.

The main objective of management accounting is to generate information for internal use by managers for planning, controlling and decision-making. Drury (2000:16) suggests that cost accounting concerns itself with cost accumulation for inventory valuation to satisfy external reporting and internal profit measurement, but management accounting is concerned with the provision of information for internal purposes. The implication is that management

accounting is a more important task than cost accounting since it provides vital decision-making information that is paramount to the survival of higher education institutions. Management accounting plays a vital role in the management functions. To adequately and accurately plan, management accounting provides important information to make decisions on product ranges, markets and prices. The budgeting aspect of planning provides invaluable information to assist managers in the planning process. The provision of performance reports by the system of management accounting assists management in the control process. The organising function of management is enhanced by the provision of internal reports by management accounting to suit the specific needs of the organisation's structure.

3.3 Management accounting at higher learning institutions

Literature on the importance and relevance of management accounting in commercial organisations is abundantly available, but there is little recorded literature and research in respect of management accounting at institutions of higher learning.

The fact that management accounting was not recognised as a means of measuring educational quality at higher education institutions was noted by Sir Ron Dearing (Jeffries, 1993:18). His argument was that, if academic departments were treated as budget centres and if resources were provided, then an evaluation would be possible if there were a regular flow of information from the academic departments. This would therefore ensure that there is accountability for achievement. Similar to management accounting in business organisations, management accounting in higher educational institutions is an important contributor to quality, since decision-making is very much reliant on the output of management accounting. This decision-making is pivotal to the effectiveness and ultimate success of the higher education institution.

The mergers of the public higher education institutions in the country, the threat of serious competition from public and international higher education institutions and the dynamics of user friendly information highways through the use of rapidly changing technology require better cost information to make decisions. Kaplan and Cooper (1998:1) suggest that there is a new environment that is demanding more relevant cost and performance information, and that leading companies are gaining a competitive advantage from enhanced cost systems. Some of these enhanced cost systems will be discussed in greater detail in later chapters. The different types of management accounting systems that can be used by commercial and higher education institutions are discussed in the next few sections.

3.4 Different types of cost centre management systems

Management accounting systems includes cost centre, activity centre, profit centre, revenue centre and investment centres. Higher education institutions generally use cost centre or profit centre systems.

3.4.1 Cost centre management accounting systems

In cost centre management structures the manager has the authority to incur costs only (Barfield, Raiborn and Kinney, 1998:881). Such managers are evaluated on the basis of how effectively they can contain costs. This is the traditional view. The Activity-Based Cost (ABC) systems differ from the traditional systems in that it involves a greater number of activity cost centres rather than traditional departments (Drury, 2000:60).

Traditionally educational institutions fall into this category and are divided into traditional departmental cost centres. All income i.e. student fees, government subsidies and donations, are managed by a central administration. The institution is separated into departments for cost allocation purposes only. In South African higher education institutions, the spending/expenditure allowed

by each department is influenced by what is referred to as full time equivalents (FTEs) and the type of department (e.g. humanities or natural sciences).

Spending/expenditure in a cost centre can be divided into operating expenses and capital expenditure categories. Some cost centre operating expenses at a higher education institution include, amongst others, the following:

- Conferences
- Consumables
- Computer software
- Co-operative education
- Entertainment
- Examination expenses
- Exhibitions
- Honorarium
- Instructional materials
- Maintenance
- Marketing costs
- Membership fees
- Merit bursaries
- Printing and stationery
- Postage and telegrams
- Rentals
- Subsistence
- Symposiums
- Telephone expenses
- Travelling costs
- Training aids.

Cost centre capital expenditures include the following:

- Furniture
- Computer hardware
- Buildings and alterations.

Operating expenses like water and electricity, rentals, personnel salaries, fringe benefits, insurance, etc. are normally treated as institutional costs i.e. they are centralised. The allocation of these costs to the various departments can be done by using some allocation bases e.g. floor space for rentals, but this might be a time-consuming and a problematic task. In addition, it is not possible to allocate all capital expenditures to the departments using some allocation basis.

Some cost centres at higher educational institutions are non-academic departments that perform services for academic departments. Cost of these 'service' centres can be allocated to academic departments in the same way service department costs are allocated to producing departments in a manufacturing concern e.g. by using the direct, reciprocal, algebraic or some computerised method of service department allocation.

Cost centre management structures allow total institutional co-ordination and enhance overall cost management and control over departments of the educational institutions. The strength of this structure is that each department is assured of its spending entitlement in terms of available funds for the institution. There is also less need for a financial expert in each cost centre because each cost centre's expenses are governed by its funding limits.

Cost centre accounting has become outdated because of its inability to determine efficiencies and inefficiencies in the departments of the institutions. Successful departments may be penalised at the expense of inefficient

departments since surpluses in one department may be used to correct the deficit in another department. This type of management structure does not allow departments within the institution flexibility and power to manage and control their own financial affairs. This lack of autonomy could lead to less commitment by heads of department in that they would not attempt to reduce costs. The strain on central administration then increases since less power and authority vested in heads of departments means more reliance on central administration for financial approval, advice and control.

Even if the cost centre approach could be adopted in the most efficient manner, the system has little meaning, since it does not measure efficiency or inefficiency in a department. Therefore the success of a department cannot be measured. To overcome some of these disadvantages and to grant greater autonomy to heads of departments, a profit centre approach can be used. Figure 3.1 on page 70 illustrates a typical organisation with many cost centres. Each department in the illustration is operated as a separate cost unit and the firm determines the profit of the whole organisation.

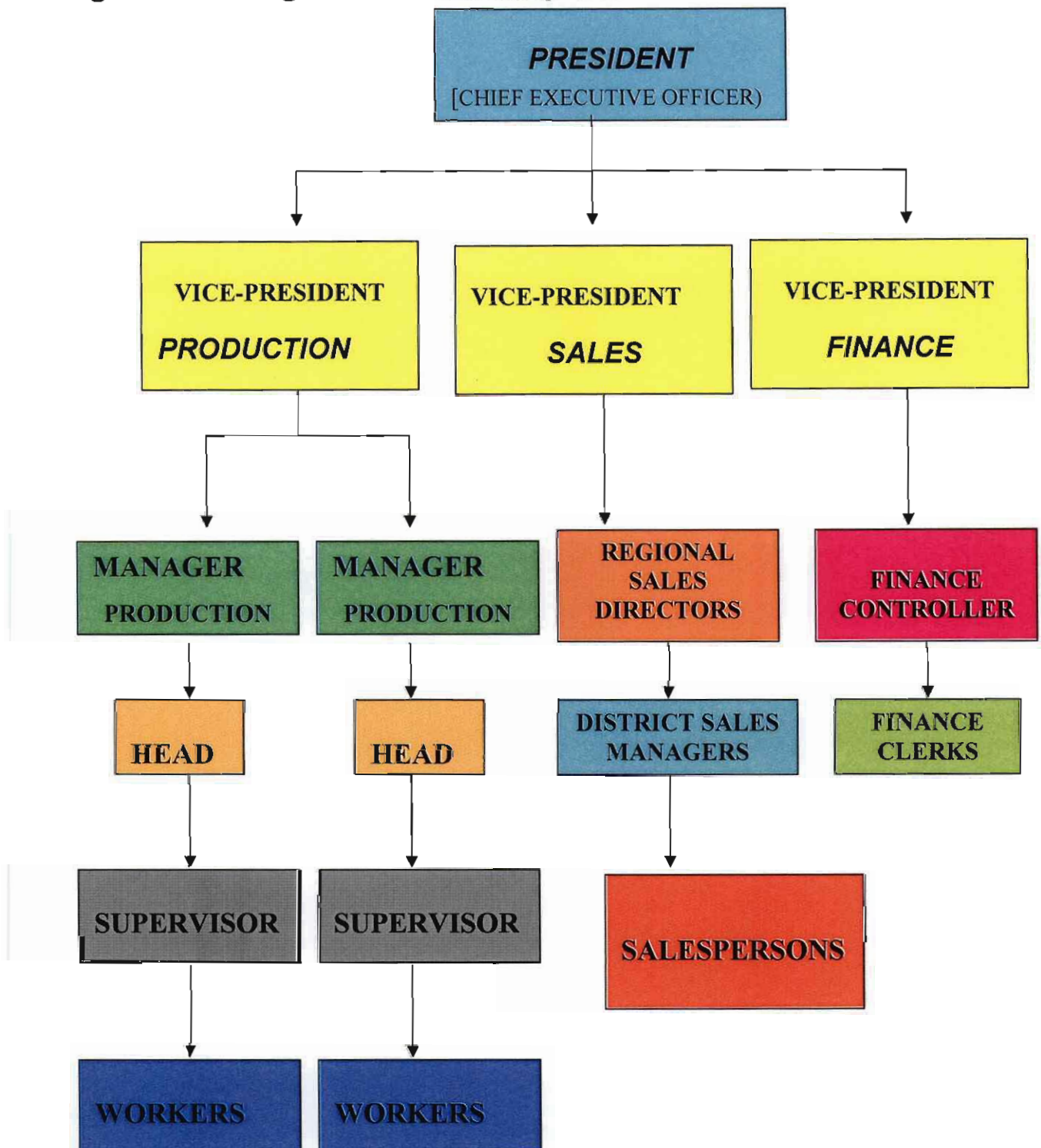
3.4.2 Profit centre management accounting systems

In this system the manager is responsible for both revenue and costs. Managers have complete responsibility for revenues, costs, and resulting profits (Morse, Davis and Hartgraves, 1996:396). In commercial enterprises profit centre management structures serve some of the following functions:

- ease of management
- determining the most profitable profit centre
- profit centre accountability.

A profit centre structure is illustrated in Figure 3.2 on page 72, which reflects units as true profit centres. At tertiary institutions the division into profit

Figure 3.1: An organisation with many cost centres



Adapted from Dominiak and Louderback (1994:392).

centres may create a conflict with the main aim of providing quality education. Unlike commercial organisations, departments of tertiary institutions that adopt a profit centre management structure cannot be criticised for making losses. There may be several valid reasons for this e.g. the head of department may not be a financial expert, or concentrates on ensuring success of departmental programmes rather than profits. If heads of departments strive to attain profits at the expense of the quality of education this would conflict with the main aim of educational institutions.

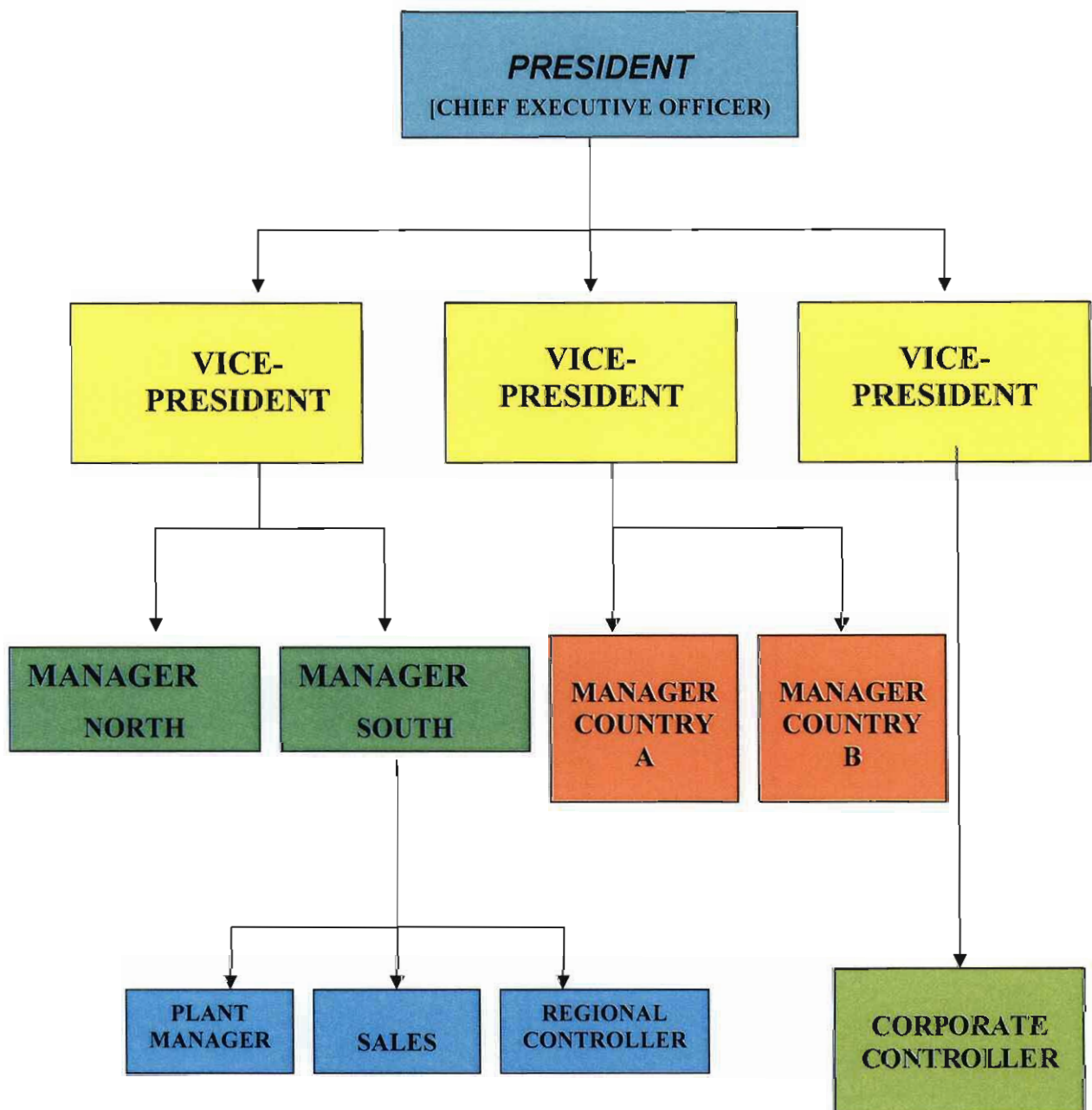
Tomkins and Mawditt (1992:28) correctly point out that the education standards could decline through the compromise of profits. On the other hand, it is possible that profit attainment can actually lead to the improvement of educational standards. Profits gained in a department can be used to improve an academic department's facilities and quality of personnel.

In a profit centre structure departments incurring losses could be penalised, leading to internal management conflicts (Tomkins and Mawditt, 1992:28). Such conflicts could damage the reputation of the institution or lead to a department striving to cancel out penalties at the expense of providing quality education. These factors could affect the attraction of quality students and possible donors.

Losses at tertiary institutions are not necessarily due to poor financial management since it may be academically justifiable. It is possible to offer high level teaching in courses in which the cost of specialised tutors and equipment exceed the total fees and government subsidy obtainable.

Profit centre structures of educational institutions may not necessarily work like commercial enterprises, where the head is accountable and can be reprimanded/dismissed.

Figure 3.2: Profit centre structure



Adapted from Dominiak and Louderback (1994:393).

In an educational institution the dismissal/reprimand of the head of department may not be possible for the following reasons:

- The head of department may not be a financial expert e.g. the Head of the Chemistry Department may have no idea of financial management.
- The head may have ensured educational success of his department rather than financial success.

The problem of heads not being financial experts suggests another problem, i.e. the need for suitable financial support staff for each department. This leads to a further problem of additional costs for the department should financial specialists be employed to carry out this function.

There have been no recent studies in these types of systems in educational institutions, but studies of a profit centre management system introduced at the University of Bath, England, (Berry, 1994:33) focused on some of the problems already discussed above and also revealed the following:

- The staff within each department was inexperienced in operating a profit centre approach.
- Schools (profit centres) were not used to financial and strategic planning, and struggled to cope with the system.
- Central services expenditure amounted to about 40% of the total university income, and all increases were unfairly forced onto departments thus affecting departmental profits.

A similar system of profit centre management was introduced at the University of Southampton, England, with some success (Bourne, 1992:15). All income was credited to the faculty after deducting a flat rate of 40% for central services. This led to deficits in some departments. Deficits may not be totally attributed to inefficiencies of the particular department. It is possible, for example, for central services to be inefficient and to pass their inefficiencies onto the profit centres.

To solve the problem of passing on inefficiencies, a system of charge outs was used at Southampton. Costs were allocated according to a set of allocation bases or cost drivers. This allocation method may not be acceptable to some departments since they can, for example, cut down on the space used and thus reduce central costs. If all departments decided to reduce their allocated space then there would be unused space, the cost of which would eventually have to be borne by the departments. In educational institutions the following strengthens the case against profit centre management structure:

- Costs of co-ordinating functions financial control will increase.
- Departments that incur losses may have to be closed down, leading to non-provision of a course of studies for new students and forcing old students to transfer to other similar institutions. This could have greater effect on funding.
- Competition can lead to unfair practises in charge outs between departments. Service charges may exceed that of outside agencies so that a department could ensure maximum profits.
- Internal conflicts can arise in the urge to be the top department, thus ignoring the initial aim to educate people.

The problems and effects of profit centred management accounting systems in educational institutions are immense and there is insufficient evidence to suggest that this system would work as well as it might be working in commercial enterprises.

It can be seen that in the profit centre approach a percentage of income is deducted for overhead charges, or what is commonly referred to as 'institutional costs'.

Overhead and other costs in educational institutions can be allocated using methods similar to that of manufacturing organisations. To present the true costs of a department under the cost centre approach or true surplus/deficit under the profit centre approach, it makes sense to prorate these institutional costs amongst the various departments.

The institutional costs of higher educational institutions that can be prorated include the following:

- Auxiliary services, e.g. postage, telefax, tea services etc.
- Computer services
- Fringe benefits
- Library services
- Maintenance
- Personnel compensation
- Rentals
- Transport services
- Water and electricity.

These costs can be allocated to the various departments using any one of the three common methods, viz. the direct method, the step method or the algebraic method.

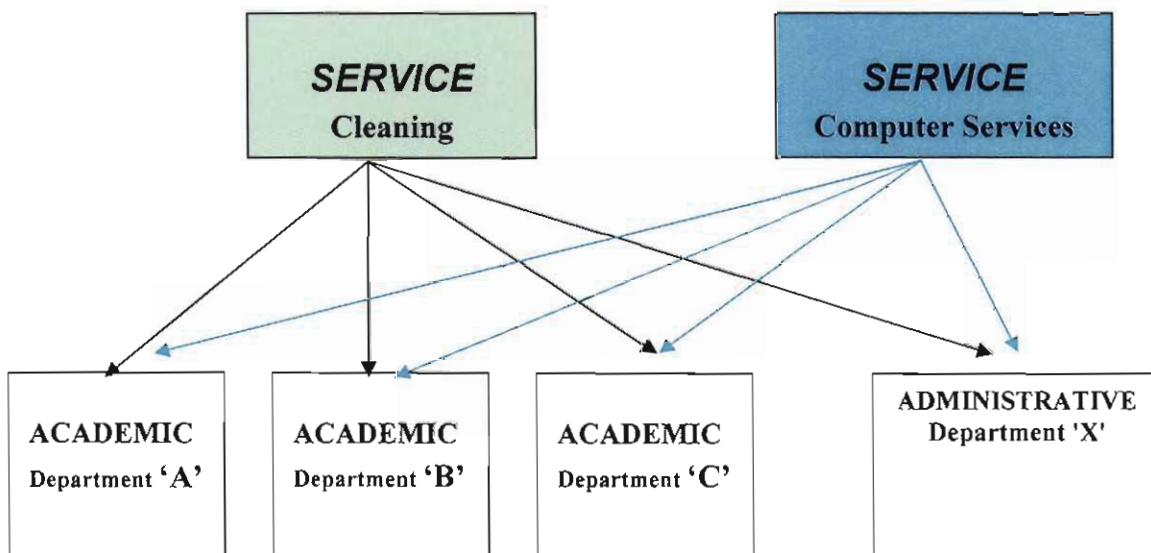
3.4.2.1 Direct method

- **Direct method**

This is the most widely used method and allocates each support department's cost directly to the operating department (Horngren *et al.*, 1999:147). It involves making a simple mathematical, direct allocation of costs to each department using a suitable basis. If, for example, the computer services of the institution are to be apportioned to each department, then a percentage could be allocated on the basis of the space used by each department.

Figure 3.3 below illustrates this.

Figure 3.3: Direct method of cost allocation



Adapted from Horngren *et al.* (1999:148-151).

3.4.2.2 Step method

- **Step method**

This method overcomes many problems of overhead cost allocations as costs of some departments must sometimes first be allocated to another department for services provided. For example, the cleaning department of an educational institution provides services to all academic departments. As a general rule servicing departments that provide services/incur cost to the greatest number of departments are allocated first. To continue using our previous example, this method can be applied using the following three steps:

Step One

Allocate computer services (and all other costs that must be directly allocated to departments).

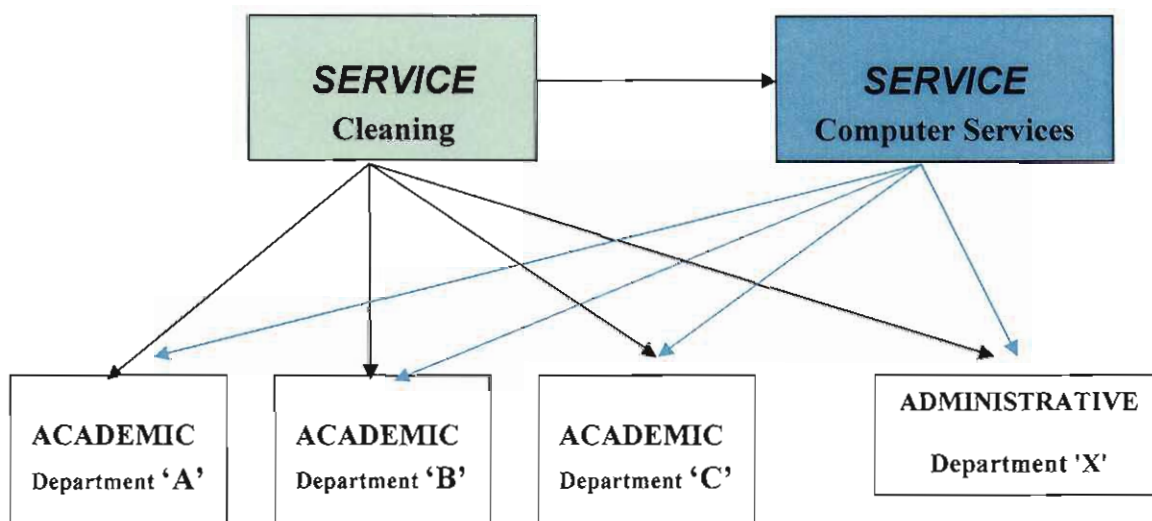
Step Two

After allocating all direct costs to the departments, allocate the total cost of the cleaning department (assuming it provides services to the greatest number of departments) by using the level of utilisation of each department as a basis.

Step Three

Allocate all other service department costs e.g. auxiliary services, library services etc., so that the remaining overhead cost is allocated to the academic departments. The step method is illustrated in Figure 3.4 below.

Figure 3.4: Step method of cost allocation



Adapted from Horngren *et al.* (1999:148-151).

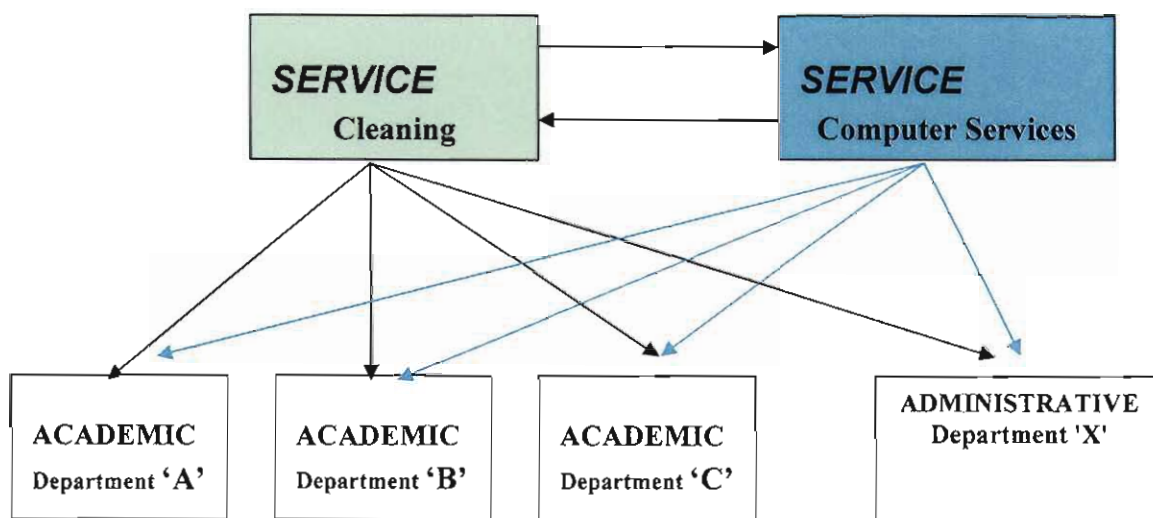
3.4.2.3 Algebraic (reciprocal) method

- **Algebraic (reciprocal) method**

Both the direct and step methods do not consider the possibility of departments providing services for each other, for example, the auxiliary

department providing services for the cleaning department, or one academic department providing a service for another academic department. The reciprocal method recognises these interactions of the service departments. Figure 3.5 below illustrates the algebraic method.

Figure 3.5: Reciprocal method

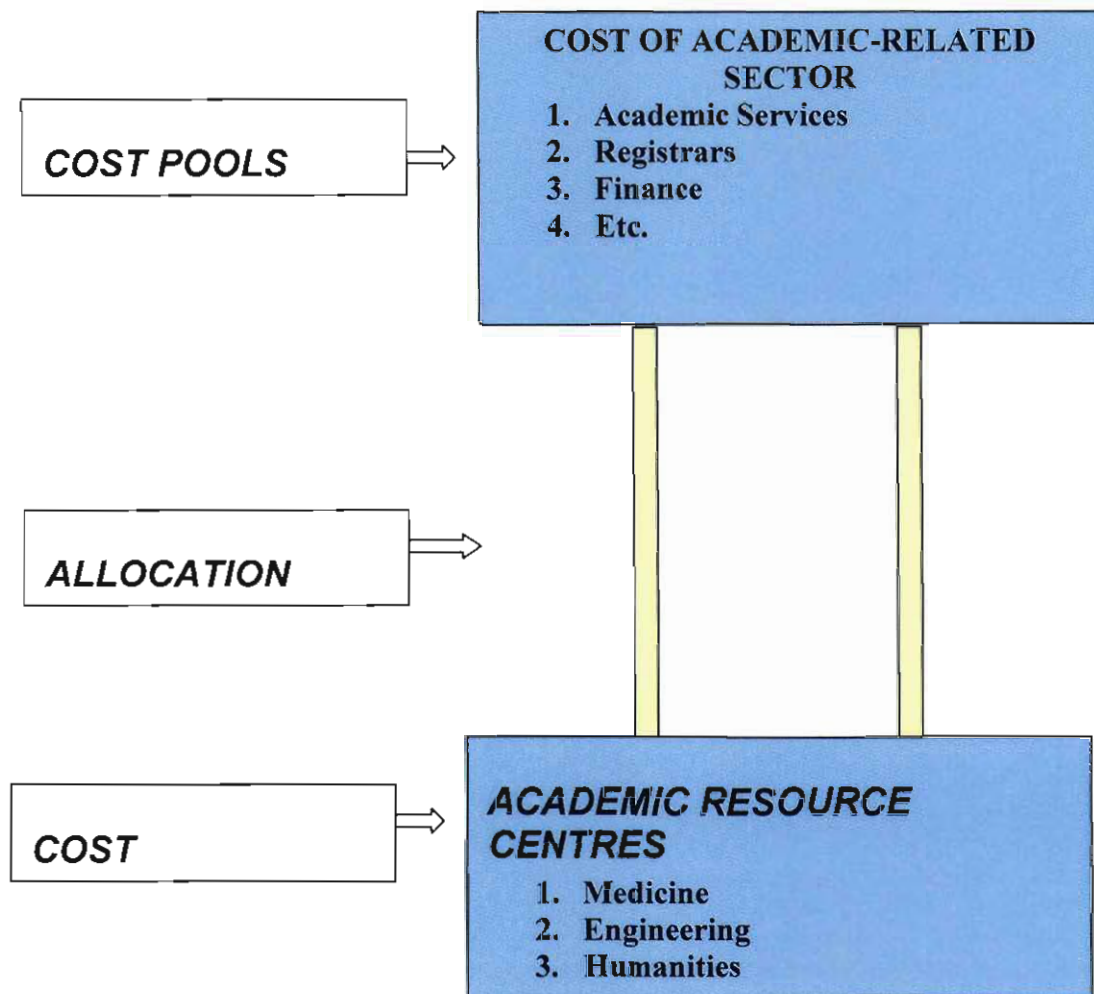


Adapted from Horngren *et al.* (1999:148-151).

The problem of reciprocal allocations can be solved by the use of simultaneous equations. In most institutions where there are a large number of such inter-departmental services, use can be made of specialised computer programs developed for this type application.

The step method has been used successfully in developing overhead recovery rates at the University of Manchester (Scapens, Ormston and Arnorld, 1992:55). The cost of academic related departments (service departments) was allocated to the academic departments using the procedures in Figure 3.6 on page 79.

Figure 3.6: Developing overhead recovery rates at the University of Manchester

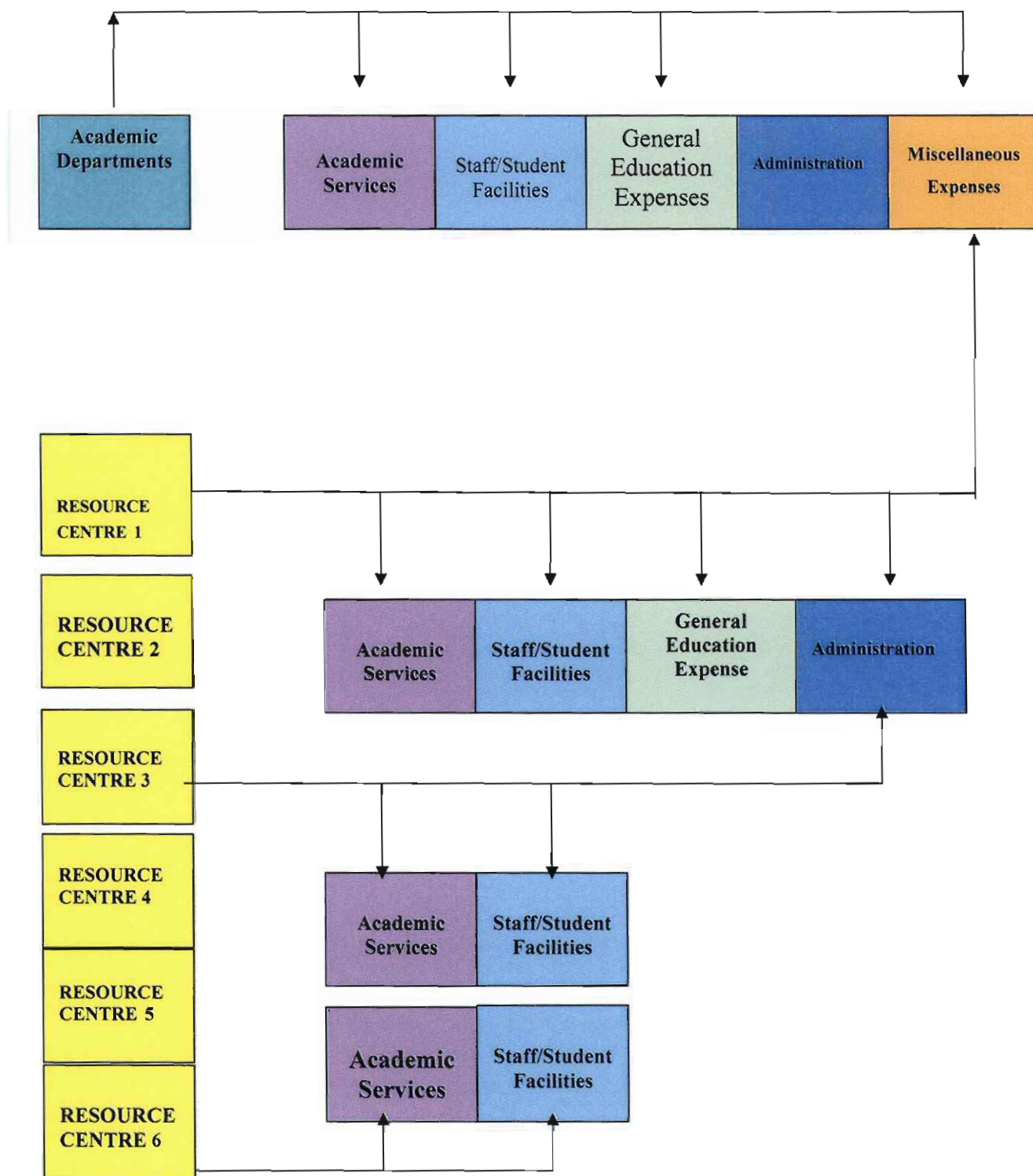


Scapens *et al.* (1992:58).

Note: Cost pools refer to the various academic related costs, which are allocated to the cost objectives, i.e. academic resource centres. The allocation of these costs is done using a suitable allocation basis.

This model suggests using allocation bases/cost drivers of student numbers, staff or space occupied for allocating cost pools to cost objectives.

Figure 3.7: Step-down procedure



Adapted from Scapens *et al.* (1992:60).

The allocation procedure is a simple step-down procedure starting with the most widely used services. This is well illustrated by Scapens *et al.* (1992:60) in Figure 3.7 on page 80.

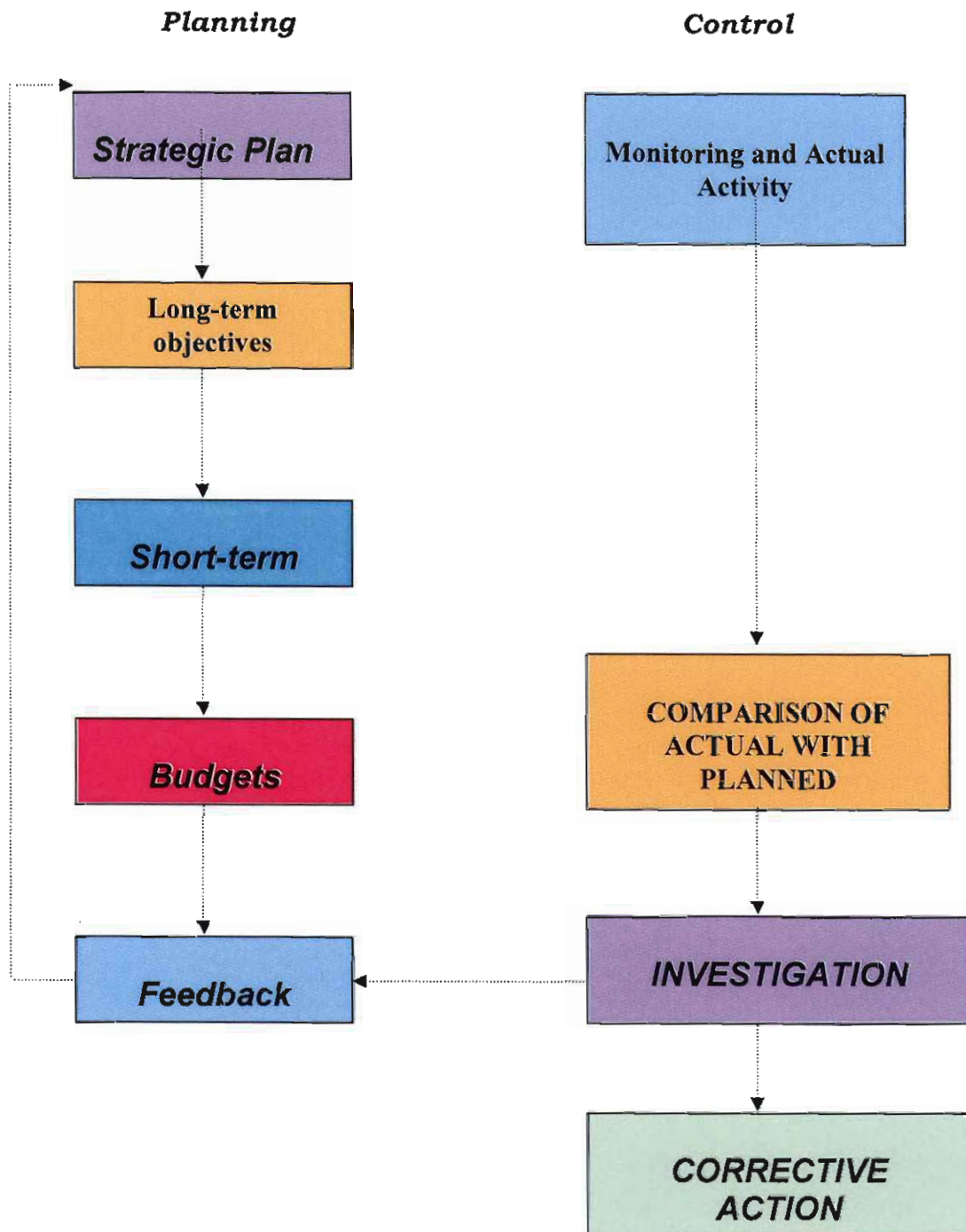
The model allows for the calculation of standard overhead rates per staff member, student or space by dividing the total overhead by, for example, the number of staff members. The use of the University of Manchester model means that overhead costs are charged to academic departments on the basis of price per student, staff member, or space used. This method enhances the preparation of budgets, and in particular allows the use of the flexible budget approach, which can reflect budget amounts at various student, staff or other levels. Heads of department will therefore be able to “plan to meet their target expenditure and to utilise the incomes they generate” (Scapens *et al.*, 1992:66).

3.5 Budgeting

A budget is a financial plan for the future that is able to identify objectives and the actions needed to achieve those objectives (Hansen and Mowen², 2000:276). The Chartered Institute of Management Accountants (2000:51) defines a budget as “a quantitative statement, for a defined period of time, which may include planned revenues, expenses, assets, liabilities and cash flows”. Most authors on the subject of budgeting give similar descriptions of budgeting (Drury, 2000:545; Sollenberger and Schneider, 1996:278). Budgeting in non-financial and non-quantifiable terms would be difficult to achieve since there are no definite targets to be achieved if such terms exist.

Budgets are closely linked to the strategic plan of organisations. This linkage can be seen in Figure 3.8 on page 82. This illustrates the pivotal role budgets play in the link between planning and achieving the objectives of an organisation.

Figure 3.8: Planning, control and budgets



Hansen and Mowen² (2000:276).

A clear distinction must be made between a forecast and a budget. A forecast is a prediction of what can happen while a budget is a target that management wishes to achieve. This target is part of the macro planning process of any

organisation. In order to attain the organisational goals and objectives, budgeting plays the vital role of co-ordinating the activities needed to implement the plans of action to achieve these goals and objectives. Barfield, Raiborn and Kinney (1998:620) emphasise the need for budgeting to provide focused direction for the planning of an organisation. Budgeting in higher educational institutions has the same meaning as in commercial organisations. Sollenberger and Schneider (1996:285) suggest that budgets are relevant in order to achieve the following:

- Formalise the planning process
- Create a plan of action
- Create a basis of performance evaluation
- Promote continuous improvement
- Co-ordinate and integrate management's efforts
- Aid in resource allocation
- Create an "aura of control"
- Motivate managers and employees positively.

The concept of budgeting is widely used in every type of organisation. Moreover, it can be used as a benchmark against which a manager's performance can be evaluated. In tertiary institutions the budget is also a management instrument. It can also be considered a policy document since the priorities of the institution and the changes in academic direction are reflected therein. In tertiary institutions the budget reflects decisions that are made about income, expenses, courses of study etc.

This close relationship between the matching of income and expenses in tertiary institutions is vital to the existence of the institution. Allocation of resources changes with the level of activity and available revenue. Inflation also impacts on the allocation of funds. The change in enrolment patterns will

also dictate the level of allocation. Changes in priority according to institutional objectives will also be considered in the allocation of resources.

3.6 The relationship between planning and budgeting

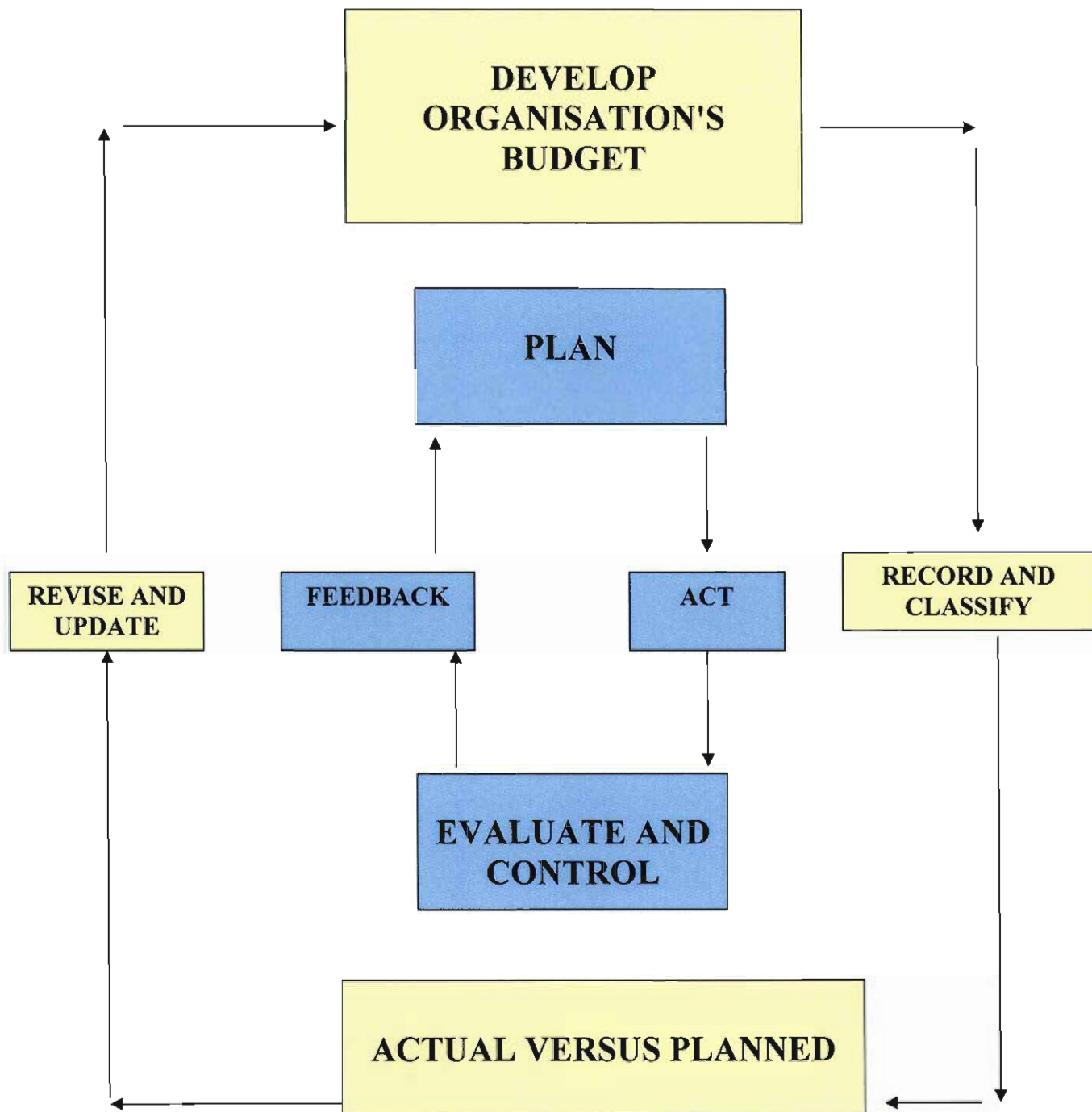
Management takes the responsibility of setting goals and objectives for the organisation - these are transformed into plans to be achieved. Hendrickse (1999:9) correctly stresses that most organisations fail for the lack of planning or the lack of linking these plans through all the other plans of the organisation. Budgeting is that quantifiable part of the planning process which is needed to expedite the achievability of the goals and objectives of the organisation.

The view of Hope and Fraser (1997:20) that the budgeting system is the primary barrier to change is debatable, but the history of budgets in linking objectives and plans is still of great importance. Hope and Fraser's (1997:20) logic that moving away from budgeting systems will change organisational forms might bear some credibility, but it would be difficult to convince most companies that operate successfully on budgeting systems that it should do anything different.

Figure 3.9 on page 85 illustrates the interaction of the managerial process and budgeting system process, which could be used in an educational institution. The diagram illustrates two interconnecting cycles viz. the PLAN-ACT-EVALUATE-FEEDBACK cycle indicates that managers at each step of the inner circle must use the outer circle to plan and control. This re-affirms our earlier analysis that budgets link the objectives and outcomes to strategic plans. Godfrey, Leitch and Ralph, (1996:38) recognises that management must make decisions using both financial and non-financial measures, and they advocate the use of multiple-objectives planning. Higher education institutions lend themselves to the use of both financial and non-financial measures in trying to

achieve multiple objectives.

Figure 3.9: Interaction of the managerial and budgeting processes



Adapted from Anderson and Sollenberger (1992:305).

3.7 Determining a base to evaluate departments at a higher education institution

Departments of higher education institutions (academic or non-academic) can be treated like budget centres as in commercial organisations. Cost centre and profit centre methods have already been fully discussed earlier in this chapter, and need no further explanation.

A method more in line with profit centre, called the 'responsibility centre approach', can also be used, for example, to guarantee the future of courses or programmes at higher education institutions. The responsibility centre approach (Strupeck, Milani and Murphy, 1993:61) has been successfully implemented at the Georgia Tech in the United States of America. This institution uses the responsibility centre approach for budgeting, taking into account the revenue and cost allocation to each responsibility centre. The responsibility approach considers both costs and revenues associated with the specific programme. The management of costs would be difficult to achieve without the identification of costs. The approach also provides a technique to measure goals and future programmes being offered at higher education institutions, since expenses are weighed against income (and the managers of each are actively involved). In the separation and allocation of costs to each responsibility programme, the Georgia Tech instituted a simple allocation method to ensure proper cost allocation. Table 3.1 on page 87 illustrates the basis used by Georgia Tech. Krupnicki and Tyson (1997:40) recommend that similar types of Activity Based Cost applications as in Georgia Tech can be adapted from manufacturing organisations for utilisation in service type businesses.

Performance centres are used to quantify the budget in terms of, for example, hours worked, number of students, number of personnel, etc., but without necessarily attaching a monetary value to these.

Investment centres work in conjunction with the profit centre approach where the profit attained is expressed as, for example, a percentage of the capital invested.

Table 3.1: Allocation of direct and indirect costs at Georgia Tech

DIRECT

Expense	Basis of Allocation
Payroll Taxes	Salaries
Employee benefits	Salaries
Telephone	Size of coaching staff
Postage	Size of coaching staff
Pension plan premiums	Salaries
Insurance	Number of athletes

INDIRECT

Expense	Basis of Allocation
Sports medicine	Number of student athletes
Facilities	% of operating budget
Sports information	% of operating budget
Academic centre	Number of student athletes
Student-athlete programme	Number of student athletes
Office supplies	Number of employees
Audit and legal	% of operating budget
Accounting office	% of operating budget
Marketing staff	% of operating budget
Administrative staff	% of operating budget

Strupeck *et al.* (1993:061).

There is little evidence or literature to validate the use of performance centre or investment approach in higher education. Research by Tomkins and Mawditt (1992:25-28) suggests that most universities are biased towards the cost centre approach.

3.8 The budgeting process

In a large commercial organisation a budget committee is responsible for co-ordinating and directing the budget process. Typically this committee comprises of directors, accountants, sales managers, production managers and other members of top management. Similarly in higher education institutions, the budget committee generally comprises of top management, i.e. the principal, vice principals, finance registrar, deans and heads of departments. The institution may even have a budget director to lead the functions of the budget committee.

Hansen and Mowen² (2000:278) point out that the functions of the committee could be to:

- Review the budget
- Provide policy guideline and budgetary goals
- Resolve differences that arise as the budget is prepared
- Approve the final budget
- Monitor the actual performance.

In the process of developing and implementing the budget the following factors must be considered:

- All levels of management must be acquainted with the process and understand how the system works.

- The budgetary process should involve as many individuals of the organisation as possible, not only for their expertise in certain fields, but also for commitment by participating in the development of the budget.
- The budget targets must be realistically set in terms of its objectives. Setting high objectives and not reaching them can be demotivating.

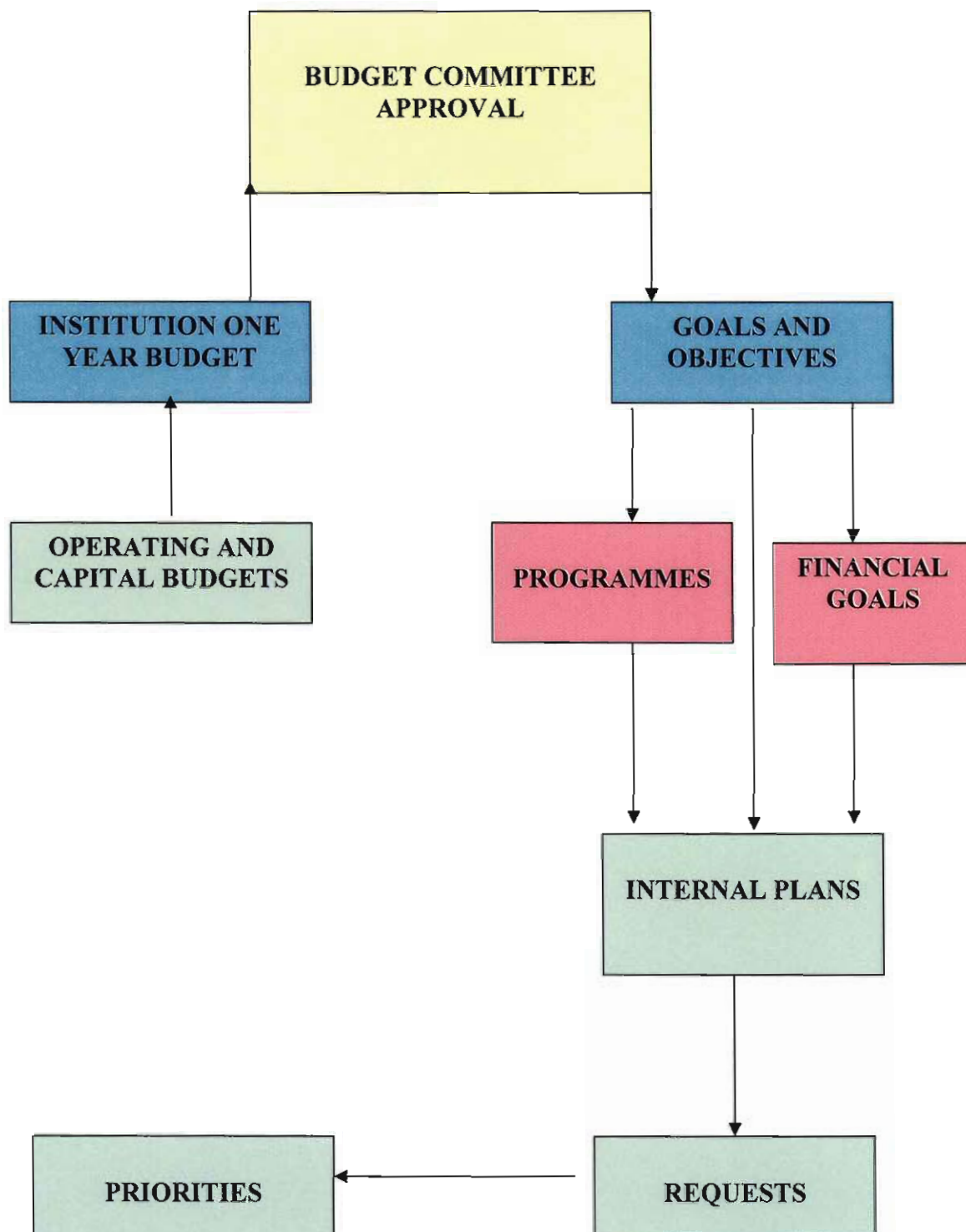
The whole process of budgeting must be seen in the context of the managerial planning function, since the use of budgets is an essential component of an integrated planning process. This integrated budget planning process can be viewed in Figure 3.10 on page 90.

The budgetary process is initiated once resources are committed to specific plans of action. These plans of action stem from the departments that form a significant part of the institution and on which rests the success of planning. Planning is not an end but a means to an end. The results must be monitored and controlled.

Horngren *et al.* (1999:488) justifiably suggest that budgeting is most useful when done as an integral part of the organisation's strategic analysis, which aims to take into account the following considerations:

- The organisation's objectives.
- Markets and market trends.
- The forms of organisational and financial structures that serve the organisation best.
- The risks, alternative strategies and contingency plans.

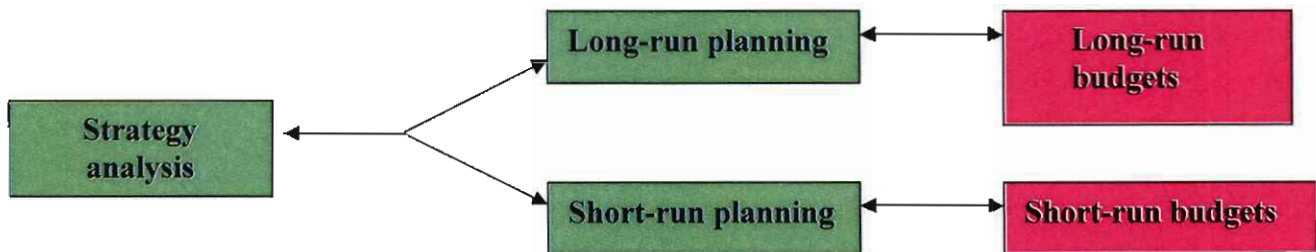
Figure 3.10: Integrated budget planning process



Adapted from Hay (1989:435).

Strategic analysis focuses on both long-run and short-run planning and can be illustrated in figure 3.11, as follows:

Figure 3.11: Strategic analysis



Horngren et al. (1999:489).

The two-way arrows in the diagram are indicative of the fact that budgets are interrelated with planning and strategy, i.e. there is a constant feed forward system as well as a feedback system.

3.9 The period of budgets and their use in higher education institutions

The type of budget will dictate the length of the budget. Generally most organisations' operating budgets cover one year. Capital budgets extend over a period greater than one year. Many organisations use a continuous budget approach, i.e. as a month or quarter expires in the budget an additional month or quarter is planned so that at any time the organisation has a twelve-month plan on hand. According to Drury (2000:552), this ensures that a twelve-month budget is always available.

Most institutions, like commercial organisations, use a periodic fixed budget approach, i.e. budgeting for an academic year. The annual fixed budget approach does not allow the organisation the flexibility of taking into account changes that might occur during the period. It therefore becomes an ineffective tool in controlling income and expenses since the original estimates could have

been based on circumstances that differ from the current reality.

It would be easy, however, to use a continuous budget approach or a form of continuous budget as a tool in higher education institutions. A continuous budget approach suggests drawing up of the budgets on a regular basis, i.e. planning for the next twelve months at the end of every quarter. The continuous budget serves as a much more definite planning and control device in achieving the objectives of the organisation since targets are constantly being updated. Through continuous planning, managers or heads of departments can work within a realistic framework and set targets that are achievable, given current circumstances. This would, for example, ensure that performance reports are more in line with actual circumstances rather than outdated ones that occur in the fixed period budget approach.

Whilst the major criticism of the continuous approach is that it takes up much of management time, a form of continuous budgeting at higher education institutions will assist in dealing with, for example, differing student numbers at the beginning of each year, semester or trimester. Drtina , Hoeger and Schaub (1996:24) have found that "managers improve their budgeting skills over time and need no more time to do quarterly budgets than would be needed for one annual budget (sic)". In addition, the availability of updated spreadsheet packages makes it possible to reduce the time spent in preparing budgets on a continual basis. A continuous budget in the form of budget revision every three months could provide a more stable assessment of needs and resources. Furthermore, a continuous budget will allow for the flexibility that a periodic budget fails to provide. This flexible approach can assist departments in taking advantage of the benefits that would not have been possible under a fixed (periodic) approach. There is, however, one danger of flexibility, i.e. being unable to make a proper evaluation of performance.

3.10 The traditional approach to budgeting

This method is also referred to as the incremental budgeting approach. It concentrates only on the proposed changes to expenses/income from the previous years budgeted, whether approved or actual amounts. Figure 3.12 illustrates this approach.

Figure 3.12: Incremental budgeting approach

110%	Proposed increase R1,2m
100%	Actual expense of previous year R12m

Adapted from MacArthur (1983:186).

In the above illustration a department needs to justify the proposed ten percent increase whilst the actual amount of R12 million of the previous year needs no further justification in the new year since it was justified previously. The main advantage of incremental budgeting is that it is a method that is simple and easy to use. Furthermore, heads of departments need only justify the increased amount and not the total amount requested. On the negative side, it allows the inefficiencies of the previous years to be carried forward without analysing and questioning such expenditures.

The incremental budgeting method does not take into account that the ranking and priority of expenses can change. A loophole is created to allow for the budgeting of expenditure that may have ceased to exist. This type of budgeting frequently leads to boardroom battles in the quest for a better share of the limited funds available, especially in higher education institutions where the head that can "shout the loudest" gets a better share. A common practice in the use of incremental budgeting is the "padding" or unjustifiable inflating of

budget requests by heads of departments. The traditional budget does not provide enough information or incentives to improve financial performance. Evidence of this was found in a study by Harr (1990:37) of the Naval Supply Systems Command in Washington D.C., America. Harr found that as long as operating objectives were met and the total budget was not exceeded, the traditional approach provided no incentive to reduce costs.

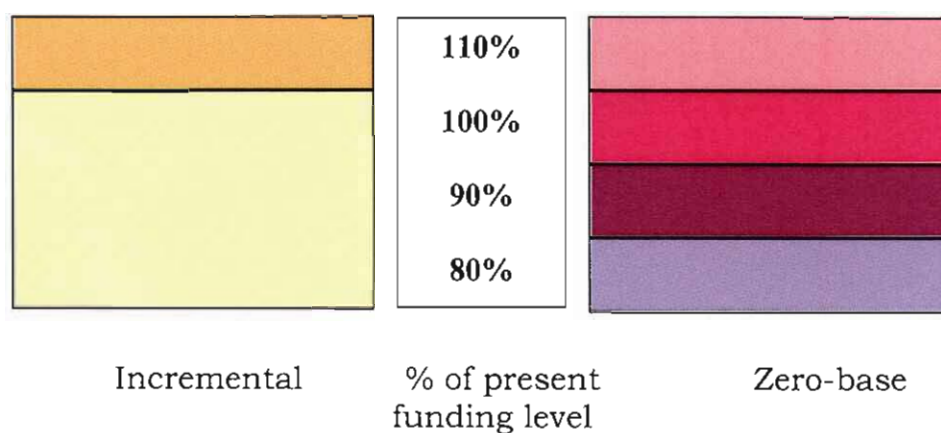
3.11 Zero-base budgeting in higher education institutions

Zero-base budgeting (ZBB) is a product of the 1970s. Although the United States used it to great advantage, it was not adopted in the United Kingdom (Birkin and Woodward, 1997:40). With the passage of time since its inception, the concept of ZBB as a way of influencing management thinking and improving communication at all levels of the organisation, with the objective of producing a better and more readily accepted allocation of resources, has not changed.

The ZBB discards principle of the incremental method, that what has been previously spent or approved must continue to exist. A zero-base approach involves justification of all budget requests. Managers are expected to make an evaluation of all activities to determine which should be eliminated, which can be funded with reduced funds, and which need to be continued (Barfield, Raiborn and Kinney, 1998:734).

The difference between incremental budgeting and ZBB can be compared in Figure 3.13 on page 95. Unlike incremental budgeting, zero-base means justifying expenditures from the minimum level to the fourth level, i.e. the entire budget is justified as if it is drawn from scratch. The focus is on drawing up the budget as if it were needed for the first time.

Figure 3.13: Incremental versus zero-base approach



Adapted from MacArthur (1983:186).

Under ZBB, all activities are re-evaluated during budget development. It requires managers to justify the necessity of any expenditure at all levels.

Geiger (2000:31) suggests that ZBB creates greater participation amongst managers, stronger commitment to plans and "more effective educational programmes at the lowest possible price".

Modern (1986:42) and Wise (1988:35) suggest that ZBB is a tried and tested management tool that can be adapted to serve the need for cost management for sustainable development within organisations.

ZBB works well with the systems approach. In this regard it is most efficiently used with Management by Objectives (MBO) and the Programme Planning Budgeting and Evaluation System (PPBES), and should complement and supplement them rather than replacing them (Harvey, 1977:2). Figure 3.14 on page 97 illustrates this accountability in higher education institutions through the use of the systems approach.

3.12 Implementing a zero-based budget at a higher education institution

Coates, Rickwood and Stacey (1989:72) and Hartley (1989:90) suggest similar procedures in implementing ZBB. This proposal can be summarised in the following steps:

Step One: Define decision units

The institution can be classified into decision areas in the form, for example, of a programme, cost centre, profit centre etc. Each centre will have a programme manager/head so that there is accountability. This can be illustrated in Figure 3.15 on page 98.

Step Two: Identify funding levels

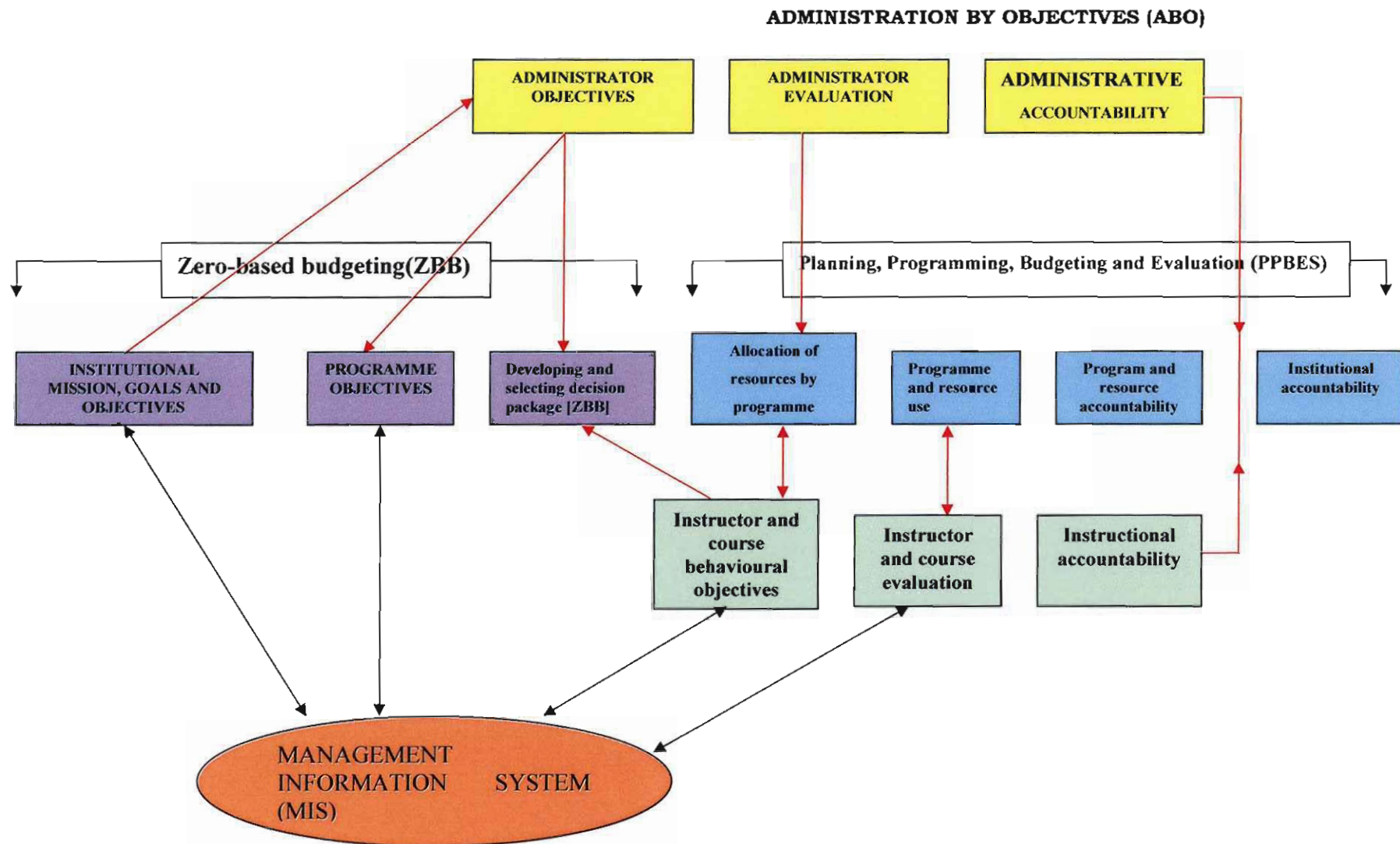
The budget director should specify the levels of funding that would guide the budget preparation. The budget director could request the submission of decision packages, i.e. justifications based on the following three levels:

- **Preferred level** e.g. a 10% increase over current spending to allow for programme improvements.
- **Maintenance level** i.e. making no change to previous years' levels, thus ensuring that the current service is maintained.
- **Reduced level** e.g. a 10 % decrease over the current spending level. This could lead to problems in providing the current service or could mean staff reductions, etc.

Step three: Develop decision packages from decision units

Once the institution clarifies and delineates its Decision Units, it should justify each of the decision packages in writing. A decision package can take the form illustrated in Table 3.2 on pages 100-102.

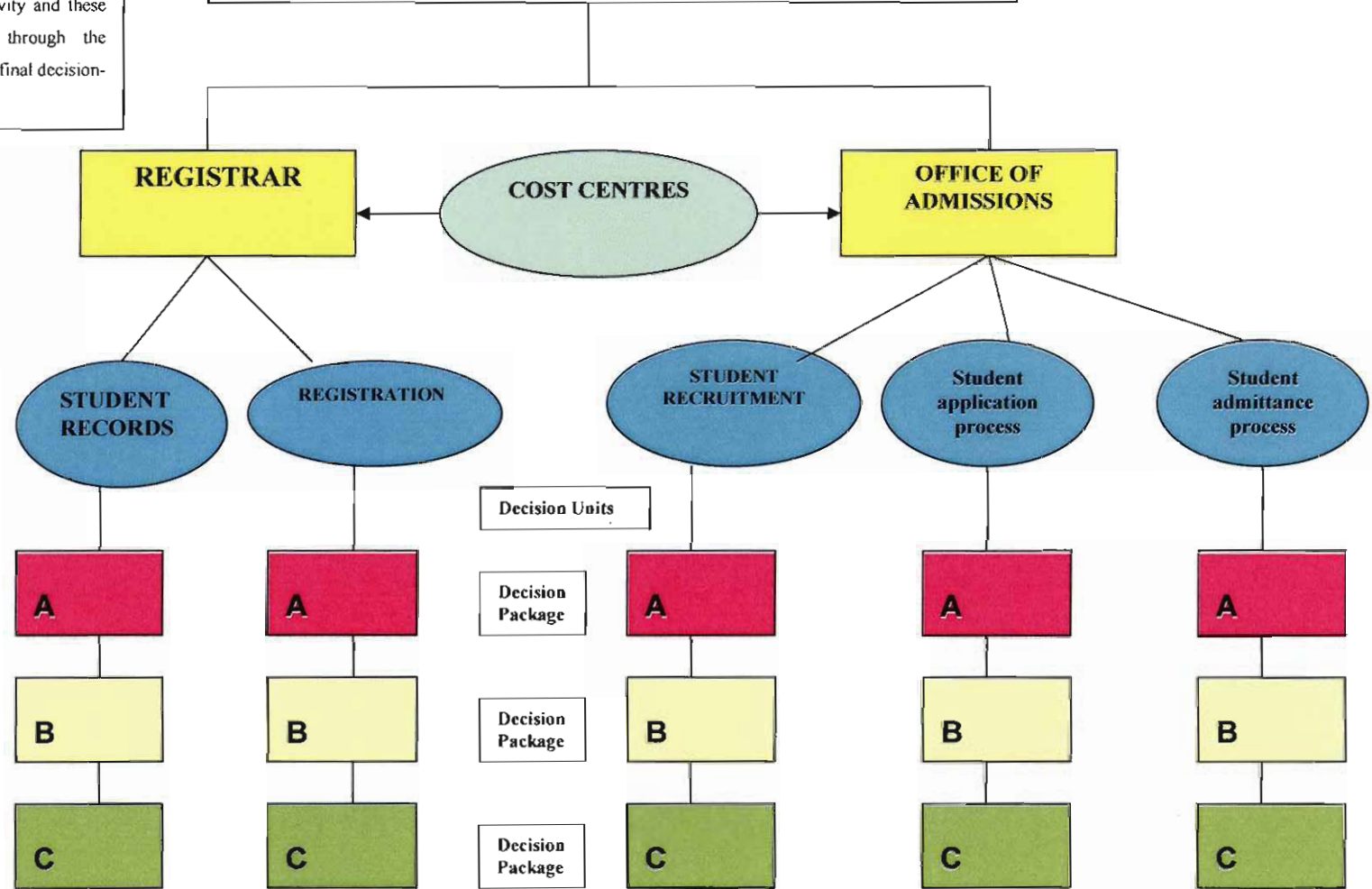
Figure 3.14: Accountability in higher education through the Systems Approach



Adapted from Harvey (1977:23).

Note: For each cost centre, decision units are established by determining the basic functions or activities within each cost centre. Three decision packages are selected for the best activity and these are ranked and sent through the organisation structure for final decision-making

Figure 3.15 Examples of Decision Units and



Adapted from Harvey (1977:11).

Step four: Rank decision packages

Management ranks decision packages according to benefits of the decision package to the organisation (Drury, 2001:305). In choosing or ranking decision packages, those packages that provide basic services are ranked first and the rest are ranked in order of their benefits. The point to which packages will be accepted depends on the amount of funds available.

The budget committee will normally undertake the ranking process. Ranking priorities can differ between the department and the budget committee e.g. in Table 3.2 on page 100-102, the department will select Alternative "A" as preferred while the budget committee will rank according to the availability of funds. The non-availability of funds or the direction of funds into other "priority" decision package areas may force the budget committee to remain with the existing situation or even choose alternative "B".

ZBB can be a major contributor to the planning of the organisation, and it complements and works with PPBES and MBO. Allocation of resources is more effective and the organisation can concentrate on priority areas by using a ZBB system. It allows management and other users a methodical and simple structure to enhance the value of information provided by the system thus ensuring that accountability and delegation of authority within the organisation can be fixed.

ZBB is a major contributor in the areas described, and the many advantages of using a ZBB system can be listed as follows:

- ZBB allows a review of the previous year's expenditures.
- It could lead to financial saving by eliminating unnecessary expenses in choosing lower cost alternatives.
- It encourages staff to be more cost conscious since expenditure must be justified at all budget reviews.

- The scrutiny of the budget requests under ZBB reduces empire building.
- ZBB can assist in identifying and remedying weak financial planning.
- ZBB makes it easier to allocate resources in accordance with institutional objectives and priorities.

Table 3.2: Decision package illustrated

<u>DECISION PACKAGE</u>	
<u>Decision Area:</u> Management Accounting Module	
<u>Prepared by:</u> M Naidoo	<u>Date:</u> _____
<u>Department/Cost Centre:</u> Accounting and Auditing	
<u>Approved by:</u> _____ (Dean)	
<u>Existing area:</u> Yes/No	
<u>Function/Purpose of decision area:</u>	
To prepare students choosing the diploma in accounting for an intense course in management accounting.	
<u>Description of services provided by the decision area:</u>	
This area will offer an elementary course in costs, cost systems, budgeting, quantitative techniques and decision-making.	
<u>Programme performance standard:</u>	
80% of all students registered for the Diploma in Accounting will master 80% of all objectives.	
<u>Consequences if decision area is not achieved:</u>	
Students will not develop the skills required to prepare them for the courses in management accounting at a higher level.	

Adapted from Horngren (1999:148-151).

Table 3.2: Decision package illustrated (continued)

DECISION PACKAGE - COST ANALYSIS					
	Expense	2003 (R)	2004 (R)	±	Rank
Existing decision area: Present performance level: 65% of all students enrolled in the management accounting course master 75 % of all the management accounting objectives.	Salaries *	1 000 000	1 100 000		
	Fringe				
	Benefits	100 000	110 000		
	Supplies	500 000	550 000		
	Miscellaneous	200 000	220 000		
	Capital	<u>200 000</u>	<u>250 000</u>		
	Outlay	<u>2 000 000</u>	<u>2 230 000</u>		
	TOTAL				

ALTERNATIVE "A"

	Expense	2003 (R)	2004(R)	±	Rank
1. Description : Employ one more lecturer 2. Justification: To lower teacher: student ratio so that students can benefit from more individual tuition. 3. Expected Performance level 80% of all management accounting students will master 80% of all objectives.	Salaries *	1 000 000	1 210 000		
	Fringe	100 000			
	Benefits	500 000	121 000		
	Supplies	200 000	550 000		
	Miscellaneous		220 000		
	Capital				
	Outlay	<u>200 000</u>	<u>250 000</u>		
	TOTAL COST	<u>2 000 000</u>	<u>2 301 000</u>		

Adapted from Horngren (1999:148-151).

Table 3.2: Decision package illustrated (continued)**ALTERNATIVE "B"**

	Expense	2003 (R)	2004 (R)	±	Rank
1. Description:	Salaries	1 000 000	990 000		
Reduce lecturing staff by one	Fringe Benefits	100 000	99 000		
2. Justification:	Supplies	500 000	400 000		
Lowest possible level offered: basic management accounting	Miscellan Capital Outlay	200 000	220 000		
		<u>200 000</u>	<u>50 000</u>		
3. Expected performance level: 50% pass rate	TOTAL COST	<u>2 000 000</u>	<u>1 759 000</u>		

* Salaries are currently based on 10 lecturers

Adapted from Hartley (1989:92-93).

- It can be easily adapted to changing circumstances.
- The feedback provided by the ZBB system provides greater satisfaction because the results are clearly observable.
- Top management decision-making is improved since they have an overall view of the resources, objectives, priorities and alternatives.

The use of ZBB leads to an increase in paperwork, especially if the ZBB system involves many changes before final approval. This problem can be overcome to a significant extent with the highly sophisticated computer hardware and software currently entering the financial market. The increase in paperwork also leads to an increase in the time required to process and present ZBB requirements and decision-making. The development of decision packages may be difficult and the ranking of priorities can create problems in most tertiary institutions where academic departments compete for limited funds. There is often a lack of

commitment from heads of departments and other members of staff required to implement ZBB unless there is a suitable system of rewards in place.

The use of ZBB should not be treated as a temporary measure to bring the institution back in line with regard to acceptable performance and expenditure levels. It should be a permanent feature of the budgeting process. Most failures in the use of ZBB occur for the following reasons:

- Top management's failure to ensure that the ZBB system is understood and to put an adequate reward system in place.
- Attempting to implement the system in a short period does not enable the user to maximise the benefits of ZBB.
- Difficulty in reading and understanding the forms created for the use of ZBB. Staff training and workshops to educate those involved with the process and methods of the whole system will positively contribute to the use of the ZBB system.
- The lack of a standard cost system may make it difficult to justify a budget in terms of the ZBB approach.
- If the decision process is unclear i.e. staff does not know where and how they fit in and what contribution they are expected to make.
- Attempting to implement a ZBB system where negative attitudes to ZBB prevail. The ZBB system and its merits must be pointed out to staff before implementation.
- If a ZBB system is used without trying to link it to institutional objectives and priorities. This system should be complemented with MBO or PPB.

3.13 Performance measurement

In order to determine the success of planning, there must be some form of measurement of the performance. These steps are explained below.

3.13.1 The task of performance evaluation

In order to assess the accuracy of planning and budgeting, there must be some feedback as to the achievements of these plans. Performance evaluation compares actual performance with what has been planned and provides feedback so that future planning can be more accurate. The performance evaluation and control system can be simplified, as shown in Figure 3.16 on page 105.

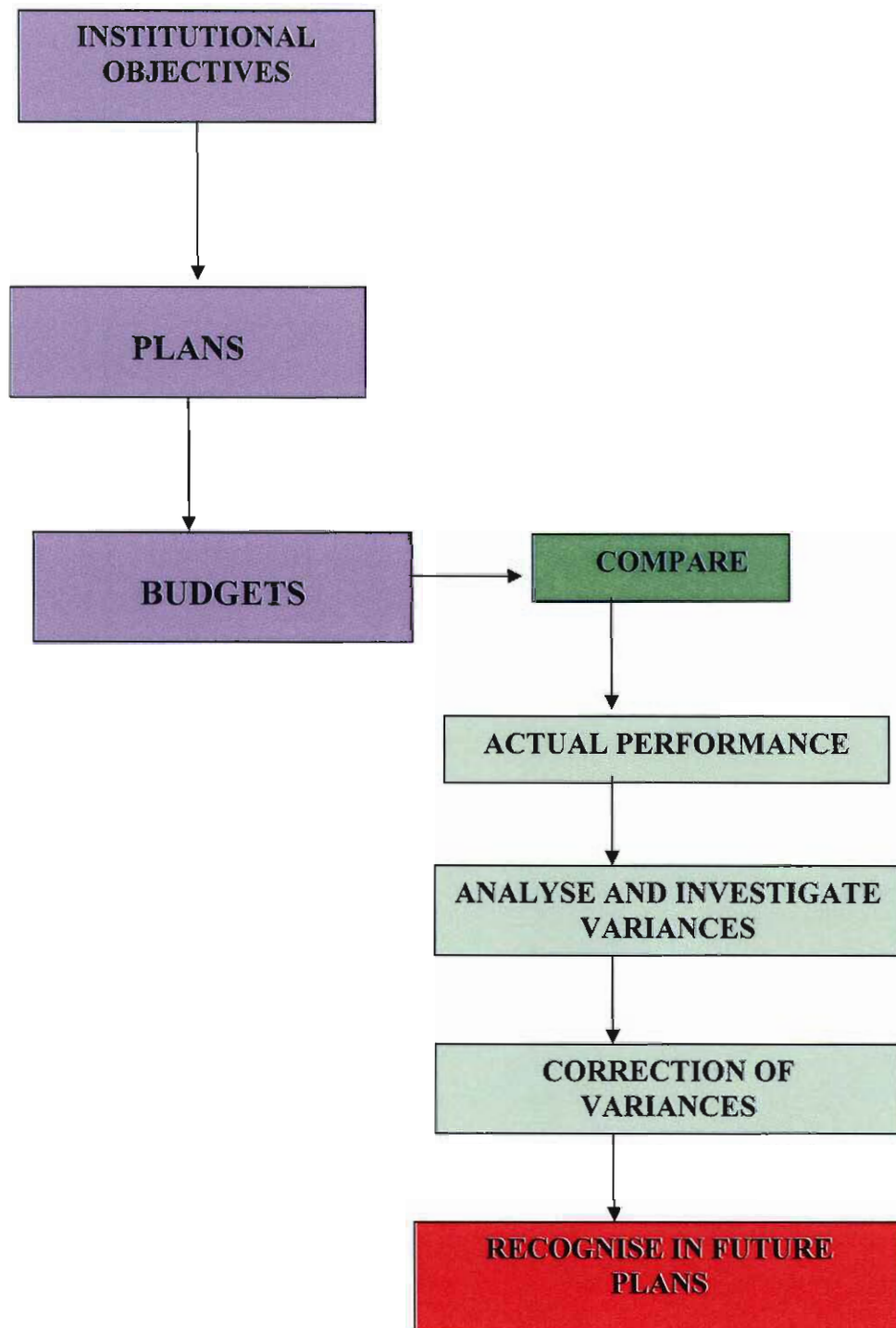
The motivation of employees to achieve organisational goals is seen as one of the most complex tasks in recent times. The achievement of goals in any organisation is not really possible without the existence of some system of rewards or penalties. The use of Value for Money audits (VFM) was popular in the United States of America in the late 1970s. These audits investigate the entire management control system and, according to Drury (2000:907), focus on the following aspects:

- the nature and functioning of the organisation's managerial systems and procedures.
- the economy and efficiency with which the organisation's services are provided.
- the effectiveness of the organisation's performance in achieving its objectives.

These three criteria can be applied to evaluate performance at higher education institutions. VFM auditing is, however, often criticised for the following reasons:

- Outputs may be difficult to define and measure, e.g. efficiency in education might be difficult to quantify.
- The suggestion of increasing student numbers so as to keep unit costs down might be done at the expense of quality.
- The measuring of effectiveness could be difficult if objectives are unclear.

Figure 3.16: Performance, evaluation and control system



Based on independent research

- The emphasis of VFM auditing might be more on costs than on measuring outputs and objectives since the concept of costs might be easier to quantify, understand and compare. Benefits might be difficult to measure and compare.

In commercial organisations performance evaluation is easier since there are measurable outputs, e.g. in terms of number of units produced, sold sales value, etc. In higher education institutions, the measuring of output is not so simple. Whilst there may be definite objectives against which performance can be evaluated it must be remembered that a typical tertiary institution has several groups impacting on performance, including management (principal, vice principal, deans etc.) and students.

Each group has their own particular objectives and means of measuring success. Therefore, in the absence of clearly stated objectives, results cannot be accurately evaluated, nor can the measurement of effectiveness be satisfactorily achieved. It will also not be possible to simultaneously achieve all of the objectives impacting on performance.

Some objectives need to give way to more important ones. Grundy (1997:64) argues that traditional management accounting techniques alone are not sufficient to help modern organisations account for their strategic performance. Managers should consider, in addition to numerical analysis, other techniques that could be revealing and visual. Davis and O'Donnel (1997:19) also suggest that the dynamics of organisations must be integrated with a set of both financial and non-financial measures.

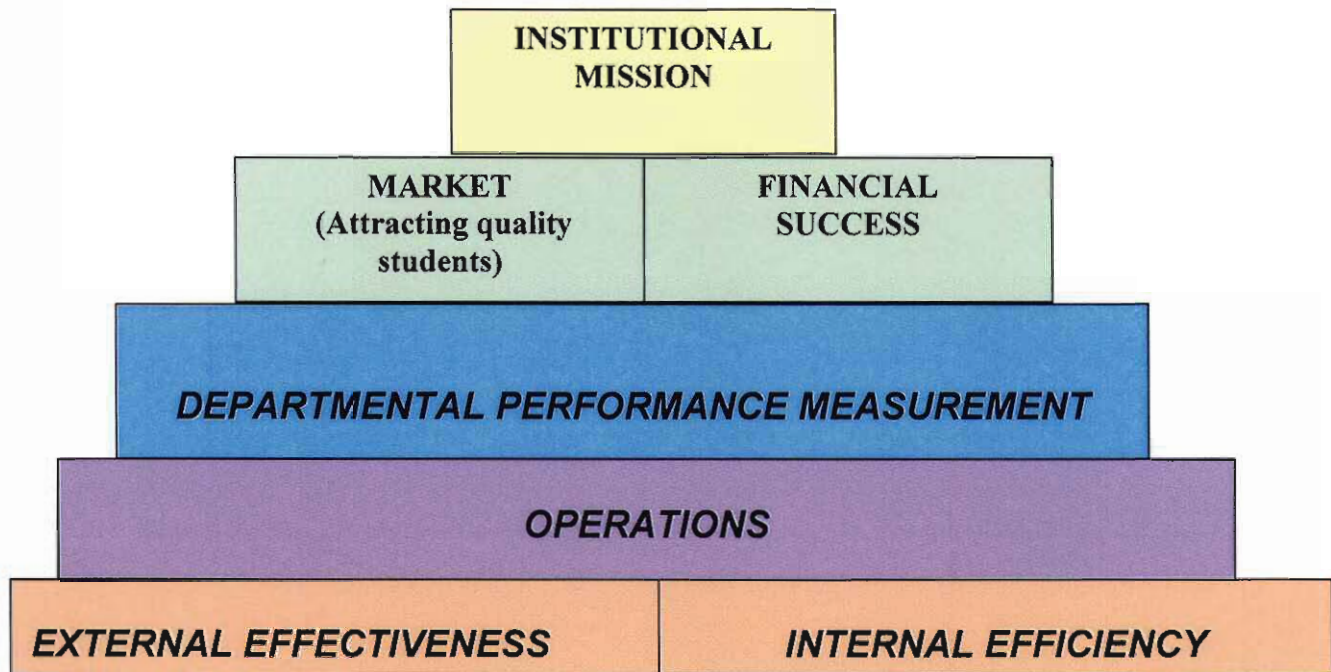
In performance measurement at higher education institutions, financial measures must be considered in conjunction with non-financial measures. The traditional measures of performance evaluation may not be sufficient since these may be too

numerically orientated. The development of standard cost variances in non-numerically orientated. The development of standard cost variances in non-manufacturing may be difficult because there are rarely homogenous physical units. The use of budgets or statements on profits may not give a clear picture of performance. In most service orientated organisations (including higher education institutions) it would be difficult to quantify performance in monetary terms because the resources employed might not be captured (Pederson and Lidgering, 1995:41). This implies that the bottom line should be on providing a service, and not only on profit.

Managers need timely and appropriate information on performance if they are to remedy any deficiency correctly. For example, unfavourable volume variances often go against managers who show quality improvements. Managers are frequently questioned about results even though there are no unfavourable variances from the original budget estimates. Some of these problems in performance measurement deal with the treatment of the subject using traditionally outdated methods. McNair *et al.* (1990:030) suggest a system of performance measurement for a manufacturing organisation that can be usefully adapted for higher education institutions. The essence of their model is a performance pyramid involving the translation of objectives from top to bottom. The objectives start from the institution's vision, and move to its immediate goals and the goals of each department in the organisation. This is an approach that is also advocated by Grady (1991:050). The translation of these objectives is illustrated in Figure 3.17 on page 108.

Management accounting plays a significant role in providing both financial and non-financial information. It is important that non-financial information be quantified so as to make such information meaningful. The assertion that management accountants should be providing "strategic cost information" is well supported by McNair, Lynch and Cross (1990:31).

Figure 3.17: Translation of objectives



Adapted from McNair (1990:30).

At each level there should be comparison, adjustment and evaluation. That is, department performance should be measured against targets set, these targets should be adjusted in the light of all current financial and non-financial information, and then evaluation should take place. It is important to maintain a balance between the use of financial and non-financial information in ensuring performance evaluation development.

It makes sense for performance measures to be derived from strategy and to be developed to support the objectives of the organisation. Performance measurement is meaningless unless it can also provide proper feedback to those concerned. This feedback can ensure that the vision from the highest level of management has been adequately reinterpreted into achievable strategies and objectives.

Performance measures and feedback are management tools to access how

effectively business strategies are being implemented, determine if the results are being achieved, and provide information to identify areas in need of corrective action. This view is widely accepted by most writers on the subject (Hirsch, 2000:615-618; Louderback III, Holmen and Dominiak, 1999:6-7; and Sollenberger and Schneider, 1996:285).

An important contribution of performance measurement is that it creates an ideal atmosphere for organisational improvement. Employees are better geared to deal with strategies and objectives, feedback for planning is enhanced, and the whole organisation becomes better focused to achieve its mission.

Performance measures and feedback are management tools to access how

The vital role of the financial manager, cost controller or other senior management officer in development and implementation of a performance measurement system must not be overlooked. It is the financial manager's responsibility to identify and monitor performance measures. The financial manager would be in the best position to look at the overall system and solve any inherent deficiencies in the system.

Management accountants are an important information source, since they are in the best position to direct activities to improve the organisation and ensure sufficient feedback.

3.13.2 Budgetary deficits at higher education institutions

The management of budgetary deficits is difficult at higher education institutions for the following reasons:

- there are no measurable output units
- no product is sold to pinpoint i.e. no incorrect sales forecast
- there are no "spoilt goods" to represent an unusual surge in costs.

The crux of deficits can only be apportioned to two factors i.e. insufficient resources and the inflexibility of the organisation in responding to changing circumstances. Institutions need to strategise around both these instances, for example, to reduce costs that are not necessary or have not been budgeted for.

In normal circumstances budgetary management, as in commercial organisations, is an ongoing process i.e. keeping track of the budget on a continuous basis and correcting imbalances as they occur. This system of management requires an efficient management information system to facilitate the review of estimates. This aspect of continuous budgeting has already been discussed in detail in this chapter. In a system of cost or profit centre management, the responsibility of budgetary management falls directly on the heads of each department, and therefore the continuous revision could be difficult to co-ordinate. In a central control system it might be easier to review expenditures on an ongoing basis. The management of deficits thus becomes easier since deviations from plans and estimates are identified earlier. According to Kitaev (1992:5), most “technical colleges and institutions” have centralised structures while many universities are also moving towards a franchising system i.e. imposing a levy on departments in return for the provision of central services. The exact reasons for budgetary deficits at educational institutions may be difficult to identify because of the nature of the service provided by these organisations. To remedy deficits or carry deficits over, some of the following measures may be considered:

- requesting an extension of time from creditors for payment of obligations
- the use of reserves
- staff retrenchment or reduction in salaries — these should be last resort measures only.

Heyneman (1990:461) suggests different approaches in dealing with budgetary

deficits. Some of these are discussed below:

- *Diversifying and increasing the sources of funding*

This is related to the trend in education and the question of whether education is a government function or a private sector function. Other methods of diversifying relate to the following:

- **Student fees**

Raising student fees will increase sources of income. This is a limited source and could actually result in the drop in student numbers if tertiary education becomes less affordable.

The other option is to increase student intake for the same course, thus increasing fee income. This measure would be detrimental to the staff/student ratios, overcrowding would occur, quality would suffer and variable expenditure would obviously increase.

- **Assistance from the private sector**

Donations, bequests and loans can supplement income and thus reduce budget deficits.

- **Consultancy**

The institution can engage in consultancy for the private sector or in applied research to generate extra funds for the institution.

- **The use of idle capacity and offering short courses**

The use of vacant facilities and staff for part-time studies, in service training, refresher courses or special short courses would contribute to the income of

the institution.

- **Profit schemes**

Rental of institutional space during weekends and academic holidays.

Academic residences could be rented to tourists during the holidays.

- **Alumni**

Past students and alumni associations can raise considerable funds.

- *Staff rationalisation and reduction in capital expenditure*

Savings in staff compensation could be achieved by, for example, offering earlier retirement, freezing salary increases and not creating or filling promotion posts. Capital expenditure can be reduced by, for example, delaying construction and major maintenance works, and reducing spending on library books.

- *Improvements in cost effectiveness and efficiency*

Cost effectiveness could be improved through the use of distance education combined with some tuition on campus and the lengthening of the academic year. Decreasing staff/student contact hours and engaging staff elsewhere with the time saved can improve efficiency. Care must be taken, however, not to cut back on other vital resources such as the library at the same time. A cutback on access to all information avenues would be an obstacle to the basic education objective.

3.14 Summary

Higher education institutions are just like profit motivated businesses. Private higher education institutions seek to make profits and hence the need for proper

planning and control that involves proper financial and cost management. This is even more important in the private sector than it is for public institutions as private higher education institutions rely solely on funds from investors and corporations.

An adequate planning and control system will enhance the achievability of set objectives and ensure that financial plans form part of the objectives of the various departments/divisions operating within higher education institutions. The use of Management by Objectives and the encouragement of zero-based budgeting systems at tertiary institutions can lead to the optimum use of limited funds.

The measurement of performance in terms of goals and objectives achieved could help to illustrate the planning direction of the institution. The review of budgetary deficits to prevent re-occurrence or to re-assess planning and control is essential for every organisation.

Regardless of the strength of the planning and control system, every system must be flexible and adaptable to the constantly changing circumstances of tertiary institutions.

In chapter four we ascertain the link between planning and decision-making, the process of decision-making and importance of decision-making for higher education institutions.

CHAPTER FOUR

DECISION-MAKING SYTEMS IN HIGHER EDUCATION INSTITUTIONS

4.1 Introduction

Decision-making, regardless of the size of the decision, is an important function in any organisation. The essence of management is in fact decision-making (Wilson and Chua, 1998:117). Management accounting provides vital information to managers in order to direct decisions. Decisions made by management, whether big or small, can impact either positively or negatively on the organisation. Management accounting and its functions play a vital role in making valuable decisions for an organisation. Managerial accounting provides much information for use in decision-making. (Louderback III *et al.*, 2000:5). A decision could be made on the basis of a single proposal or could be decided from several alternative proposals.

It is therefore only reasonable to assume that an outcome is the best one once it has been measured against the results following a decision. "Bad decisions" need to be considered within the circumstances in which the decision was made. The "circumstances" here relate to the reliance of decision-makers on relevant information provided by the management accounting system. Sollenberger and Schneider (1996:468) correctly suggest that decision-making process creates action, and that the manager's experiences and skills are applied to specific problems.

Whilst it is very difficult to take decisions without quantitative information, qualitative and other non-financial information also plays an important role in the decision-making process of some organisations (Horngren *et al.*, 1999:389). Even though there may be qualitative techniques such as computer simulation and scenario building, the final decision will still depend on the experiences, intuition, and judgement of the decision-maker to make effective decisions.

4.2 Data and information in the decision-making process

Data represent observations or events that are used as an input for information (Cushing and Romney, 1994:002). This means that data are the raw details of occurrences, for example, in a tertiary institution, the number of courses offered or the number of students in a course is data that needs to be used for analytic purposes. The analysis and refinement of data by the organisation produces information that adds usable knowledge, which is of real value to decision-makers. Figure 4.1 on page 116 reflects how data is processed to provide information for decision-making.

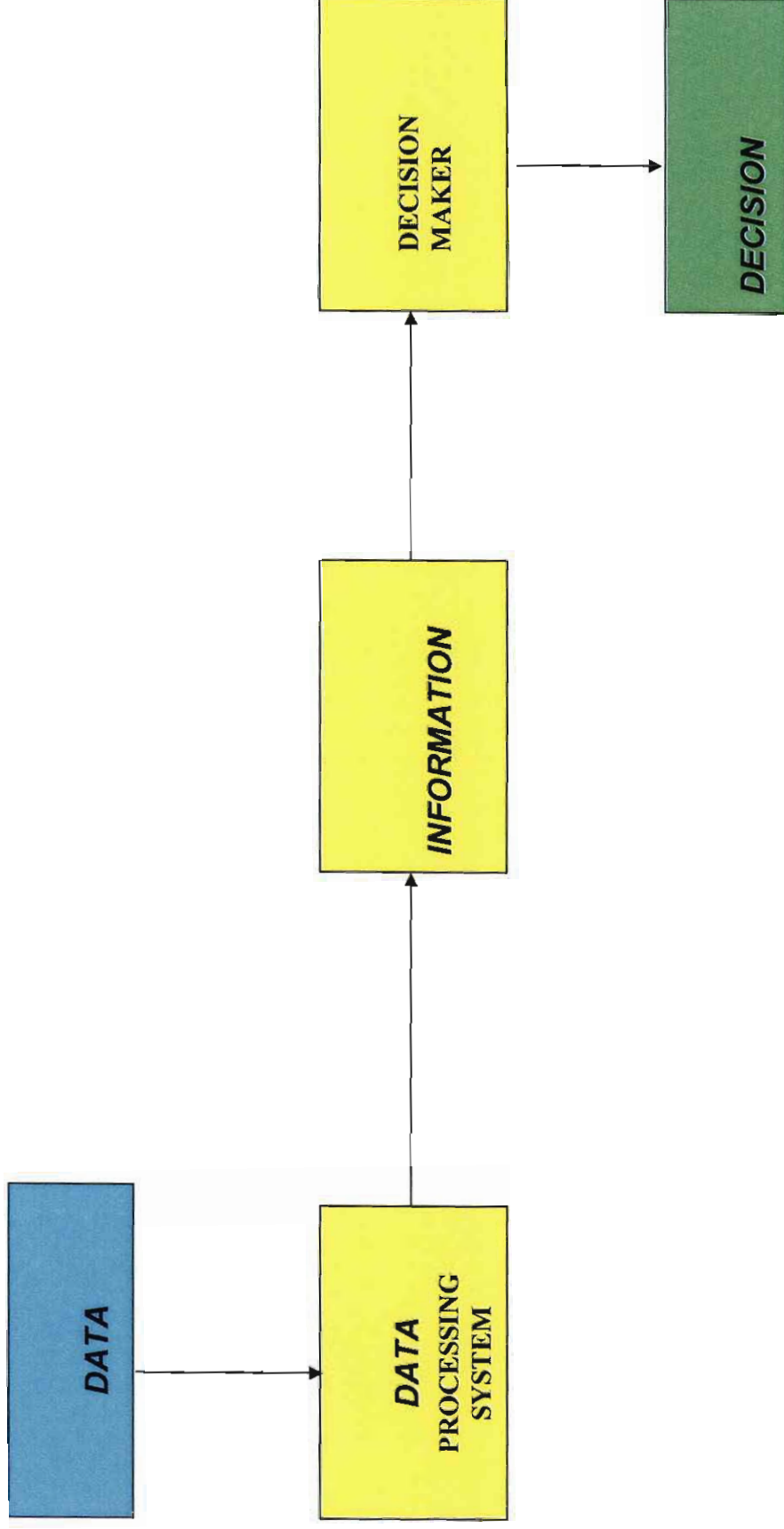
For decision-makers to make the right decision they need to have useful information. Information cannot be useful without having at least the following characteristics:

- Reliability
- Relevance
- Timeliness
- Completeness
- Understandability
- Verifiability.

Daft (1993:220-221).

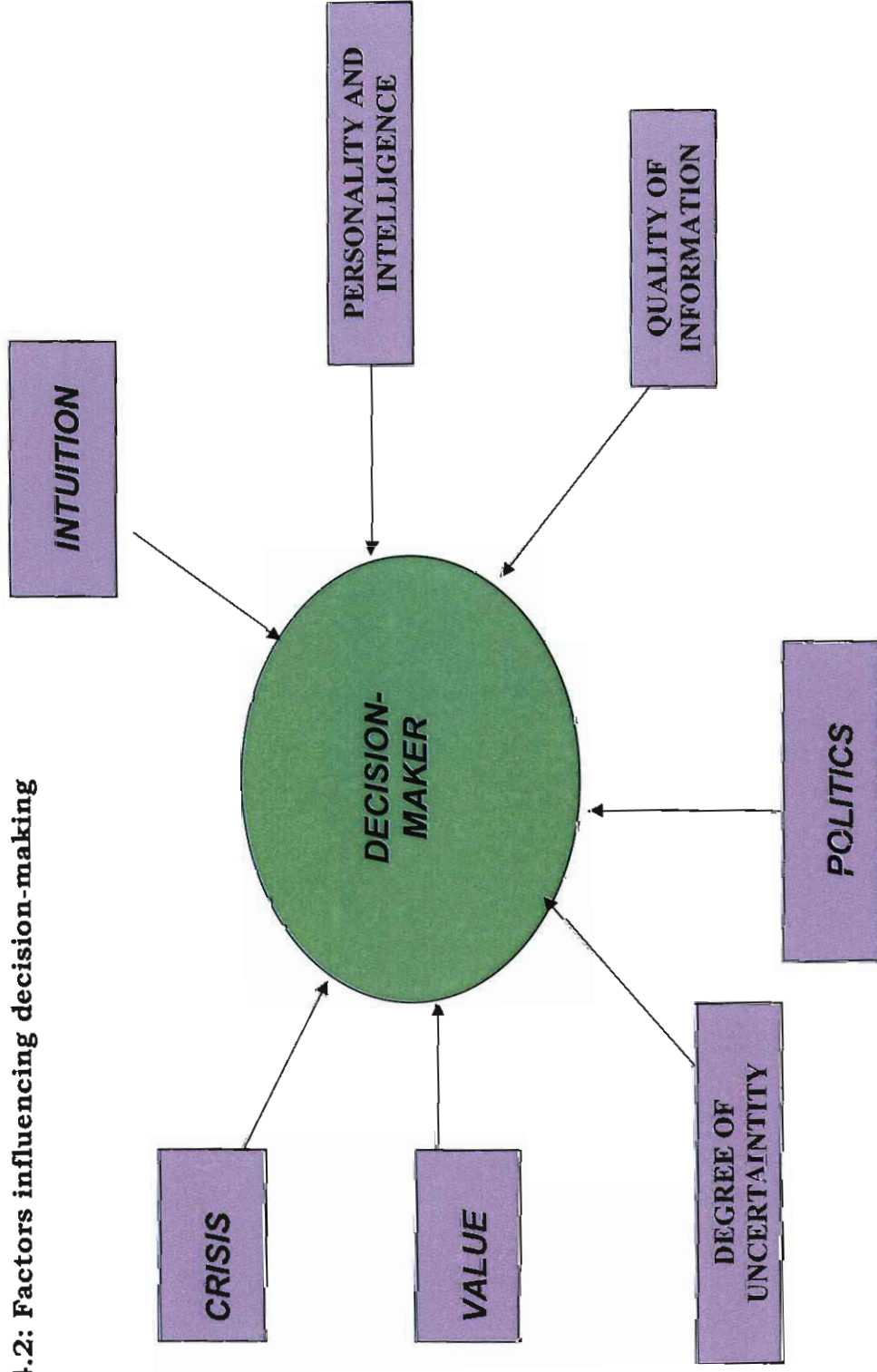
Information that contains errors, redundant information, incomplete information and information that cannot be understood by the decision-maker cannot assist in the decision-making process. This process will differ among decision makers since the factors influencing decision-making will be treated by each decision maker according to his or her own personal perception. The factors influencing decision-making can be illustrated in Figure 4.2 on page 117.

Figure 4.1: Information processing: from data to decisions



Adapted from Cushing and Romney (1994:3).

Figure 4.2: Factors influencing decision-making



Adapted from DuBrin (1994:103).

Bartol and Martin (1991:262) assert that decision-makers generally face the following type of problems:

- a "crisis problem", requiring an immediate decision with or without adequate information to hand.
- problems that can be solved "without urgency".
- problems that need to be solved to take "advantage of an opportunity" that may arise.

In each of the above situations the decision-maker can use either predetermined or ad-hoc methods to arrive at a decision. Predetermined methods are used where decisions are the normal, routine decisions that can be taken by an experienced decision-maker (DuBrin, 1994:107).

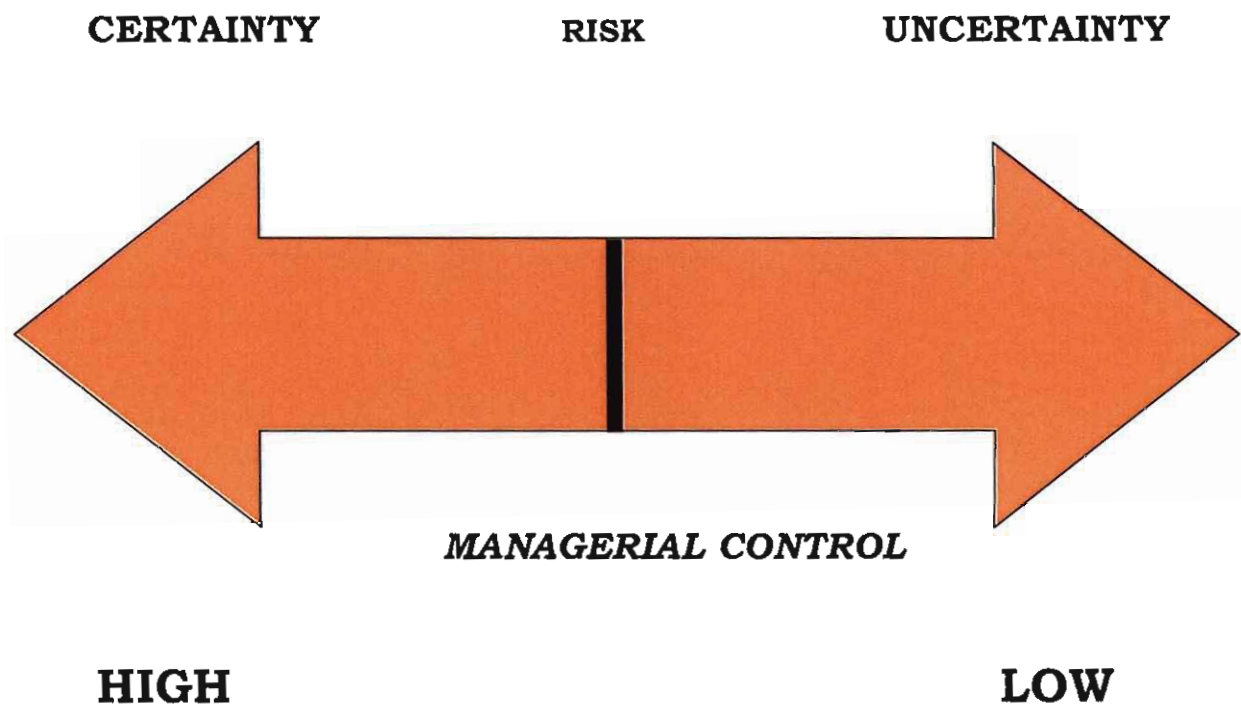
Making decisions also involves focusing on the future. According to Wilson and Chua (1998:118), there are four types of views on the future:

- **Ignorance**, which suggests that the future is seen as a blank slate. In cases of ignorance, a systematic approach and delaying the decision until more information is made available seems to be the best solution.
- **Certainty** suggests the decision maker has all the information necessary to make the decision, indicating that there is no need for any delays.
- **Risk** suggests that the decision maker does not know exactly what will happen in the future, but various possibilities can be imputed at different levels of probability of occurrence.
- **Uncertainty** suggests that a variety of outcomes are possible, but it is not possible to designate levels of probability to each outcome.

During risk and uncertainty conditions the purpose of expressing an opinion about the likelihood of an event happening would be to enhance the decision-making process.

Decisions are improved if information about alternatives is gathered and made available to managers (Hansen and Mowen¹, 2000:15). In most organisations lower level managers make routine decisions. Important or strategic decisions are taken by higher levels of management (Drucker, 1989:346). These significant decisions need to be made without reference to any specific structured rules. The use of unstructured rules would therefore involve greater risk and uncertainty. Stoner *et al.* (1995:246) categorise decision-making on a continuum from highly predictable (certainty) to highly unpredictable (uncertainty). This categorisation can be viewed in Figure 4.3 below.

Figure 4.3: The continuum of decision-making conditions



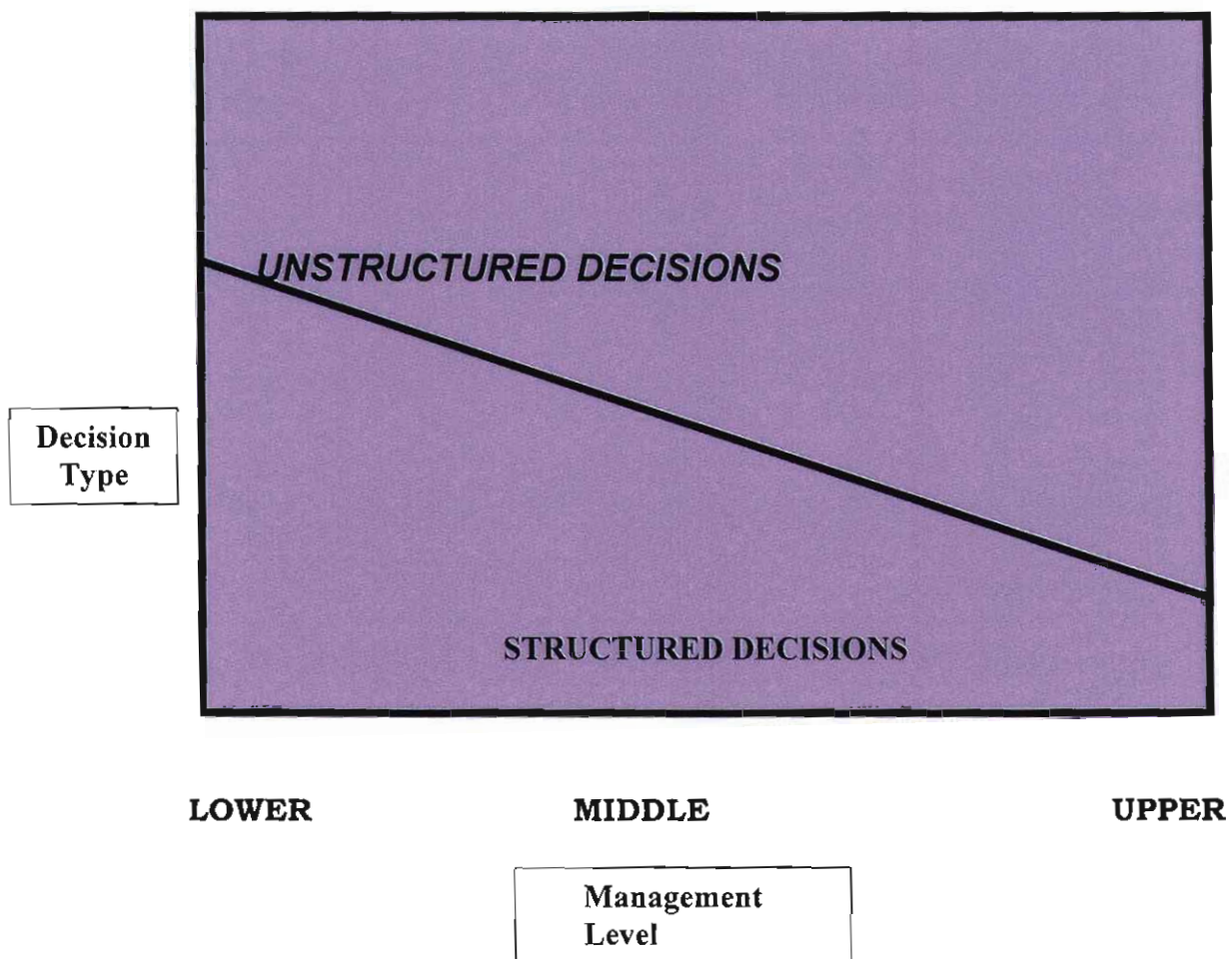
Adapted from Stoner *et al.* (1995:246).

The provision of information that reduces uncertainty or reassures the

decision-maker allows higher-level decision-makers to make strategic decisions more confidently.

The relationship between decision-making at the different management levels is depicted in Figure 4.4 below.

Figure 4.4: Decision-making at different managerial levels



Adapted from Bartol and Martin (1991: 263) and DuBrin (1994:108).

It is appropriate at this stage to distinguish between long-term decision-making

and short-term decision-making. Long-term decisions allow the business to plan without being strained by current resources or commitments. The various approaches for long-term decision-making relevant to higher education institutions will be discussed later in this chapter. Long-term decision-making involves long-term planning, which could follow a hierarchy from mission to the implementation of the plans. It should be noted that the long-term nature of decisions would make it difficult to accurately predict their outcomes. The risks associated in long-term decision-making are great, due to the time between events.

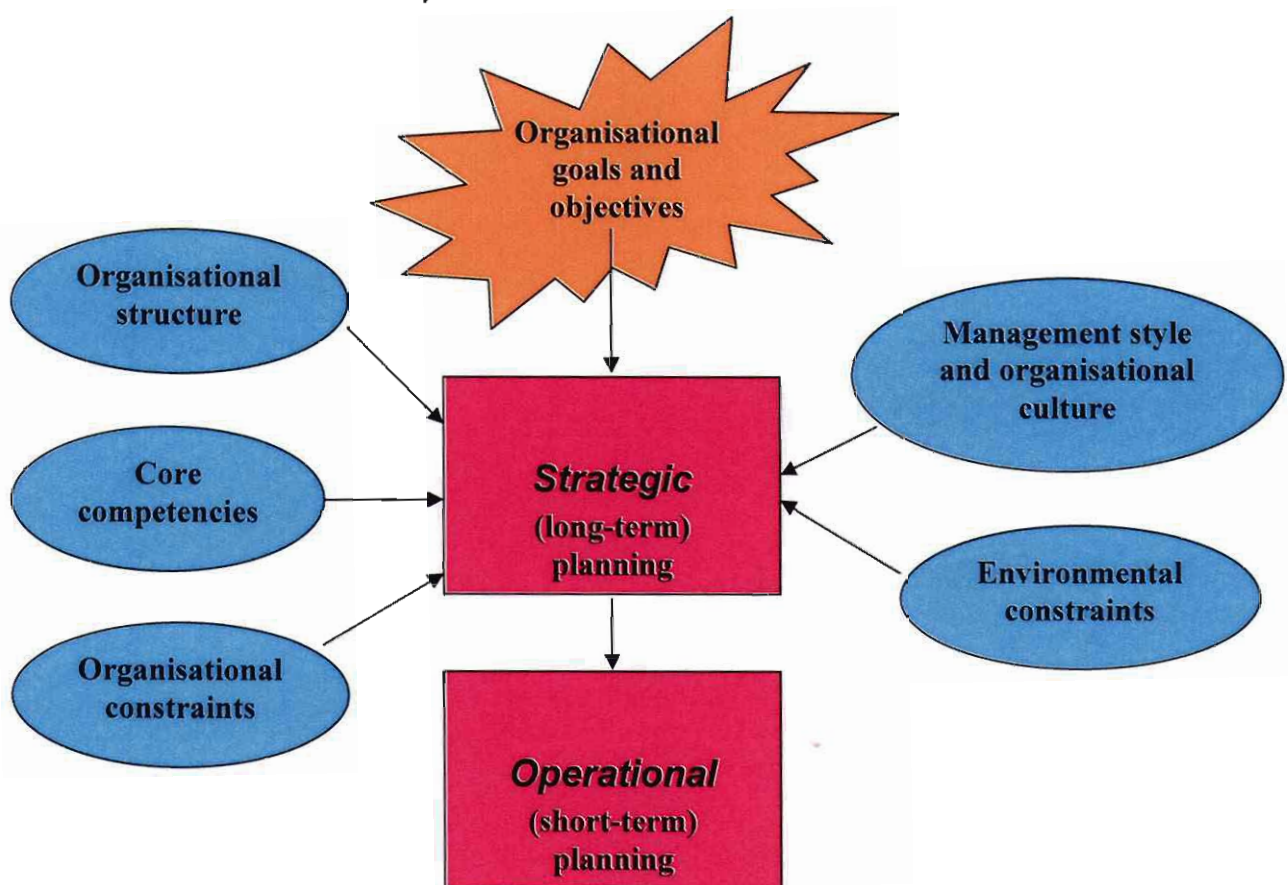
Short-term decisions are taken within the parameters of much greater organisational constraints, but are obviously necessary for the achievement of the long-term business objectives. Consequently, the short-term plans must form an integrated part of long-term planning. In the short term the decision-making freedom will be reduced because of the effects of previous decisions. There may be difficulty in increasing or reallocating resources to other areas when it seems financially advisable. It would, for example, be impossible to close off certain operations that are running at a loss in order to improve financial performance as the impact of previous decisions in respect of long-term commitments will worsen the financial impact. Long-term planning and short-term planning lead to decisions that impact positively or negatively on organisations. Figure 4.5 on page 122 presents the total impact of factors that determine a firm's typical short-term and long-term planning cycle which gives effect to relevant decisions. The use and benefits of budgets in higher education institutions as a form of short-term planning has already been discussed in the previous chapter.

4.3 Decision-making using the Quantitative Approach

Quantitative measures take into account factors that can be expressed in numerical terms while qualitative factors cannot be measured in numerical

terms (Horngren *et al.*, 1999:307). Quantitative factors could be either financial or non-financial. Decision-makers could make an evaluation after analysing quantitative financial information and then use quantitative non-financial and qualitative information to make a final decision.

Figure 4.5: Factors that determine organisational strategy (long-term and short-term)



Adapted from Barfield *et al.* (1998:41).

Quantitative approaches assist managers in taking decisions with a reasonable degree of confidence. A "more quantitative approach" enables managers to make a proper assessment of all possible alternatives in the decision-making process. This does not mean, however, that any relevant non-financial,

qualitative or other information should be disregarded (Hansen and Mowen¹, 2000:687). In using a quantitative approach towards decision-making, the following four methods can be utilised:

- ***The systems approach***

Decisions by one unit of the organisation have an effect on other units/departments within the organisation. This is particularly true of higher education institutions where a decision taken to provide expensive equipment in one department could affect another by reducing the latter's budgetary allocation if additional funds are unavailable. A systems approach would recognise this and take the effects into account before such decisions are made.

- ***The scientific approach***

The scientific approach deals with making decisions after observable reasoning. This approach presents a hypothesis about a specific problem and observations are then made to accept or reject the hypothesis.

- ***The interdisciplinary approach***

This approach allows academic disciplines such as mathematics, physics and economics to assist in arriving at decisions. In using an interdisciplinary approach a committee comprising of experts in each discipline can work together to reach a common, mutually acceptable decision.

- ***The modelling approach***

The use of simulations or representations of what is actually expected can be used to direct decision-making. In the area of management accounting, models such as the use of probabilities, queuing theory, program evaluation and review technique (PERT), can be used for decision-making.

4.4 The decision-making process

Management accounting information plays an important role in the decision-making process. Writers on the subject of decision-making suggest an organised approach to decision-making using a decision model framework or setting out steps to arrive at a decision (Horngren *et al.*, 1999:304; Drury, 2001:280; Hansen and Mowen¹, 2000:685; Hansen and Mowen², 2000:756). The process of decision-making is illustrated in Figure 4.6 on page 124. To make a decision and carry it out effectively, Horngren (1999:305) suggests following the steps described in Figure 4.6 on page 125. The model indicates that the actual decision (step 3) is taken after considering the alternatives/predictions (step 2). Feedback is important since it has a bearing on similar decisions that may have to be taken in the future.

In the decision-making process the decision-maker needs to consider those costs that are relevant to making a specific decision (Drury, 2001:28). The implication is therefore that only future costs are relevant to the decision-making purpose, and that any other costs should be excluded. The following costs need to be defined in relation to relevant costs:

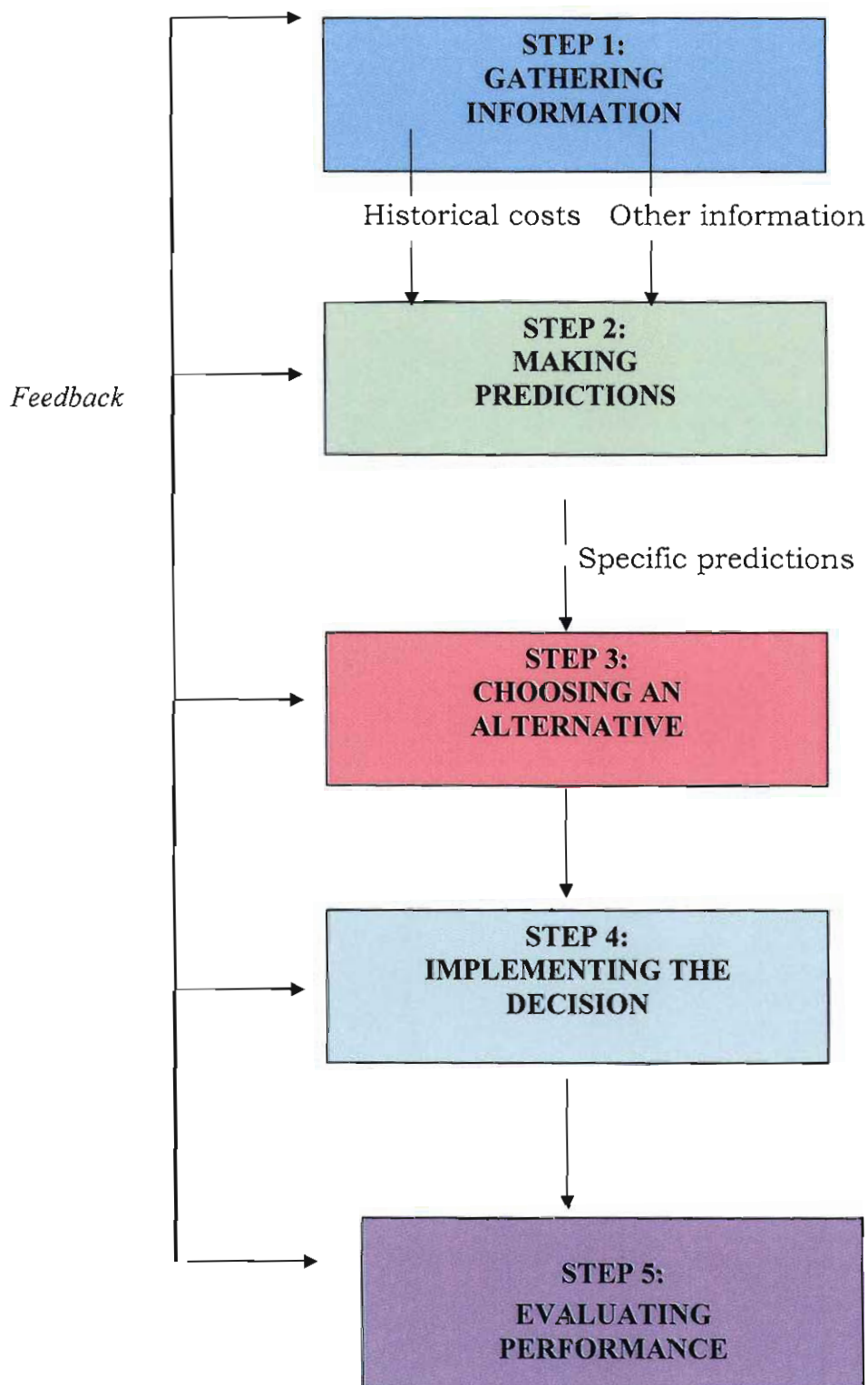
- **Committed costs**

These are costs that will be incurred irrespective of whether the organisation enters into, or does not enter into, a particular course of action e.g. a rental lease agreement for the next five years of R120 000 per year is a commitment, and will have no bearing if a higher education institution is deciding whether or not to discontinue a programme.

- **Sunk costs**

Sunk costs pertain to costs that are irrelevant in the decision making process since they are costs “created by a decision made in the past” (Drury, 2000:30). These costs will not alter as a result of a decision in the future.

Figure 4.6: The decision-making process



Adapted from Horngren *et al.* (1999:305).

▪ **Opportunity costs**

These are benefits that must be “given up or sacrificed when one alternative is chosen over another” (Hansen and Mowen¹, 2000:32). An opportunity cost is relevant if resources have an alternative use. If no alternative use of resources exists, then the opportunity cost is zero and irrelevant to the decision.

▪ **Incremental costs**

Incremental costs and income are the difference between costs and revenues for the corresponding items under each alternative that must be decided upon. If, for example, a fixed cost has to change as a result of a decision, then this would be relevant to the making of that decision. If fixed costs do not change then incremental costs will be zero.

▪ **Avoidable costs**

Avoidable costs are costs that can be saved by taking a specific course of action. Although avoidable costs are more in keeping with dis-investment decisions, avoidable costs can also be applied to cost savings decisions.

4.5 Decision-making at higher education institutions

In 4.2 above, short-term and long-term decision-making were briefly discussed.

According to Drury (2001:43-44), in most commercial organisations, management accounting decisions relating to the following areas are considered:

Short-term decisions

- Cost-Volume-Profit analysis
- Measuring relevant costs and revenues for decision-making
- Cost assignment

- Activity based costing
- Pricing decisions
- Decision-making under conditions of risk and uncertainty.

Long-term decisions

- **Capital investment decisions.**

These areas are relevant to higher education institutions but some may not need to be taken into account to the same degree as in manufacturing organisations. The aspects relating to relevant costs have already been discussed in this chapter, and cost assignment with regard to cost allocation has already been covered in chapter 3.

The following important aspects with regard to decision-making in higher education institutions still need to be highlighted:

- Budgetary allocations
- Using CVP analysis to expand capacity in courses or discontinue courses
- Pricing of courses
- Capital investments and capital replacement.

4.5.1 Budget allocations

Budgeting decisions in higher education institutions are not different to those of commercial organisations and are made by the budget committee (Hansen and Mowen¹, 2000:278). The budget committee has the following responsibilities:

- Reviewing the budget
- Providing policy guidelines and budgetary goals
- Resolving differences that arise from the preparation of budgets

- Approving the completed budget
- Performance evaluation.

Most aspects of budgeting have already been discussed in chapter 3 and need not be repeated here. One aspect that does need attention, however, is the flexibility of budgets in higher education. Sensitivity analysis allows managers to plan a range of possible situations, which will differ from the final budget. This is particularly important given the circumstances of a changing enrolment pattern in higher education in South African. The use of these flexible budgets may be seen as a contingency plan should such circumstances dictate. Flexible budgets allow managers to deal with uncertainties that may arise (Hansen and Mowen¹, 2000:284). Budgets are therefore not static documents, although it should be remembered that it is also not advisable to use a planning instrument that continually changes.

An alternative to a static budget and a flexible budget is a rolling budget forecast, which can greatly reduce the pressure of decision-makers who are “fixed” to the former types of budget. Rolling or continuous budgets allow managers to be continuously involved in planning (Barfield *et al.*, 1998:644).

4.5.2 The use of Cost-Volume-Profit Analysis (CVP) at higher education institutions

According to the official terminology supplied by the Chartered Institute of Management Accountants (2000:45), CVP analysis studies the effects on future profit changes of fixed cost, variable cost, sales price, quantity and mix. By analysing the relationship between cost, volume and profit, decision-makers can choose amongst alternative operating levels, which differ in total sales volume and in the composition of that volume. Although the aim of most public tertiary institutions may not necessarily be to make a profit on the courses they offer, the use of CVP analysis is a powerful tool for making decisions in

the short-term. Higher education institutions are mainly interested in breaking even and may therefore need to know what the breakeven student enrolment for a particular course should be, or what the price of the course should be if more students are enrolled.

The objective of CVP analysis is to establish what will happen to the financial results due to activity or volume changes in the short-term (Drury, 2001:45). It is beneficial to look at CVP analysis in its entirety and then relate the “break-even” aspect to higher education organisations only.

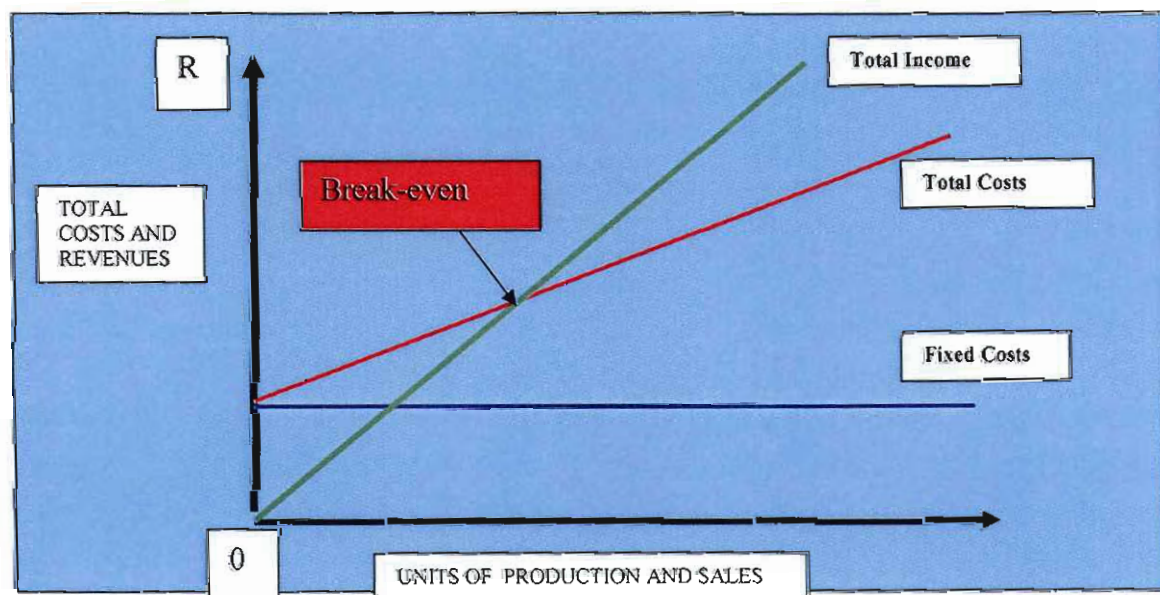
A simple calculation of profit can be illustrated as follows:

Profit = Income – total costs **or** restated as

Profit = Income – (fixed costs + variable costs)

A CVP analysis is illustrated in Figure 4.7 below.

Figure 4.7: Graphic illustration of a CVP Analysis



Adapted from Drury (2001:50).

The chart in this illustration is based on the following assumptions:

- The selling price is the same for all units.
- The variable cost is the same for all units.
- The total fixed cost does not change.
- This chart is applicable to a relevant range, i.e. capacity constraint.

For higher education institutions what may be most relevant from the chart is the breakeven point, i.e. trying to ensure that the total income can at least match total costs.

4.5.3 Pricing decisions

According to the User Guide of the Joint Costing and Pricing Steering Group (JSPSG) of the United Kingdom (1999:134), pricing is important for all organisations. The private sector organisations need to recover sufficient income to meet their costs otherwise they will become uncompetitive and eventually cease trading; public sector bodies need to price in such a way as to meet the needs of sponsors, including state bodies and other organisations. Pricing is essential to the long-term financial viability of any organisation.

The JSPSG research indicates that, whilst the methods and techniques of costing are well understood and widely applied, there is less commonality between organisations in their approaches to determining and setting prices. Two broad approaches – cost-based pricing and demand-based pricing – can be closely aligned to pricing determination in higher education institutions.

4.5.3.1 The cost-based pricing approach

A cost-based pricing approach uses the cost of an object to determine its price, while a demand-based approach uses market demand to determine the price of an object.

Cost-plus pricing is widely used in charities and in private sector organisations.

In the United Kingdom (JSPSG, 1999:135), The Government Accounting Conventions (GAC) approach is an example of cost-plus pricing as it enables higher education institutions to incorporate a profit margin in their price to account for research projects. In terms of this approach, the price of a research project is the sum of the total cost of the project, including direct and indirect costs, plus a profit element.

The GAC profit formula is designed to secure a fair and reasonable return on capital employed compared with the average return on British industry, and requires an HEI to calculate two costs: the Cost of Production (CP) and the cost of Capital Employed (CE). In simple terms, the Cost of Production can be viewed as equivalent to total operational cost inclusive of direct and indirect costs; and Capital Employed as the net cost of assets (land, buildings, equipment, etc.) employed. The data for calculating capital employed can be based on the historic cost of assets or on a modified form of current (replacement) cost accounting. For both CP and CE there are published lists of eligible and non-eligible costs, which are used in determining the relevant costs. The profit to be added to a contract is then calculated as the sum of two elements: a profit element based on CE and a profit element based on CP.

Another important aspect to be considered in pricing is the Breakeven – a concept which links cost, price and volume. This is sufficiently covered under the section on Cost-Volume-Profit-Analysis (CVP). Breakeven is used to assist many pricing decisions as it can be used to analyse the impact of changes in costs and changes in volume on price and income. Breakeven analysis can be used for the purposes of financial planning and budgeting as well as guiding and informing the process of resource allocation.

4.5.3.2 Demand-based pricing and the role of the market

A demand-based pricing approach uses market demand to determine the price of a cost object. The use of a demand-based pricing approach requires information on market demand and the process of determining a specific price. Demand-based pricing methods can include the following:

- ***Market price***

This refers to the price obtainable in an open market.

- ***Sponsor-determined pricing***

In the higher education sector, the areas in which an institution has the discretion to determine its prices must be separated from those in which it has no discretion. Higher education institutions have limited discretion in pricing policy. In the UK, the bulk of a university's income is derived from Funding Council grants, publicly funded undergraduate student fees, and Research Council and charitable research grants. The sponsor in these areas and not the institution determines the price. Institutions therefore have limited discretion in price setting, and concentrate their efforts on determining costing policy in these areas (JSPSG, 1999:135).

- ***Differential price***

Differential pricing is used for selling the same product or service at different prices in different markets or under different conditions. It is usually used:

- to achieve social objectives
- to maximise unutilised capacity.

Differential pricing in higher education is usually applied to sport in that discretionary tariffs may be applied to individual users or groups of users for the same sporting facility.

▪ ***Transfer price***

Transfer pricing is concerned with intra-organisational pricing, i.e. pricing products and services which are transferred within an organisation. Generally most transfers are cost-based.

▪ ***Non-financial factors***

The following non-financial factors also affect price:

- Behavioural factors e.g. brand loyalty, customer satisfaction, supplier behaviour, ethical behaviour
- Social factors e.g. fashion, trends, image, reputation
- Environmental factors e.g. location, pollution, noise, technological innovation
- Political factors e.g. legal constraints, views of politicians.

Quantifying the cost of a non-financial factor is usually difficult. Decisions on the price structure of student fees need to be reached after taking into account all factors that have a bearing on costs and resources. The financial position of the course and the social functions of the provision of the courses are important in determining the charge and existence of a course (Burnett *et al.*, 1992:85). Higher education institutions are expected to generate from private sources the portion of funds not subsidised by the government in terms of the subsidy formula. These private sources include tuition fees, investment income and income from contracts (South Africa⁷, 1996:212). This implies that

tuition fees can be calculated after taking into account the subsidy income and income from all other non-subsidised sources.

The amount of tuition fees charged by different institutions varies and the tuition price ranges are established by the supply and demand in higher education institutions (Halstead, 1995:97). The meaning of supply is the same as in *supply* from an economic perspective.

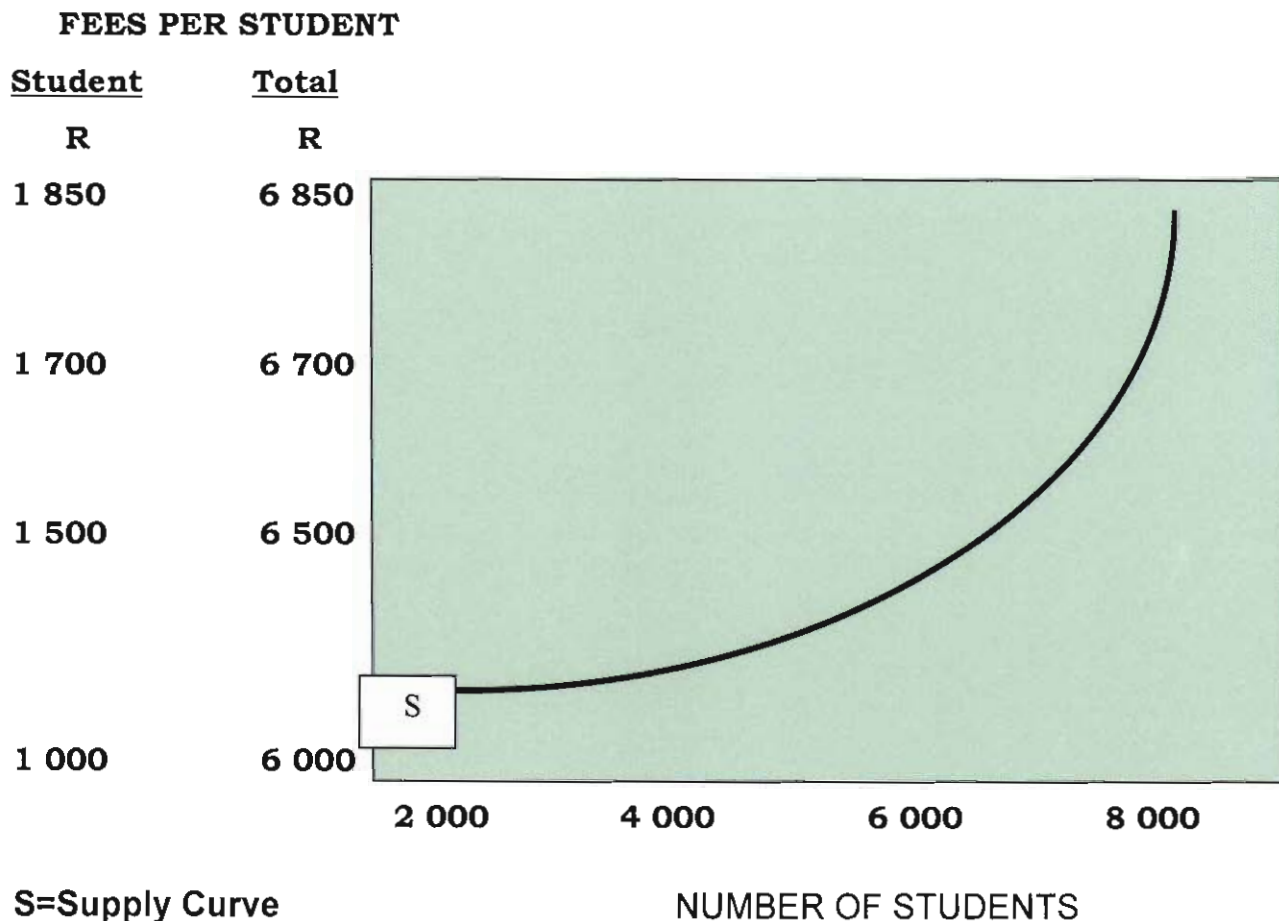
Economic supply is defined as the number of units that suppliers are willing to supply at a particular price (Beardshaw, 1992:62). Relating this to an educational institution would mean that it is the number of students that an educational institution would be willing to tutor at the various price levels. This is illustrated in Figure 4.8 on page 135, after taking into account a subsidy from the government. The figure reflects the nature of supply, i.e. the higher the price the greater the number of units the supplier is willing to supply.

Demand means demand from an economic perspective. Economic demand is defined by Case and Fair (1992:85) as the number of units demanded by consumers over a specific period of time at a certain price.

The demand for higher education is illustrated in Figure 4.9 on page 136. As in keeping with the economic concept of demand, the lower the student fees the higher the demand for higher education.

The fee acceptable to the institution in order to ensure that it covers its costs and the fee that students are willing to pay represents the equilibrium price, which has the same meaning as *equilibrium price* in economics. The equilibrium price is illustrated in Figure 4.10 on page 137.

Figure 4.8: Supply versus Price



S=Supply Curve

NUMBER OF STUDENTS

Assumption: Government subsidy of R5 000 is obtained per student

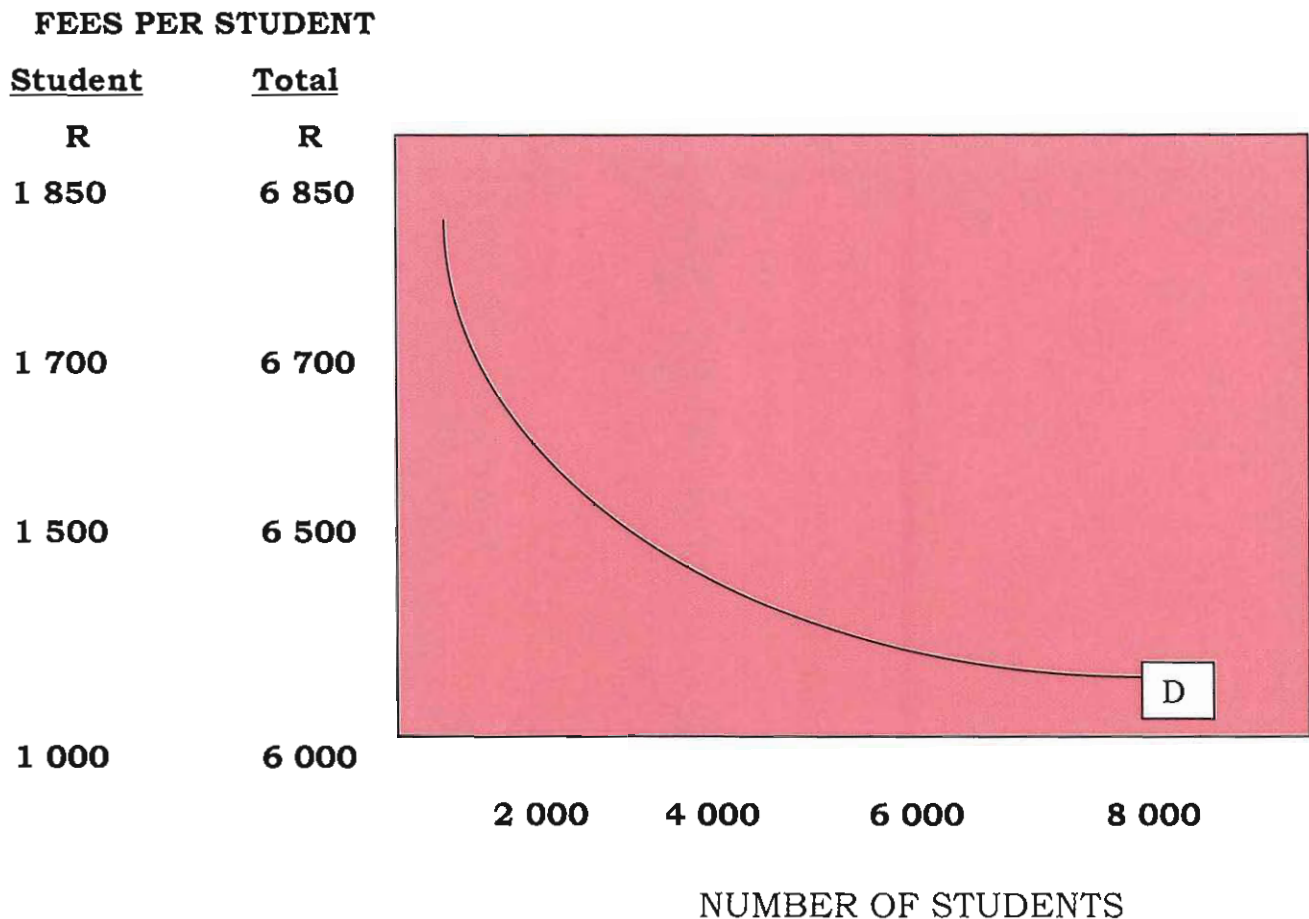
Adapted from Halstead (1995:89).

The demand, supply, and equilibrium price illustrations are simplistic and further adjustment factors must be taken into account before making a final decision on the fees to be charged. These factors relate to the following:

- Instruction levels
- Subject category, i.e. the Human Sciences or Natural Sciences group.

The fees charged for lower instructional levels would be in keeping with the progression of intensity of course levels, where, for example, level two intensity is "twice as intensive" as level one (South Africa¹⁵, 1989:9).

Figure 4.9: Demand versus Price



D= Demand Curve

Assumption: Government subsidy of R5 000 is obtained per student

Adapted from Halstead (1995:89).

The use of target costing can be helpful in pricing decisions in higher education cost management. Target costing is a cost management tool that planners use to reduce cost (Kaplan and Atkinson, 1998:224). Target costing involves the development of the maximum cost that can be allowed for a service or manufacture of a product. This cost is achieved through a detailed market analysis to find out what the market is willing to pay for a product or service. If the organisation's profit margin is deducted from the projected

Figure 4.10: Equilibrium Price

FEES PER STUDENT

Student Total

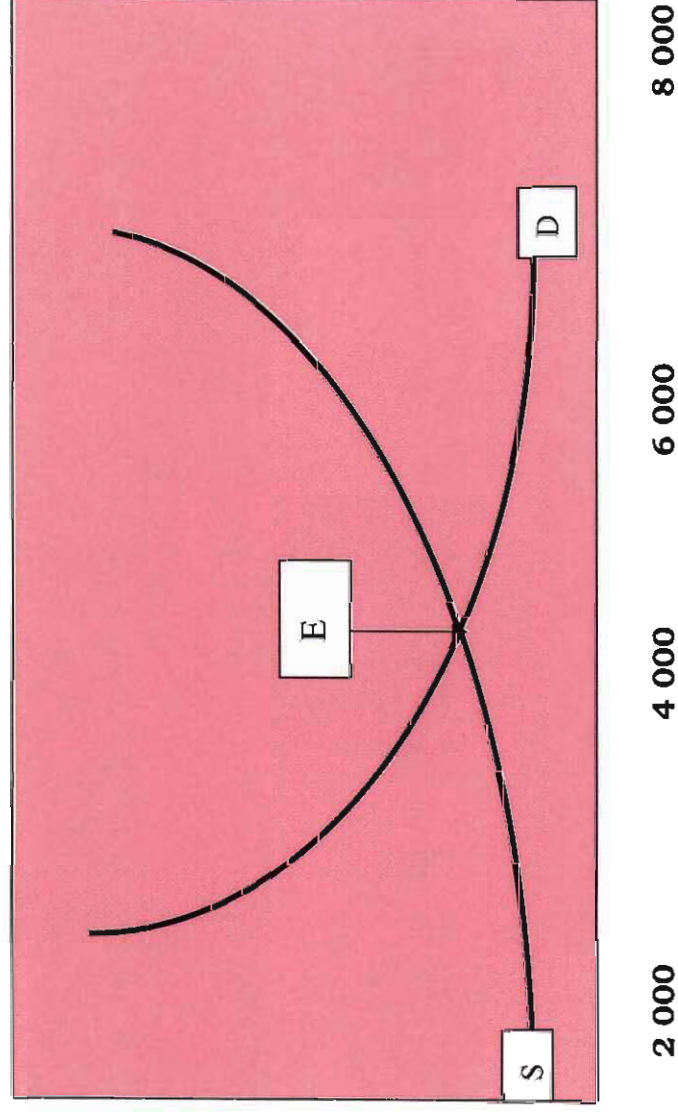
R R

1 850 6 850

1 700 6 700

1 500 6 500

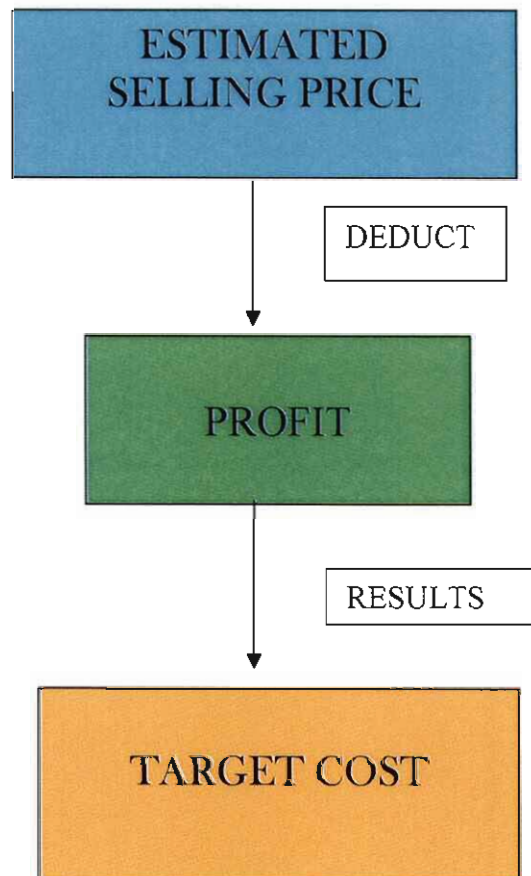
1 000 6 000



Adapted from Halstead (1995:90).

selling price an implied target cost is achieved. This can be illustrated in figure 4.11 below, as follows:

Figure 4.11: Target Cost



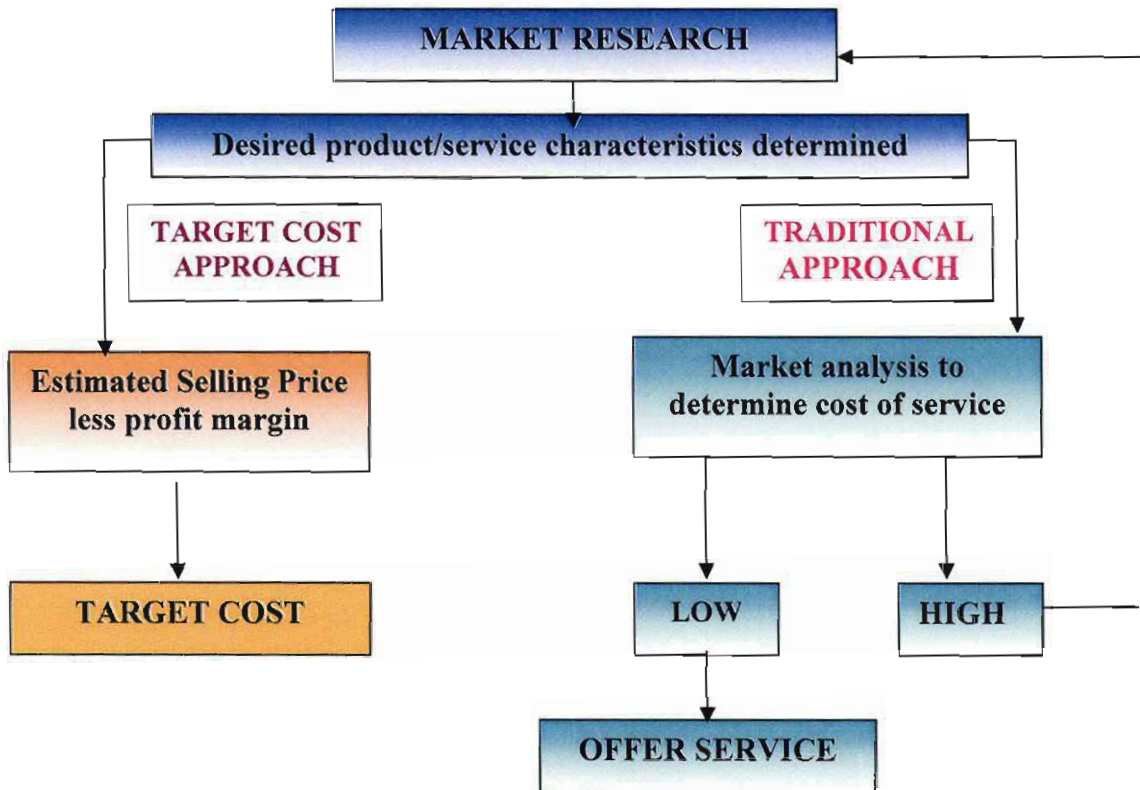
Based on independent research

Garrison and Noreen (2000:880) cite the following as reasons for using target costing as a pricing tool:

- Organisations have less control over price than they think. The market really determines the price, and so the anticipated market price is taken as the target price.
- Most of the cost has already been “targeted” in the design stage and very little can be done to significantly reduce the cost thereafter.

A: comparison of target costing with traditional costing can be illustrated in figure 4.12 below, as follows

Figure 4.12: Target Cost versus Traditional Cost



Adapted from Barfield *et al.* (1997:225).

South African higher education institutions work on an independent pricing of courses. In the United Kingdom the JSPSG has developed a programme to encourage higher education institutions to formulate and implement a policy for their own institution. The JSPSG's programme of activities addresses the following specific aims:

- To raise the profile of pricing in institutions.
- To promote greater consideration of the marketing, competitive and strategic contexts of pricing.
- To improve pricing practices within institutions.
- To improve institutional ability to raise net contributions to income.

- To ensure that best practice in institutions is disseminated both throughout the sector and within each institution.
- To promote the use of proper business planning and risk appraisal techniques.
- To encourage improvements in control and accountability.
- To improve the understanding of institutional strategic objectives as they relate to pricing.
- To ensure that pricing strategies match institutional objectives.

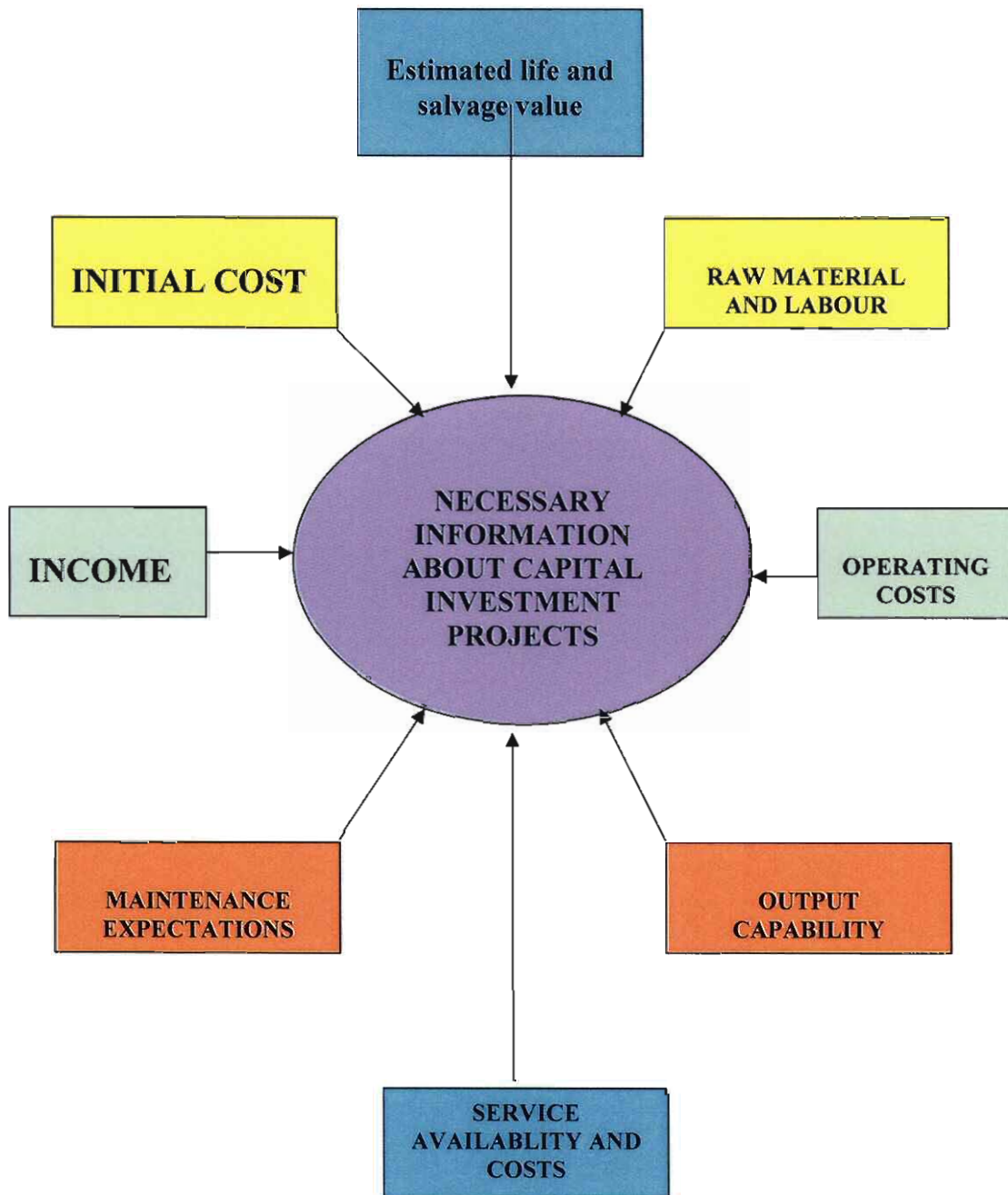
4.5.4 Capital investment decisions

Although the funding of fixed assets (excluding land) is provided for in the funding formula (South Africa¹⁵, 1989:20), higher education institutions still need to make major decisions with respect to choosing specific items of fixed assets from a range of alternatives. According to Drury (2001:243), the capital investment decision normally represents the most important decision that an organisation makes, since huge sums are invested which cannot be re-imbursed. Figure 4.13 on page 141 reflects a decision-making model for capital investment decisions.

A major decision criterion in capital investments is always what amount of money to invest in the initial stages of the product. The investment also impacts on the business profile of the organisation. If an organisation has surplus funds to invest then the opportunity cost foregone of alternative use of surplus funds must also be considered. Capital investments are also associated with risk factors. Ingram *et al.* (2001:384) lists these factors as shown in Table 4.1 on page 142.

An organisation is at greater financial risk if a capital investment, which is a large investment in terms of the size of the organisation, fails. The risk will be smaller where an organisation makes a few smaller investments in different projects.

Figure 4.13: Capital investment information



Adapted from Barfield *et al.* (1998:824).

Two other factors that always need to be considered are:

Technology risk – there is always the danger that the technology applied to a capital project may become obsolete.

Cash flow risk – the impact of inflation may lead to the possibility of not being able to accurately forecast cash flows in the long-term. The impact of

currency fluctuations on cash flows is always difficult to estimate.

Table 4.1: Factors that increase risk and factors that decrease risk

FACTORS THAT INCREASE RISK	FACTORS THAT DECREASE RISK
1. Large investment size relative to the company's total investment (assets).	1. Large potential for recovery of investment through resale of the investment asset.
2. Long-term recovery of the cost of the investment.	2. Recovery of the investment in a short period of time.
3. Management inexperience with similar investments.	3. Management experience with similar investments.
4. Difficulty in reversing the investment decision.	
5. Considerable uncertainty about whether the asset will perform as expected.	

Ingram *et al.* (2001:384).

In evaluating capital projects, the long-term allocation of funds within the business is not only to select the most profitable project. Management should look at maximising long-term returns and thus long-term success. This means that, whilst a financial analysis may result in a preferred ranking, a strategic analysis by top management is essential to prioritise projects in terms of the strategic plan of the organisation. Top management decision is influenced by the other factors, which Hirsch (2000:525) indicates as a post audit evaluation of decisions. Two other factors include:

Non-quantifiable factors

Generally, financial information is used as a basis for calculations, but should not be the only criteria. It may be financially worthwhile to invest in the latest computer technology, for example, but would be strategically unwise if it were to lead to retrenchments that would be detrimental to the

image of the firm.

Management preferences

Managers are sometimes driven by motives of profit or other targets rather than cash flow principles. Managers may wish to do what is convenient and practical to them.

Management can gather specific monetary and non-monetary information for each asset or project to ensure the best decision. This information is included in the information listed in Figure 4.13 on page 141.

The following methods of capital investment appraisal are advocated by many writers, including Drury (2001:244), Louderback III *et al.* (1999:326) and Hansen and Mowen (2000:732):

- *Payback*

This is the simplest of methods used in the appraisal of most capital investment projects. The payback period is determined by computing the period over which the amount of investment is repaid. The technique is based on calculating the cash flow arising from the project each year which thus becomes available for use in other areas of the business. This can be illustrated in the following simple example in Table 4.2 below:

Table 4.2: Payback period

	Project A	Project B
Initial Investment	(500 000)	(500 000)
Cash Inflows Year 1	200 000	300 000
Cash Inflows Year 2	200 000	150 000
Cash Inflows Year 3	100 000	25 000
Cash Inflows Year 4	0	25 000

Based on independent research

Project A reflects a shorter payback period than Project B. The decision-making criterion used under the payback method indicates that the more quickly the cost of the investment can be recovered, the more desirable the investment is (Garrison and Noreen, 2000:686).

Louderback III *et al.* (2000:342) and Ingram *et al.* (2001:391) suggest that there are significant arguments for the use of the payback period. These can be listed as follows:

- It is significant to a company that is concerned with liquidity. Companies would want to recover their outlay in the quickest possible time.
- It can serve as a rough screening device for investment proposals.
- A long payback period means a low rate of return and this can be used as a measure of risk against inflation, new technology and interest rate increases.
- It can be helpful in deciding whether to invest in projects in foreign countries, since investors need to consider aspects relating to the risk of nationalisation, inflationary conditions in foreign countries, trade restrictions, exchange rate fluctuations and changes in policies. Chrysler Motor Manufacturing withdrew from China when the
- country required the company to hand over all its technology so that it could sell the design to other Asian countries, while Mercedes accepted these conditions (Louderback III *et al.*, 2000:346).

The payback period does, however, have serious flaws. It is not a true measure of the profitability since it only tells a manager the period required to cover the original investment. Another major deficiency of the payback method is that it does not consider the time value of money (Garrison and Noreen, 2000:687). If we reconsider Table 4.1 on page 142, it is reasonable to suggest that Project B is actually better since more money is recovered

earlier. These obvious and serious disadvantages of the simple payback method have led to the development of the more sophisticated Discounted Cash Flow Models.

- *Discounted cash flow models*

Net present value method (NPV)

The present value of future cash inflows involves the inverse process of compound interest. This represents the "present value of the net cash inflows less the project's initial investment outlay" (Drury, 2001:3247). Using discounted cash flows will enable the decision maker to identify the present value of all future cash flows over the life of any project. The present value of all required investments when deducted from the present value of all cash inflows will result in the net present value of the overall project. A positive or more favourable NPV suggests that the investment should be made in that specific project. A key advantage of the present value method of using discounted cash flows is that a number of projects with various economic lives can be satisfactorily compared.

Internal rate of return (IRR) or discounted rate of return method

IRR is defined as the interest rate that sets the present value of a project's cash inflow equal to the present value of the project's cost (Hansen and Mowen, 2000:740). The IRR can be used to assess the acceptability of investing in a project. If the IRR exceeds the cost of capital then the project is acceptable.

Barfield *et al.* (1998:819), in evaluating the IRR method, argues that there are three major drawbacks of using this method. These can be listed as follows:

- Problems of calculating the IRR when there are uneven cash inflows.
- The difficulty of using present value tables without fractional interest rates.

- The possibility of finding several rates of return that will make the net present value of cash flows equal to zero.

Discounted payback method

This method calculates the payback period to its present value after discounting the cash flows of future periods. The discounted payback method overcomes the main criticism of the payback period – that it ignores the time value of money. It gives a more realistic indication of the payback period (Dugdale and Drury, 1993:41). Moreover, the use of this method can provide better information for decision-makers.

4.5.5 Capital investment decisions in higher education institutions

In using capital investment appraisal techniques at universities, Cropper (1996:30) found that "41% of higher education institutions use it often or always". This indicates that higher education institutions place some reliance on capital investment appraisal techniques in deciding whether to make an investment or whether to choose another alternative. There is a difficulty in comparing the use of capital investment decisions in higher education institutions with those of commercial organisation, since, as Cropper (1996:30) suggests, these educational institutions have a problem "placing a value on qualitative benefits". Carter (1992:59) advocates the use of a multi-attribute decision model (MADM) to take into account "quantitative financial and non-financial as well as non-quantitative factors" in capital decision-making. In the MADM model the analyst rates the courses of action by weighting factors. Table 4.3 on page 147 illustrates an MADM model of a manufacturing enterprise. MADM models for capital investment decisions in higher education can be created on the same basis to take into account non-quantitative factors as well as the objectives of the institution.

In the South African higher education scenario, fees charged for courses in the Natural Sciences group are higher than those in the Human Sciences in

keeping with the weighting of the effective subsidy student (ESS) calculation, in which one full time equivalent (FTE) instruction/research personnel unit will be provided for 15 ESS in the Natural Sciences as opposed to one FTE instruction/research personnel per 42 ESS in the Human Sciences (Department of National Education Report 02-326, 1992:3). This adjustment factor also allows courses requiring more specialised equipment and personnel (Natural Sciences group) to be justifiably weighted.

Table 4.3: Worksheet for the multi-attribute decision model (MADM)

FACTORS	Existing Technology				New Technology			
	Weights	Ratings	Confidence	Scores	Weights	Ratings	Confidence	Scores
Quantitative financial*								
Net present value	15	x	2	x 0.8 = 24	15	x	0	x 0.6 = 0
Payback	15	x	2	x 0.9 = 27	15	x	0	x 0.9 = 0
Quantitative non-financial*								
Reduce complexity	10	x	1	x 1.0 = 10	10	x	2	x 0.9 = 18
Improve quality	30	x	1	x 1.0 = 30	30	x	2	x 0.9 = 54
Non-quantitative*								
Company image	15	x	1	x 0.8 = 12	15	x	2	x 0.9 = 27
Design Flexibility	15	x	1	x 1.0 = 15	15	x	2	x 0.9 = 27
Sum of factor weights	100				100			
COMPOSITE FOR NEW TECHNOLOGY								126
COMPOSITE FOR EXISTING TECHNOLOGY				118				118
NET ADVANTAGE								8

*Many factors could be used in each category, but the sum of the factor weights always equals 100.

Adapted from Carter (1992:061),

In short, course costing, day release programmes and other academic courses that were not considered in the original budget estimates are generally used in the principle of marginal costing (Burnett *et al.*, 1992:09).

In terms of the principles of marginal costing "excess (unused) capacity" can be used to improve the organisation if the firm's profitability is improved (Henk and Spoede, 1991:521). Similarly, in higher education institutions, short courses can be offered if there is excess capacity and the income from such offerings exceed the variable costs. This is a typical short-term decision (Horngren *et al.*, 1999:318).

In more developed higher education systems, government and government agencies assist in providing guidelines for making capital investments, for example, The Higher Education Funding Council for England in the United Kingdom is the responsible agent that provides explicit guidelines to higher education institutions. Annexure F provides these details.

4.6 Summary

Decision-making is an integral component of planning at higher education institutions since it involves making decisions about the goals of these institutions. Although managers can follow an orderly process in decision-making, every decision is not necessarily a result of such orderly process (DuBrin, 1994:98). Higher education institutions have been faced with turbulent conditions in recent times and decision-making is even more crucial. The fact that the government has no additional funds to spend on higher education (Bhengu, 1996:3) points to the importance of making correct decisions.

Against the backdrop of a transforming education system and the pressure to obtain maximum benefit from limited financial resources, a proper management accounting system can add value to all-important financial decisions made in higher education institutions.

Both long term and short-term mis-decisions can adversely affect the existence of institutions. The quality of business decisions in higher education institutions can be improved by using proper and updated

management accounting techniques. The use of qualitative factors in addition to quantitative factors is more important in higher education institutions, and the use of a multi-attribute model, similar to the one suggested by Carter (1992:61), can enhance the decision-making process.

The aspects discussed in this chapter and in chapters two and three have been researched in higher education institutions in South Africa. The research methodology, findings, recommendations and conclusions are discussed in chapters five and six.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1 Introduction

This chapter provides details of the methodology employed in the design of the research. It focuses *inter alia* on the sample and sampling procedure, data collection methods, the research instrument, validity, reliability, data processing and the procedure for the design and administration of the questionnaire.

According to Wellman and Kruger (2000:2), research methodology refers to “The application of various methods, techniques and principles in order to create scientifically obtained knowledge by means of objective methods and procedures within a particular discipline”. Research methodology is therefore the ways one collects and analyses data. These methods were developed for acquiring knowledge by reliable and valid procedures. Research methodology should therefore be systematic and purposeful so that procedures are planned to yield data on a particular research problem.

5.2 The Research Problem And Objectives Of This Study

5.2.1 Problem Statement

The emerging higher education scenario in South Africa has great financial implications for private higher education institutions. The decrease in enrolments at tertiary institutions must be of concern not only to the private institution but also the government since it would have a far reaching negative socio-economic impact. This is coupled with the state’s attempt to achieve a high skills growth rate of around 5 percent (South Africa², 1999: iv)

The government’s attitude to private higher education institutions has been contradictory. On one hand they want private institutions to create the

complementary and competitive role in higher education. On the other hand it has created regulations to restrict or curb its development. From student recruitment to the programmes of study, private institutions have limited room to manoeuvre in the face of relevant government policies.

Private higher education institutions have greater autonomy over their institution because they are financially independent and do not receive any subsidies or grants from the Government (Vergnani, 2001:1). However, they are subject to the same government policies that public institutions are subjected to. Private higher education institutions are effectively made to compete on an unequal footing since public institutions are subsidised of between 50 to 60 percent per student by the government (SOUTH AFRICA²³, 2004:196).

By far the greatest problem facing private higher institutions is the issue of proper financial management which is crucial to their existence and further development of private higher education. This study investigates this issue by focussing on a sample of private higher education institutions and their financial management systems.

This study examines financial management systems, cost management systems, and decision making systems at private higher education institutions in South Africa. It assesses long-term financing decisions of private institutions with regard to sources of funds, costs of funds and its impact on capital structure. Further an analysis of long-term investing decisions on investment in fixed assets, acquisition of other businesses, mergers and disinvestment will be assessed. Finally liquidity decisions concerning the day-to-day management of the institutions short-term assets and liabilities would be assessed (Ross et al, 1996:3-4).

The findings of this study will be of benefit to private higher education institutions for the following reasons:

The study:

- evaluates financial management systems used in private higher education institutions in South Africa;
- evaluates from literature the developments in financial management;
- makes recommendations on the financial management approaches and techniques that will benefit private higher education institutions.

5.2.2 Objectives of the Study

Primary Objective

To analyse and compare the financial management systems, cost management systems and decision making systems of private higher education systems in South Africa from 1990 to 2005 in order to equip administrators of private higher education institutions to make more informed and relevant decisions at their institutions.

Secondary Objectives

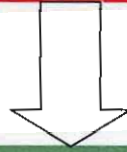
The attaining of the following three secondary objectives is important to support the achievement of the primary objective:

- To investigate the key issues and trends in the policy and practice of financial management systems of private higher education institutions in South Africa.
- To describe and evaluate the different cost management systems that is relevant to private higher education institutions.
- To establish from literature the types of decision-making systems relevant in private higher education.

Figure 5.1 : SIX STEP PROCEDURE FOR DRAWING A SAMPLE

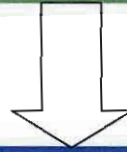
STEP 1

**DEFINING THE
TARGET POPULATION**



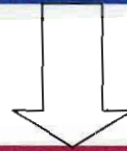
STEP 2

**IDENTIFYING THE
SAMPLING FRAME**



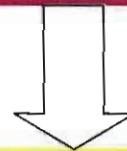
STEP 3

**SELECTING THE
SAMPLING
PROCEDURE**



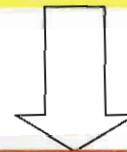
STEP 4

**DETERMINING THE
SAMPLE SIZE**



STEP 5

COLLECTING DATA



STEP 6

**SELECTING THE
SAMPLING ELEMENTS**

Source : Churchill and Iacobucci, 2002:449)

5.3 The Sampling Procedure

Churchill and Iacobucci (2002:449) outline a six-step procedure that researchers can follow when drawing a sample from a population. The steps are systematically reflected in figure 5.1 on page 153.

5.3.1 Target Population

The target population is a clearly defined group of entities that have some characteristics in common (Boyce, 2002:232). Often in research the population is defined by one or two behavioural characteristics. Hair *et al.* (2000:328) view a population as an identified group of elements that are of interest to the researcher and pertinent to infer something about the population. The researcher therefore has to be precise in specifying exactly what elements are of interest and what elements are to be excluded.

For the purpose of this study, the population comprised one hundred (100) private higher education institutions that were registered with the Department of Education on 23rd November 2005. It was decided select forty-five institutions and to send out questionnaires only to these institutions. The 45 institutions were selected on the following basis:

- All registered institutions with the Department of education were ranked according to their student enrolments.
- Since majority of the institutions were small, that is, the institution had below 400 students enrolled; it was decided to choose twenty-two (22) small institutions.
- A total of twenty-three (23) institutions with student enrolment of over 400 were chosen as the larger institution.

5.3.2 Identification of the sample frame

After defining the target population, the researcher should assemble a list of eligible sampling units, referred to as the sampling frame. Some common sources of sampling frames are lists of registered voters, customer's lists or even a map. Hair, Bush and Ortinau, (2000:330) maintain that it is often

very difficult to gain access to accurate or representative sampling frames. In such instances the researcher will have to employ alternative methods such as random-digit dialling (if conducting a telephone interview) or a location survey (for example supermarket intercept or mall intercept) in order to generate a sample of prospective respondents.

A sample relates to a sample frame as the listing of elements or units from which the actual sample is drawn (Cooper and Schindler, 1998:204). According to McMillan and Schumacher (1993:163) "The researcher must determine the size of the sample that will provide sufficient data to answer the research question. The general rule in determining the sample size is to use the largest sample possible, since the larger the sample the more representative it will be of the population".

In this study, the criteria mentioned above in 5.2.1 have been used to garner the largest possible sample and one that is truly representative to the population.

5.3.3 The sampling procedure

The nature of the research necessitated the use of a combination of convenience and judgement sampling (Parasuraman *et al.*, (1991:456; Naumann & Giel, 1995:201; Churchill, 2001:454; Meidan, 1996:53; Expinoza, 1999:453). Convenience sampling allows a large number of respondents to be interviewed in a relatively short period of time, and for this reason is commonly used in construct and scale measurement.

5.4 Response rate

Owing to the fact that the response rate was extremely poor, it was decided to telephone the Institution concerned and complete the questionnaire telephonically. This resulted in thirty-one (31) of the forty-five (45) private higher education institutions contacted.

According to Fink, (1998:87), all studies aim for a high response rate. However, no standard exists to assist the literature reviewer in deciding whether the aim has been achieved and, if not, the effect on the outcomes of that particular study.

The response rate in this study i.e. the number that responded divided by the sample size is 31 divided by 45 or 69 percent.

5.5 The Questionnaire

According to McMillan and Schumacher (1993:239), a questionnaire is one of the many ways to obtain data and that a researcher that chooses to use it should ensure that there is no other better way of obtaining reliable information. Parasuraman (1991:363) defines a questionnaire as a set of questions designed to generate the data necessary for accomplishing a research project's objectives. Equally important, is to evaluate the questions being asked. This can be achieved by asking the following questions, as described by Orna & Stevens (1995:21).

- Are the questions really necessary in view of the objectives for the particular research study?
- Will the respondents be willing and able to provide adequate information on the subject?
- Do the questions cover the content area for which it was designed?
- What does the research questionnaire seek to establish?
- What limits must be set to the breadth and depth of the particular questions asked?
- What are the potentially useful ways in applying the research questionnaire (methodological options)?

When the above questions have been addressed, the researcher must try and ascertain the type of questions he or she will be using within the limits

of the actual research questionnaire. To achieve this aim the following type of questions could be useful, according to Bennett (1997:42).

- Open-ended questions, which require the respondents to provide their own personal opinions and answers to the questions.
- Multiple-choice questions, which require the respondent to choose an answer or alternative answer from a list provided within the questionnaire.
- Dichotomous questions which the opposite from multiple choice questions are and which allows the respondent only one or two responses such as "Yes" or "No".
- A standard five-point Likert-scale, which is used in most questionnaires in order to ensure consistency and which is also easy for the respondent to complete.
- A nominal scale, which is used for questions relating to demographics, this type of questionnaire can be completed by the respondent by means of a multiple-choice form.

The next step involved drafting a questionnaire to achieve the primary objective set out earlier in this chapter and solicits opinions from management accounting experts.

5.6 Measuring instruments

There must be differentiation between different levels of measurement on the basis of the following four features of the numbers assigned within the research process.

- Distinguishability (the number 2 is different from the number 1).
- Order of rank (2 has a higher rank than 1).
- Equal intervals between successively higher numbers.
- Absolute size.

Wellman and Kruger (2000:133) support the view that a different level of measuring may be assigned corresponding to each of these four characteristics. According to Zikmund, (2000:276), these four categories of measurement scales can be described as follows:

Nominal scale

A scale in which the numbers or letters assigned to objects serve as labels for identification or classification; a measurement scale of the simplest type.

Ordinal scale

A scale that arranges objects or alternatives according to their magnitudes.

Interval scale

A scale that not only arranges objects according to their magnitudes but also distinguishes this ordered arrangement in units of equal intervals.

Ratio scale

A scale having absolute rather than relative quantities and possessing absolute zero, where there is an absence of a given attribute.

5.7 Finalising of the Questionnaire

The draft questionnaire was sent to an independent consulting agency, Calypso Consulting of Durban, who obtained expert opinions before the research questionnaire was finalised. The result was that the questionnaire was adopted and vague or unclear questions were excluded. The final questionnaire is attached in Annexure A. This does not mean therefore that there was no chance that some questions caused problems. Questionnaires need to be tested in order to identify and eliminate problems that might occur (Sudman and Blair, 1998:300).

5.8 Data processing and analysis

An independent research statistician, Trevor Hanekom, from RFact, directly captured the various responses from the relevant research questionnaire. Calculations were made in order for the researcher to check the reliability of data analysed.

Once the researcher is sure that the relevant data has been correctly coded and entered, as described by Bennett (1997:44) he/she must then decide on an appropriate computer programme in order to analyse the data obtained.

The following programs were considered and used:

- Statistica
- SPSS
- Survey System

The primary data was assimilated by means of a statistical software package where the final analysis and cross-tabulations were done.

5.9 Analysis and Interpretation of Data

An appropriate statistical procedure must be used to analyse and interpret the data that have been captured. The relevant data must be interpreted, so that results can be obtained against the formulated research problem. The analysis of data is done mainly by means of reliable statistical techniques and methods aimed at investigating variables and their effect, relationships and patterns of intent, within the particular area of study (Wellman and Kruger, 2000:201). The data analysis was done through the Statistica, SPSS and Survey System software programme.

5.9.1 Tabulated data

Data tabulation is the process whereby data are converted into the "List of required information" required by a prior step in the research process. At this stage, the researcher has ample data, but very little information. The researcher may have many completed questionnaires, but until they are tabulated and analysed it will remain useless (Bennett, 1997:43). The particular data for this research study was first analysed by means of tabular format. A standard set of tables was produced which included an average response rate for each of the items expressed in terms of a standardised 100-index (per cent). The average response, however, refer to the particular score of each item as expressed in terms of the standardised index.

According to Boyd, Westfall and Stasch, (1981:407-415), a tabulation plan specifying the precise counts must be obtained and prepared so as to eliminate errors in the raw data. This means that the researcher must choose between uni-variate and multi-variate tabulations in counting the particular data. The former is tabulation of a set of responses to one question at a time, and the latter to the tabulation of responses of two or more questions simultaneously (Drew and Hardman, 1985:236-245). In some instances the deviation in the scores of items must be calculated in order to measure certain variations in responses.

Before discussing a few of the statistical methods, it is necessary to distinguish between categorical and continuous variables. Categorical variables are ones that cannot be quantified, or that can be measured only in terms of classes or categories, or that are more conveniently measured in categories than on a continuum (Bennett, 1997:46).

A second form of categorical data can be obtained by employing an ordinal scale. The data obtained are referred to as ordinal-scale responses. Although responses are categorised, the numbers possess the power of

rank order. Two summary statistics, the mode and the median, can be used to good effect in interpreting ordinal scale responses (Zikmund, 2000:284).

Continuous variables, on the other hand, are ones that can be quantified or measured on a continuum rather than in a class or category. A respondent's age, height and number of children are examples here. Two types of response categories fall into this group, namely interval-scaled responses and ratio-scaled responses. All summary statistics, namely the mode, median and mean and the standard deviation, can be used to good effect in the case of interval-scaled responses.

The difference between interval-scaled responses and ratio responses, lie in the fact that, despite the fact that the values or units of measurement in the interval scale remain constant throughout, its starting point or zero point, is arbitrary. An interval scale, therefore, may start with zero (0) or one (1), with the result that different interval-scale responses cannot be meaningfully compared or interpreted. The ratio-scaled response, however, has an inherent, unambiguous starting point. The starting point of such scales will always be equal to absolute zero.

The above-mentioned classification should be kept in mind when selecting statistical procedures to analyse data, since some methods can be used only when the data is categorical, whilst in other cases the data has to be of a continuous nature (Parasuraman, 1991:407-447).

5.9.2 Chi-square analysis and analysis of variance

Chi-square (χ^2) analysis determines whether the differences observed between two sets of data are attributable to sampling variation or not. In order to employ this method, the following four conditions must be met.

- There must be two observed (collected) sets of sample data or one set of observed sample data and one hypothetical set of data.
- Typically, these data are arranged in columns and rows, or in frequency distribution form.
- The two sets of data must be based on the same sample size.
- Each cell in the data must contain an observed or hypothetical count (not percentage) of five or larger

According to Boyd, et al, (1981:432) different cells in a row or column may represent either categorical variable or continuous variable data that have been put into classes or categories (Boyd, et al, 1981:432)

Applying this method, involves the following.

- Calculating a statistic (called the Chi-square statistic) that summarises the difference between the two sets of data.
- Determining the degrees of freedom associated with the data set.
- Using these two values and a table of the Chi-square distribution so as to determine whether the calculated Chi-square statistic falls within the range which may easily have occurred by chance, as a result of sampling variation

(Boyd, et al, 1981:432-438).

The χ^2 test allows us to compare the observed frequencies (O) with the expected frequencies (*Et*) based on the theoretical ideas about the population distribution or the presupposed proportions. The technique tests whether or not the data come from a certain probability distribution. Calculation of the chi-square statistic allows us to determine if the difference between, the observed frequency distribution and the

expected frequency distribution can be attributed to sampling variation. The steps in the process are the following:

- Formulate the null hypothesis and determine the expected frequency of each answer.
- Determine the appropriate significance level.
- Calculate χ^2 the value, using the observed frequencies from the sample and expected frequencies.
- Make the statistical decision by comparing the calculated χ^2 value with the critical χ^2 value.

After the chi-square test has been determined appropriately at the, 05 level of significance (or some other probability level), the chi-square statistic may be calculated (Zikmund, 2000:471). The χ^2 statistic can be calculated using a computerised programme.

5.9.3 Cross tabulation, correlation and regression

Cross tabulation, correlation and regression explain the occurrence of significant differences which the statistical procedures referred to above do not. According to Bennett (1997:48) the use of these methods assumes the following:

- The data to be analysed, is obtained from descriptive studies.
- The data are from representative samples.
- The data include measures on a number of variables for each respondent.

Cross-tabulation is a method, which can be used when both the dependent and the independent variables are categorical. For example, if a researcher wishes to determine why respondents exhibit different behaviour from one other, a number of independent variables could be selected that could influence the behaviour of respondents. These could

then be cross-tabulated with the dependent variables (for example average consumption of a product). The researcher would then be able to establish whether the independent variable has an effect on the dependent variable (Parasuraman, 1991:407-447).

A major drawback of cross-tabulation is that the researcher must evaluate the results subjectively. Some researchers employ correlation and regression analysis in order to overcome this problem, provided they have ordinal data at their disposal (Boyd, et al, 1981:456-462).

5.10 Reliability And Validity

According to McMillan and Schumacher (1993:227) reliability refers to the consistency of measurement. The aim of developing reliable measures is to minimise the influence of chance or variables unrelated to the intent of the measure. Researchers are therefore obliged to select and develop data gathering procedures that will be highly reliable and valid.

According to Locke, Silverman and Spirduso (1998:117), two types of validity can be identified, namely:

- ***Internal validity***

This focuses on the design of the research, which should deal with what is being probed. The data collected should be used to achieve the objectives set out in the research.

- ***External validity***

This focuses on whether the results obtained can be truthfully applied to external people, institutions or objects.

In dealing with reliability Wellman and Kruger (2000:142-145) distinguish between the following types of reliability used within the research process:

- The test-retest approach that involves the same test twice to the same group and correlating with the first test results
- Internal consistency implying a great degree of generalisation across the item within the test.
- Parallel-form reliability of a test, which is determined by the interchangeable versions of a particular test that can measure the same items by using different content.
- Internal reliability refers to the unreliability due to accidental, inconsistent behaviour on the part of the individual administering or scoring the test.

It is important therefore that the researcher ensures that the methods for collecting data are valid and reliable. Whilst it is difficult to achieve absolutely valid and reliable results the researcher should attempt to produce results that have the least doubt as to reliability and validity.

In this study applicable research techniques were used to the test the research problem and objectives. The total population for the area investigation was used since a sample would have been unnecessary. Furthermore the use of the total population would enhance the reliability and validity of the results achieved in this study. Passing it through an independent consultant, who, solicited the opinions of experts in the field in order to determine the suitability of the questions posed, ensured the reliability of the questionnaire. A response rate of 69 percent of the total sample in this area of study is considered very good, and it is possible to rely on the results obtained in this study.

5.11 Synopsis

In this chapter the research methodology applied, namely, the sampling procedure, the research instrument and the measurement process were reviewed. The research design outlines the various steps that were undertaken in developing the questionnaire. Measurement, reliability and validity are also highlighted. Reliability focuses on the consistency or stability of scores generated by a scale, whilst validity refers to whether a scale truly and fully measures the attitude.

The sampling procedure resulted in a total of 45 private higher education institutions being approached for the final sample. There were a total of 8 institutions (18%) that declined to complete the questionnaire indicating either that information regarding their institution was confidential, or that the questionnaire was irrelevant to them. There was no response from 6 institutions. This resulted in a response rate of 69%. Martins *et al.* (1999:129) states that a refusal in a survey is in the region of 10-30%.

The data was captured using the Statistica, SPSS and Survey System software programme, and subsequently prepared for analysis. From here the study advances towards the data analysis stage, which is discussed in Chapter Six.

CHAPTER SIX

RESEARCH FINDINGS

6. Introduction

Chapters two, three and four provided the theoretical background for the empirical research that follows. The background to South African private higher education and the issues relevant to cost management in private higher education institutions were explored thoroughly in these chapters.

In Chapter five, a detailed description of the process in conducting the empirical research was described. The findings are illustrated in the form of bar graphs to assist immediate understanding of the findings.

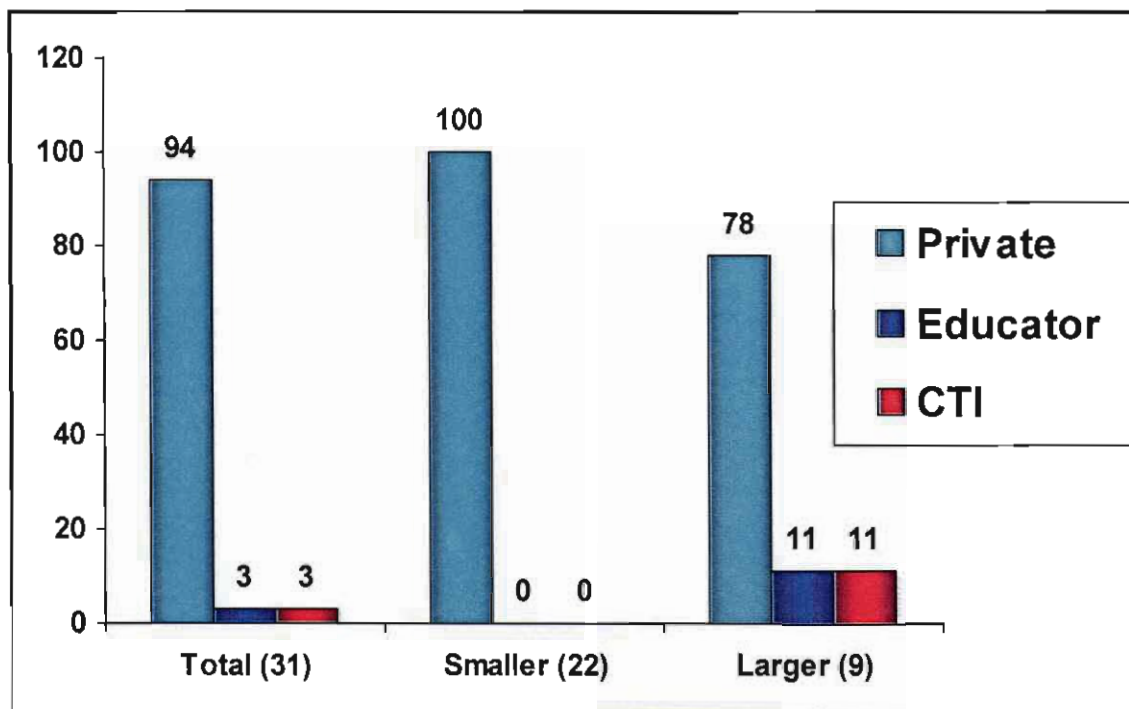
The questionnaire is divided into six sections (Annexure A), to enable the researcher to achieve the objectives of this research study.

Section one of the questionnaire relates to the institutional structure and the substructure of a cost management function within the institution. Section 2 examines the manner in which costs are analysed and considers the different cost drivers that institutions use. Section 3 looks at the budgetary control measures in place and the form and frequency of reporting. Section 4 relates to capital investments and the various methods employed by institutions when making capital investments. Section 5 considers financing decisions and sources of funds. Section 6 refers to the management accounting systems of these institutions and changes that may have occurred. The responses to the different questions in each section are considered in the remainder of this section.

6.1 Respondents Position on Institutional Structure (Questionnaire - Questions 1.1 – 1.13)

6.1.1 Ownership Type

Figure 6.1: Ownership type



When the sample was chosen, thirty-one (31) Institutions were chosen of which twenty-six (26) a student enrolment of under 600 and five (5) had had an enrolment of over 600. It was decided not to include too many of those that belonged to the major group Educor, since it would distort the analysis.

Educor is the largest provider of private higher education in South Africa and owns, Intec, ICG, Damelin and Lyceum College. Toward the end of 2005, it sold Midrand Graduate Institute, which is now owned by Computer Training Institute (CTI). CTI is fairly new to the higher education sector and had initially focused on information technology training rather than offering a diverse group of programmes.

Figure 6.1 on page 168 indicates that most institutions do not belong to a group but rather operate with their own funds or privately. However, it must be borne in mind that this is only true for the sample and not for the population. Further, it must be noted that some of the institutions chosen only have a total population of about 50 students and does not necessarily reflect the attributes of the population.

6.1.2 Location of Institutions

Figure 6.2 A: Location of Institutions

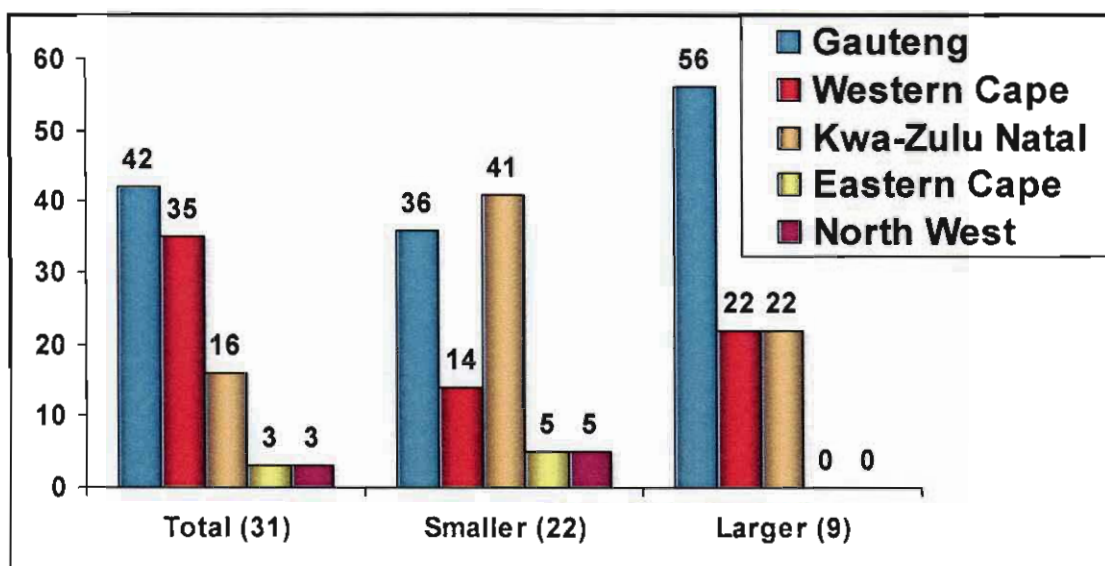


Figure 6.2 B: Location of campuses

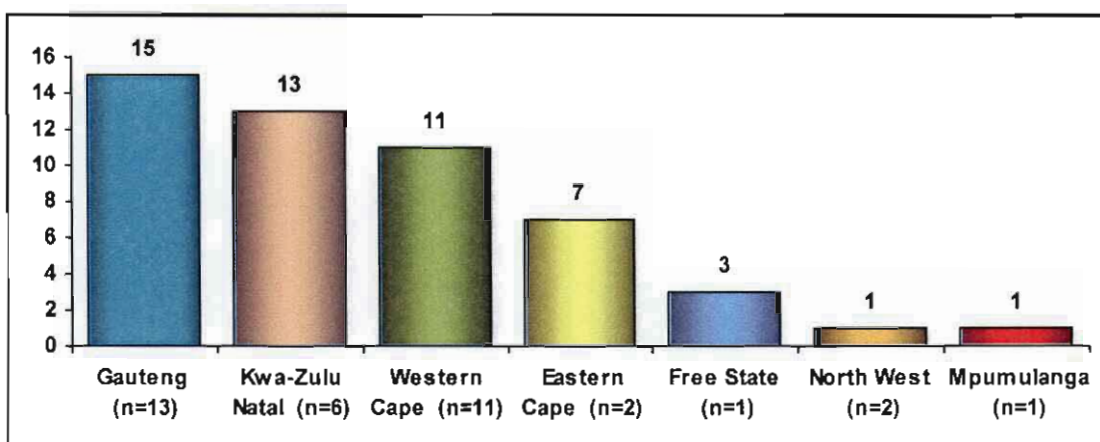
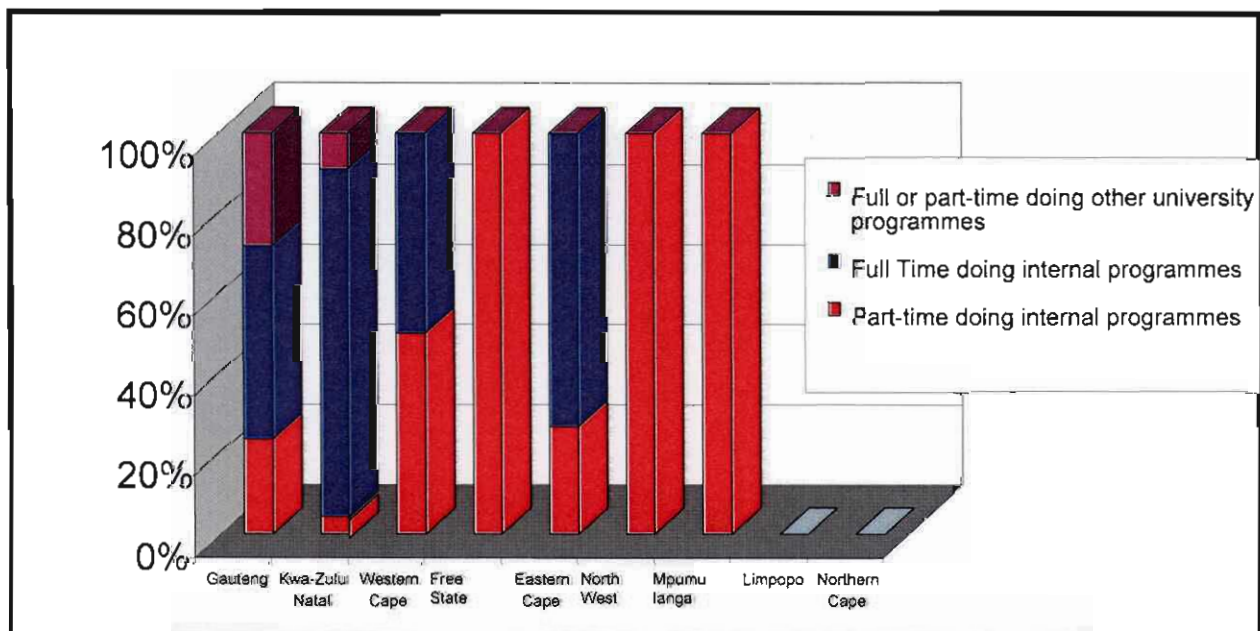


Figure 6.2 A on page 169 indicates that 42 percent of the institutions, which comprise the sample, are in the Gauteng province, followed by 35 percent located in the Western Cape province. It is also evident that most of the smaller and larger private institutions are in the Gauteng province. This is supported by the Higher Education Quality Committee (HEQC), (HEQC: 2004), which states that three-quarter of the private institutions are located in Gauteng and Kwa-Zulu Natal. This is illustrated in Figure 6.2 B on page 169.

6.1.3 Location of students

Figure 6.3 below, show that most students in Gauteng do programmes from other universities, whereas in Kwa-Zulu Natal, more students undertake internal programmes offered by their institutions. In the Free State, Mpumalanga and North West provinces, all students are undertaking registered for part-time internal programmes. This implies that there is a greater demand for internal programmes offered by private higher education institutions rather than programmes of public institutions.

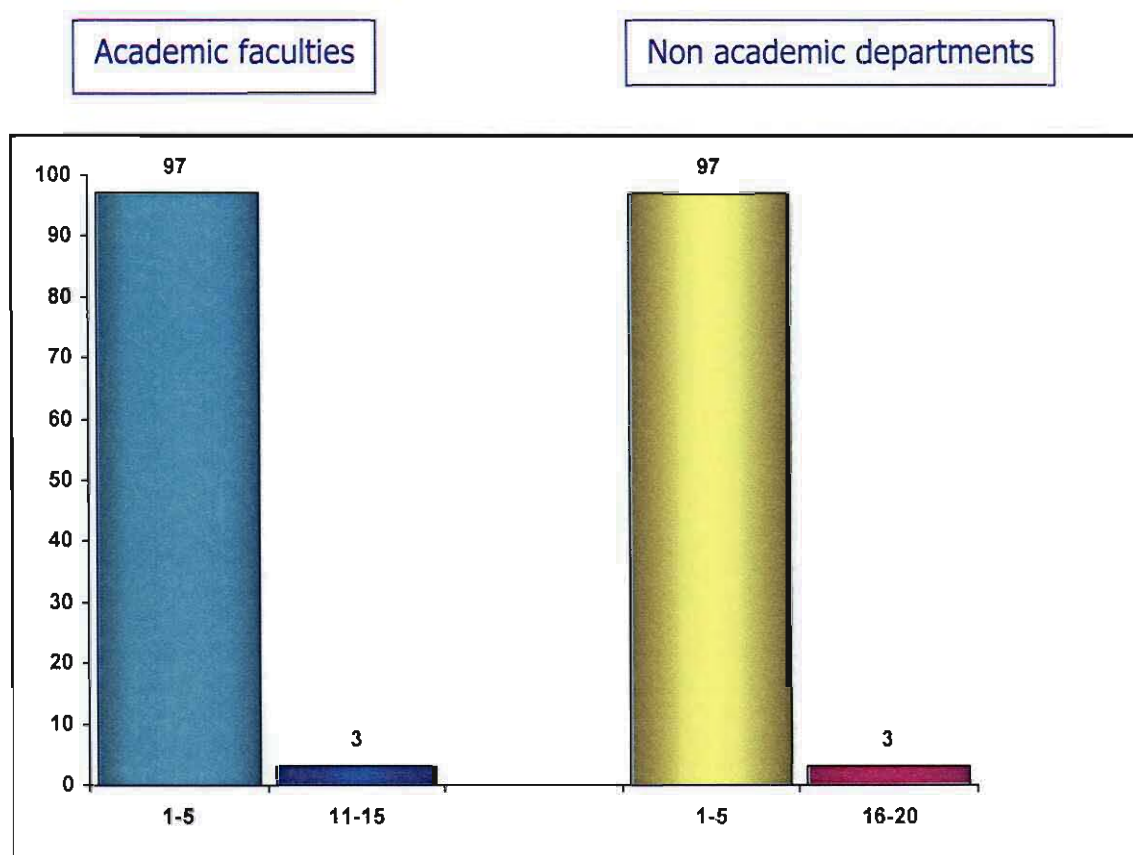
Figure 6.3: Location of students



6.1.4 Academic faculties and non-academic departments

Figure 6.4 below, indicates that 97 percent of the respondents were institutions that had five or less academic faculties and non-academic departments, whilst a small percentage (03) have six to ten academic faculties and non-academic departments. This indicates that private higher education institutions are generally very small, in keeping with the Figure 6.3 on page 170. Hence there are in most institutions fewer than five faculties or departments

Figure 6.4: No of Academic faculties and non-academic departments

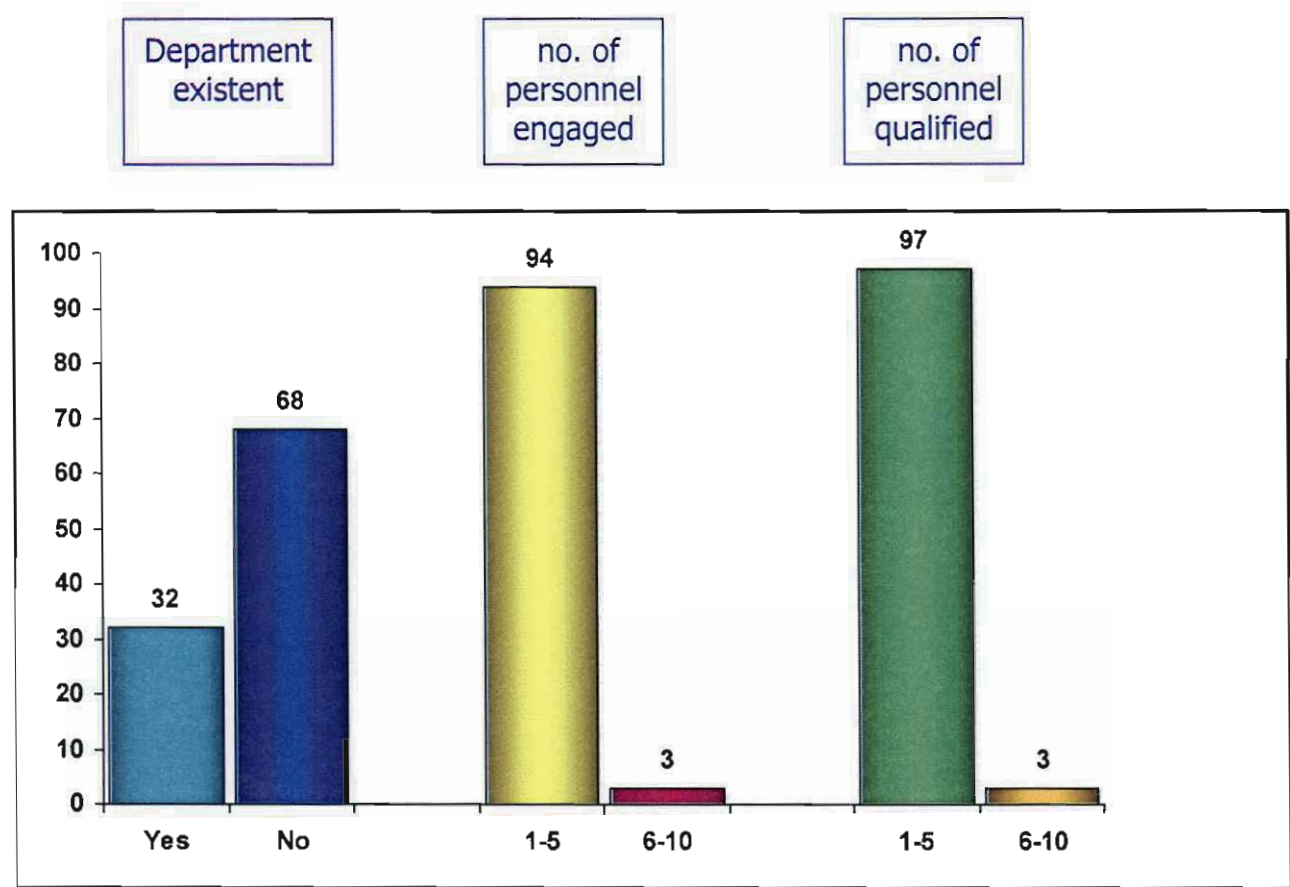


6.1.5 Cost management department

Figure 6.5 on page 172, reveals that 68% of the institutions surveyed do not have a separate cost and management department. Furthermore, there are 5 or fewer personnel involved in this department, who are qualified. This further re-enforces the fact that private higher institutions are generally

small in size and hence there is no need to have a separate department or a large number of personnel involved in cost management.

Figure 6.5: Cost and Management Department



A 32 percent response rate in figure 6.5, above, that a separate cost management department does exist within institutions is a positive indication of the seriousness of cost management issues within private higher education institutions.

The majority of the respondents (94 percent) indicated that 5 and fewer personnel were responsible for the cost management function. This confirms the statement that most institutions are involved in cost management although they do not have separate departments.

Although less than 5 personnel may be involved in the cost management issues in the majority of the institutions it can be reasonably deduced that many departments have an integrated accounting-cost management approach. This is further supported by the fact that over 68 percent of responding institutions do not have separate cost management departments.

6.1.2: Respondents position on cost analysis

[Questionnaire – Questions 2.1 – 2.10]

6.2.1 Cost analysis

A large proportion of the respondents (with a mean of over 3 out of 5), stated that they trace costs to faculties/schools, individual courses and student types (Figure 6.6 A on page 174). Since all respondents indicated that there is at least some tracing of costs, it means that this represents an important aspect of cost control in private higher education institutions. (Figure 6.6 B on page 174)

More than 51 percent of the respondents fall in the “Always” and “Often” categories indicating that tracing costs to student type is very important. This is illustrated on Figure 6.6 A on page 174. This is important considering that private higher institutions are concerned with maximising profits and minimising costs. Thus, incorrect analysis of costs could lead to under-pricing of programmes.

Figure 6.6 B on page 174, show that the smaller institutions tend not to trace costs and figure 6.6 C on page 175, indicates that a great proportion of larger institutions trace costs. This may be due to the fact that smaller institutions tend not to have too many different types of costs as compared to larger institutions.

Figure 6.6 A: Cost Analysis – all respondents

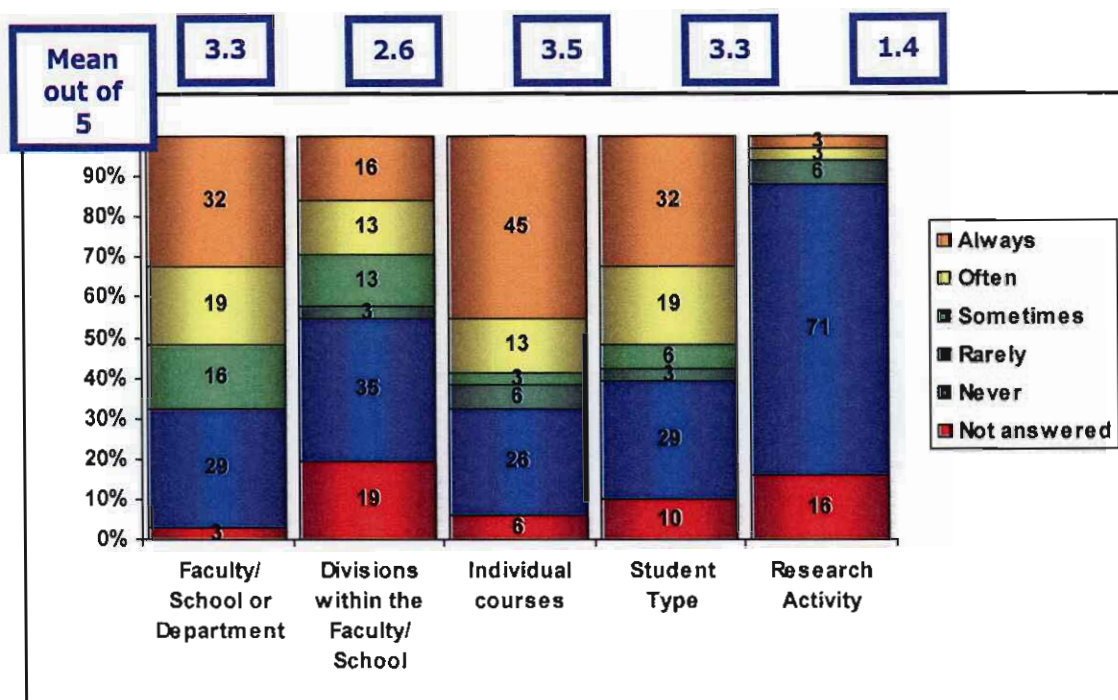


Figure 6.6 B: Cost analysis – Smaller institutions

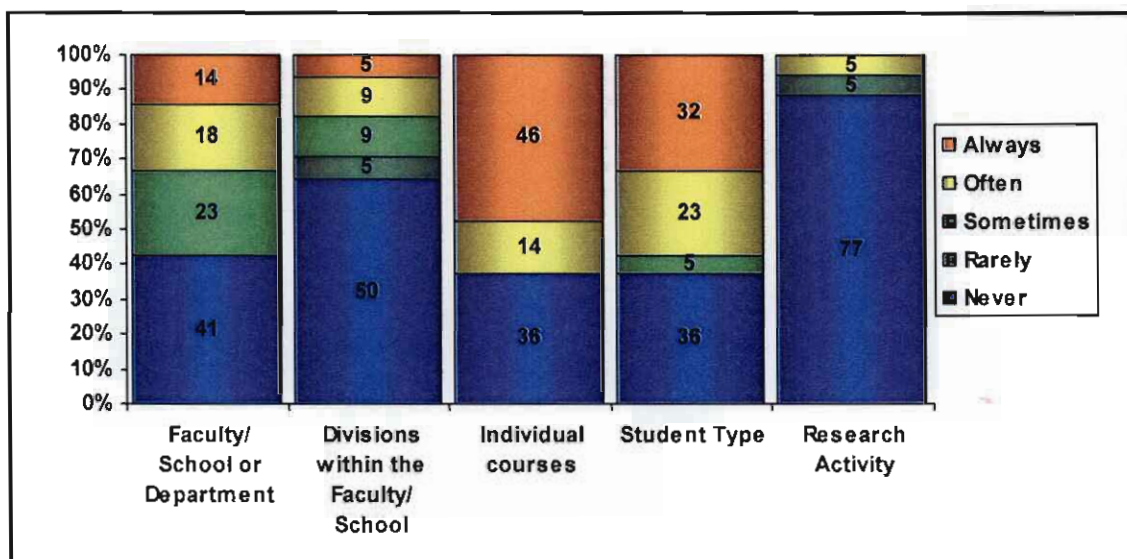
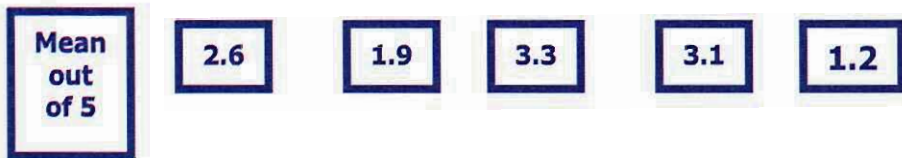


Figure 6.6 C: Cost analysis – larger institutions

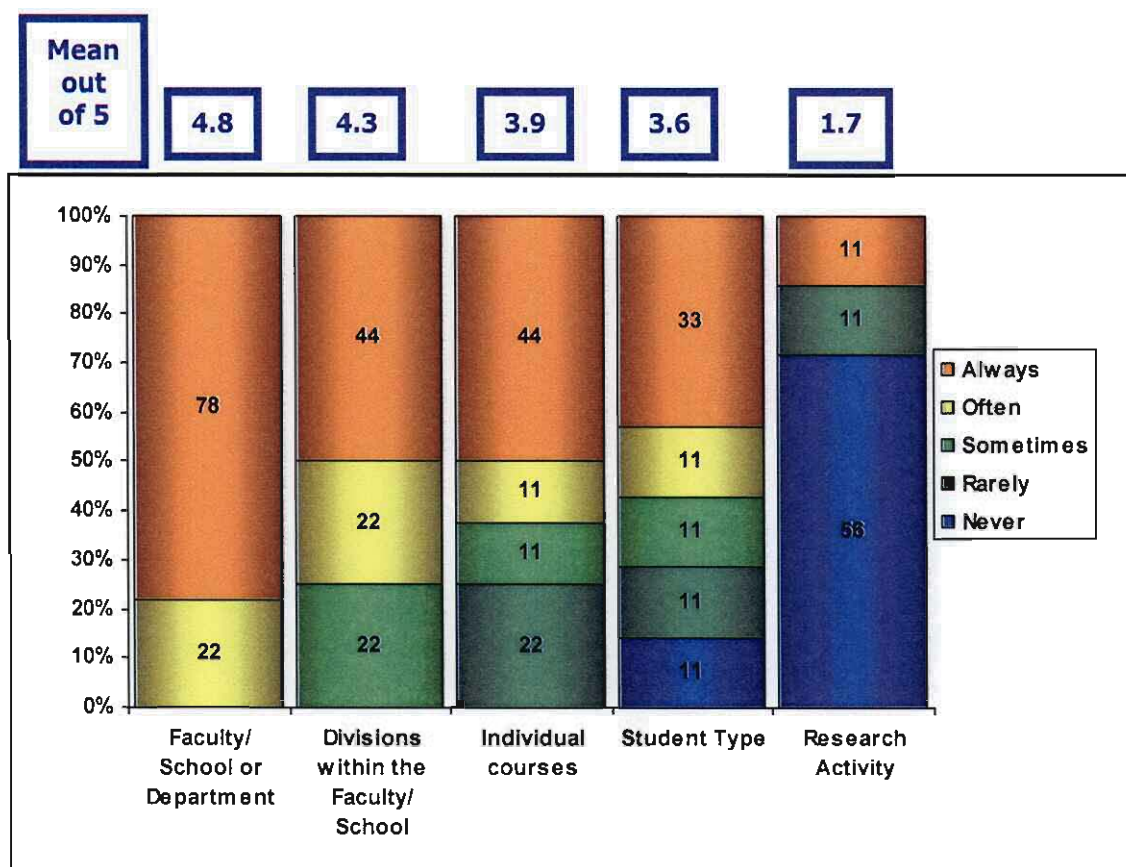
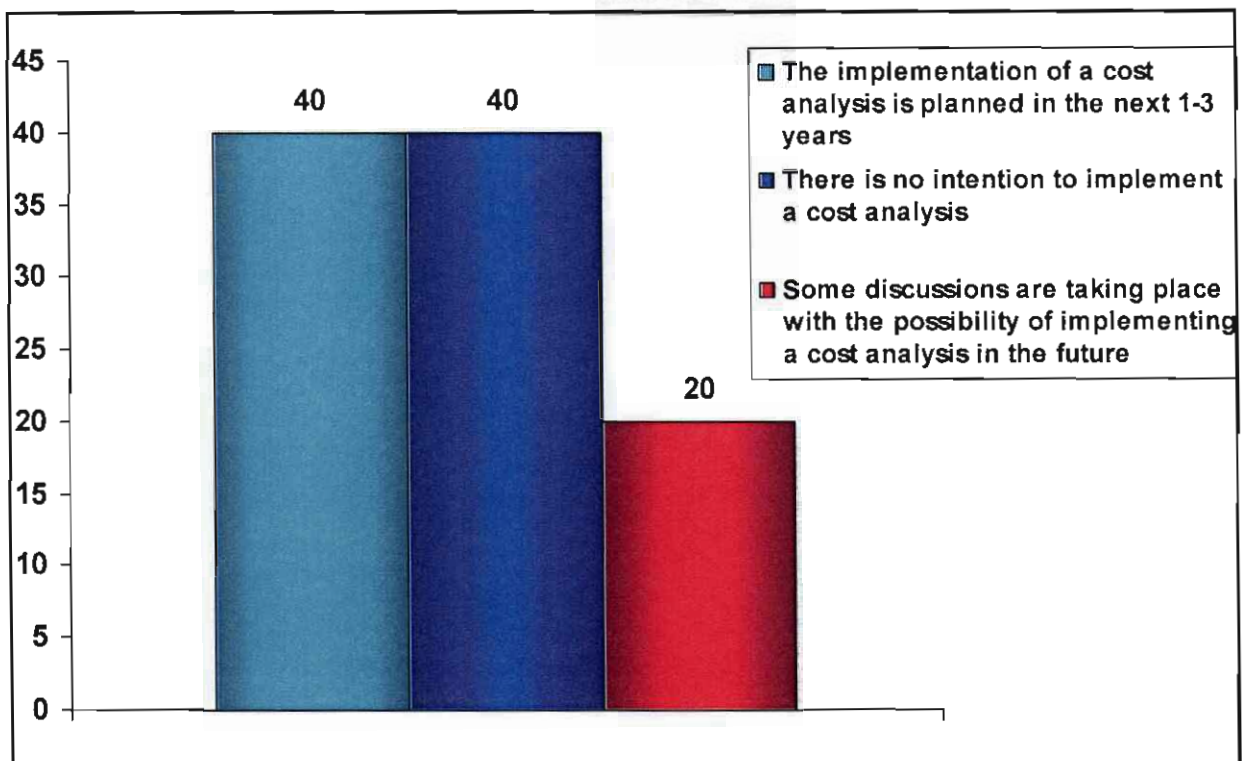


Figure 6.6 A on page 174 and figure 6.6 C above, reveals that 87% of respondents do not trace costs by research activity. One of the reasons for this is that private institutions do not receive any grants or subsidies for research unlike their public counterparts. This has discouraged private institutions from actively participating in research and publications. In keeping with the profit motive, private institutions focus on programmes that would generate greater profits at the least cost.

6.2.2 Institutions that do not analyse costs

The number of responses indicates that 60 percent are not analysing costs in terms of the total description. The fact that more than 50% of respondents are analysing costs, as seen in Figure 6.7 A on page 176, indicates that institutions are serious about cost analysis.

Figure 6.7: Institutions that do not analyse costs

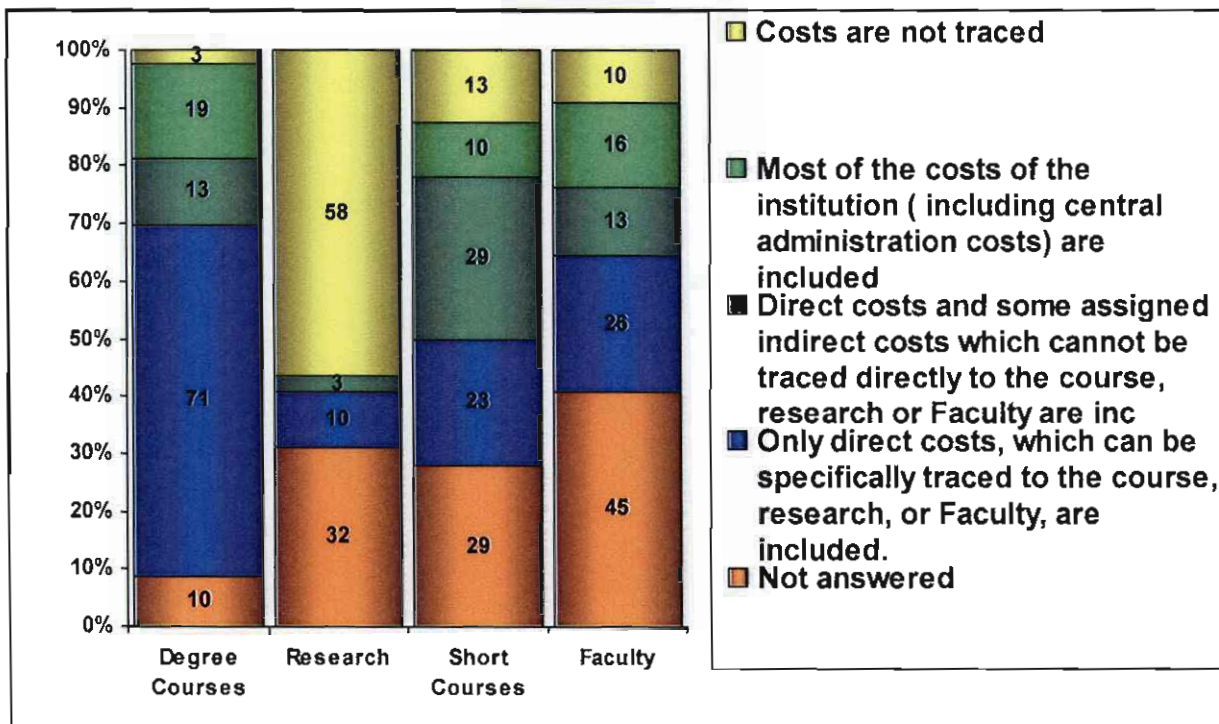


This deduction that institutions are serious about cost analysis is strengthened by the responses in Figure 6.7 above which indicate that those institutions that do not analyse costs fully intend doing so in the next three years (60 percent), or are discussing it for future implementation.

6.2.3 Tracing of Costs

There is a positive indication that all institution costs are considered in tracing costs. The respondent indicated that they trace costs as follows: 71 percent for degree courses, 10 percent for research, 23 percent for short courses and 26 percent for faculty. An alarming number of institutions did not answer this question, which may be due to confusion over the question or the fact that they do not have a specialised cost and management department. A large number of respondents do not trace costs for research (58%) which is in keeping with Figure 6.8 on page 177.

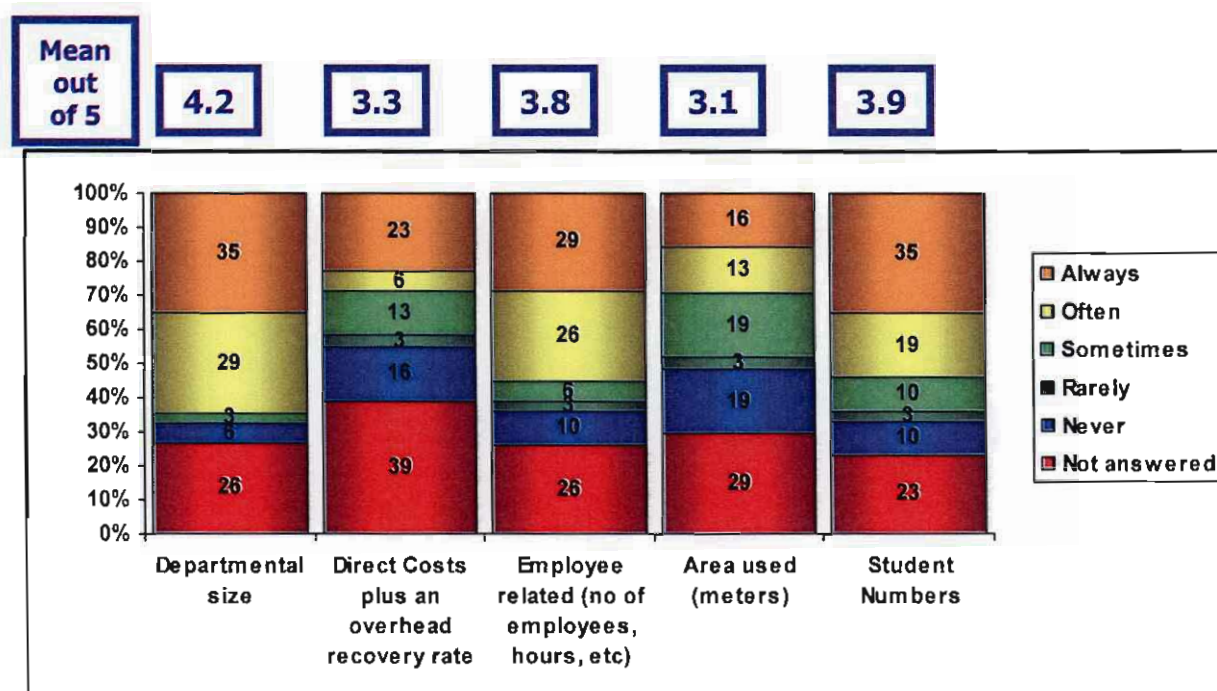
Figure 6.8: Tracing of Costs



6.2.4 Allocation basis of costs

Figure 6.9 below, illustrates how costs within private institutions are allocated.

Figure 6.9: Cost allocation basis assigned to Service Departments



A large number of respondents assign costs based on departmental size (67 percent) and based on student numbers (64 percent). A small percentage of respondents do not use this method of cost allocation.

In respect of the use of direct costs plus an overhead recovery rate, 42 percent of the institutions have used this method and 23 percent have always used this method. However, 39 percent of the respondents did not answer this question or never use this method, which implies that they do not understand how to use and apply this method within their institutions.

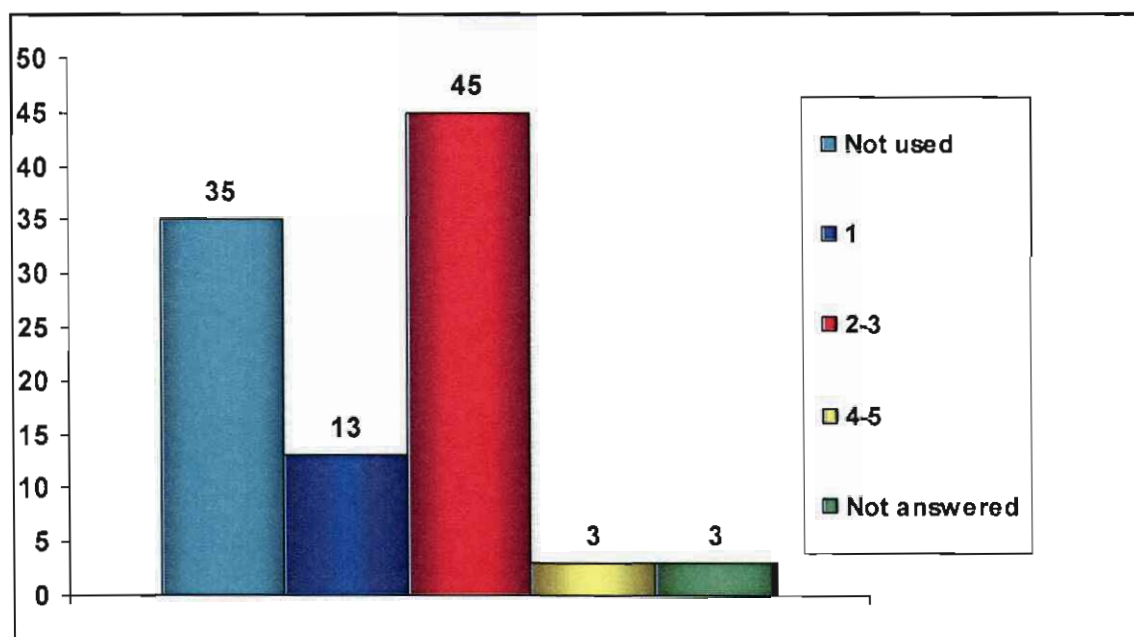
A few (ten percent) have never used this method of assigning costs on the basis of employees, whilst 61 percent have used this method. A large proportion (29 percent) always uses this method indicating the popularity in its use. This could be indicative of the fact that the major costs in higher education institutions are linked to salaries i.e. employee related costs.

A reasonably large proportion (48 percent) of respondents, utilise area as a basis. With a greater proportion having used this method it can be argued that it is easy to apply and assign indirect costs using the area as a base.

6.2.5 Number of different allocation methods used to allocate costs

According to figure 6.10 on page 179, over 61 percent use at least one method or more of cost allocation for indirect costs. The response that 48 percent of institutions are using more than one method indicates that there is an assignment of costs on more than an arbitrary basis in these institutions. It is also evident that fewer institutions (3 percent) are using four or more methods, which may be quite sophisticated and designed for use with better management information systems.

Figure 6.10: Number of different allocation methods used to allocate costs



6.2.6 Frequency of internal cost statements

Figure 6.11: Frequency at which the institution prepares cost statements for internal cost analysis

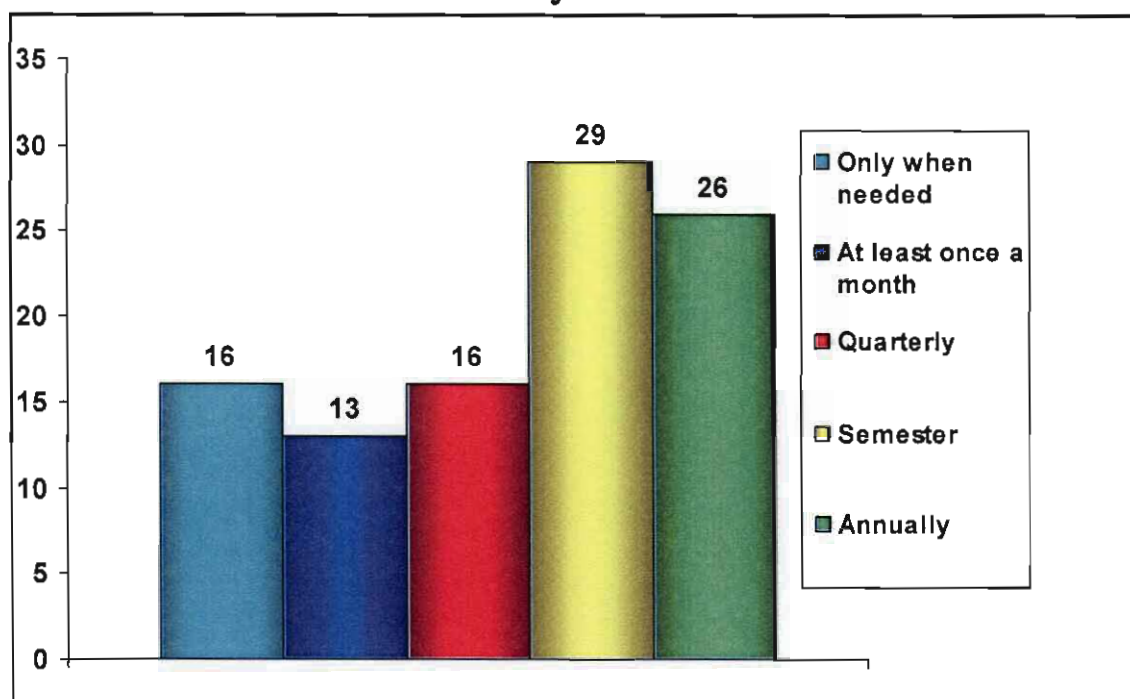
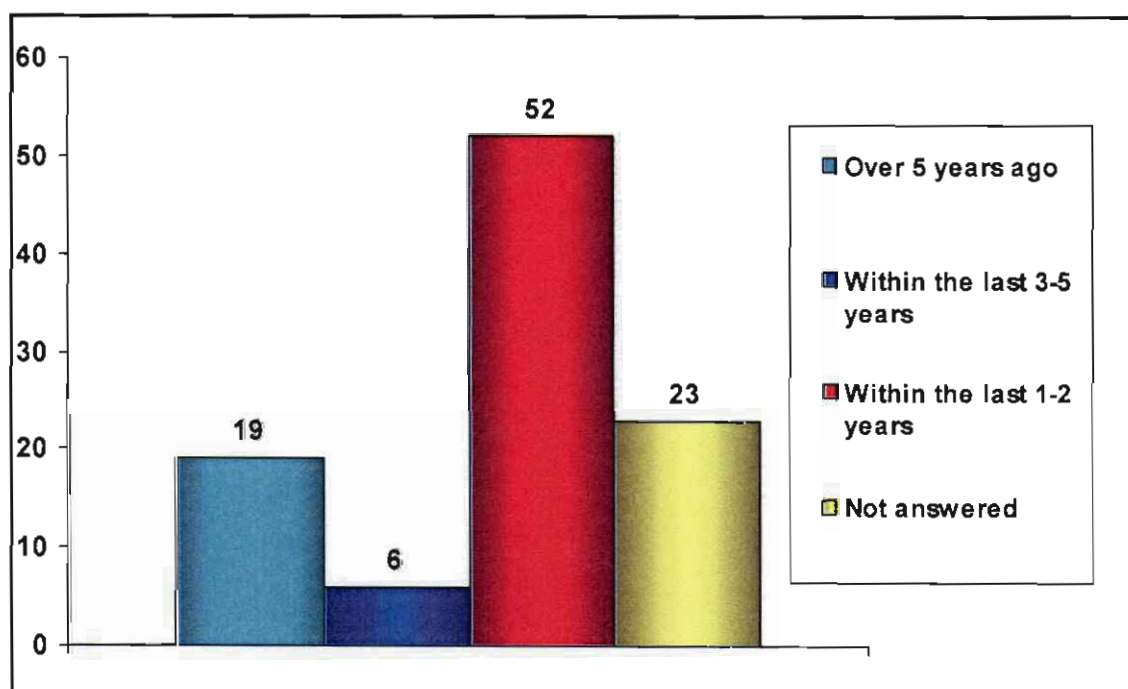


Figure 6.11 on page 179, reflects that most respondents produce internal reports on a semester basis (26 percent) and on a yearly basis (26 percent), which is more in line with the academic periods of the private higher education institutions. The relative even responses in the remaining categories also indicate that internal cost statements are produced and utilized by institutions. Those institutions that provide these statements spend a great deal of time on cost analysis, which may arguably be essential in the type of system within the private higher education institutions in South Africa.

6.2.7 The initiation of cost analyses

Figure 6.12: When did the institution start to analyse costs



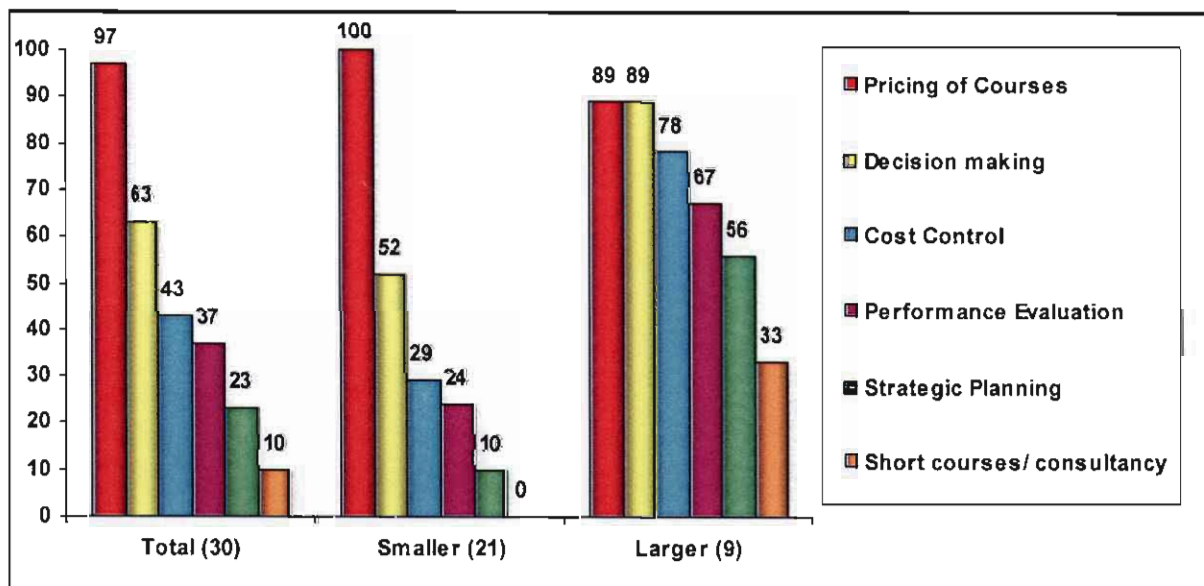
According to figure 6.12, above, the majority of the institutions (52 percent) started analysing costs within the last 1-2 years, reflecting the recent application of cost within these institutions. It can be deduced from this that private institutions only recently realised the importance of analysing costs and factoring these costs into their costing systems to obtain a reliable cost

structure when selling their programmes to prospective students. This also suggests that many of the early problems in developing and implementing cost systems have not yet been overcome by these institutions.

6.2.8 Purpose of course costing

A major proportion of respondents (97), in figure 6.13 below, use course-costing information for decision-making. A fair number of respondents indicated that course costing information is used for decision making (63), cost control (43), performance evaluation (23) and strategic planning (23).

Figure 6.13: If course costing used, what is the purpose

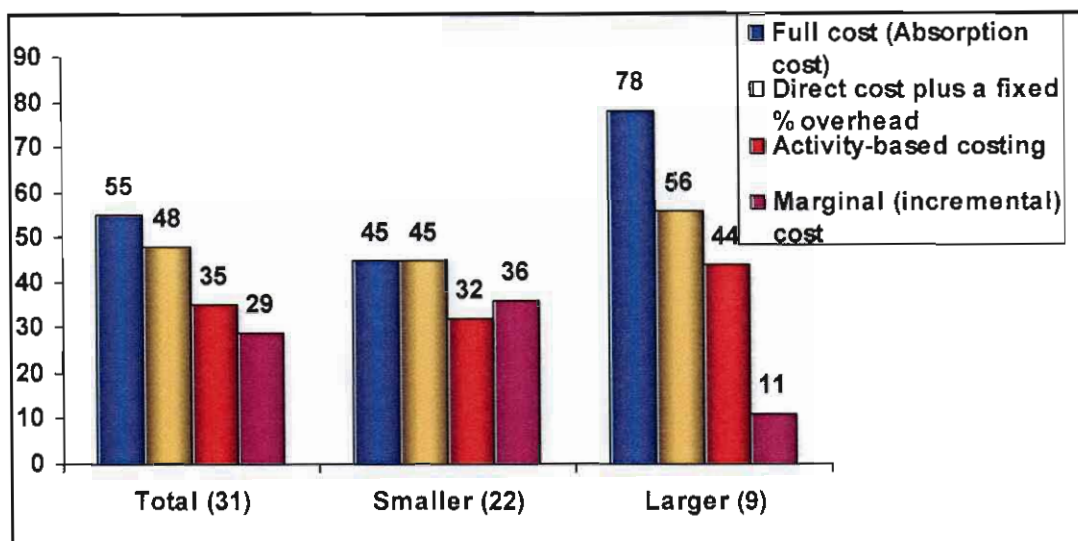


It can be noted from Figure 6.13 above that all small institutions use course costing to price their courses (100 percent). The majority of larger institutions (89 percent) use course costing in decision-making.

6.2.9 The most important cost driver in private higher education

According to figure 6.14 on page 182, the majority of institutions consider full costing of direct costs plus a fixed percentage overhead to be the most appropriate method of costing. This implies that both large and small institutions prefer to depend on traditional cost drivers. However, there are a

Figure 6.14: Most important cost driver in higher education



significant number of institutions that use Activity Based Costing. The fair distribution of the different cost drivers indicate that institutions understand the principles of the different cost systems and are able to relate to a method, which is reliable and accurate for better-cost allocation in higher education institutions.

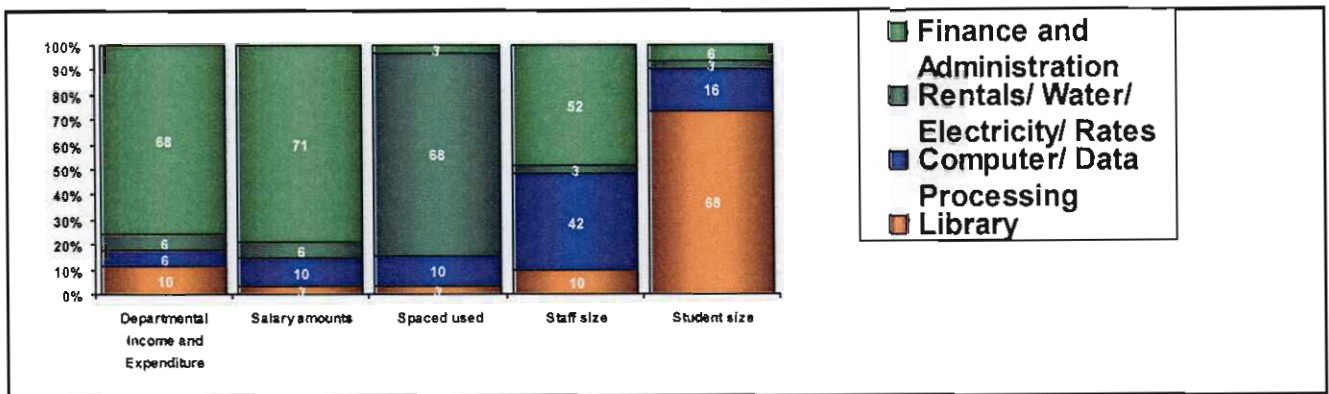
6.2.10 Most appropriate cost drivers for allocating costs

Figure 6.15 A, 6.15 B and figure 6.15 C on page 183, indicate that most respondents use the appropriate cost drivers. For finance and administration, departmental income and expenditure, salary amounts and staff size is predominantly used to allocate costs. For rentals, water and electricity and rates, space used is the predominant driver to allocate costs. The student size is used to allocate costs for the library.

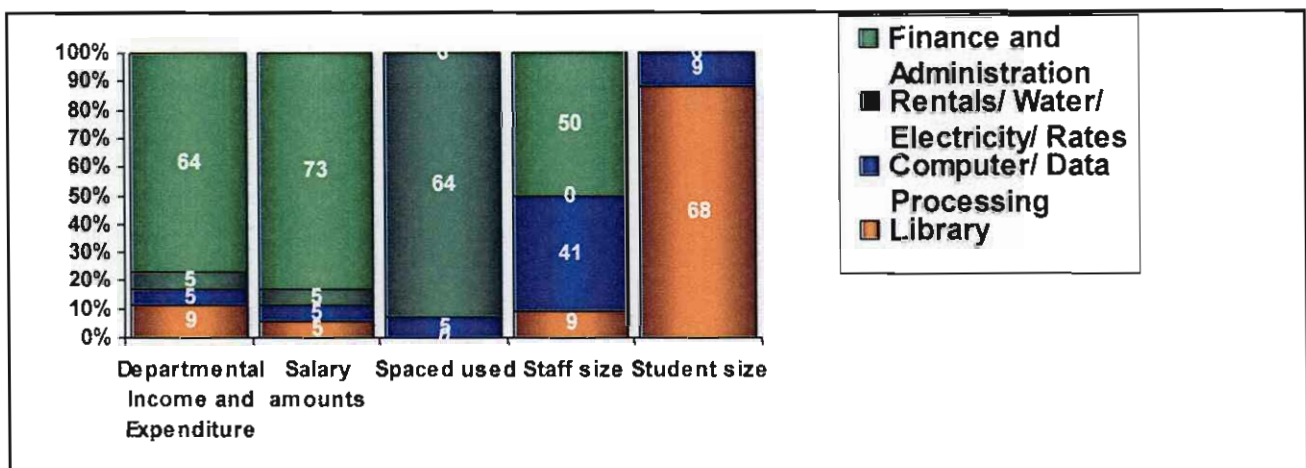
Some institutions also indicated that the following additional drivers were used:

- Network points for allocating computer related costs
- Value of books as basis for Library Books
- Number of transactions for Finance related costs

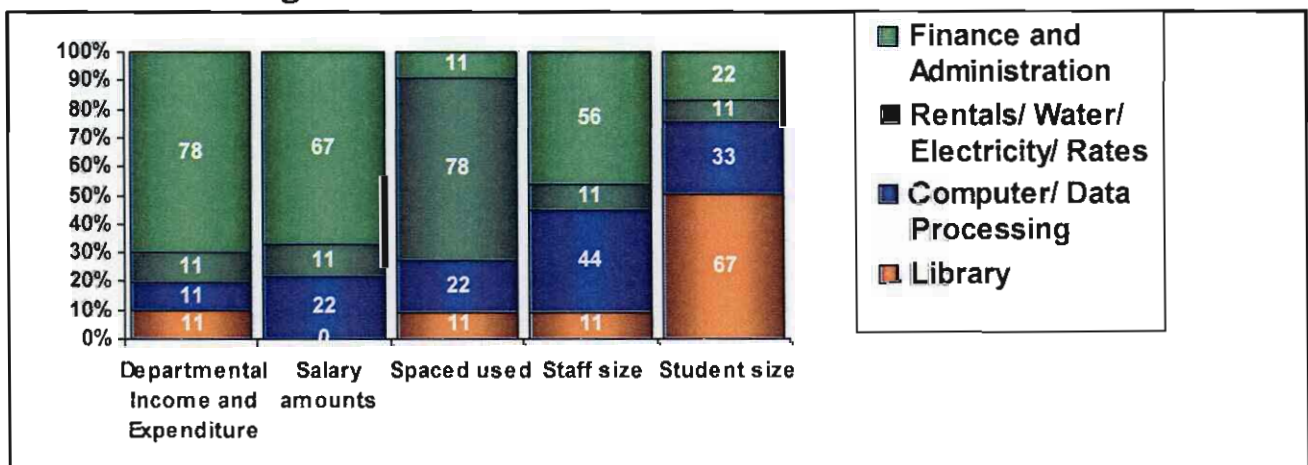
**Figure 6.15 A: Most appropriate cost driver for allocating costs –
all institutions**



**Figure 6.15 B: Most appropriate cost driver for allocating costs –
small Institutions**



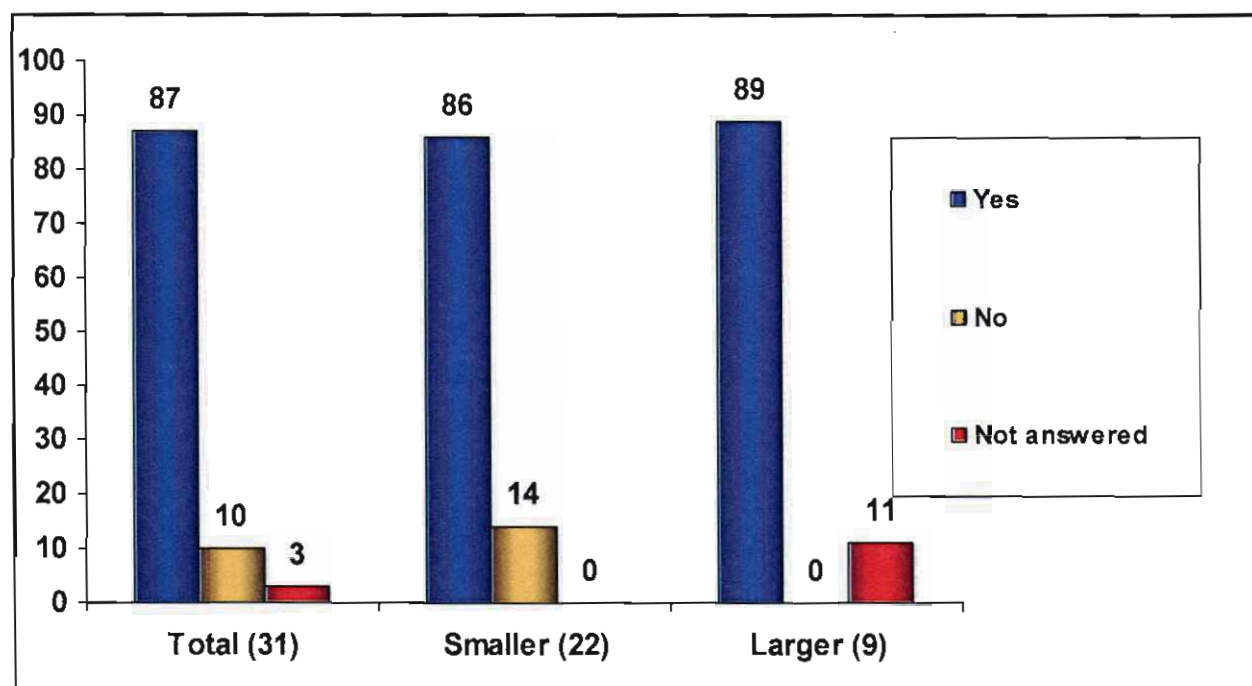
**Figure 6.15 C: Most appropriate cost driver for allocating costs –
large Institutions**



6.3 Respondents position on Budgetary Control and Reporting (Questionnaire – Questions 3.1 – 3.13)

6.3.1 System of budgetary control

Figure 6.16: System of budgetary control



A small percentage did not have a system of budgetary control in place or did not answer the question as can be viewed in figure 6.16 above. However, the larger institutions indicated that they do have a system of budgetary control. This indicates that the institutions recognise the importance of managing within a budgetary system.

6.3.2 The budget controllers

The majority of the respondents indicate that Deans/Academic Directors (61 percent), Non-Academic Directors/Heads (68 percent) and Academic Heads (87 percent) control budgets within institutions. (Figure 6.17 A on

page 185 below). This is also evident for small and large institutions as can be gauged from Figure 6.17 B below and Figure 6.17 C on page 186.

Figure 6.17 A : Which of these are budget controllers

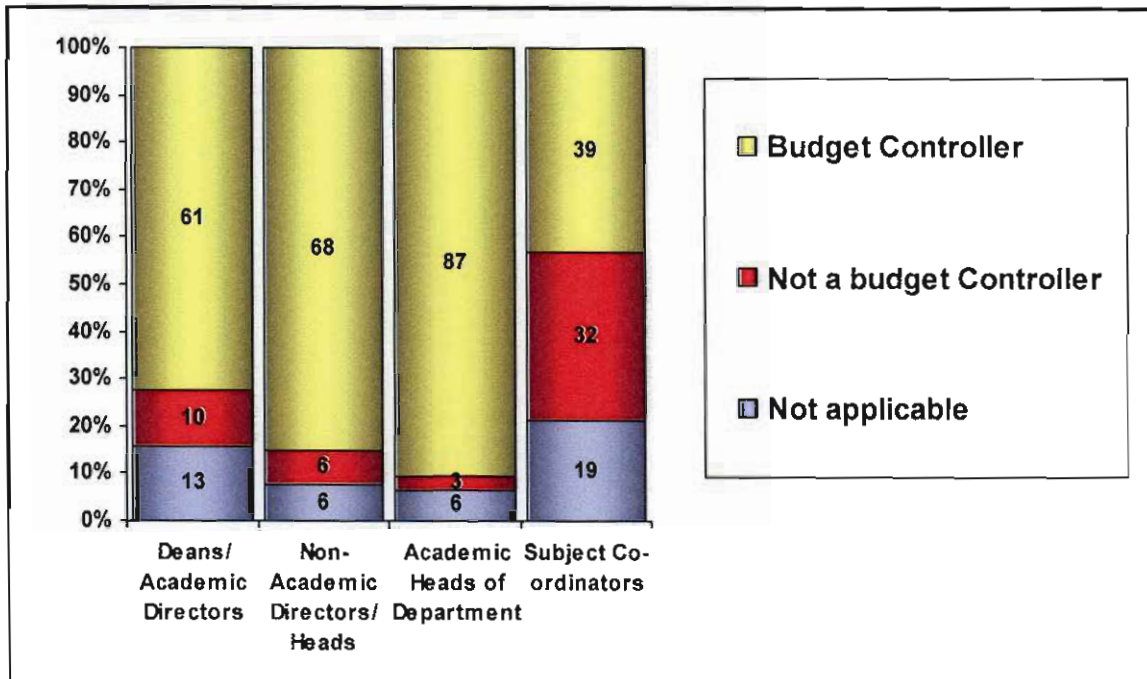


Figure 6.17 B : Which of these are budget controllers – Small Institutions

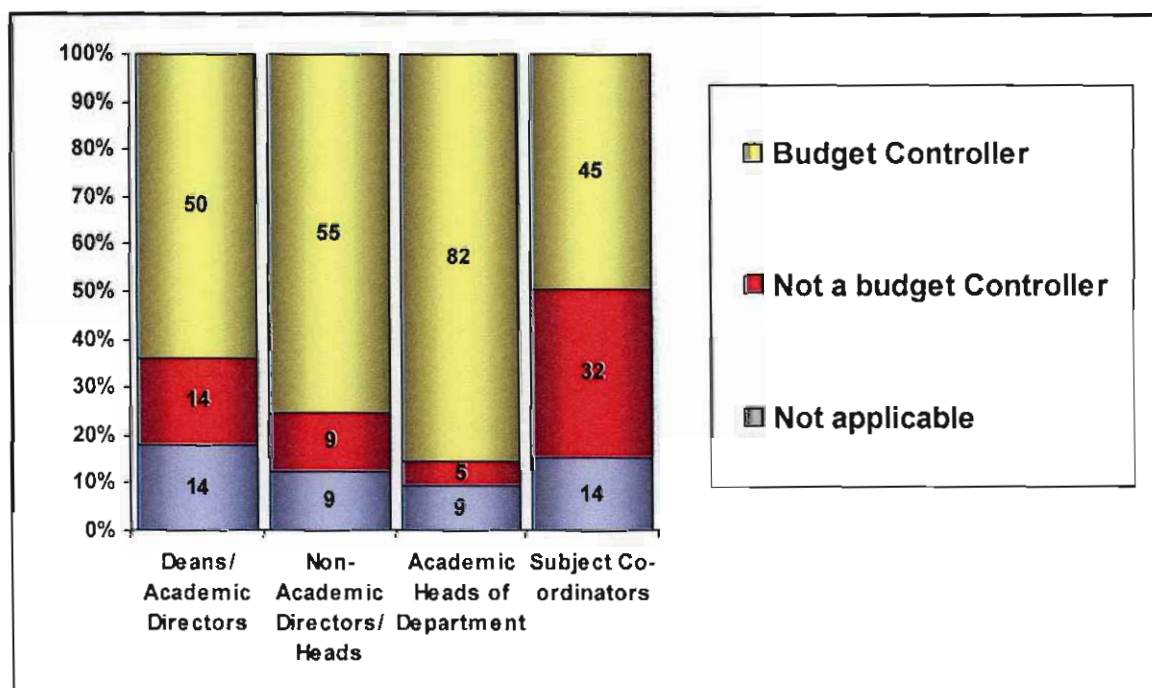
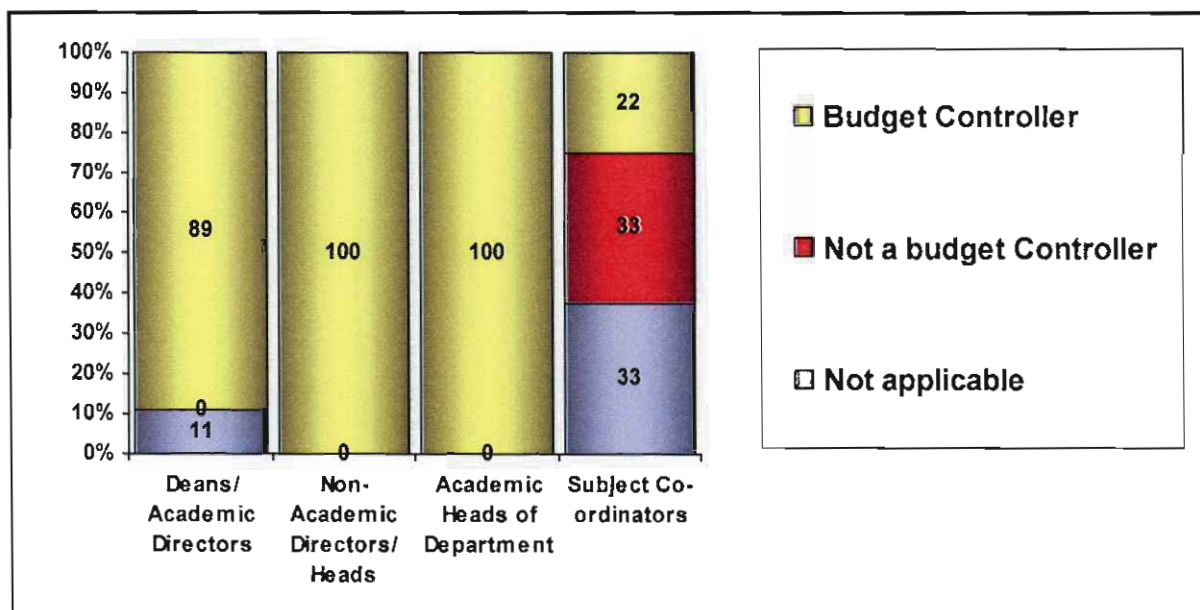


Figure 6.17 C : Which of these are budget controllers – Large Institutions



This could also be indicative that institutions are willing to work together with lower levels of staff in arriving at a budget that meets approval of all staff.

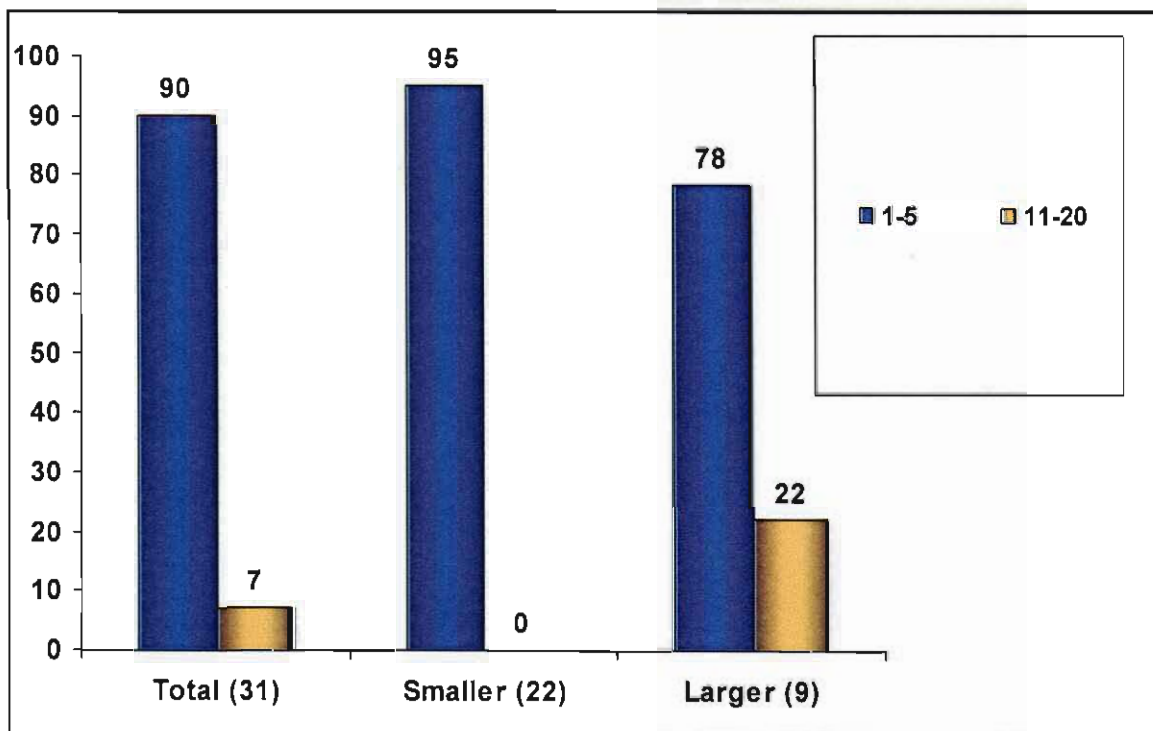
Whilst this clearly indicates that most responding institutions place the responsibility of control over budgets on upper level managers, the few that indicated that these categories do not control budgets,

Deans/Academic Directors (10 percent), Non-Academic Directors/Heads (6 percent) and Academic Heads (3), could also be important, since a devolution of this function to a dedicated controller could be important to release upper level management for much more strategic matters. Figure 6.17 A on page 185, also clearly indicates that the majority of the respondents (32 percent) do not use subject co-ordinators to control budgets.

6.3.3 Number of budget controllers

The responses reflected in Figure 6.18 below, reveal that larger institutions have between 11 and 20 budget controllers (22 percent) whereas smaller institutions are limited to between 1 and 5 budget controllers (95 percent). The size of the institutions limit the number of controllers to between 1 and 5, which is adequate since too many controllers may lead to more control problems and greater costs and reporting issues.

Figure 6.18: Number of budget controllers



6.3.4 Budget breakdown

Figure 6.19 A on page 188 illustrates a breakdown of the budgets across all institutions, figure 19 B on page 188 illustrates a breakdown of the budgets at smaller institutions and figure 19 C on page 189, illustrates a breakdown of the budgets at larger institutions.

Figure 6.19 A: Budget breakdown for all institutions

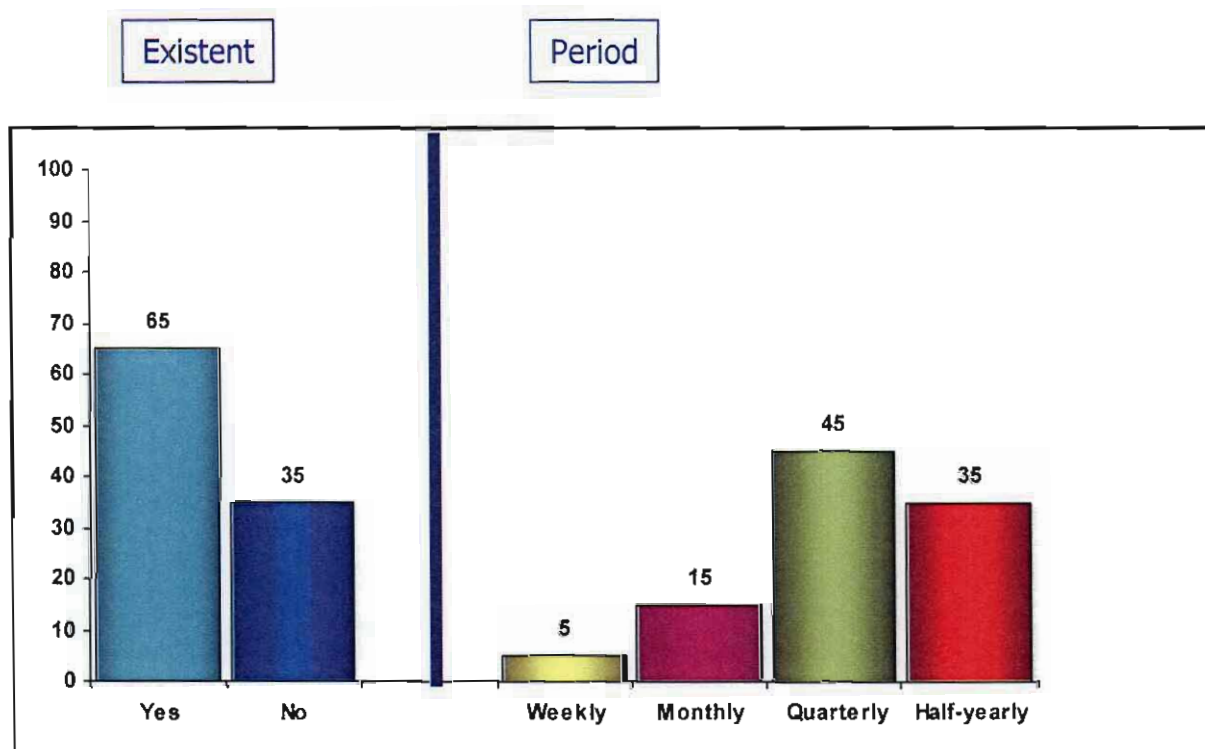


Figure 6.19 B: Budget breakdown for small institutions

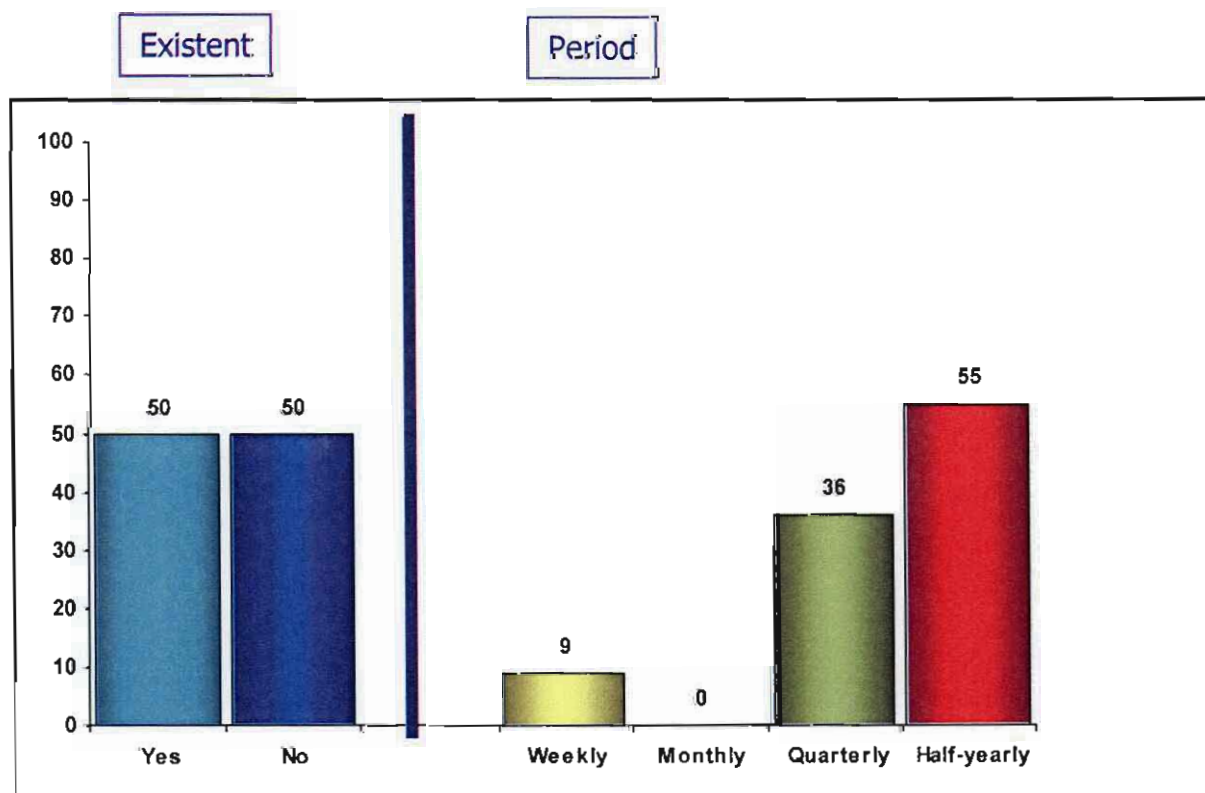
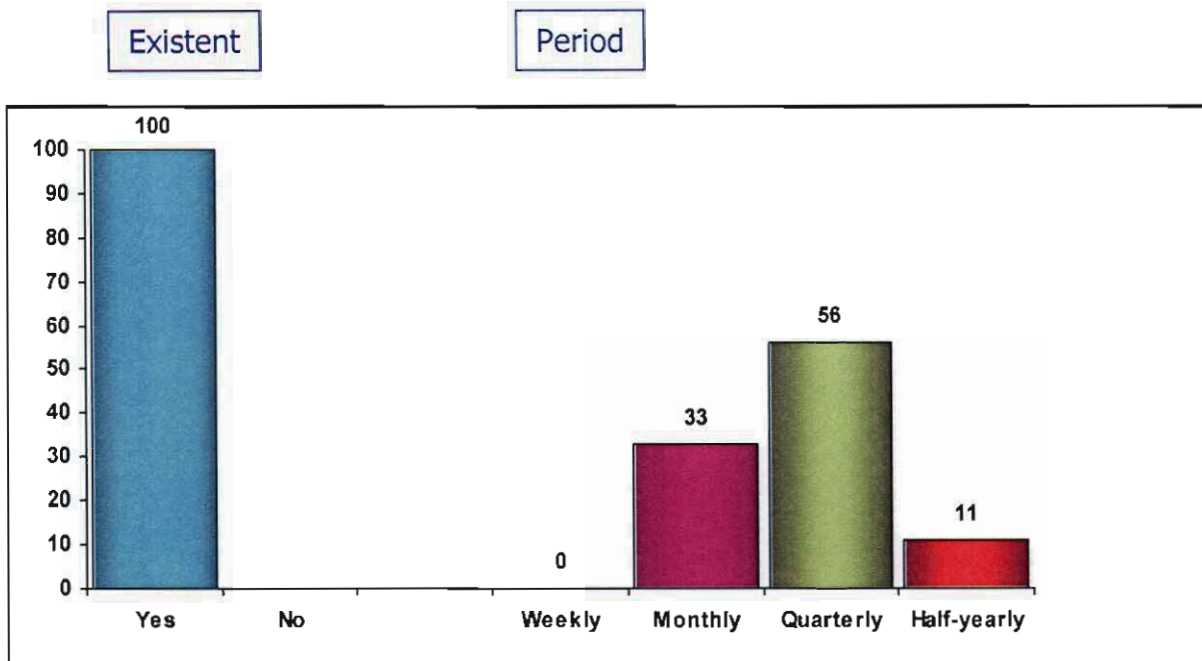


Figure 6.19 C: Budget breakdown for larger institutions



Most institutions break the budget into control periods (65 percent). Whilst it can be argued that there are no strict rules about what is the most appropriate control period within a financial period, the correct frequency for such period is open to debate. All the large institutions break down their budgets into periods ranging from monthly to half-yearly. One of the problems associated with this break down is that managers may be overwhelmed with masses of figures especially if they are not financial experts.

6.3.5 Influence on budget approval – institutional budget

Figures 6.20 A and 6.20 B on page 190, shows that a large number of respondents did not answer this question. This may have been due to their misunderstanding of the question and what was required. Hence this question will not be analysed further.

Figure 6.20.A: Influence on budget approval – institutional budget all institutions

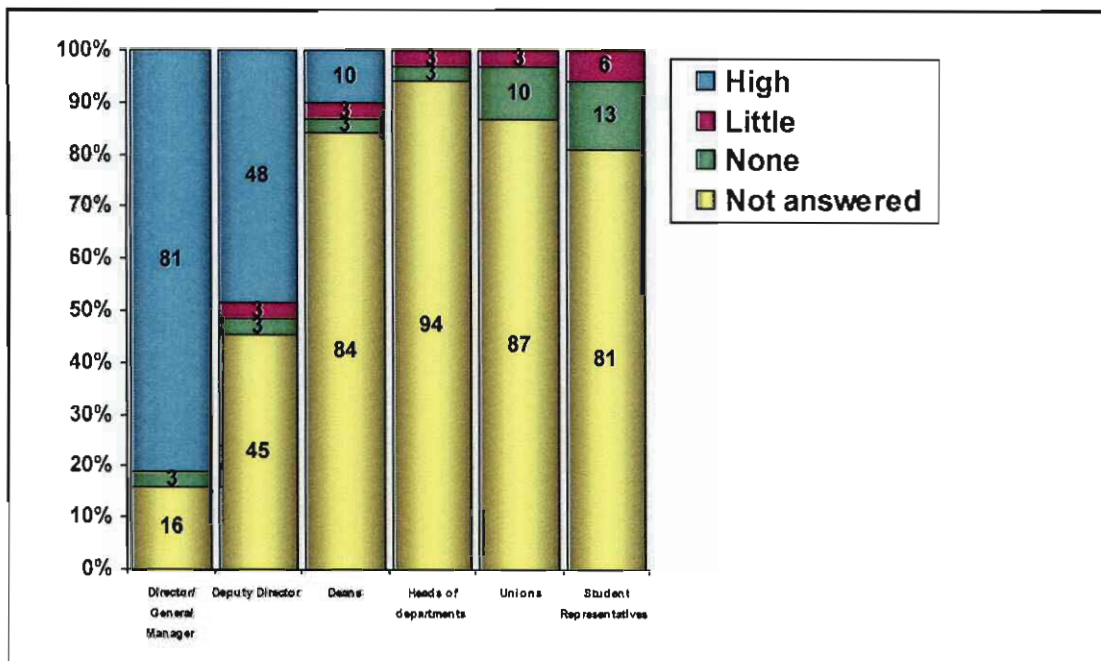
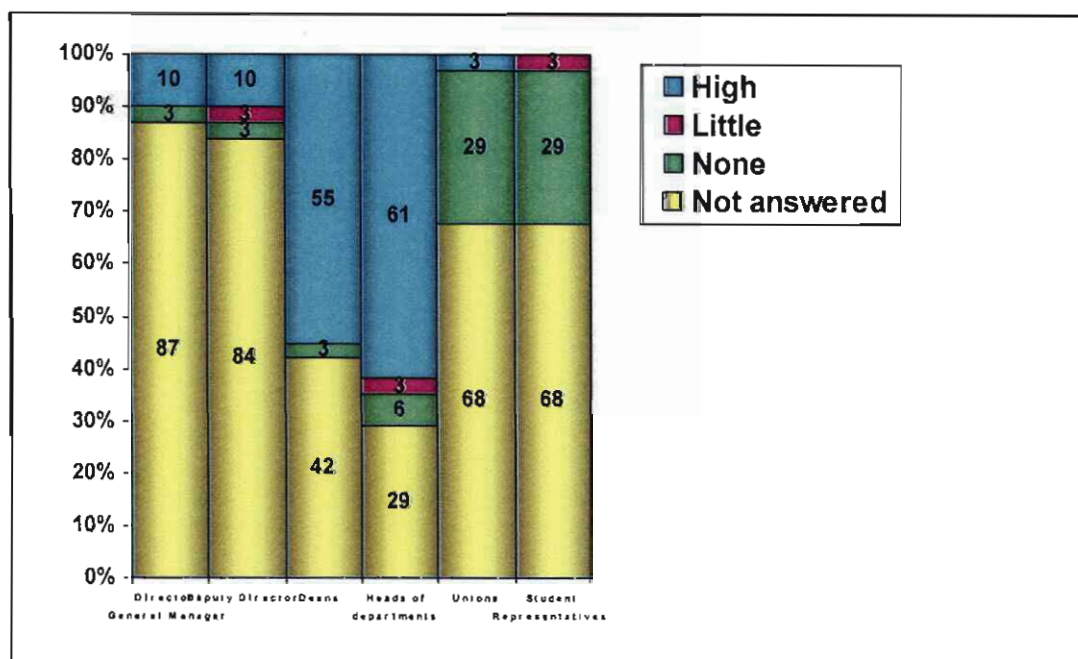


Figure 6.20.B: Influence on budget approval – department/faculty all institutions



6.3.6 Reasons for decreases in budgets

The following graph illustrates the reasons cited for decreased in budgets.

Figure 6.21: Reasons cited for decreases in budgets

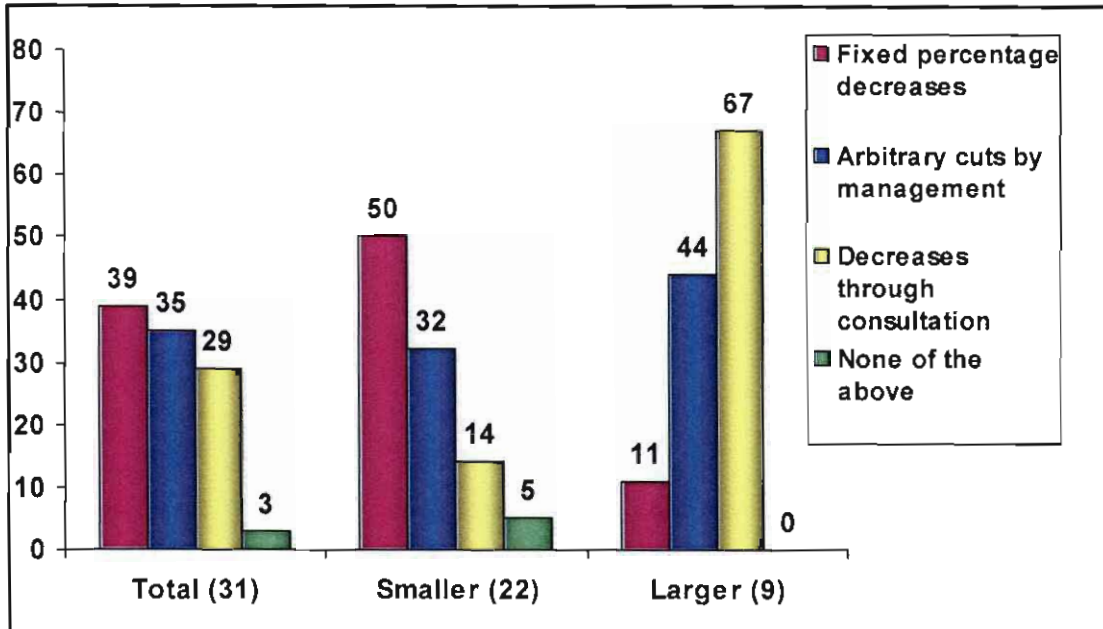


Figure 6.21 above, shows that most common reasons provided to budget controllers who submit unrealistic budgets are fixed percentage decrease (39 percent), arbitrary cuts by management (35 percent) and decrease by consultation (29 percent). It is evident that in larger institutions decrease through consultation (67 percent) is the major reason supplied whereas in small institution decrease by a fixed percentage is the major reason (50 percent).

6.3.7 Measurement of performance

There is an even distribution of measuring performance, as can be gauged by Figure 6.22 A on page 192, using customer satisfaction (a mean of 4.6), income generation (a mean of 3.5), space generation (a mean of 3.7), staff/student ratios (a mean of 4.0) and unit cost per student (a mean of 3.4). It is quite clear from Table 6.22 C above, that a larger institution with a

mean of over 4 out of 5 uses all factors in evaluating performance as compared to smaller institution with a mean of 3 out of 5. This is reflected in Figure 6.22 B on page 193.

Figure 6.22 A: Extent to which performance is measured in all institutions

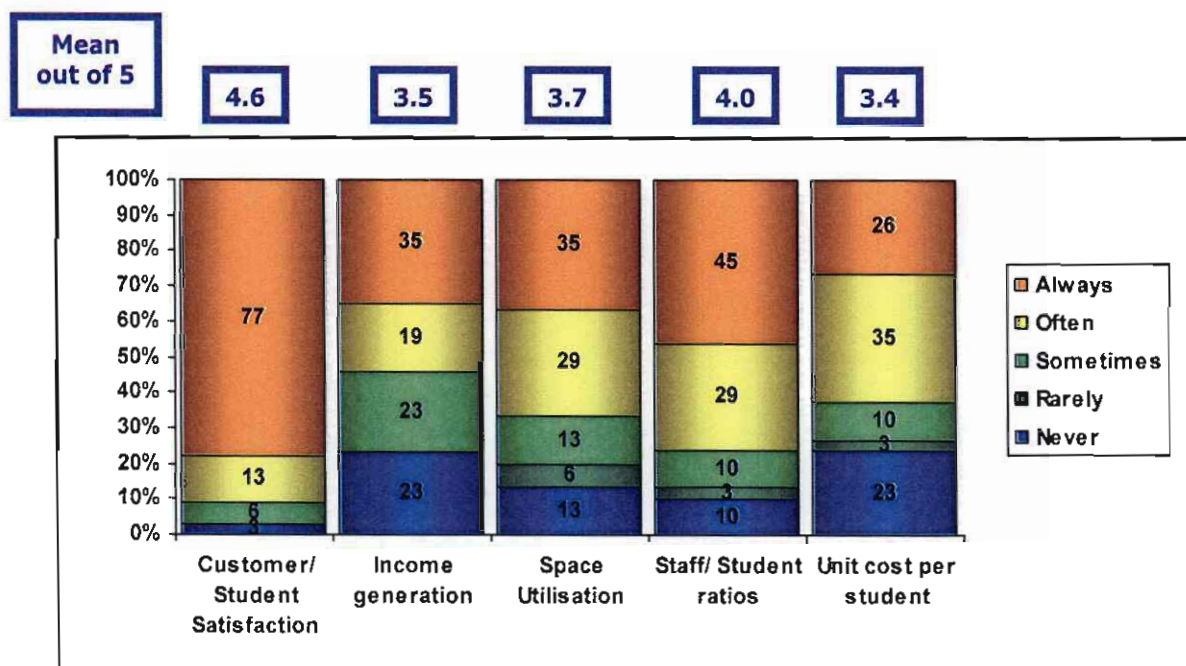


Figure 6.22 B: Extent to which performance is measured in small institutions

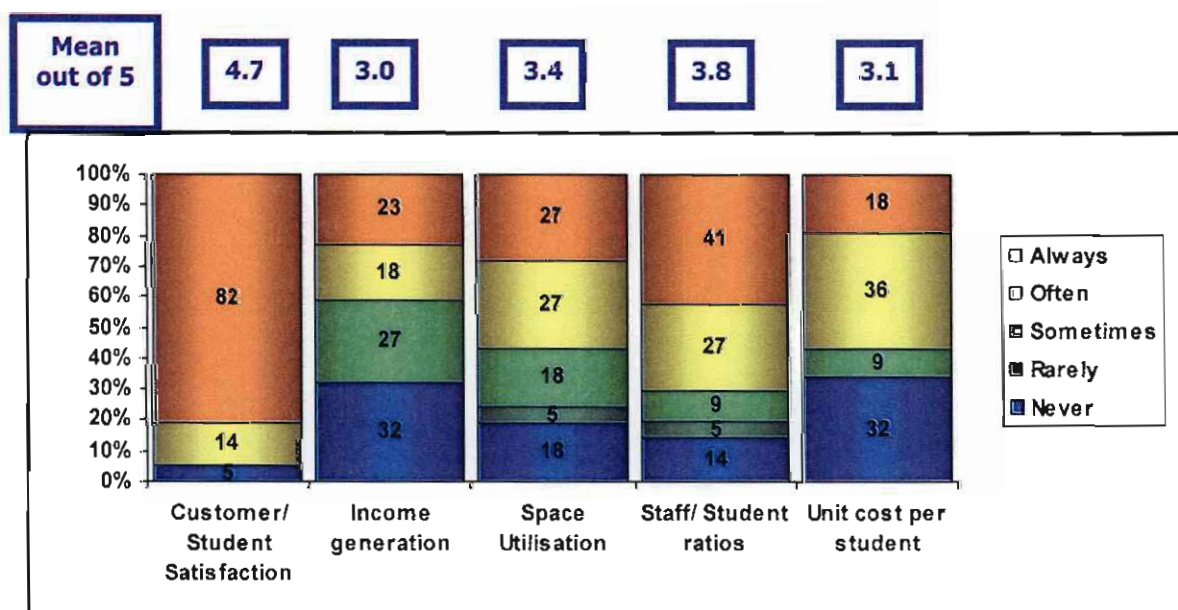
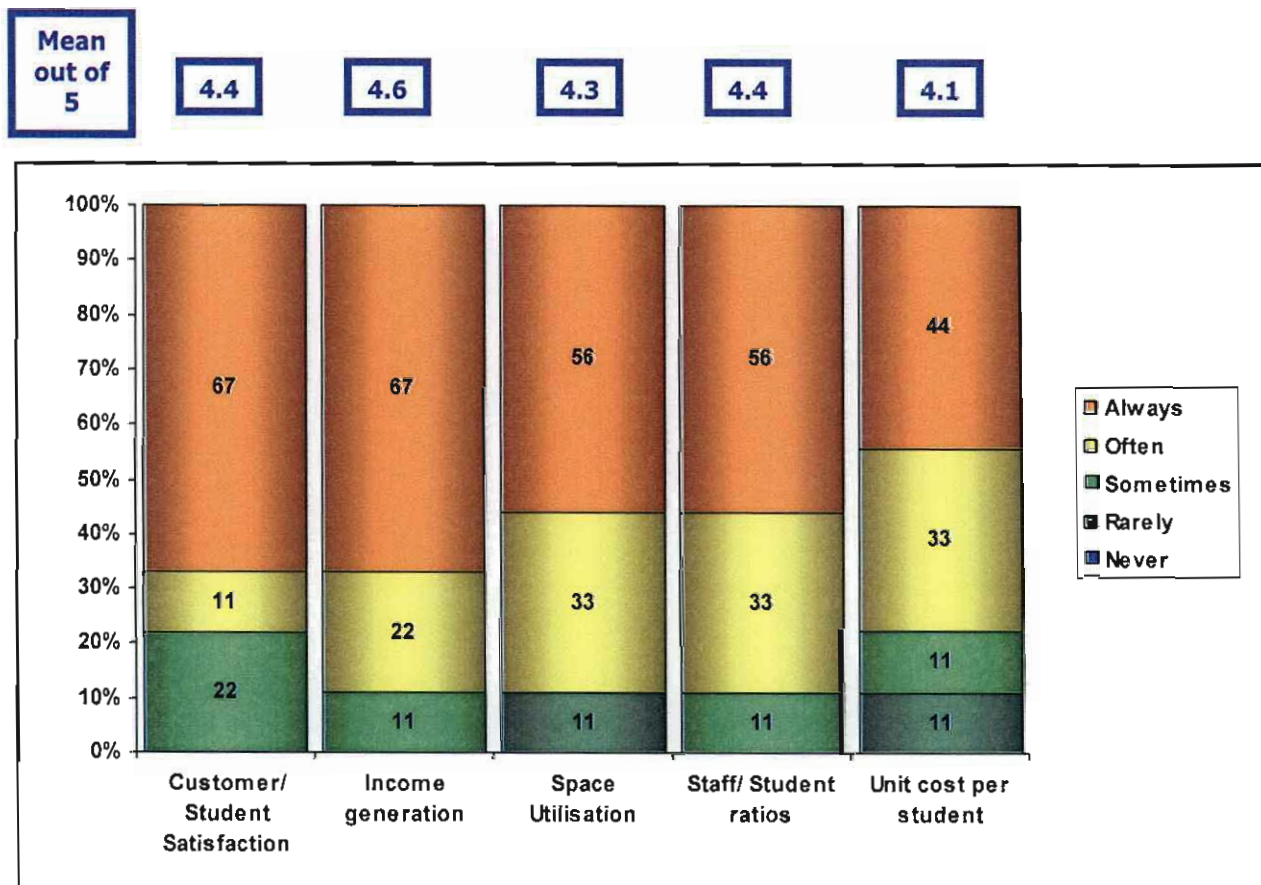


Figure 6.22 C: Extent to which performance is measured in large institutions



6.3.8 Importance of variances to measure management performance

Responses in Figure 6.23 A on page 194, indicates that variances are used as a measure of managerial performance with great importance by both large and small institutions (71 percent), whereas, in larger institutions some 78 percent think that variances are of great importance in measuring management performance.

Figure 6.23 A: Level of importance of variances to measure management performance – all institutions

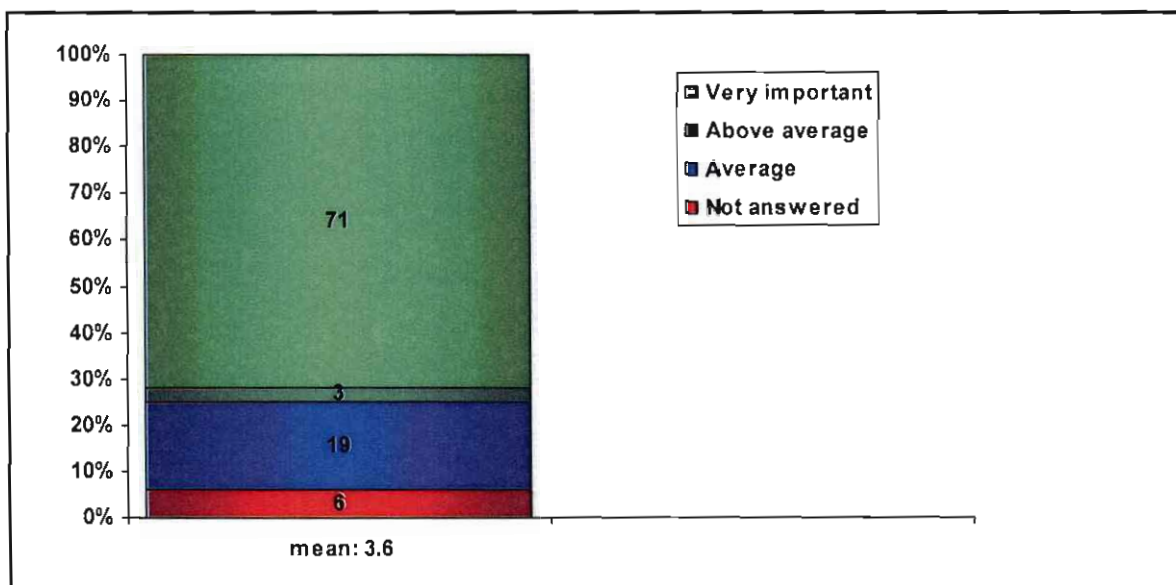


Figure 6.23 B: Level of importance of variances to measure management performance – smaller institutions

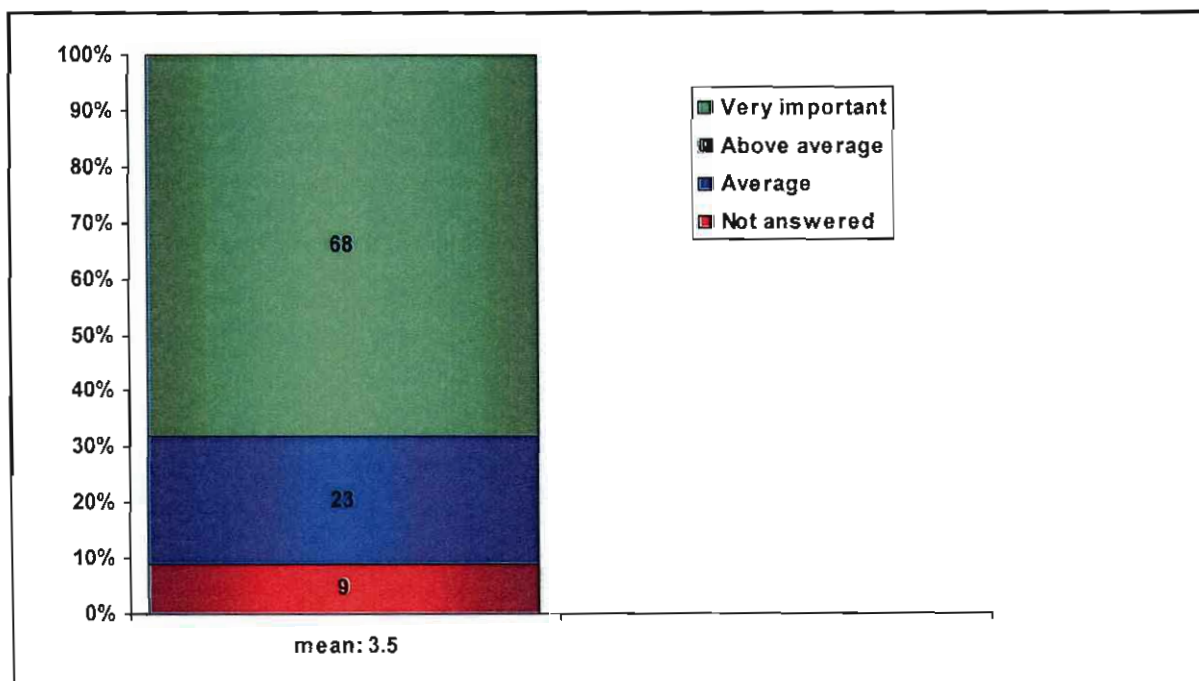
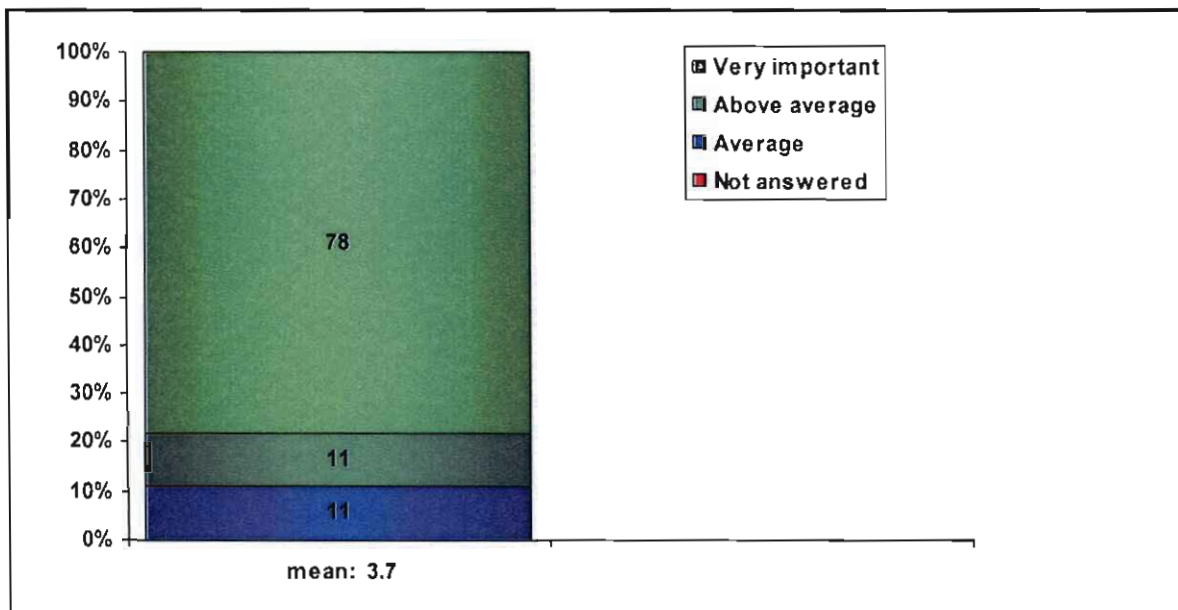


Figure 6.23 C: Level of importance of variances to measure management performance – larger institutions

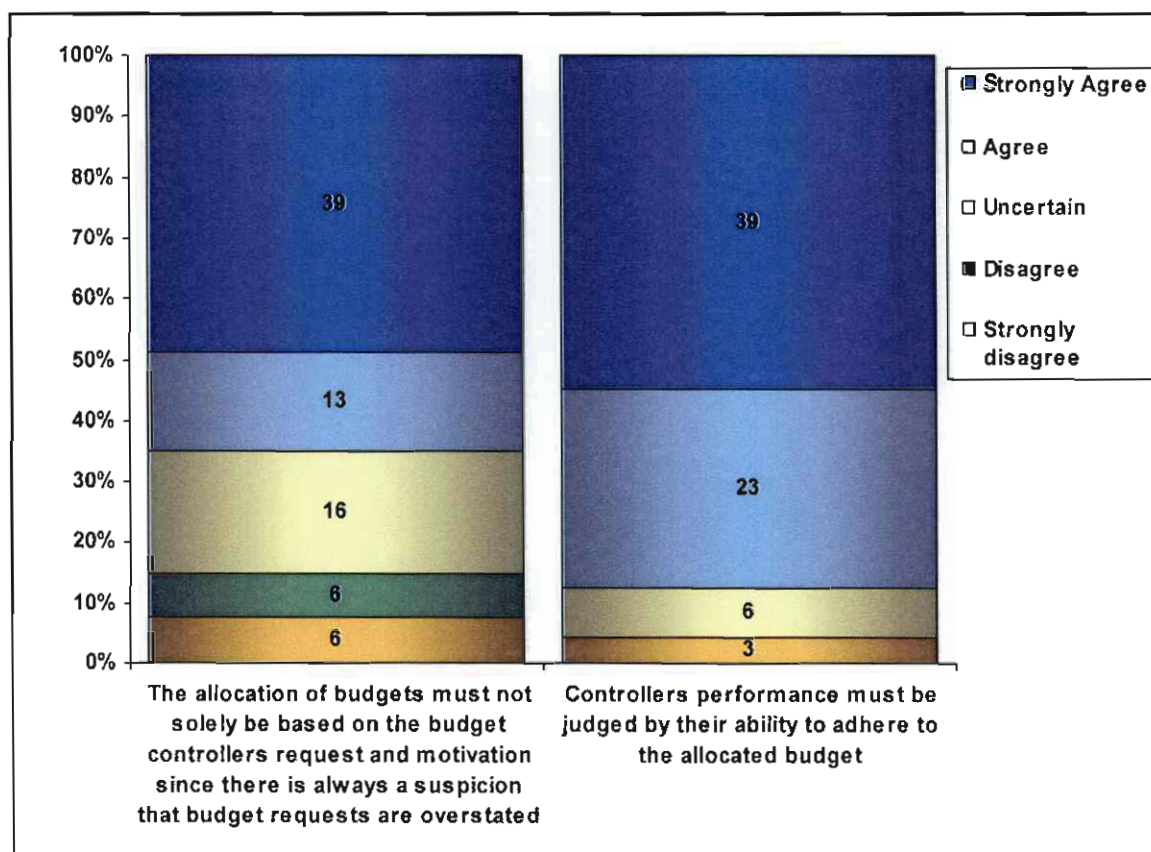


6.3.9 Institutions approach to budget control

The majority of the respondents (52 percent) are in agreement that budgets should not solely be based on the budget controller's request and motivation. There is always this tendency for budget controllers to request more than they really require in the hope they get what they really need. This is obvious when the practice in institutions is always one of reducing budget requests.

Although 62 percent agree that controllers must be judged by their ability to adhere to the allocated budget (Figure 6.24 on page 196), those respondents who are uncertain and disagree (9 percent) might have viewed it from the total restriction it places on achieving the outcomes or plans set out in the strategic plans of the institutions.

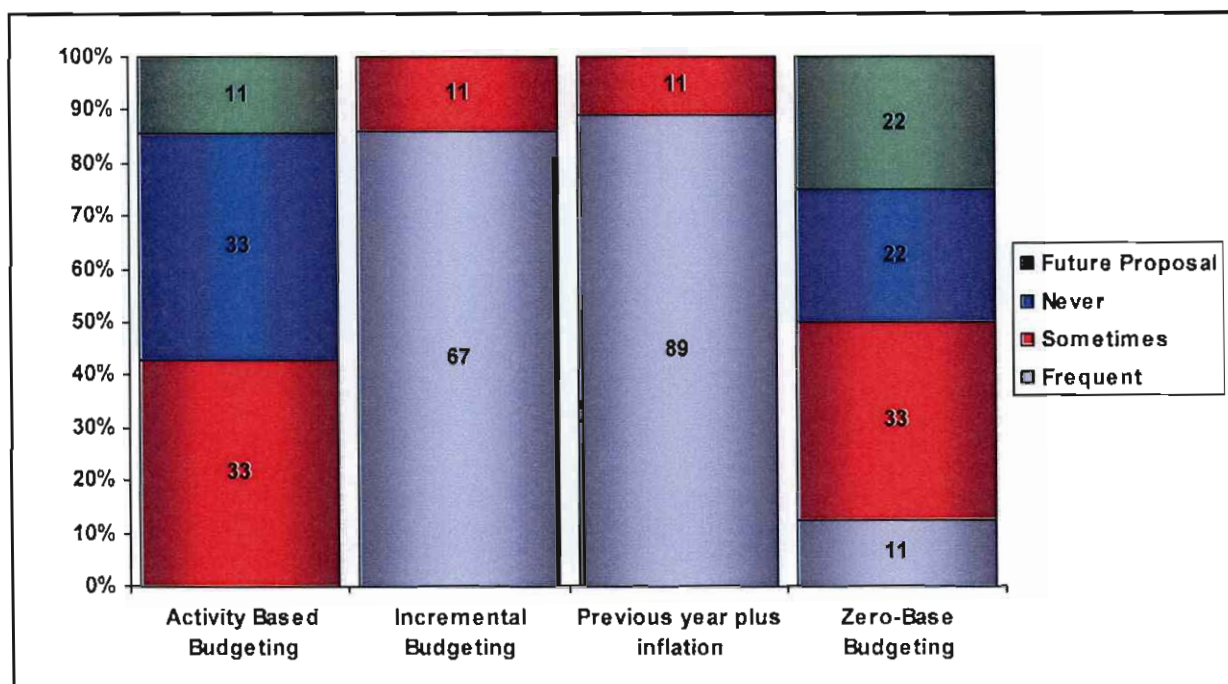
Figure 6.24: Institutions approach to budget control



6.3.10 Extent to which methods of budgeting used

The most frequent approach used indicated by Figure 6.25 on page 197, is clearly the previous year plus inflation (89 percent) and the incremental budget approach (67 percent). The lack of use of Activity based budgeting (33 percent) and Zero-based budgeting (33 percent) is concerning since institutions in the private sector are not following the industry practice closely.

Figure 6.25: Extent to which methods of budgeting used



6.4 Respondents position on Capital Investments (Questionnaire – questions 4.1 – 4.4)

6.1.4.1 The use of financial appraisal techniques

Figure 6.26 A on page 198, that the Internal rate of return (a mean of 3.5) and the Net present Value (a mean of 3.5) methods are the more popular financial appraisal techniques at most institutions. The payback (a mean of 2.4) and discounted payback methods (1.9) are not popular methods of appraisal. It is quite evident from Figure 6.26 B on page 198 and 6.26 C on page 199, that larger institutions tend to use make more use of the financial appraisal techniques than smaller one. This is supported by the fact that larger institutions are actively involved in the industry with demands from shareholders to perform.

Figure 6.26 A: Extent to which financial appraisal techniques are used in all institutions

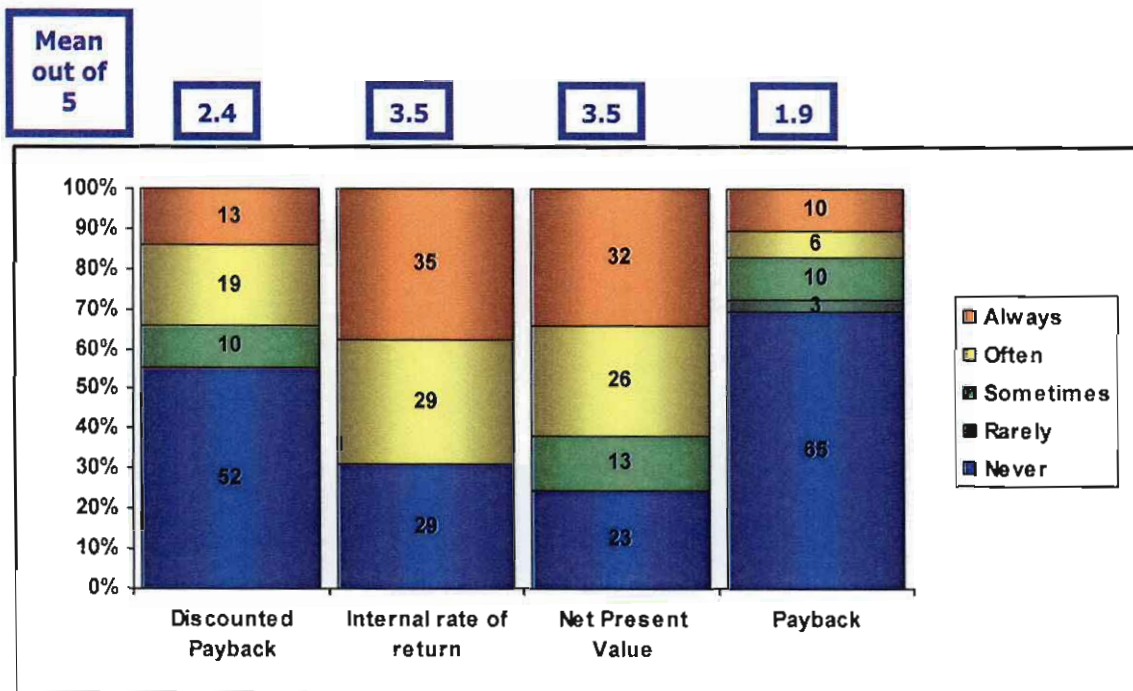


Figure 6.26 B: Extent to which financial appraisal techniques are used in smaller institutions

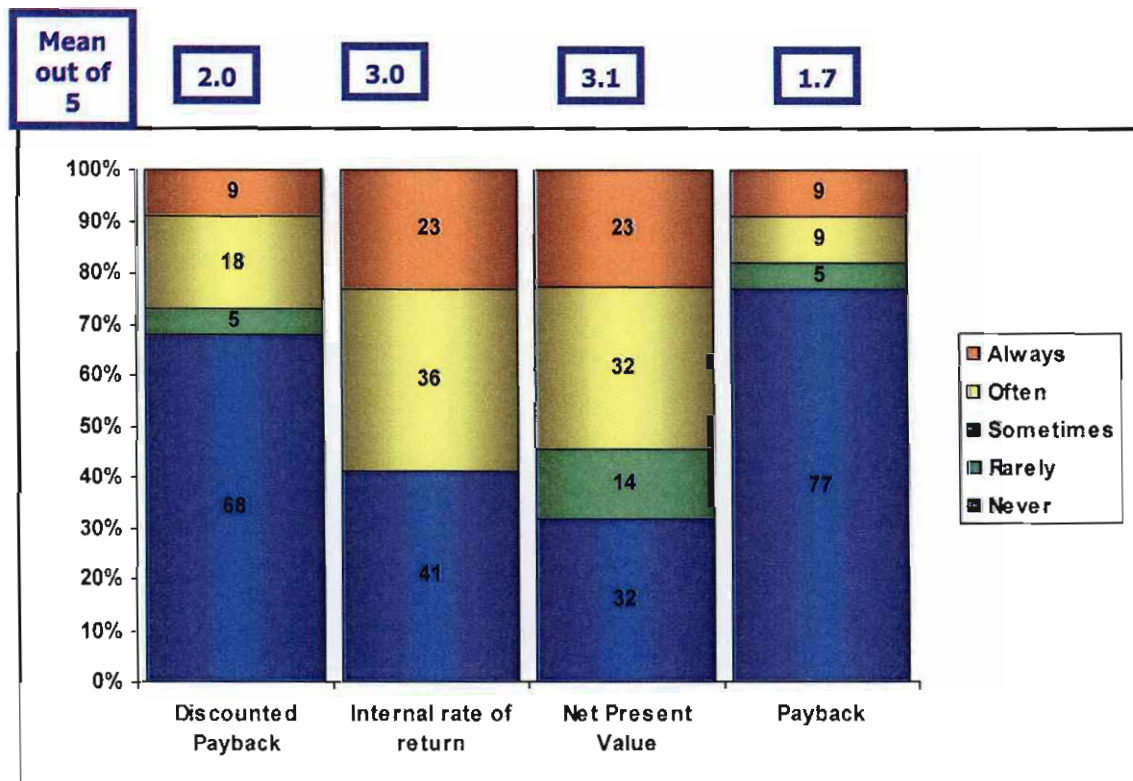
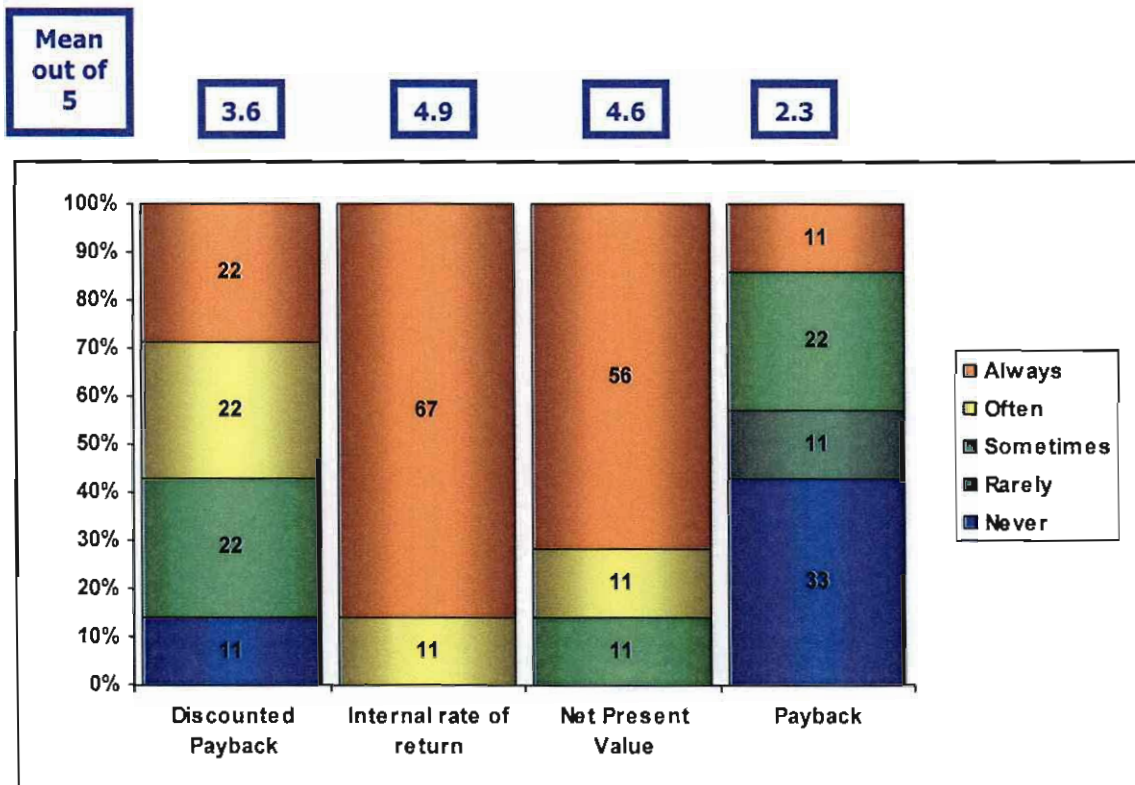


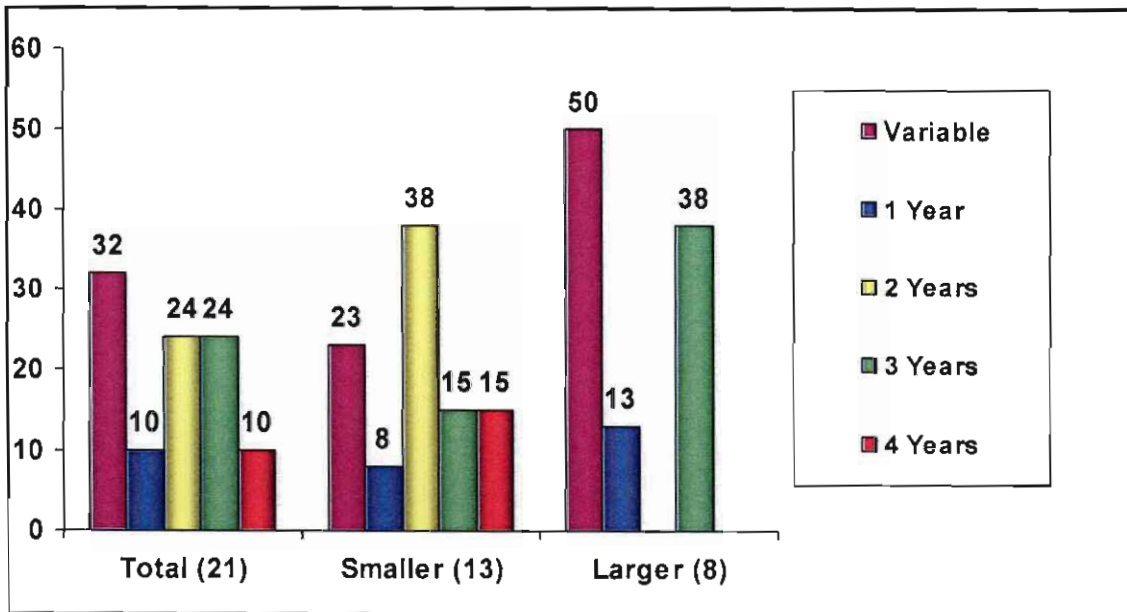
Figure 6.26 C: Extent to which financial appraisal techniques are used in larger institutions



6.4.2 Payback periods used for capital investments

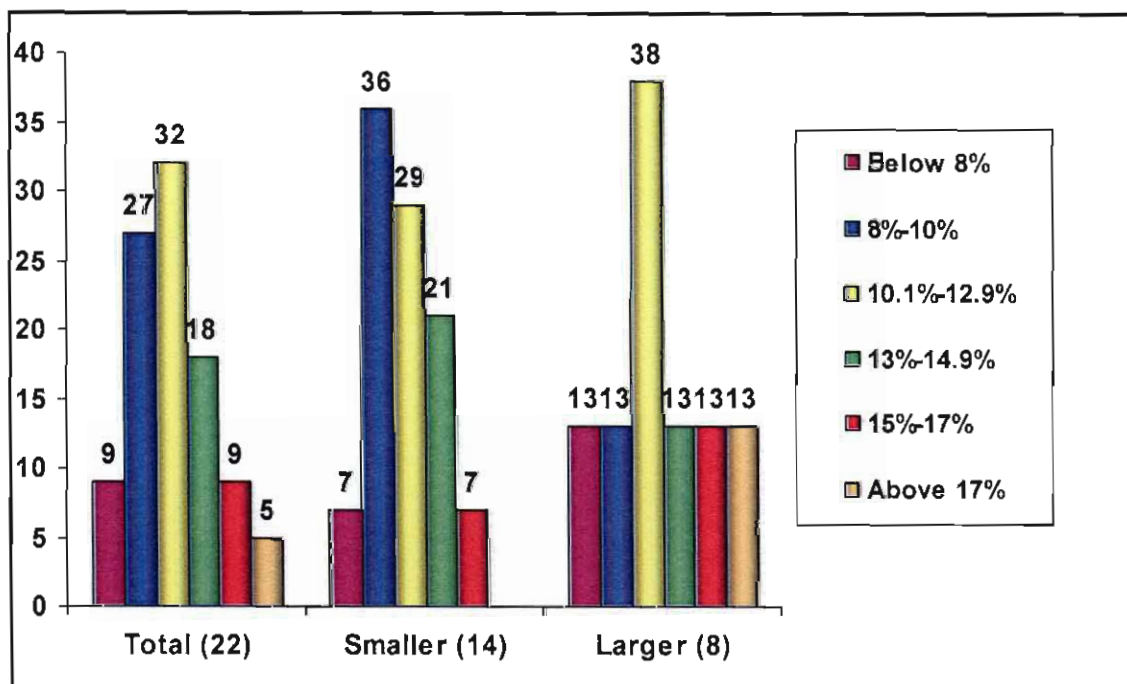
Figure 6.27 on page 200; reveal that the average payback period is between two and three years. Smaller institutions tend to have shorter payback period as compared to larger ones that prefer a three-year period. The length of the payback period will also be dependent on the type of investment.

Figure 6.27: Payback period used for capital investments



6.4.3 Minimum rates of returns

Figure 6.28: Minimum rates of returns



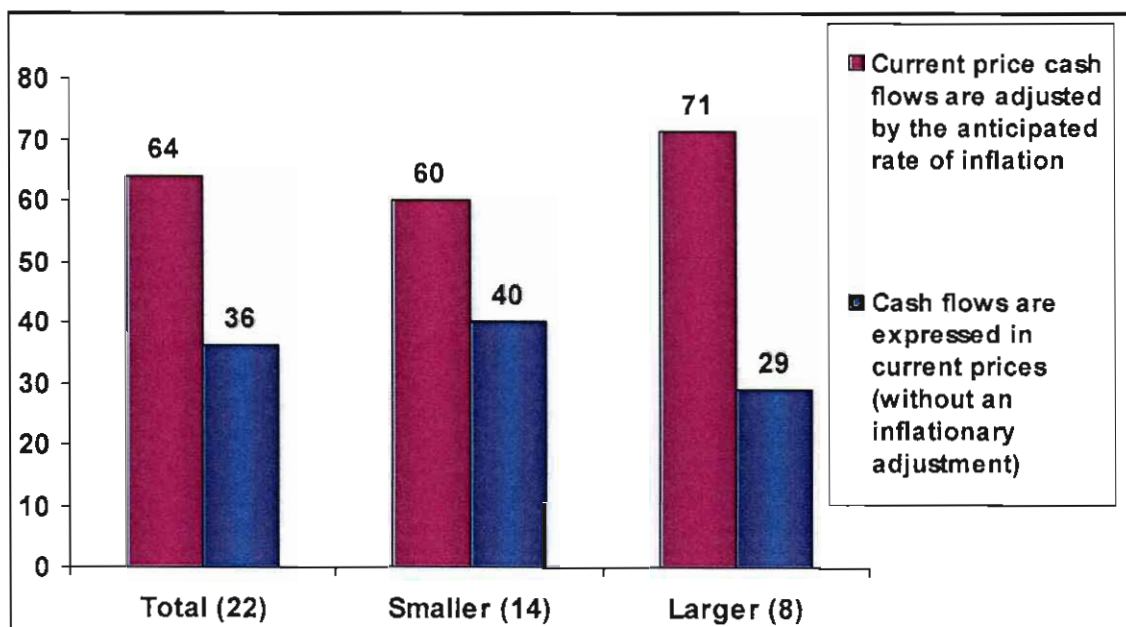
The minimum rate of return is between 8 and 13 percent, but for smaller institutions this rate is between 8 and 10 percent when compared to larger institution that require a minimum rate of between 10 to 13 percent. This

implies that larger institution due to their size in the industry would require a larger minimum return to satisfy shareholders.

6.4.4 Taking inflation into account

Most institutions as illustrated in figure 6.29, adjust cash flows for inflation (64 percent). Larger institutions (71 percent) see a greater need to adjust cash flows for inflation in comparison to smaller institutions (60 percent). This may be due to the fact that larger institutions have longer cash flow periods as compared to smaller institutions.

Figure 6.29: Taking inflation into account



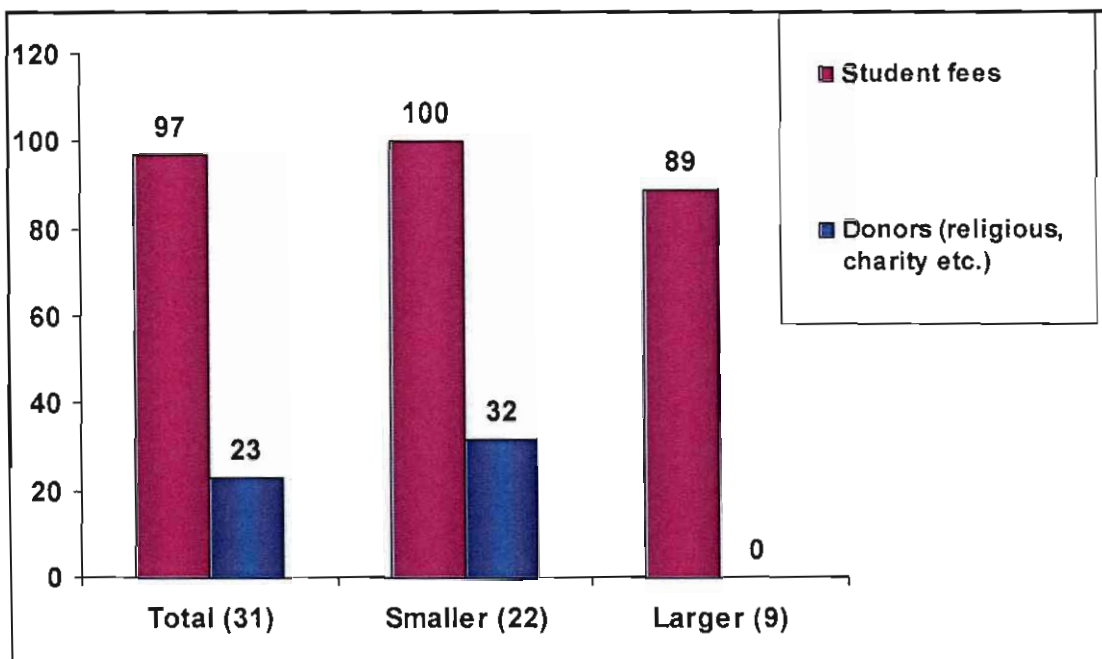
6.5 Financing decisions

(Questionnaire – questions 5.1 – 5.2)

6.5.1 Main source of income

The main source of income of private institutions, as illustrated in figure 6.30 on page 202, is student fees. Smaller institutions get their income from donors (32 percent). No private institution receives any income from the Government in the form of a subsidy like public institutions.

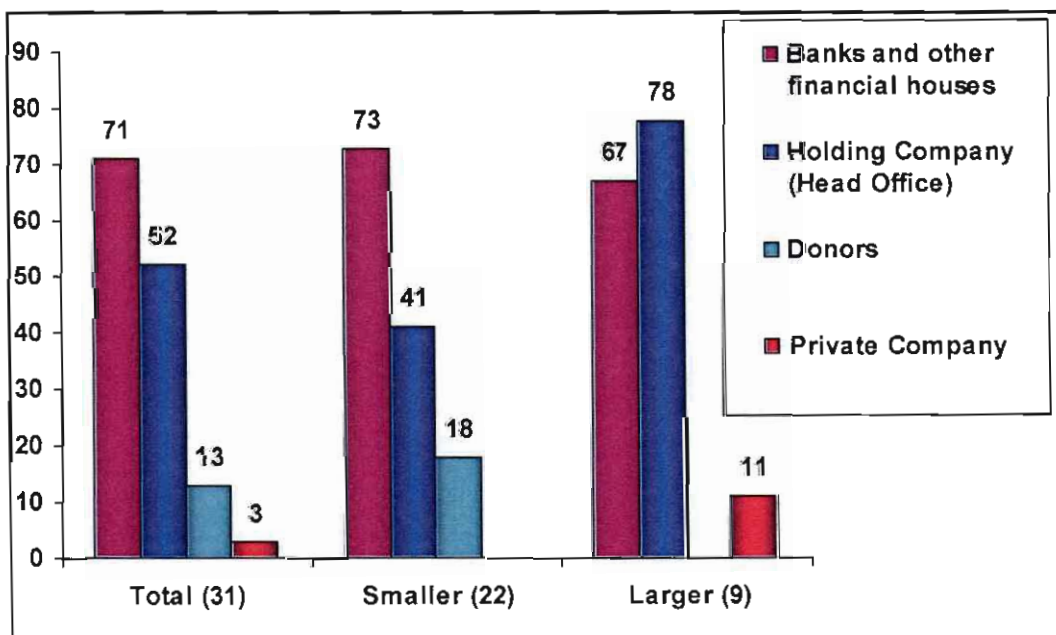
Figure 6.30: Main source of income



6.5.2 Long term funds

Most institutions are able to borrow from banks and other financial houses (71 percent) and their holding companies (52 percent). Smaller institutions are reliant on banks and other financial institutions (73%), whereas larger institutions are able to borrow from their holding companies (78%).

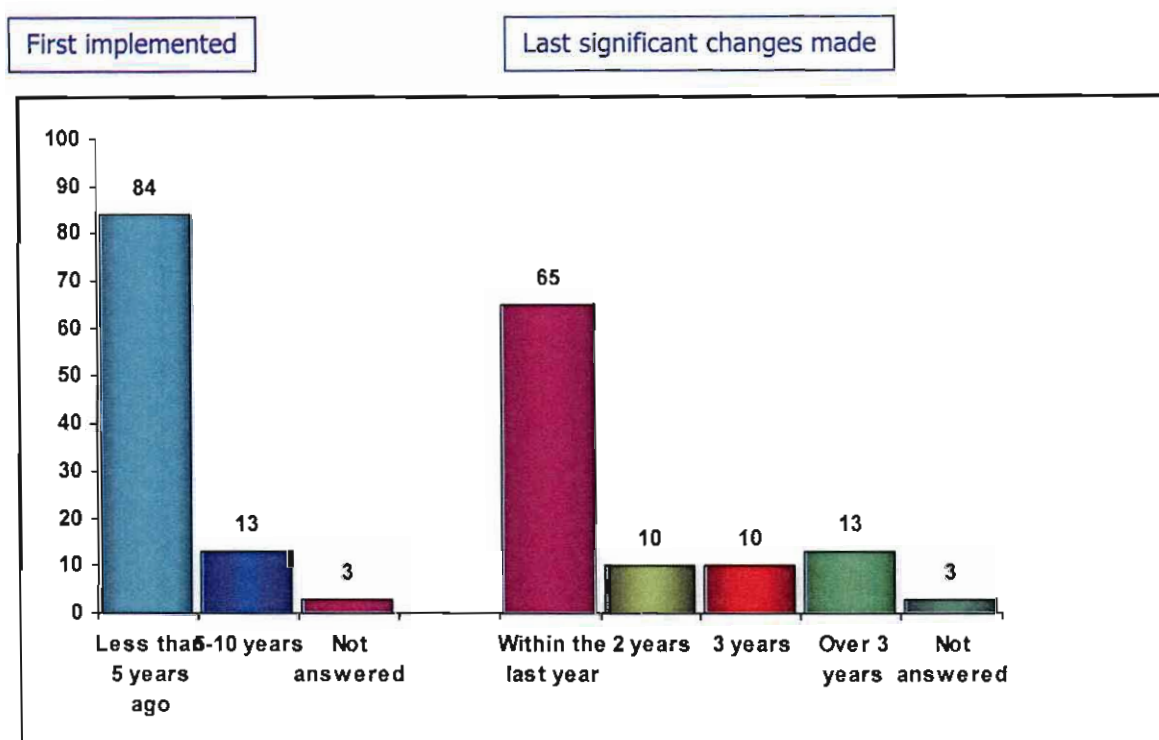
Figure 6.31: Borrowing of long-term funds



6.6 Respondents position Management Accounting Systems (Questionnaire – Questions 6.1 – 6.5)

6.6.1 Implementation and changes to the cost and management system

Figure 6.32 A: Implementation and changes to the cost and management system – all institutions



Cost and management systems were first implemented less than five years ago in most institutions (84 percent, Figure 6.32 A above). In larger institutions 33 percent of the institutions had implemented their cost and management systems between five and ten years ago (figure 6.32 B on page 204). This may indicate that these institutions are in existence for a longer period. Most institutions have made changes to their cost and management systems within the last year (65 percent). This implies that their cost and management system is not static and changes to the changing needs of the

market and the institution. It also indicates a significant move towards better costing systems within higher education institutions, as well as the recognition of the use of new models of cost accountability.

Figure 6.32 B: Implementation and changes to the cost and management system – small institutions

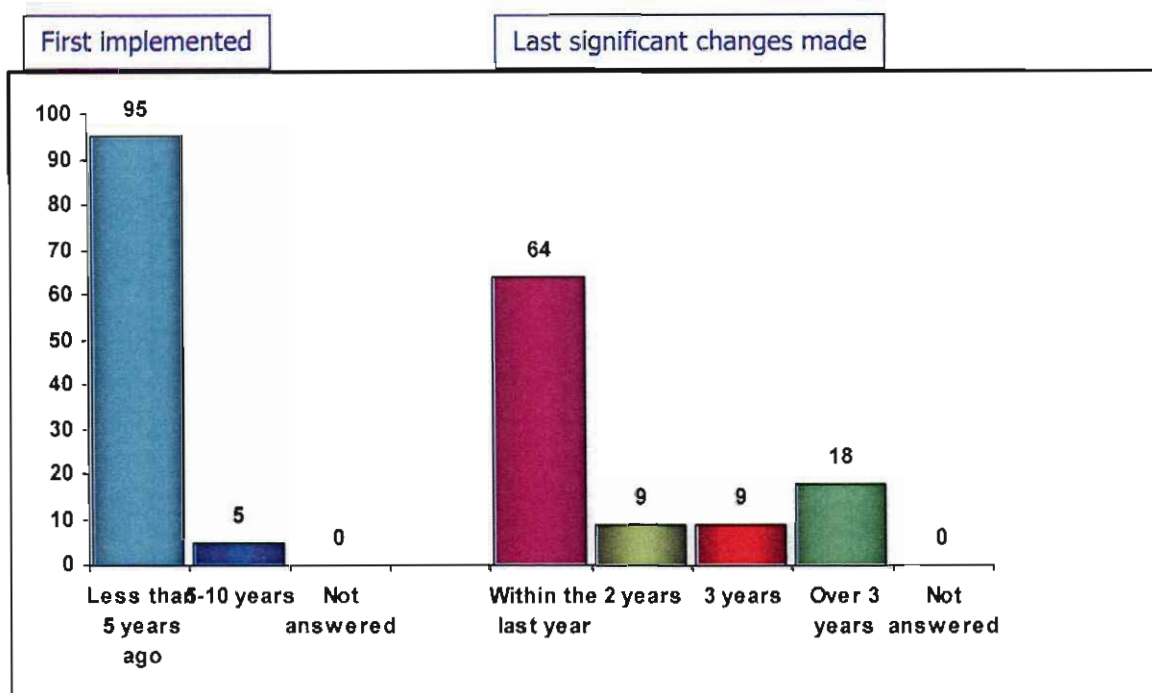
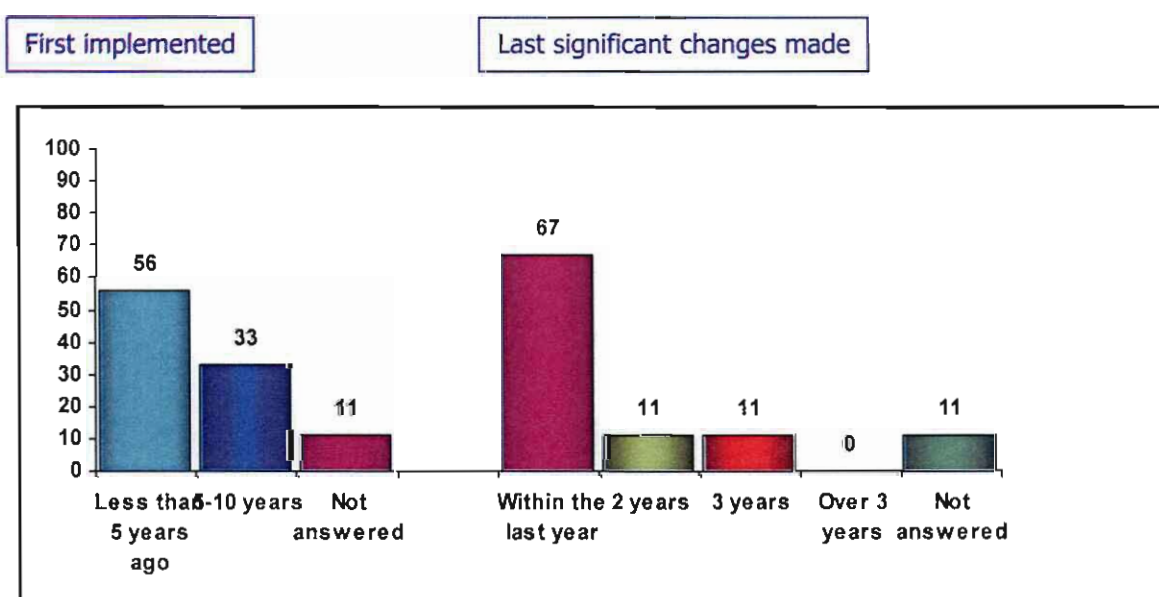
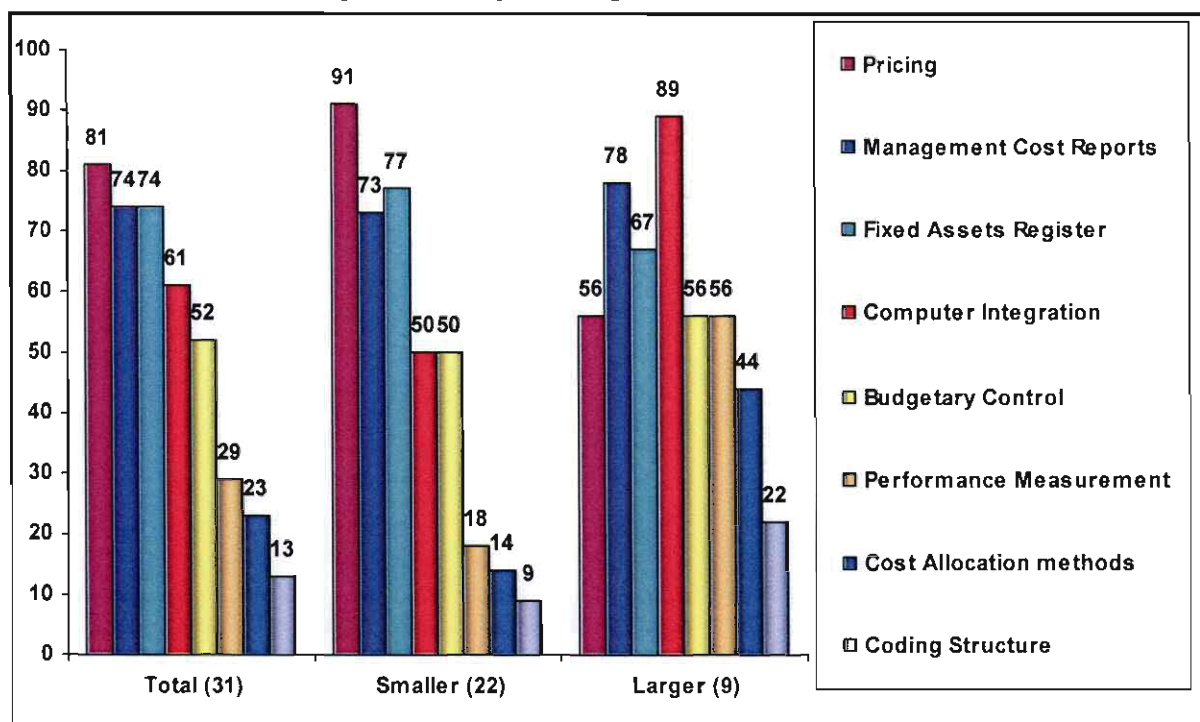


Figure 6.32 C: Implementation and changes to the cost and management system – large institutions



6.6.2 Areas significantly changed or amended

Figure 6.33: Areas significantly changed or amended



Most respondents reported that pricing (81 percent), management cost reports (74 percent) and fixed asset register (74 percent) were most significantly changed/amended. The reason for the notable change in fixed asset register was due to the changes in the Corporations Act. Also significantly changed/amended was computer integration for larger institutions (89 percent). This is due to the increased use of computers in higher education.

6.6.3 Changes to the cost and management system within the next three years

It is of considerable concern to note that most institutions do not envisage making changes to the cost and management system within the next three years (84 percent). All small institutions indicated they will not be making any changes whereas 44 percent of the larger institutions indicated changes

within the next three years. One of the reasons for this response may be that the institutions feel that their systems are working adequately and any

Figure 6.34 A: Changes to the cost and management system within the next three years – all institutions

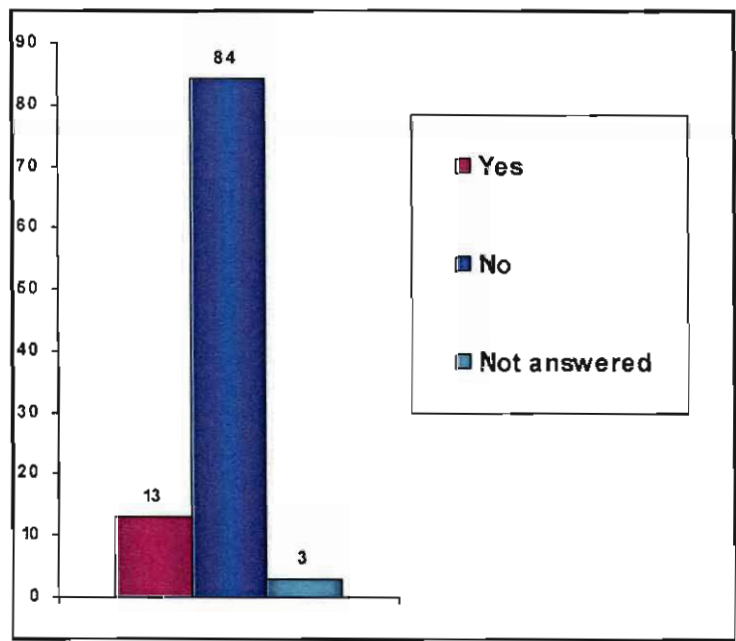


Figure 6.34 B: Changes to the cost and management system within the next three years – small institutions

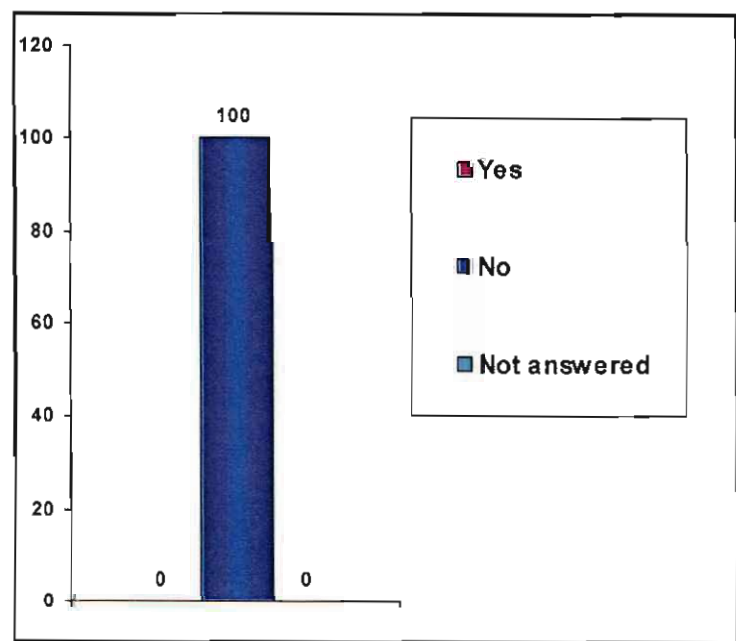
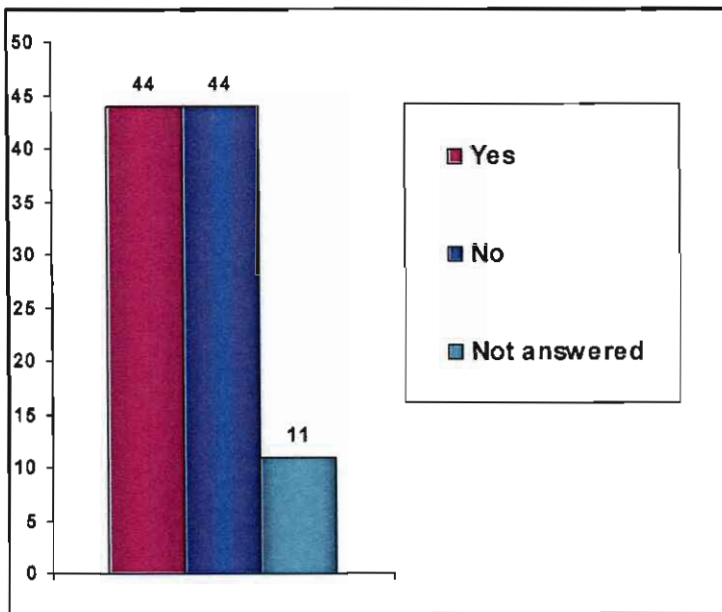


Figure 6.34 C: Changes to the cost and management system within the next three years – large institutions



changes may create problems for the system currently being used. The institutions may have insufficient funds to change the costing systems to adapt to technological changes.

6.6.3.1 Possible changes institutions can make

The following list indicates the possible changes that institutions thought they could make:

- Improvement performance measurement systems
- Introduction of small cost (business) units (SBU's)
- Integrated computer and cost systems
- Activity based budgeting and management (ABB and ABM)
- More devolved budgeting
- Complete zero-based approach to budgeting
- All overheads to be allocated to cost centres to reflect total true cost of divisions

6.7 Hypothesis testing

The hypothesis states that:

Administrators of private higher education institutions are unaware of the different financial management systems, cost management systems and decision-making systems that exist at the various higher education institutions.

This hypothesis will be tested using the Chi-Square test. For the purpose of this test, it was decided to use the Chi-Square test on the total sample, the small institutions and the large institutions.

Table 6.1: The Chi-Square test for the total sample

Test Statistics

	Q1.11 The institution has a separate cost management/management accounting department :
Chi-Square(a)	3.903
df	1
Asymp. Sig.	.048

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 15.5.

Table 6.2: The Chi-Square test for small institutions**Test Statistics**

	Q1.11 The institution has a separate cost management/ management accounting department :
Chi-Square(a)	11.636
df	1
Asymp. Sig.	.001

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 11.0.

Table 6.3: The Chi-Square test for large institutions**Test Statistics**

	Q1.11 The institution has a separate cost management/ management accounting department :
Chi-Square(a)	2.778
df	1
Asymp. Sig.	.096

a. 2 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 4.5.

From Table 6.1 on page 208, Table 6.2 above and Table 6.3 above, it can be noted that the hypothesis is true for all the institutions. The significance of 0.048 for all institutions, 0.001 for small institutions and 0.096 for large institutions supports the hypotheses. This means that both small and large institutions are unaware of the different financial management, cost and management systems and decision making systems that exists at higher education institutions.

6.8 Summary

The response from the surveyed institutions indicate that the size of the private higher education institutions in terms of student enrolments does not justify a separate cost and management department but rather an integrated accounting system.

The responses indicate that the size of the private higher education sector is small, which is supported by the fact that in 2004 it was estimated that there were about 30 to 35 000 students in the sector, with the number of private higher institutions drastically reduced from 323 in 2000 to 93 (South Africa²³, 2004:48). This is only 5 percent of the total headcount of public higher education in South Africa.

Thus, administrators are not well equipped in financial management, cost management and decision making at private higher institutions since they tend to operate in a very competitive environment with diminutive institutions when compared to their smallest public counterpart.

The final chapter will discuss the achievement of the primary and secondary objectives in this study and make important recommendations and suggest possible future related research studies in this important area within the higher education sector.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

This chapter will evaluate whether the primary objectives and secondary objectives of the study has been achieved. It will also determine whether hypothesis set out is true. This chapter will make recommendations and suggest possible further research areas in private higher education.

The extensive literature study investigated various issues on private higher education. It highlighted the role and development of private higher education within the higher education sector. This study also highlighted the development in cost management theory and practice and the different type of cost management systems, financial management systems and decision making systems that exists in private higher education.

The research findings of this study were identified and discussed by means of various statistical and descriptive methods and techniques in chapter six.

7.2 Literature Review

Private higher education institutions, will inevitably find themselves in financial crisis. Various factors have placed these institutions in this position. Some of these factors are:

- the latest government legislation that compel private institutions to register themselves with the Registrar of private higher institutions
- the mergers of public higher institutions to form mega institutions and monopolize the sector
- the lack of State grants or subsidies to private higher education institution, unlike the financial support that public institutions receive

- the perception that private institutions place profits before the education and training of students

The above factors have led to institutions looking for better ways to financially operate their institutions. The use of cost effective strategies to optimise the use of limited funds must be seen as a vital tool in private higher institutions.

Chapter two reflected on the role of private higher education focusing on the South African higher education system. This chapter highlights the complementary and competitive role of private higher education. This chapter also highlights the different categories and marketing strategies employed by private higher education institutions. The regulations and responsibilities of private institutions are discussed in this chapter.

In essence, the complementary and competitive role of private higher institutions is of importance. It is mentioned that private institutions should complement the different programmes on offer by public institutions and at the same time offer competition to public institutions. A weak private higher education sector does not provide competition to a State assisted public sector may result in lower standards of higher education in comparison to that of world standards.

Chapter three focused on budgeting in higher education institutions in addition to the relevant management accounting systems that are used in higher education institutions worldwide. Proper planning in higher institutions is pivotal to the financial sustainability of higher education institutions. In similarity to large corporate enterprises, the application of the principles of planning and control should not be any different. Proper planning and control will enhance the achievement of the objectives set by higher education institutions. This chapter also emphasized the use of a zero-based approach to budgeting.

The researcher is of the opinion that this method, if used properly, can be effective in cost management throughout higher education institutions. The key role of performance management using both financial and non-financial measures in higher education institutions has also been highlighted in this section of the literature study. Clearly the measurement of performance in terms of goals and objectives achieved could help illustrate the planning direction of higher education institutions.

Over and above this proper performance measurement creates a healthy environment for institutional effectiveness. Employees at all levels can become more focused to deal with strategies and objectives. This will, obviously, enhance the achievement of the organizations mission and vision.

In chapter four we have seen the critical importance of decision-making within higher education institutions. Management accounting and its related functions play a vital role in assisting decision makers to make decisions that can add value to the organisation. The relevance of both quantitative and qualitative factors have also been analysed in this chapter to illustrate the effect it has on decision making in higher education institutions. The understanding of the decision making process can make a major difference in arriving at the correct decision for both the short and long term. In higher education chapter four has also landscaped the importance of making the right decision in respect of budgetary allocations, cost volume analysis, course pricing and capital investment decisions.

The pressure is now even greater on higher education managers in South African higher system to make the right decisions. This pressure increases when there is an absolute need to deliver the best benefit from extremely limited resources. Higher education managers have to be much more creative and prudent to ensure that there are no mis-decisions that can negatively affect the financial economy of their institutions.

7.3 Achievement of the research objectives

In the first chapter we identified specific objectives for this research study. Having processed the relevant information through a literature study in chapters two to four and an empirical research which has its findings reported in chapter five we can now determine how the objectives in this study has been met.

7.3.1 Primary objective

The primary objective was to analyse and compare the financial management systems, cost management systems and decision-making systems of private higher education systems in South Africa from 1990 to 2005 in order to equip administrators of private higher education institutions to make more informed and relevant decisions at their institutions.

In order to achieve this, an empirical research study was conducted by means of a questionnaire survey on a sample of thirty-one (31) private higher education institutions in South Africa. A full detail of the research process and methodology used has already been presented in chapter six. In order to determine the extent to which cost management principles and cost management systems are applied in higher education institutions in South Africa the questionnaire was divided into four relevant sections.

Section one of the questionnaire was necessary to determine the institutional structure and the substructure of a cost management function within the institution. Section 2 enabled the researcher to analyse the manner in which costs are analysed and the different cost drivers that institutions use. Section 3 allowed the researcher to consider the budgetary control measures in place and the form and frequency of reporting. Section 4, analysed capital investments and various methods employed by institutions when making capital investments. Section 5 was used to

analyse financing decisions and sources of funds. Section 6, reported on the management accounting systems of these institutions and changes that may have occurred.

The findings of Section One are adequately reflected in chapter five. Of relevance is the fact that 32 percent of the respondents have a separate cost management department. This is significant in that it reflects that higher education institutions in South Africa recognize the importance of the cost management functions.

The 68 percent that do not have a separate cost management department must not be seen from negative perspective since there is ample evidence through responses received in the remaining sections that these institutions are also fully aware of cost management. Furthermore, it was mentioned that the size of private higher education does not warrant separate cost and management systems. This is also confirmed by the 94 percent of the respondents that indicated that there were at least between one and five dedicated personnel for cost management or management accounting.

In Section 2 of the questionnaire the responses are sufficient to deduce that South African private higher education institutions analyse costs to effectively manage institutions. Almost all institutions analyse costs at different level. In faculties and divisions costs are analysed in some form although the level of analysis varies. The detailed analysis in chapter 6 reflects these different levels. Most institutions also analyse costs by individual courses, research activity and student type, although at different levels. The only area of concern could possibly be the analysis of costs by research activity (Figure 6.6 A on page 174). Over 71 percent do not analyse costs by research activity although research should be a critical variable for cost analysis and cost prediction

The fact that all institutions trace service costs to various divisions indicates that institutions use methods to determine the costs within divisions of the organisations although an analysis of the categories of cost tracing may be insufficient. Very few of the respondents trace costs directly and indirectly to research.

The majority of the respondents use an allocation method to assign indirect costs. The extent of allocation differs amongst methods with the employee related and student number categories being the most popular. Over 60 percent have used these as a basis at different levels on the scale provided. Figure 6.9 on page 177 reflect this. This does not however mean that the allocation methods and the tracing of costs provide the most accurate reflection of costs within institutions. The use of cost drivers in allocating costs are an important means of accurate cost allocation. The positive responses received (Figure 6.15 A on page 183) suggest that institutions use appropriate drivers although they may need to evaluate whether the drivers used are providing the necessary accurate information for a better-cost analysis. These points will be revisited when recommendations are made in this research study.

Most institutions that responded to this question prepare cost statements (Figure 6.8 on page 177). The frequency may not, however, be at levels that could add more value to the information provided to managers. The frequency of producing statements could also be dependent on needs of the organisation.

The level of understanding of appropriate cost management techniques is reflected in the fact that most respondents could determine the appropriateness of its use (Figure 6.15A on page 183). The use of the activity-based costing method suggests that institutions are utilizing or considering the utilisation of better methods of cost allocation.

In Section 3, 87 percent of respondents indicated that they operate a budgetary system, which indicates, that institutions recognise that proper budgeting and control can be achieved through such a system.

The devolution of budget control to different levels of management (Figure 6.17 A on page 185) indicates that there is the involvement of managers at different levels in budgeting and control. This involvement of managers at different levels suggests that top management within these institutions encourages the co-ownership of the financial management function of the organisation.

In responding to the annual budget separated into control periods 65 percent of the respondents provide for this. Those that do not break their budgets into control periods could possibly do so at the risk of cash flow problems earlier or later in the budget year.

The influence of various stakeholders in the budget approval is encouraging. However, most respondents did not answer this question, which makes it impossible to determine their influence on the budgets of the institution. It is important for management to have a major influence on budget approval, since the performance of the organisation is the responsibility of management. The Director and/or General Manager highly influence the budget approvals at institutional levels whilst the others influence the budget at lower levels.

In responding to budget cuts 67 percent of respondents indicated that this is done through a consultative process. This is reflective of the positive way of sharing the available funds within the institution.

It is encouraging that over 95 percent of the respondents indicated that performance reports are provided to budget controllers, although the types of reports could be improved in the future. The measurement of performance

with respect to customer satisfaction, income generation, space utilisation, staff/student ratios and unit cost per student are performed by most respondents but the levels vary from rarely to always (Figure 6.22 A on page 192). Whilst it is encouraging to note performance measurement (Figure 6.23 A on 194) is being done and that variances are used as a performance measure by institutions, the frequency of this will be revisited as part of the recommendations in this study.

In Section 4, it is evident that most institutions use some form of appraisal technique in their capital investment decision-making. Although 52 percent (Figure 6.26 A on page 198) have never used the discounted payback method, the 48 percent, which did use it, suggest that they do have an understanding of a method, which is very complex and difficult to apply by non-financial managers. Similarly the use by 71 percent (Figure 6.26 A on page 198) of the respondents of the internal rate of return and use of the net present value by 77 percent (Figure 6.26A on page 198] of the respondents shows that a reasonable proportion of respondents understand these complex methods. Although the payback period is a much more simpler method the use by 35 percent of the respondents is adequate to conclude that it is used by a small proportion of private higher education institutions.

Section 6 indicated management accounting systems were well established within all institutions (Figure 6.32 A on page 203), although there may not be a separate cost management department as indicated in Figure 6.5 on page 172. Sixty-five percent (Figure 6.32 A on page 203) of the respondents made significant changes in the last year, which suggests that higher education, institutions are keeping abreast with the latest developments in cost management and looking for better ways to achieve cost efficiencies. Also of significance is that only 13 percent of respondents are planning to make further changes in the next three years. The fact that majority of the respondents have made changes to areas of critical importance supports the deductions about changes made and to be made. The major areas include

changes in management cost reports (74 percent of respondents), budgetary control (52 percent of respondents) and computer integration (61 percent of respondents). Other areas of change are reflected in Figure 6.33 on page 205.

The analysis in this section and the detailed research findings of the empirical study presented in chapter 6 is sufficient to conclude that cost management principles and cost management systems are applied in higher education institutions in South Africa. There are however specific aspects relating to cost management that may need attention and these will be the subject of discussion within the recommendations made in this study.

7.3.2 *Secondary objectives*

Three secondary objectives were set at the beginning of this study to support the achievement of the primary objective.

The first secondary objective was to investigate the key issues and trends in the policy and practice of financial management systems of private higher education institutions in South Africa.

Chapter two provided a detailed analysis of education in South Africa, description of universities and technikons and enrolment at these institutions. In addition the National Plan for Higher Education was well analysed, as was the private higher education funding and the proposals for a new funding mechanism for higher education in South Africa. This extensive literature study was sufficient to achieve the first of the secondary objectives of this study.

The second secondary objective was to describe and evaluate the different cost management systems that are relevant to private higher education institutions.

The focus in chapter three was therefore on management accounting systems and budgeting since this was the relevant issues the area of this study. An extensive literature study of management accounting systems, and more specifically management accounting in higher education institutions, cost centre systems and profit centre systems were featured.

The literature study specifically to budgeting relevant to higher education institutions was highlighted, together with important issues such as, zero-based budgeting in higher education and performance measurement. This literature survey was sufficient to meet the second of the secondary objectives.

The final secondary objective was to establish, from literature, the types of decision-making systems relevant in higher education institutions. This literature study concentrated on the decision-making process and decision-making in higher education institutions. The relevant areas of focus were, budgetary allocations, cost-volume-profit analysis, pricing decisions and capital investment decisions. The extensive literature study of the aspects relevant to higher education institutions was sufficient to meet the last of the secondary objectives.

7.4 Recommendations

This study has highlighted the ever changing environment of higher education under which private institutions have to operate. The fierce competition from public institutions and the financial strength supported by government makes private higher education institutions little “pawns” in the higher education sector. The following recommendations are considered important if private institutions are to move to optimum levels of cost and management and improved financial sustainability.

7.4.1 Being a World Class Organisation (WCO)

Although private higher institutions are very small in terms of student enrolments when compared to public institutions, they should not restrict themselves to competing merely with their local counterparts. They should strive to acquire world class management techniques and ensure that amongst other techniques, they make use of Just-in-time (JIT) and Total Quality Management (TQM).

7.4.2 Separate the cost management function and financial accounting function

Private institutions must not restrict themselves to the education sector. They must operate as though they are competing in the normal business environment with the same threats and opportunities of any company. In order to achieve this, private institutions should separate their cost and financial accounting functions. However, this department should not work in isolation but must be fully integrated with not only the financial accounting department but all other departments in the organisation.

7.4.3 Analysis of costs

The correct analysis of costs in terms of key cost drivers must be seen as an important tool for proper cost calculation. It is important therefore that costs analysis be appropriately treated when it relates to faculties, courses, student types or research. Moreover the use of the correct cost driver (allocation base) will ensure accurate calculation of costs.

7.4.4 Tracing of costs

It is appropriate to recommend that all costs whether direct or indirect be traced to the correct centre (cost or profit). This will ensure that cost information provided is accurate and relevant when cost analysis is undertaken within institutions.

7.4.5 Frequency of preparation of internal cost statements

A monthly frequency would be ideal, but it is suggested that these internal cost statements be prepared at least on quarterly basis, since most higher education institutions work on a quarterly period (term basis). This will enable line managers to review cost performance on a regular basis and be able to rectify significant deviations before it is too late.

7.4.6 Use of Activity-Based Costing

Institutions should consider using this method for the proper allocation of costs, in addition to the use of activity based-budgeting. This can add value to the accuracy of the budgetary process and serve as a better statement of true costs within departments of institutions.

7.4.7 Budgetary cuts

It is recommended that this should be a consultative process when decreases in budgets must be explained in terms of the budget focus. The budget focus could e.g. indicate the core business of the institution and provide reasons for greater or lesser allocation in some areas. It is important that transparent and honest information is provided to all stakeholders.

7.4.8 Performance reporting

It is appropriate that performance reports for all categories of costs be provided. Performance reports should not be seen as a punitive tool but as an instrument to improve control over costs within organizations. The use of non-quantitative measures like balanced scorecard, financial measure, innovation and learning measures, of performance should also supplement quantitative reports.

7.4.9 The use of investment techniques in capital decision making

Institutions should seriously consider internal rate of return method or the net present value or the discounted payback method in capital investment decisions. Whilst the manual application of these methods may be complex, suitable computer software applications are available for convenient application.

7.4.10 Addressing budget deficits

Institutions should address the problems of budgetary deficits through the income side of the budget. The following should be considered:

- Increasing student intake
- Improving graduate output rates
- Engaging in consultancy work
- Use of idle capacity to offer part-time work and short courses
- Rental of facilities and equipment in the vacation periods
- Contributions from alumni

7.4.11 Using benchmarks

Benchmarking involves comparing the best practices and methods and adopting methods that institutions can use to make improvements. Organisations can focus on the external environment and draw from other successful competitors and leaders in the higher education market. Besides transforming the way people perform, it also creates and enables employees to improve their understanding of their performance in comparison to those employed by leaders in the world.

Institutions should consider using national and international benchmarks as a measure of cost effectiveness e.g. the spending on the library could be based on a national benchmark of rands spent per student. The same could be done for salaries, research etc.

7.4.12 The use of Activity Based Management (ABM)

ABM is an integrated approach by which management's attention is directed on activities with the objective of improving customer value and profit achieved by providing this value. An ABM model has two dimensions, a cost dimension and process dimension. The cost dimension provides cost information about resources, activities, products, and customers. The cost of resources is traced to activities and the cost of activities is then assigned to services and customers. This method will enhance the usefulness of the cost information provided within higher education institutions.

7.4.13 Training for all budget managers in cost management

Higher education institutions comprise staff that is of a diverse nature. Managers may not understand cost issues and it is therefore important that full training be provided to enhance the provision of cost information for proper decision-making within institutions.

7.5 Limitations of the study and further research

This study has the following limitations namely :

- No benchmark exists for this type of study in the country and therefore comparing the findings to previous studies in this regard is not possible
- This study was conducted during a period when institutions were faced with major changes in higher education. Respondents may have been extra prudent in responding to some categories of the questionnaire.

Several opportunities for future research in this course of study can be identified, namely

- A funding formula for private higher education institutions
- The implementation of new costing techniques to private higher education institutions.

- A comparative study of management accounting in private higher education institutions in South Africa and Australia.
- The effect of the funding of private higher education on the access to higher education for previously disadvantaged students in South Africa.

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ANNEXURE A
RESEARCH QUESTIONNAIRE

Dear Professor/Doctor/Sir/Madam

RESEARCH: MANAGEMENT ACCOUNTING IN SOUTH AFRICAN PRIVATE HIGHER EDUCATION INSTITUTIONS

I am currently conducting research for a Doctorate in Philosophy. I would appreciate your kind assistance in completing the attached questionnaire, which should not take more than twenty minutes of your precious time. Should you need further clarification on any question, please do not hesitate to contact me via my contact details below.

I wish to assure you that all responses will be treated as ***highly confidential*** and information will be used for statistical purposes only. No Institutions names will be mentioned in any part of this study.

It is my hope that that the results of my research can reflect on cost management systems, financial management systems and decision making systems at private higher education institutions in South Africa and possibly offer recommendations on how to better utilise our dwindling resources for achieving the goals of higher education. It is further hoped that the recommendation can motivate the Department of Education to assist with the funding of private higher education institutions and also offer the same or similar rewards that public higher institutions receive from the Education Department, for example for research publications etc.

You can contact me via the following means:

E-mail address : naidom1@unisa.ac.za or jaycela@yahoo.com

Telephone Numbers : (012) 429 4025 (w) or (012) 654 2653(h)

Cell Phone Number : 084 505 2680

Postal Address: P.O. Box 55325
WIERDA PARK
0149

Should you require to receive a copy of this research finding please indicate your name and institution in the space provided on the questionnaire

I wish to thank you for your support.

Yours sincerely

Jayce Naidoo
Senior Lecturer: Department of Management Accounting(UNISA)

SECTION ONE : INSTITUTIONAL STRUCTURE

Place a tick or cross in the relevant block

1.1 The name of the Institution _____

1.2 The name and position of the person completing this questionnaire.

1.3 The campus is owned and controlled by ..

Private	
Educor	
AdvTech	
AdCorp	
Other: Specify	

1.4 The institutions Head Office is located in :

Gauteng	
Kwa-Zulu Natal	
Western Cape	
Free State	
Eastern Cape	
North West	
Mpumulanga	
Limpopo	
Northern Cape	

1.5 The number of campuses located in each province are :

Gauteng	
Kwa-Zulu Natal	
Western Cape	
Free State	
Eastern Cape	
North West	
Mpumulanga	
Limpopo	
Northern Cape	

1.6 The number of students are

Province	Full Time doing internal programmes	Part-time doing internal programmes	Full or part-time doing other university programmes
Gauteng			
Kwa-Zulu Natal			
Western Cape			
Free State			
Eastern Cape			
North West			
Mpumulanga			
Limpopo			
Northern Cape			

1.7 The total number of students enrolled (2006)

1 - 200	201 - 400	401 - 600	601 - 800	Over 800 (Specify) -----
---------	-----------	-----------	-----------	--------------------------------

1.8 The number of academic faculties/schools

1 - 5	6 - 10	11 - 15	16 - 20	Over 20
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1.9 The number of non-academic departments (eg. Finance, student affairs etc.)

1 - 5	6 - 10	11 - 15	16 - 20	Over 20
-------	--------	---------	---------	---------

1.10 The total headcount enrollment

1 - 200	201 - 400	401 - 600	601 - 800	Over 800 (Specify) -----
---------	-----------	-----------	-----------	--------------------------------

1.11 The institution has a separate cost management/management accounting department.

Yes	No
-----	----

1.12 The number of personnel engaged in the cost management/management accounting Department

1 - 5	6 - 10	11 - 15	Over 15
-------	--------	---------	---------

1.13 The number of personnel in the finance/accounting department that have an accounting qualification

1 - 5	6 - 10	11 - 15	Over 15
-------	--------	---------	---------

SECTION TWO : COST ANALYSIS

2.1 To what extent does your institution analyse cost by

	1=Never	2=Rarely	3=Sometimes	4=Often	5=Always
	1	2	3	4	5
Faculty/School or Department					
Divisions within the Faculty/School					
Individual courses					
Student Type					
Research Activity					

2.2 If your institution does not analyse cost (as suggested above) then which of the following is most applicable to your institution?

The implementation of a cost analysis is planned in the next 1-3 years	
Some discussions are taking place with the possibility of implementing a cost analysis in the future	
There is no intention to implement a cost analysis	

2.3 Which of the following adequately describes the tracing of costs to Service/Support Divisions or Faculty/School for the purposes of cost analysis?

	Degree Courses	Research	Short Courses	Faculty
Only direct costs, which can be specifically traced to the course, research, or Faculty, are included.				
Direct costs and some assigned indirect costs which cannot be traced directly to the course, research or Faculty are included				
Most of the costs of the institution (including central administration costs) are included				
Costs are not traced				

2.4 If indirect costs are assigned to Service departments or Departments/Faculties/Schools please indicate on which basis allocation is done:

	1=Never	2=Rarely	3=Sometimes	4=Often	5=Always
	1	2	3	4	5
Departmental size					
Direct costs plus an overhead recovery rate					
Employee related (no of employees, hours, etc.)					
Area used (meters)					
Student numbers					
Other (specify):					

2.5 How many different allocation methods are used to assign indirect costs to Service Departments and/or Departments/Faculties/Schools

Not used	1	2 – 3	4 – 5	Over 5
----------	---	-------	-------	--------

2.6 The frequency at which the institution prepares cost statements for internal cost analysis and cost management purposes.

Only when needed	At least once a month	Quarterly	Semester	Annually
------------------	-----------------------	-----------	----------	----------

2.7 When did the institution start analyzing costs within categories listed in 2.1

Over 5 years ago	Within the last 3-5 years	Within the last 1-2 years
------------------	---------------------------	---------------------------

2.8 If course costing is used, for what purpose is the information used
(More than one of the following could be applicable)

Cost Control	
Decision-Making	
Performance Evaluation	
Pricing of Courses	
Short courses/consultancy	
Strategic Planning	
Other(Specify)	

2.9 In terms of costing and from your experience in an higher education institution which of the following would you consider most appropriate in higher education institutions?

Activity-based costing	
Direct cost plus a fixed % overhead	
Full cost (Absorption cost)	
Marginal (incremental) cost	
Other (specify)	

2.10 Which is the most appropriate cost driver (allocation base) for allocating the following service department costs to Departments/Faculties/Schools or courses?

	Library	Computer/Data Processing	Rentals/Water/Electricity/Rates	Finance and Administration
Departmental Income and Expenditure				
Salary amounts				
Space used				
Staff size				
Student Size				
Other (Specify):				

SECTION THREE: BUDGETARY CONTROL AND REPORTING

3.1 Does your institution operate a system of budgetary control?

Yes	No
-----	----

3.2 Which of the following are budget controllers (cost centre managers) and take responsibility for reporting or analysing variances between budget and actual costs incurred.

	Budget Controller	Not a budget Controller	Not Applicable
Deans/Academic Directors			
Non-Academic Directors/Heads			
Academic Heads of Department			
Subject Co-ordinators			
Other (Specify):			

3.3 How many budget controllers (cost centre managers) are there in your institution?

1 – 5	6 – 10	11 – 20	21 – 30	31 – 50	Over 50
-------	--------	---------	---------	---------	---------

3.4 Is the annual budget broken down into control periods ?

Yes	No
-----	----

3.5 If your answer to 3.4 is yes, specify which category best describes this period

Weekly	Monthly	Quarterly	Half-yearly
--------	---------	-----------	-------------

3.6 Rate the influence of the persons described below in approving the budget of your Institution using the categories of **High, Little or None**

	Institutional Budget	Department/ Faculty Budget	Course/Programme Budget
Director/General Manager			
Deputy Manager			
Deans			
Heads of Departments			
Unions			
Student Representatives			

3.7 Which of the following is the most frequent response provided to Budget Controllers who submit cost estimates/requests that are unrealistic or unaffordable?

Arbitrary cuts by management	
Decreases through consultation	
Fixed percentage decreases	
None of the above	

3.8 Which of the following **best** describes the nature of the performance reports provided to budget controllers?

Both controllable and fixed costs are presented but they are distinguished	
Both controllable and non-controllable cost are presented but they are not distinguished	
Only costs controllable by the particular manager are presented	
No reports are provided	

3.9 Indicate the extent to which the performance in the following areas is measured in your institution.

	1=Never		2=Rarely		3=Sometimes		4=Often		5=Always
	1	2	3	4	5				
Customer/Student Satisfaction									
Income generation									
Space Utilisation									
Staff/Student ratios									
Unit cost per student									

3.10 What level of importance would you allocate to variances as being used as a measure of managerial performance?

Unimportant	Average	Above average	Very important
-------------	---------	---------------	----------------

3.11 What level of importance would you allocate to variances as being used as a measure of managerial performance?

Unimportant	Average	Above average	Very important
-------------	---------	---------------	----------------

3.12 To what extent do the following statements best describe your institution's approach to budget control ?

1 = Strongly disagree 2 = Disagree 3 = Uncertain
4 = Agree 5 = Strongly Agree

	1	2	3	4	5
The allocation of budgets must not solely be based on the budget controllers request and motivation since there is always a suspicion that budget requests are overstated					
Controllers performance must be judged by their ability to adhere to the allocated budget					

3.13 Rate the extent to which the following methods of budgeting are used by your Institution

	Frequent	Sometimes	Never	Future Proposal
Activity Based Budgeting				
Incremental Budgeting				
Previous year plus inflation				
Zero-Base Budgeting				
Other (Specify):				

SECTION FOUR : CAPITAL INVESTMENTS

4.1 Classify the extent to which your institution use the following financial appraisal techniques in capital investment decision-making(for example, fixed assets, acquisitions, mergers, and disinvestments)

	1=Never	2=Rarely	3=Sometimes	4=Often	5=Always
	1	2	3	4	5
Discounted Payback					
Internal rate of return					
Net Present Value					
Payback					
Other (Specify):					

4.2 If the payback period is used which of the following best reflects the most frequent payback period used for capital investments.

Variable	1 Year	2 Years	3 Years	4 Years	Over 4 years
----------	--------	---------	---------	---------	--------------

4.3 If the discounting methods are used which of the following best reflects the minimum rates of return or discount rates required for capital projects taking into account investment rates are between 8 % and 11% p.a.

Below 8%	8%-10%	10.1%-12.9%	13%-14.9%	15%-17%	Above 17%
----------	--------	-------------	-----------	---------	-----------

4.4 In using the discounting methods to appraise capital investments, how is inflation taken into account

Current price cash flows are adjusted by the anticipated rate of inflation	
Cash flows are expressed in current prices (without an inflationary adjustment)	
Other (Specify):	

SECTION FIVE: FINANCING DECISIONS

5.1 The institutions main source of income is

Student Fees	
Donors(Religious, Charity etc.)	
Government	
Other(Specify)	

5.2 The institution is able to borrow long term funds from :

Holding Company(Head Office)	
Private Company	
Banks and other financial houses	
Other(Specify)	

SECTION 6: MANAGEMENT ACCOUNTING SYSTEMS

6.1 When was your cost management/accounting system first implemented?

Less than 5 years ago	5-10 years	11-15 years	16-20 years	Over 20 years
-----------------------	------------	-------------	-------------	---------------

6.2 When last were significant changes made to your cost management/accounting system?

Within the last year	2 years	3 years	Over 3 years
----------------------	---------	---------	--------------

6.3 Which of the following areas would describe as being significantly changed / amended?

Management Cost Reports	
Computer Integration	
Budgetary Control	
Pricing	
Cost Allocation methods	
Performance Measurement	
Coding Structure	
Fixed Assets Register	
Other (specify):	

6.4 Is there any possibility that your institution will be making any changes in the cost/management accounting system within the next three years?

Yes	No

6.5 List the nature of the possible changes you think your institution would make?

THANK YOU

I require a copy of the findings: Name:_____ Institution:_____

ANNEXURE B

HIGHER EDUCATION ACT No. 101 OF 1997
Including amendments No.55 of 1999 and No.54 of 2000

HIGHER EDUCATION ACT 101 OF 1997

[ASSENTED TO 26 NOVEMBER 1997] [DATE OF COMMENCEMENT: 19 DECEMBER 1997]

(English text signed by the President)

as amended by

Higher Education Amendment Act 55 of 1999

Higher Education Amendment Act 54 of 2000

Higher Education Amendment Act 23 of 2001

ACT

To regulate higher education; to provide for the establishment, composition and functions of a Council on Higher Education; to provide for the establishment, governance and funding of public higher education institutions; to provide for the appointment and functions of an independent assessor; to provide for the registration of private higher education institutions; to provide for quality assurance and quality promotion in higher education; to provide for transitional arrangements and the repeal of certain laws; and to provide for matters connected therewith.

Preamble

WHEREAS IT IS DESIRABLE TO-

ESTABLISH a single co-ordinated higher education system which promotes co-operative governance and provides for programme-based higher education;

RESTRUCTURE AND TRANSFORM programmes and institutions to respond better to the human resource, economic and development needs of the Republic;

REDRESS past discrimination and ensure representivity and equal access;

PROVIDE optimal opportunities for learning and the creation of knowledge;

PROMOTE the values which underlie an open and democratic society based on human dignity, equality and freedom;

RESPECT freedom of religion, belief and opinion;

RESPECT and encourage democracy, academic freedom, freedom of speech and expression, creativity, scholarship and research;

PURSUE excellence, promote the full realisation of the potential of every student and employee, tolerance of ideas and appreciation of diversity;

RESPOND to the needs of the Republic and of the communities served by the institutions;

CONTRIBUTE to the advancement of all forms of knowledge and scholarship, in keeping with international standards of academic quality;

AND WHEREAS IT IS DESIRABLE for higher education institutions to enjoy freedom and autonomy in their relationship with the State within the context of public accountability and the national need for advanced skills and scientific knowledge;

BE IT THEREFORE ENACTED by the Parliament of the Republic of South Africa, as follows:-

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2. Application
3. Determination of higher education policy

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COUNCIL ON HIGHER EDUCATION

4. Establishment of Council on Higher Education (CHE)
 5. Functions of CHE
 6. Information to be provided to CHE
 7. Quality promotion and quality assurance functions of CHE
 8. Composition of CHE
 9. Term of office of members
 10. Vacation of office by members
 11. Filling of vacancies
 12. Executive officer and employees of CHE
 13. Executive committee of CHE
 14. Committees of CHE
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CHAPTER 1

DEFINITIONS, APPLICATION AND DETERMINATION OF POLICY (ss 1-3)

1 Definitions

In this Act, unless the context otherwise indicates-

'academic employee' means any person appointed to teach or to do research at a public higher education institution and any other employee designated as such by the council of that institution;

'applicant' means any person who makes any application referred to in Chapter 7;

'auditor' means any person registered as such in terms of the Public Accountants' and Auditors' Act, 1991 (Act 80 of 1991);

'CHE' means the Council on Higher Education established by section 4;

'college' means any college established or declared as a college under this Act;

'council' means the governing body of a public higher education institution;

'Department of Education' means the Government department responsible for education at national level;

'Director-General' means the Director-General of the Department of Education;

'employee' means any person employed at a public higher education institution;

'employer' means the council of a public higher education institution;

'financial year' means a year commencing on the first day of April and ending on the thirty-first day of March of the following year;

'foreign juristic person' means a person-

- (i) registered or established as a juristic person in terms of a law of a foreign country; and
- (ii) recognised or registered as an external company in terms of the Companies Act, 1973 (Act 61 of 1973);

[Definition of 'foreign juristic person' inserted by s. 1 (a) of Act 54 of 2000.]

'grade 12' means the highest grade in which education is provided by a school as defined in the South African Schools Act, 1996 (Act 84 of 1996);

'higher education' means all learning programmes leading to qualifications higher than grade 12 or its equivalent in terms of the National Qualifications Framework as contemplated in the South African Qualifications Authority Act, 1995 (Act 58 of 1995), and includes tertiary education as contemplated in Schedule 4 of the Constitution;

'higher education institution' means any institution that provides higher education on a full-time, part-time or distance basis and which is-

- (a) established or deemed to be established as a public higher education institution under this Act;
- (b) declared as a public higher education institution under this Act; or
- (c) registered or conditionally registered as a private higher education institution under this Act;

'Higher Education Quality Committee' means the committee of the CHE established in terms of section 7 (1);

'Institutional forum' means the body contemplated in section 31;

'Institutional rules' means any rules made by the council of a public higher education institution under section 32;

'Institutional statute' means any statute made by the council of a public higher education institution under section 32;

'local juristic person' means a person established as a juristic person in South Africa in terms of the Companies Act, 1973 (Act 61 of 1973);

[Definition of 'local juristic person' inserted by s. 1 (b) of Act 54 of 2000.]

'Minister' means the Minister of Education;

'organ of state' means an organ of state as defined in section 239 of the Constitution;

'prescribed' means prescribed by regulation;

'principal' means the chief executive and accounting officer of a public higher education institution, and includes a vice-chancellor and a rector;

'private higher education institution' means any institution registered or conditionally registered as a private higher education institution in terms of Chapter 7;

'public higher education institution' means any higher education institution that is established, deemed to be established or declared as a public higher education institution under this Act;

'registrar' means the registrar referred to in section 50 (1);

[Definition of 'registrar' substituted by s. 1 of Act 55 of 1999.]

'SAQA' means the South African Qualifications Authority established by section 3 of the South African Qualifications Authority Act, 1995 (Act 58 of 1995);

'senate' means the body contemplated in section 28, and includes an academic board;

'student' means any person registered as a student at a higher education institution;

'technikon' means any technikon established, deemed to be established or declared as a technikon under this Act;

'this Act' includes the regulations made under this Act;

'to provide higher education' means-

- (a) the registering of students for-
 - (i) complete qualifications at or above level 5 of the National Qualification Framework as contemplated in the South African Qualifications Authority Act, 1995 (Act 58 of 1995); or
 - (ii) such part of a qualification which meets the requirements of a unit standard as recognised by the South African Qualifications Authority at or above the level referred to in subparagraph (i);
- (b) the taking of responsibility for the provision and delivery of the curricula;
- (c) the assessment of students regarding their learning programmes; and
- (d) the conferring of qualifications,

in the name of the higher education institution concerned.

[Definition of 'to provide higher education' inserted by s. 1 (c) of Act 54 of 2000.]

'university' means any university established, deemed to be established or declared as a university under this Act;

'vice-principal' includes a vice-rector and a deputy vice-chancellor.

2 Application

This Act applies to higher education in the Republic of South Africa.

3 Determination of higher education policy

(1) The Minister must determine policy on higher education after consulting the CHE.

(2) The Minister must-

- (a) publish such policy by notice in the Gazette; and
- (b) table such policy in Parliament.

(3) The Minister may, in terms of the policy contemplated in subsection (1) and in the interest of the higher education system as a whole, determine the scope and range of operations of-

- (a) public higher education institutions;
- (b) private higher education institutions; and
- (c) individual public or private higher education institutions.

CHAPTER 2

COUNCIL ON HIGHER EDUCATION (ss 4-19)

4 Establishment of Council on Higher Education (CHE)

The Council on Higher Education (CHE) is hereby established as a juristic person.

5 Functions of CHE

(1) The CHE may advise the Minister on any aspect of higher education on its own initiative and must-

- (a) advise the Minister on any aspect of higher education at the request of the Minister;
- (b) arrange and co-ordinate conferences;
- (c) subject to section 7 (2), through its permanent committee, the Higher Education Quality Committee-
 - (i) promote quality assurance in higher education;
 - (ii) audit the quality assurance mechanisms of higher education institutions; and
 - (iii) accredit programmes of higher education;
- (d) publish information regarding developments in higher education, including an annual report on the state of higher education, on a regular basis;
- (e) promote the access of students to higher education institutions; and
- (f) perform any other function-
 - (i) conferred on or assigned to it in terms of this Act;
 - (ii) delegated or assigned to it by the Minister by notice in the Gazette.

(2) The advice contemplated in subsection (1) (a) includes advice on-

- (a) quality promotion and quality assurance;
 - (b) research;
 - (c) the structure of the higher education system;
 - (d) the planning of the higher education system;
 - (e) a mechanism for the allocation of public funds;
-

- (f) student financial aid;
 - (g) student support services;
 - (h) governance of higher education institutions and the higher education system; and
 - (i) language policy.
- (3) The Minister must-
- (a) consider the advice of the CHE; and
 - (b) provide reasons in writing to the CHE if the Minister does not accept the advice.
- (4) The Minister may act without the advice of the CHE-
- (a) if the matter is urgent; or
 - (b) if the CHE has failed to provide the advice within a reasonable time.
- (5) If the Minister acts without the advice of the CHE the Minister must-
- (a) notify the CHE of such action; and
 - (b) provide reasons in writing to the CHE for such action.

6 Information to be provided to CHE

Every national and provincial department of state, every publicly funded science, research and professional council and every higher education institution must provide the CHE with such information as the CHE may reasonably require for the performance of its functions in terms of this Act.

7 Quality promotion and quality assurance functions of CHE

(1) The CHE must establish the Higher Education Quality Committee as a permanent committee to perform the quality promotion and quality assurance functions of the CHE in terms of this Act.

(1A) The Higher Education Quality Committee is deemed to be accredited by SAQA as an Education and Training Quality Assurance body primarily responsible for higher education.

[Sub-s. (1A) inserted by s. 1 of Act 23 of 2001.]

(2) The CHE and the Higher Education Quality Committee must comply with the policies and criteria formulated by SAQA in terms of section 5 (1) (a) (ii) of the South African Qualifications Authority Act, 1995 (Act 58 of 1995).

(3) The Higher Education Quality Committee may, with the concurrence of the CHE, delegate any quality promotion and quality assurance functions to other appropriate bodies capable of performing such functions.

(4) The delegation under subsection (3)-

- (a) must be in writing and published by notice in the Gazette;
- (b) is subject to such conditions as the Higher Education Quality Committee may determine; and
- (c) does not prevent the performance of such functions by the Higher Education Quality Committee.

(5) The CHE may charge fees for any service rendered by the Higher Education Quality Committee to any person, institution or organ of state.

(6) The Minister must make regulations to give effect to quality promotion and quality assurance in terms of this Act.

8 Composition of CHE

(1) The CHE consists of-

- (a) a chairperson;
- (b) ordinary members;
- (c) co-opted members; and
- (d) non-voting members.

(2) The selection of the chairperson, ordinary members and co-opted members must be undertaken in such a manner as to ensure, insofar as is practically possible, that-

- (a) the functions of the CHE in terms of this Act are performed according to the highest professional standards;
- (b) the membership taken as a whole-
 - (i) is broadly representative of the higher education system and related interests;
 - (ii) has deep knowledge and understanding of higher education and research;
 - (iii) appreciates the role of the higher education system in reconstruction and development; and
 - (iv) has known and attested commitment to the interests of higher education;
- (c) due attention is given to representivity of the CHE on such relevant grounds as race and disability; and
- (d) the members contemplated in subsection (1) (b) and (c) consist of equal numbers of women and men.

(3) The Minister must, by notice in the Gazette and in two national newspapers circulating in every province of the Republic, and by any other means regarded necessary by him or her, invite nominations for the chairperson and the ordinary members of the CHE from-

- (a) the public;

- (b) national organisations representing students, academic employees, employees other than academic employees, university principals, technikon principals, principals of colleges of education, principals of other higher education colleges, principals of private higher education institutions, the further education sector, the distance education sector, educators, organised business and organised labour;
- (c) research and science councils; and
- (d) non-governmental organisations.

(4) The Minister must consider the nominations as contemplated in subsection (3), and from the persons so nominated, the Minister must appoint-

- (a) the chairperson of the CHE; and
- (b) no more than 13 ordinary members of the CHE.

(5) At least three of the members contemplated in subsection (4) (b) must be external to the higher education sector and must be appointed on account of their particular experience and expertise.

(6) The Minister must appoint six non-voting members of the CHE nominated respectively by the Director-General, the Provincial Heads of Education, the Director-General of the Department of Arts, Culture, Science and Technology, the Director-General of the Department of Labour, the National Research Foundation established in terms of the National Research Foundation Act, 1998 (Act 23 of 1998), and SAQA.

[Sub-s. (6) substituted by s. 2 of Act 23 of 2001.]

(7) The CHE may co-opt no more than three members.

9 Term of office of members

- (1) The chairperson of the CHE holds office for a period of five years.
- (2) Every ordinary member of the CHE holds office for a period of four years.
- (3) Any co-opted member of the CHE holds office for a period determined by the CHE.
- (4) A member of the CHE may not serve for more than two consecutive terms of office.

10 Vacation of office by members

A person ceases to be a member of the CHE if he or she-

- (a) resigns by giving written notice to the chairperson or, in the case of the chairperson, to the Minister;
- (b) is absent from three consecutive meetings of the CHE without the leave of the chairperson or, in the case of the chairperson, the leave of the executive committee of the CHE;
- (c) is declared insolvent, is removed from an office of trust by a court of law or is convicted of an offence involving dishonesty or an offence for which the sentence is imprisonment without the option of a fine; or

- (d) is declared unable to attend to his or her personal affairs by a court of law.

11 Filling of vacancies

(1) If a member vacates his or her office, the resultant vacancy must be filled by nomination, appointment or co-option in accordance with section 8.

(2) A member nominated in accordance with subsection (1) serves for the unexpired term of office of the predecessor.

[Sub-s. (2) added by s. 3 of Act 54 of 2000.]

(3) Notwithstanding section 8 (3), the Minister must in writing invite nominations to fill a vacancy contemplated in subsection (1) from-

- (a) national organisations representing-
 - (i) students;
 - (ii) academic employees;
 - (iii) employees other than academic employees;
 - (iv) university principals;
 - (v) technikon principals;
 - (vi) principals of higher education colleges;
 - (vii) principals of private higher education institutions;
 - (viii) organised business; and
 - (ix) organised labour; and
- (b) research and science councils.

[Sub-s. (3) added by s. 3 of Act 54 of 2000.]

12 Executive officer and employees of CHE

(1) The CHE must appoint an executive officer to-

- (a) perform the functions determined by the CHE;
- (b) supervise the employees of the CHE; and
- (c) account for the assets and liabilities of the CHE.

(2) The CHE may appoint such other employees as it deems necessary to assist the executive officer.

(3) The CHE must, with the concurrence of the Minister and the Minister of Finance, determine the conditions of service of the executive officer and the other employees of the CHE.

13 Executive committee of CHE

(1) The CHE must establish an executive committee and determine its functions.

(2) The executive committee consists of-

- (a) the chairperson of the CHE; and
- (b) four other members appointed by the CHE.

(3) A decision of the executive committee must be regarded as a decision of the CHE, unless such decision is revoked at the next meeting of the CHE.

(4) Anything done in consequence of a decision of the executive committee before its revocation is not invalid by reason only of the fact that the decision is revoked by the CHE under subsection (3).

14 Committees of CHE

(1) The CHE may establish other committees in addition to the Higher Education Quality Committee and the executive committee, to assist it in the performance of its functions.

(2) Any committee other than the executive committee may include persons who are not members of the CHE.

(3) The chairperson of a committee must be appointed by the CHE.

(4) Members of the committees contemplated in subsection (2) may be appointed for such period or periods as the CHE may determine.

15 Meetings of CHE and committees

(1) Meetings of the CHE and its committees must be held at such times and places as may be determined by the chairperson concerned, but the chairperson must convene a meeting at least twice a year or if asked to do so in writing by at least one third of the members of the CHE or the committee, as the case may be.

(2) Whenever the chairperson is absent from any meeting of the CHE or a committee, the members present must elect a person from among themselves to preside at that meeting.

(3) The CHE may make rules relating to the procedure at meetings of the CHE and its committees, including the quorum for such meetings, and any other matter necessary or expedient for the performance of its functions.

(4) The proceedings at a meeting of the CHE or of a committee are not invalid by reason only of the fact that a vacancy exists on the CHE or such committee, as the case may be, at the time of such meeting.

16 Funds of CHE

(1) The funds of the CHE consist of-

- (a) money appropriated by Parliament;
- (b) donations, contributions and other income received by the CHE from whatever source; and
- (c) money payable by any person, institution or organ of state for services rendered by the CHE or the Higher Education Quality Committee.

(2) The CHE-

(a) must in each financial year, at such time and in such manner as the Minister may determine, submit a statement of its estimated income and expenditure for the ensuing financial year to the Minister for his or her approval granted with the concurrence of the Minister of Finance;

(b) may in any financial year submit adjusted statements of its estimated income and expenditure to the Minister for his or her approval, granted with the concurrence of the Minister of Finance;

(c) may not incur any expenditure which exceeds the total amount approved in terms of paragraphs (a) and (b).

(3) If the Minister does not approve the CHE's statement of its estimated income and expenditure, the Minister must require the CHE to provide a revised statement within a specified period to him or her.

(4) The money contemplated in subsection (1) must be used by the CHE in accordance with the approved statement referred to in subsection (2), and any unexpended balance must be carried forward as a credit to the following financial year.

(5) Subject to subsection (4), the CHE may invest any portion of its funds in such manner as the Minister, with the concurrence of the Minister of Finance, may approve.

17 Remuneration and allowances of members of CHE and committees

The chairperson of the CHE, every other member and any person appointed as a member of a committee, who is not in the full-time service of the State may, in respect of services rendered by him or her in connection with the affairs of the CHE or a committee, be paid by the CHE-

(a) such travelling, subsistence and other allowances; and

(b) in the case of the chairpersons of the CHE and the Higher Education Quality Committee, such additional remuneration,

[Para. (b) substituted by s. 3 of Act 23 of 2001.]

as the Minister with the concurrence of the Minister of Finance may determine.

18 Annual audit

The books of account and financial statements of the CHE must be audited at the end of each financial year by the Auditor-General.

19 Annual report

(1) The CHE must, within six months after the end of each financial year, submit a report to the Minister on the performance of its functions during the past financial year.

[Sub-s. (1) substituted by s. 2 of Act 55 of 1999.]

(2) The Minister must table copies of the report in Parliament as soon as reasonably practicable.

CHAPTER 3

PUBLIC HIGHER EDUCATION INSTITUTIONS (ss 20-25)

20 Establishment of public higher education institutions

(1) The Minister may, after consulting the CHE, by notice in the Gazette and from money appropriated for this purpose by Parliament, establish a university, technikon or college.

(2)

[Sub-s. (2) deleted by s. 4 (a) of Act 23 of 2001.]

(3) The notice contemplated in subsection (1) must determine-

- (a) the date of establishment of the institution;
- (b) the type and name of the institution; and
- (c) the physical location and official address of the institution.

(4) Every public higher education institution established, deemed to have been established or declared as a public higher education institution under this Act, is a juristic person.

(5) Notwithstanding subsection (4), a public higher education institution may not, without the concurrence of the Minister, dispose of or alienate in any manner, any immovable property acquired with the financial assistance of the State or grant to any person any real right therein or servitude thereon.

(6) The Minister must in the notice contemplated in subsection (1) establish an interim council for a period not exceeding six months, to perform the functions relating to the governance of the institution, except the making of an institutional statute.

[Sub-s. (6) added by s. 4 (b) of Act 23 of 2001.]

(7) The Minister may extend the period referred to in subsection (6) once for a further period not exceeding six months.

[Sub-s. (7) added by s. 4 (b) of Act 23 of 2001.]

(8) The members of the interim council contemplated in subsection (6) are appointed by the Minister and consist of-

- (a) the chairperson; and
- (b) four other members.

[Sub-s. (8) added by s. 4 (b) of Act 23 of 2001.]

(9) The interim council must co-opt three members of the interim management contemplated in subsection (10) (a) and these co-opted members have no voting powers.

[Sub-s. (9) added by s. 4 (b) of Act 23 of 2001.]

(10) Apart from the functions contemplated in subsection (6), the interim council must in particular-

- (a) appoint an interim body to manage the day-to-day activities of the institution;
- (b) ensure that a council is constituted in terms of the standard institutional statute contemplated in section 33(3); and
- (c) ensure that such other structures as may be determined in the standard institutional statute contemplated in section 33(3) are constituted.

[Sub-s. (10) added by s. 4 (b) of Act 23 of 2001.]

(11) Any decision of the interim council which may affect the right of any structure of the public higher education institution, may only be taken after consultation with such structure.

[Sub-s. (11) added by s. 4 (b) of Act 23 of 2001.]

21 Declaration of education institutions as public higher education institutions

(1) The Minister may, after consulting the CHE and by notice in the Gazette, declare any education institution providing higher education as-

- (a) a university, technikon or college; or
- (b) a subdivision of a university, technikon or college.

(2) The notice contemplated in subsection (1) must determine-

- (a) the date on which the education institution becomes a university, technikon or college or a subdivision of a university, technikon or college, as the case may be;
- (b) the name of the university, technikon or college; and
- (c) the physical location and the official address of the university, technikon or college.

(3) The Minister may act under subsection (1) only-

(a) after consulting-

- (i) the governing body of the education institution, if it is a public institution;
- (ii) the council of the existing public higher education institution, if the education institution is to be declared a subdivision of such existing public higher education institution; or
- (iii) the responsible Minister, Member of the Executive Council or authority, if the education institution is administered, controlled or funded by an organ of state other than the Department of Education; and

(b) after having-

- (i) published a notice in one or more daily newspapers circulating in the area in which the education institution provides higher education, containing the reasons for the declaration referred to in subsection (1), in all the official languages used as media of instruction by the education institution concerned;
- (ii) given any interested persons an opportunity to make representations; and

(iii) considered such representations;

(c) if it is a private institution, with the concurrence of the owner of the education institution and the Minister of Finance.

(3A) Section 20 (6) to (11), with the changes required by the context, applies to a declaration referred to in subsection (1) (a).

[Sub.s (3A) inserted by s. 5 of Act 23 of 2001.]

(4) Nothing contained in this Act or any other law may be regarded as obliging the Minister to declare an education institution to be a public higher education institution in terms of this section.

(5) An education institution may only be declared a public higher education institution after the employer has complied with its obligations in terms of the applicable labour law.

22 Consequences of declaration as public higher education institutions

(1) From the date determined in terms of section 21 (2) (a)-

(a) the education institution is deemed to be a public higher education institution established under this Act or a subdivision of such public higher education institution, as the case may be;

(b) the assets, liabilities, rights and obligations of the education institution devolve upon the public higher education institution; and

(c) any agreement lawfully entered into by or on behalf of the education institution is deemed to have been concluded by the public higher education institution.

(2) Immovable property devolving upon the public higher education institution in terms of subsection (1) (b) must, subject to the concurrence of the Minister of Finance, be transferred to such institution without payment of transfer duty, stamp duty or other money or costs, but subject to any existing right, encumbrance, duty or trust on or over that property.

(3) The officer in charge of a deeds office or other office where the immovable property contemplated in subsection (2) is registered must, on submission of the title deed and on application by the public higher education institution, make such endorsements on that title deed and such entries in the registers as may be required to register the transfer concerned.

(4) The declaration of an education institution as a public higher education institution under section 21 (1) does not affect anything lawfully done by the education institution prior to the declaration.

(5) All funds which, immediately prior to the date determined in terms of section 21 (2) (a), were vested in the education institution by virtue of a trust, donation or bequest must be applied by the public higher education institution in accordance with the trust, donation or bequest, as the case may be.

(6) Notwithstanding subsection (2), any fees charged by the Registrar of Deeds resulting from such transfer must be paid in full or in part from funds appropriated by Parliament for that purpose.

23 Merger of public higher education institutions

(1) Subject to subsection (2), the Minister may, after consulting the CHE and by notice in the Gazette, merge two or more public higher education institutions into a single public higher education institution.

(2) The Minister must-

(a) give written notice of the intention to merge to the public higher education institutions concerned;

(b) publish a notice giving the reasons for the proposed merger in at least one national and one regional newspaper circulating in the area in which the public higher education institutions concerned are situated;

(c) give the councils of the public higher education institutions concerned and any other interested persons an opportunity to make representations within at least 90 days of the date of the notice referred to in paragraph (b);

(d) consider such representations; and

(e) be satisfied that the employers at the public higher education institutions concerned have complied with their obligations in terms of the applicable labour law.

(3) The single public higher education institution contemplated in subsection (1) is deemed to be a public higher education institution established under this Act.

(4) Section 22 (1) (b) to (6), with the changes required by the context, applies to a merger referred to in subsection (1).

(5) The Minister must in the notice contemplated in subsection (1) establish an interim council for a period not exceeding six months, to perform the functions relating to the governance of the single public higher education institution contemplated in subsection (1), except the making of an institutional statute.

[Sub-s. (5) added by s. 6 of Act 23 of 2001.]

(6) The Minister may extend the period referred to in subsection (5) once for a further period not exceeding six months.

[Sub-s. (6) added by s. 6 of Act 23 of 2001.]

(7) The members of the interim council contemplated in subsection (5) are appointed by the Minister and consist of-

(a) the chairperson; and

(b) four other members.

[Sub-s. (7) added by s. 6 of Act 23 of 2001.]

(8) The four members contemplated in subsection (7) (b) -

(a) must be appointed by the Minister from nominations received from the public higher education institutions concerned; and

(b) may not include any member of staff, or student, from the public higher education institutions concerned.

[Sub-s. (8) added by s. 6 of Act 23 of 2001.]

(9) The interim council must co-opt three members of the interim management contemplated in subsection (10) (a) and these members have no voting powers.

[Sub-s. (9) added by s. 6 of Act 23 of 2001.]

(10) Apart from the functions contemplated in subsection (5) the interim council must in particular-

- (a) appoint an interim body to manage the day-to-day activities of the institution;
- (b) ensure that a council is constituted in terms of the standard institutional statute contemplated in section 33(3); and
- (c) ensure that such other structures as may be determined in the standard institutional statute contemplated in section 33(3) are constituted.

[Sub-s. (10) added by s. 6 of Act 23 of 2001.]

(11) Any decision of the interim council which may affect the right of any structure of the public higher education institution, may only be taken after consultation with such structure.

[Sub-s. (11) added by s. 6 of Act 23 of 2001.]

24 Merger of subdivisions of public higher education institutions

(1) The Minister may, after consulting the CHE and by notice in the Gazette, merge a subdivision of a public higher education institution with another public higher education institution.

(2) The assets, liabilities, rights and obligations of the subdivision concerned devolve upon the public higher education institution with which the subdivision has merged in a manner agreed by the councils of the public higher education institutions concerned or failing such agreement, in a manner determined by the Minister after consulting such councils.

(3) Sections 22 (2) to (6) and 23 (2), with the changes required by the context, apply to a merger referred to in subsection (1).

25 Closure of public higher education institutions

(1) The Minister may, after consulting the CHE and by notice in the Gazette, close a public higher education institution.

(2) If a public higher education institution is closed under subsection (1), all assets and liabilities of such public higher education institution must after closure be dealt with according to law by the Minister and any assets remaining after payment of all liabilities vest in the Minister.

(3) Sections 22 (2) to (6) and 23 (2), with the changes required by the context, apply to a closure referred to in subsection (1).

CHAPTER 4

GOVERNANCE OF PUBLIC HIGHER EDUCATION INSTITUTIONS (ss 26-38)

26 Institutional governance structures

(1) Every public higher education institution may appoint a chancellor as its titular head.

(2) Every public higher education institution must establish the following structures and offices:

- (a) A council;
- (b) a senate;
- (c) a principal;
- (d) a vice-principal;
- (e) a students' representative council;
- (f) an institutional forum; and
- (g) such other structures and offices as may be determined by the institutional statute.

(3) Subject to subsection (4), a structure referred to in subsection (2) (a), (b), (e), (f) and (g) must elect a chairperson, vice-chairperson and other office-bearers from among its members in the manner determined by the institutional statute.

[Sub-s. (3) substituted by s. 3 (a) of Act 55 of 1999 and by s. 7 of Act 23 of 2001.]

(4) Notwithstanding the provisions of subsection (3)-

- (a) the principal is the chairperson of the senate;
- (b) the registrar of the public higher education institution appointed by the council, is the secretary to the council; and
- (c) the chairperson and the vice-chairperson of the council may not be elected from members contemplated in section 27 (4) (a), (b), (d), (e), (f) and (g).

[Sub-s. (4) added by s. 3 (b) of Act 55 of 1999.]

27 Council of public higher education institution

(1) The council of a public higher education institution must govern the public higher education institution, subject to this Act and the institutional statute.

[Sub-s. (1) substituted by s. 8 (a) of Act 23 of 2001.]

(2) Subject to the policy determined by the Minister, the council, with the concurrence of the senate, must determine the language policy of a public higher education institution and must publish and make it available on request.

(3) The council, after consultation with the students' representative council, must provide for a suitable structure to advise on the policy for student support services within the public higher education institution.

(4) The council of a public higher education institution must consist of-

- (a) the principal;
- (b) the vice-principal or vice-principals;
- (c) not more than five persons appointed by the Minister;
- (d) members of the senate elected by the senate;
- (e) academic employees of the public higher education institution, elected by such employees;
- (f) students of the public higher education institution, elected by the students' representative council;
- (g) employees other than academic employees, elected by such employees of the public higher education institution; and
- (h) such additional persons as may be determined by the institutional statute.

(5) The number of persons contemplated in subsection (4) (b), (d), (e), (f), (g) and (h) and the manner in which they are elected, where applicable, must be determined by the institutional statute or an Act of Parliament.

(6) At least 60 per cent of the members of a council must be persons who are not employed by, or students of, the public higher education institution concerned.

(7) The members of a council-

- (a) must be persons with knowledge and experience relevant to the objects and governance of the public higher education institution concerned; and
- (b) must participate in the deliberations of the council in the best interests of the public higher education institution concerned.

(8) If 75 per cent or more of the members of the council of a public higher education institution resign at a meeting of council, it is deemed that the council has resigned.

[Sub-s. (8) added by s. 8 (b) of Act 23 of 2001.]

(9) If a council resigns as contemplated in subsection (8) a new council must be constituted in terms of the institutional statute of the public higher education institution.

[Sub-s. (9) added by s. 8 (b) of Act 23 of 2001.]

28 Senate of public higher education institution

(1) The senate of a public higher education institution is accountable to the council for the academic and research functions of the public higher education institution and must perform such other functions as may be delegated or assigned to it by the council.

(2) The senate of a public higher education institution must consist of-

- (a) the principal;

- (b) the vice-principal or vice-principals;
- (c) academic employees of the public higher education institution;
- (d) employees of the public higher education institution other than academic employees;
- (e) members of the council;
- (f) members of the students' representative council; and
- (g) such additional persons as may be determined by the institutional statute.

(3) The number of persons contemplated in subsection (2) (b), (c), (d), (e), (f) and (g) and the manner in which they are appointed or elected, as the case may be, must be determined by the institutional statute.

[Sub-s. (3) substituted by s. 9 of Act 23 of 2001.]

(4) The majority of members of a senate must be academic employees of the public higher education institution concerned.

29 Committees of council and senate

(1) The council and the senate of a public higher education institution may each establish committees to perform any of their functions and may appoint persons, who are not members of the council or the senate, as the case may be, as members of such committees.

(2) The council and the senate are not divested of responsibility for the performance of any function delegated or assigned to a committee under this section.

(3) The council and the senate of a public higher education institution may jointly nominate committees, to be known as joint committees, to perform functions that are common to the council and the senate.

(4) The composition, manner of election, functions, procedure at meetings and dissolution of a committee and a joint committee are determined by the institutional statute or institutional rules.

[Sub-s. (4) substituted by s. 10 of Act 23 of 2001.]

30 Principal of public higher education institution

The principal of a public higher education institution is responsible for the management and administration of the public higher education institution.

31 Institutional forum

(1) The institutional forum of a public higher education institution must-

- (a) advise the council on issues affecting the institution, including-

(i) the implementation of this Act and the national policy on higher education;

(ii) race and gender equity policies;

(iii) the selection of candidates for senior management positions;

(iv) codes of conduct, mediation and dispute resolution procedures; and

(v) the fostering of an institutional culture which promotes tolerance and respect for fundamental human rights and creates an appropriate environment for teaching, research and learning; and

(b) perform such functions as determined by the council.

(2) The institutional forum of a public higher education institution must consist of representatives of-

(a) the management, as determined by the institutional statute;

[Para. (a) substituted by s. 11 (a) of Act 23 of 2001.]

(b) the council;

(c) the senate;

(d) the academic employees;

(e) the employees other than academic employees;

(f) the students; and

(g) any other category determined by the institutional statute.

(3) The number of persons contemplated in subsection (2) and the manner in which they are appointed or elected, as the case may be, are determined by the institutional statute.

[Sub-s. (3) substituted by s. 11 (b) of Act 23 of 2001.]

32 Institutional statutes and institutional rules

(1) The council of a public higher education institution may make-

(a) an institutional statute, subject to section 33, to give effect to any matter not expressly prescribed by this Act; and

[Para. (a) substituted by s. 12 of Act 23 of 2001.]

(b) institutional rules to give effect to the institutional statute.

(2) An institutional statute or institutional rules in connection with-

(a) the composition of the senate may not be amended or repealed except after consultation with such senate;

(b) the academic functions of the public higher education institution concerned, including the studies, instruction and examinations of students and research, may not be made, amended or repealed except with the concurrence of the senate of such institution;

(c) the composition of the students' representative council may not be amended or repealed except after consultation with such students' representative council; and

(d) the disciplinary measures and disciplinary procedures relating to students, may not be made except after consultation with the senate and the students' representative council of the public higher education institution concerned.

33 Institutional statutes to be approved or made by Minister

(1) Any institutional statute must be submitted to the Minister for approval, and if so approved must be published by notice in the Gazette and comes into operation on the date mentioned in such notice.

(2) The Minister must table any institutional statute made under section 32 in Parliament as soon as reasonably practicable after it has been published as contemplated in subsection (1).

(3) The Minister must make a standard institutional statute, which applies to every public higher education institution that has not made an institutional statute until such time as the council of such public higher education institution makes its own institutional statute under section 32.

34 Appointment and conditions of service of employees of public higher education institutions

(1) The council of a public higher education institution must appoint the employees of the public higher education institution.

(2) Notwithstanding subsection (1) the academic employees of the public higher education institution must be appointed by the council after consultation with the senate.

(3) The council must determine the conditions of service, disciplinary provisions, privileges and functions of the employees of the public higher education institution, subject to the applicable labour law.

35 Students' representative council

The establishment and composition, manner of election, term of office, functions and privileges of the students' representative council of a public higher education institution must be determined by the institutional statute and the institutional rules.

[S. 35 substituted by s. 13 of Act 23 of 2001.]

36 Disciplinary measures

Every student at a public higher institution is subject to such disciplinary measures and disciplinary procedures as may be determined by the institutional statute or the institutional rules.

[S. 36 substituted by s. 14 of Act 23 of 2001.]

37 Admission to public higher education institutions

(1) Subject to this Act, the council of a public higher education institution, after consulting the senate of the public higher education institution, determines the admission policy of the public higher education institution.

(2) The council must publish the admission policy and make it available on request.

(3) The admission policy of a public higher education institution must provide appropriate measures for the redress of past inequalities and may not unfairly discriminate in any way.

(4) Subject to this Act, the council may, with the approval of the senate-

(a) determine entrance requirements in respect of particular higher education programmes;

(b) determine the number of students who may be admitted for a particular higher education programme and the manner of their selection;

(c) determine the minimum requirements for readmission to study at the public higher education institution concerned; and

(d) refuse readmission to a student who fails to satisfy such minimum requirements for readmission.

38 Co-operation between public higher education institutions

(1) Public higher education institutions may co-operate with each other in any manner to achieve the optimal utilisation of resources and the performance of their functions.

(2) Public higher education institutions may establish regional or national structures to assist and facilitate the co-operation contemplated in subsection (1).

(3) The Minister may provide financial incentives to such structures and to public higher education institutions participating in such structures to achieve the aims of such co-operation.

CHAPTER 5

FUNDING OF PUBLIC HIGHER EDUCATION (ss 39-42)

39 Allocation of funds by Minister

(1) 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.

(2) The Minister must, subject to the policy determined in terms of subsection (1), allocate public funds to public higher education on a fair and transparent basis.

(3) The Minister may, subject to the policy determined in terms of subsection (1), impose-

- (a) any reasonable condition in respect of an allocation contemplated in subsection (2); and
- (b) different conditions in respect of different public higher education institutions, different instructional programmes or different allocations, if there is a reasonable basis for such differentiation.

(4) The policy referred to in subsection (1) may discriminate in a fair manner between students who are not citizens or permanent residents of the Republic and students who are citizens or permanent residents of the Republic.

[Sub-s. (4) added by s. 4 of Act 55 of 1999.]

40 Funds of public higher education institutions

(1) The funds of a public higher education institution consist of-

- (a) funds allocated by the Minister in terms of section 39;
- (b) any donations or contributions received by the institution;
- (c) money raised by the institution;
- (d) money raised by means of loans and overdrafts;

[Para. (d) substituted by s. 4 (a) of Act 54 of 2000.]

- (e) income derived from investments;
- (f) money received for services rendered to any other institution or person;

(g) money payable by students for higher education programmes provided by the institution, but the council may discriminate in a fair manner between students who are not citizens or permanent residents of the Republic and students who are citizens or permanent residents of the Republic when the amount payable is determined;

[Para. (g) substituted by s. 5 of Act 55 of 1999.]

(h) money received from students or employees of the institution for accommodation or other services provided by the institution; and

- (i) other receipts from whatever source.

(2) (a) Subject to paragraph (b), a public higher education institution may only with a resolution of its council, not taking into account any vacancy that may exist, enter into a loan or an overdraft agreement.

(b) An agreement contemplated in paragraph (a) must be approved by the Minister if the agreement, or the sum of loans and overdrafts to be raised in any financial year, exceeds-

- (i) such amount as the Minister had determined for such institution; or
- (ii) in the absence of such determination, five per cent of the average income of that public higher education institution received during the two years immediately preceding such agreement.

[Sub-s. (2) added by s. 4 (b) of Act 54 of 2000.]

(3) (a) Subject to paragraph (b), a public higher education institution may only with a resolution of its council, not taking into account any vacancy that may exist, embark on any-

- (i) construction of a permanent building or other immovable infrastructural development;
- (ii) purchasing of immovable property; or
- (iii) long-term lease of immovable property.

(b) Any action contemplated in paragraph (a) must be approved by the Minister if the value of such development or property exceeds five per cent of the average income of that public higher education institution received during the two years immediately preceding such action.

[Sub-s. (3) added by s. 4 (b) of Act 54 of 2000.]

41 Records to be kept and information to be furnished by council

(1) The council of a public higher education institution must in the manner determined by the Minister-

- (a) keep records of all its proceedings; and
- (b) keep complete accounting records of all assets, liabilities, income and expenses and any other financial transactions of the public higher education institution as a whole, of its substructures and of other bodies operating under its auspices.

(2) The council of a public higher education institution must, in respect of the preceding year and by a date or dates and in the manner determined by the Minister, provide the Minister with-

- (a) a report on the overall governance of the public higher education institution;
- (b) a duly audited statement of income and expenditure; and
- (c) a balance sheet and cash flow statement.

(3) The council of a public higher education institution must provide the Minister with such information, in such format, as the Minister may reasonably require.

[Sub-s. (3) substituted by s. 5 of Act 54 of 2000.]

41A Appointment of administrator

(1) If an audit of the financial records of a public higher education institution, or an investigation by an independent assessor as contemplated in section 47, reveals financial or other maladministration of a serious nature at a public higher education institution or the serious undermining of the effective functioning of a public higher education institution, the Minister may, after consultation with the council of the public higher education institution concerned, if practicable, and notwithstanding any other provision of this Act, appoint a person as administrator to take over the authority of the council or the management of the institution and perform the functions relating to governance or management on behalf of the institution for a period determined by the Minister, and such period may not exceed two years.

[Sub-s. (1) substituted by s. 15 of Act 23 of 2001.]

(2) The Minister may extend the period referred to in subsection (1) once for a further period not exceeding six months.

[S. 41A inserted by s. 6 of Act 55 of 1999.]

42 Action on failure of council to comply with this Act or certain conditions

(1) If the council of a public higher education institution fails to comply with any provision of this Act under which an allocation from money appropriated by Parliament is paid to the institution, or with any condition subject to which any such allocation is paid to such institution, the Minister may call upon such council to comply with the provision or condition within a specified period.

(2) If such council thereafter fails to comply with the provision or condition, the Minister may withhold payment of any commensurate portion of any allocation appropriated by Parliament in respect of the public higher education institution concerned.

(3) Before taking action under subsection (2), the Minister must-

(a) give notice to the council of the public higher education institution concerned of the intention so to act;

(b) give such council a reasonable opportunity to make representations; and

(c) consider such representations.

(4) If the Minister acts under subsection (2), a report regarding such action must be tabled in Parliament by the Minister as soon as reasonably practicable after such action.

CHAPTER 6

INDEPENDENT ASSESSOR (ss 43-49)

43 Appointment of independent assessment panel

(1) The CHE must appoint an independent assessment panel consisting of at least three suitable persons who-

(a) have knowledge and experience of higher education;

(b) are not members of the CHE; and

(c) comply with any other requirements determined by the CHE.

(2) A member of the panel contemplated in subsection (1) is appointed for a period of not more than two years, and may be reappointed.

44 Appointment of independent assessor

(1) The Minister may, from the independent assessment panel contemplated in section 43, appoint an assessor who is independent in relation to the public higher education institution concerned, to conduct an investigation at the public higher education institution-

- (a) in the cases referred to in section 45; and
- (b) after consulting the council of the public higher education institution concerned, if practicable.

(2) The council of the public higher education institution and any person affected by the investigation must assist and co-operate with the independent assessor in the performance of his or her functions in terms of section 47.

45 Cases where independent assessor may be appointed

An independent assessor may be appointed under section 44 if-

- (a) the council of a public higher education institution requests the appointment; or
- (b) circumstances arise at a public higher education institution that-
 - (i) involve financial or other maladministration of a serious nature; or
 - (ii) seriously undermine the effective functioning of the public higher education institution; or
- (c) the council of the public higher education institution has failed to resolve such circumstances; and
- (d) the appointment is in the interests of higher education in an open and democratic society.

46 Independent assessor may be appointed for two or more public higher education institutions

The Minister may appoint an independent assessor under section 44 to conduct an investigation at two or more public higher education institutions.

47 Functions of independent assessor

(1) An independent assessor appointed under section 44 must, within 30 days and on the terms of reference specified by the Minister-

- (a) conduct an investigation at the public higher education institution concerned;
- (b) report in writing to the Minister on the findings of his or her investigation; and
- (c) suggest appropriate measures.

(2) The Minister must as soon as practicable provide a copy of the report referred to in subsection (1) to the council concerned and publish such report in the Gazette.

48 Assistance to independent assessor

An independent assessor appointed under section 44 may, with the concurrence of the Minister, appoint any other person with suitable knowledge and experience to assist him or her in the performance of his or her functions.

49 Remuneration and allowances

The Minister, with the concurrence of the Minister of Finance, may determine the remuneration and allowances to be paid to an independent assessor and any other person appointed under section 48.

CHAPTER 7

PRIVATE HIGHER EDUCATION INSTITUTIONS (ss 50-64)

50 Designation of registrar

(1) The Director-General is the registrar of private higher education institutions.

[Sub-s. (1) substituted by s. 7 of Act 55 of 1999.]

(2) The Minister may designate any other employee of the Department of Education to assist the registrar in the performance of his or her functions in terms of this Act.

[Sub-s. (2) substituted by s. 7 of Act 55 of 1999.]

(3) The registrar may delegate any of his or her functions in terms of this Act to an employee contemplated in subsection (2).

51 Registration of private higher education institutions

No person other than a public higher education institution or an organ of state may provide higher education unless that person is-

(a) in the prescribed manner, registered or conditionally registered as a private higher education institution in terms of this Act; and

(b) registered or recognised as a juristic person in terms of the Companies Act, 1973 (Act 61 of 1973), before such person is registered or conditionally registered as contemplated in paragraph (a).

[S. 51 substituted by s. 6 of Act 54 of 2000.]

52 Application for registration

An application for registration as a private higher education institution must be made to the registrar in the manner determined by the registrar and must be accompanied by the prescribed fee.

53 Requirements for registration

(1) The registrar may register an applicant as a private higher education institution if the registrar has reason to believe that the applicant-

(a) is financially capable of satisfying its obligations to prospective students;

(b) with regard to all of its higher education programmes-

(i) will maintain acceptable standards that are not inferior to standards at a comparable public higher education institution;

(ii) will comply with the requirements of the appropriate quality assurance body accredited by SAQA in terms of the South African Qualifications Authority Act, 1995 (Act 58 of 1995); and

(iii)

[Sub-para. (iii) substituted by s. 8 of Act 55 of 1999 and deleted by s. 7 (b) of Act 54 of 2000.]

(c) complies with any other reasonable requirement prescribed by the Minister.

[Para. (c) added by s. 7 (c) of Act 54 of 2000 and substituted by s. 16 of Act 23 of 2001.]

[Sub-s. (1) amended by s. 7 (a) of Act 54 of 2000.]

(2) The registrar may require further information, particulars and documents in support of any application for registration.

54 Determination of application for registration

(1) The registrar-

(a) must consider any application for registration as a private higher education institution and any further information, particulars or documents provided by the applicant;

(b) may, when considering the application, differentiate between a foreign juristic person and local juristic person with regard to matters such as its scope and range of operations, its size and its institutional configuration; and

(c) may register the applicant as a private higher education institution if the requirements for registration contemplated in section 53 are fulfilled.

[Sub-s. (1) substituted by s. 8 (a) of Act 54 of 2000.]

(2) If the registrar decides-

(a) to grant the application, the registrar must-

(i) enter the applicant's name in the appropriate register of private higher education institutions;

(ii) issue a certificate of registration, stating the terms of such registration;

(iii) provide the certificate to the applicant; and

(iv) as soon as practicable after the decision, publish the certificate of registration in the Gazette; or

(b) not to grant the application, the registrar must advise the applicant in writing of the decision and provide the applicant with written reasons for his or her decision.

(3) Notwithstanding subsection (1), the registrar may provisionally register an applicant, other than a foreign juristic person, who does not fulfil the requirements for registration contemplated in section 53 if the registrar believes that the applicant will be able to fulfill the relevant requirements within a reasonable period.

[Sub-s. (3) substituted by s. 8 (b) of Act 54 of 2000 and by s. 17 (a) of Act 23 of 2001.]

(4) If the registrar provisionally registers an applicant under subsection (3), the registrar must-

(a) determine the period within which the applicant must satisfy the requirements for registration;

(b) enter the applicant's name in the appropriate register of private higher education institutions;

(c) issue a certificate of provisional registration, stating the terms and the duration of such registration;

(d) provide the certificate of provisional registration to the applicant; and

(e) as soon as practicable after the decision, publish the certificate of provisional registration in the Gazette.

[Sub-s. (4) substituted by s. 17 (a) of Act 23 of 2001.]

(5) The registrar may on good cause shown extend the period referred to in subsection (4) (a).

(6) If, on the expiry of the period referred to in subsection (4) (a) or any extension thereof, the applicant-

(a) satisfies the requirements for registration specified by the registrar, the registrar must register the applicant in accordance with subsection (2) (a); or

(b) fails to satisfy the requirements for registration specified by the registrar, the applicant's provisional registration lapses.

[Para. (b) substituted by s. 17 (b) of Act 23 of 2001.]

(7) No independent school as defined in the South African Schools Act, 1996 (Act 84 of 1996), or other private education institution may call itself a university or a technikon or confer a professorship or an honorary degree or use the title of rector, vice-chancellor or chancellor, unless it is registered as a private

higher education institution in terms of Chapter 7 and the word 'university' or 'technikon' appears in its name.

[Sub-s. (7) added by s. 8 (c) of Act 54 of 2000.]

55 Certificate of registration

(1) A private higher education institution must conspicuously display-

(a) its certificate of registration or provisional registration or a certified copy thereof on its premises; and

(b) its registration number and an indication that it is registered or provisionally registered on all its official documents.

(2) If the registrar has cancelled the registration or provisional registration of a private higher education institution under section 62, the private higher education institution must return the original certificate of registration or provisional registration to the registrar within 14 days.

[S. 55 substituted by s. 18 of Act 23 of 2001.]

56 Access to information

(1) Any person may inspect-

(a) the register of private higher education institutions; and

(b) the auditor's report provided in terms of section 57.

(2) The registrar must provide a certified copy of, or extract from, any of the documents referred to in subsection (1) to any person who has paid the prescribed fee.

57 Records and audits

(1) Every private higher education institution must, in accordance with generally accepted accounting practice, principles and procedures-

(a) keep books and records of income, expenditure, assets and liabilities;

(b) prepare financial statements within three months of the end of the year, including at least-

(i) a statement of income and expenditure for the previous year;

(ii) a balance sheet as at the end of the previous year; and

(iii) any other information the registrar may reasonably require.

(2) Every private higher education institution must, within the period determined by the registrar-

- (a) ensure an annual audit of its books, records of account and financial statements by an auditor, who must conduct the audit in accordance with generally accepted auditing standards;
- (b) provide to the registrar a certified copy of the auditor's report in respect of the financial statements referred to in subsection (1); and
- (c) provide to the registrar any additional information, particulars or documents in the manner determined by the registrar.

58 Amendment of registration

A private higher education institution may apply to the registrar to amend its registration or provisional registration-

- (a) in the manner determined by the registrar; and
- (b) by paying the prescribed fee.

[S. 58 amended by s. 19 of Act 23 of 2001.]

59 Requirements for amendment of registration and determination of application

(1) The registrar may not amend the registration of a private higher education institution unless the registrar is satisfied that such amendment is in the interests of higher education and complies with the provisions of this Act.

(2) The registrar may require further information, particulars or documents in support of any application for such amendment.

(3) If the registrar decides-

- (a) to grant the application, the registrar must-
 - (i) amend the certificate of registration or provisional registration accordingly;

[Sub-para. (i) substituted by s. 20 of Act 23 of 2001.]

- (ii) provide a copy of the amended certificate to the applicant; and
 - (iii) as soon as reasonably practicable after the decision, publish the amended certificate in the Gazette; or

(b) not to grant the application, the registrar must advise the applicant in writing of the decision and provide the applicant with written reasons for the decision.

60 Conditions for registration

(1) The registrar may impose any reasonable condition, which may include a condition that none of the words or any derivatives of the words 'university' or 'technikon' may appear in its name, on a private higher education institution in respect of-

- (a) its registration;
- (b) its provisional registration; or
- (c) any amendment of its registration or provisional registration.

[Sub-s. (1) substituted by s. 21 of Act 23 of 2001.]

(2) The registrar may impose different conditions under subsection (1) in respect of different institutions, if there is a reasonable basis for such differentiation.

61 Amendment or cancellation of conditions

Subject to section 63, the registrar may, on reasonable grounds, amend or cancel any condition imposed under section 60 or impose new conditions under that section.

62 Cancellation of registration

(1) Subject to section 63, the registrar may, on reasonable grounds, cancel any registration or provisional registration in terms of this Act.

[Sub-s. (1) substituted by s. 22 of Act 23 of 2001.]

(2) If the accreditation of any programme offered by a private higher education institution is withdrawn, the registrar must review such institution's registration.

63 Steps before amendment or cancellation

The registrar may not act under section 61 or 62 unless the registrar-

- (a) has informed the private higher education institution of the intention so to act and the reasons therefor;
- (b) has granted the private higher education institution and other interested persons an opportunity to make representations in relation to such action; and
- (c) has considered such representations.

64 Appeal to Minister

(1) Any interested person may appeal to the Minister against any decision of the registrar in terms of this Chapter.

(2) An appeal referred to in subsection (1) must be lodged with the Minister within 60 days of the date of the registrar's decision.

(3) The Minister, on good cause shown, may extend the period within which an appeal may be noted against the decision of the registrar.

(4)

[Sub-s. (4) deleted by s. 23 of Act 23 of 2001.]

CHAPTER 8

GENERAL (ss 65-70)

65 Name change of public higher education institution

(1) Notwithstanding anything to the contrary contained in any other law, a council of a public higher education institution may, with the approval of the Minister and by notice in the Gazette, change the name of such higher education institution.

(2) Any change of name contemplated in subsection (1) does not affect any right, duty, liability or obligation of the public higher education institution in question.

[S. 65 substituted by s. 9 of Act 54 of 2000.]

65A Seat of public higher education institution

(1) The seat of a public higher education institution is the physical location of the institution, as contemplated in sections 20 (3) (c) and 21 (2) (c), where an institution carries out its teaching activities and must be defined in the institutional statute.

(2) Subject to the approval of the Minister, a public higher education institution may conduct its teaching activities beyond the seat contemplated in subsection (1).

(3) If the teaching activities contemplated in subsection (2) fall within the seat of another public higher education institution or at a place where the teaching and research activities of another public higher education institution are conducted, the Minister's approval is subject to consultation with such other public higher education institution.

[S. 65A added by s. 24 of Act 23 of 2001.]

65B Degrees, diplomas and certificates

(1) A public higher education institution may, subject to its institutional statute and this Act, award diplomas and certificates and confer degrees.

(2) Save as is provided in section 65C, no diploma or certificate may be awarded and no degree may be conferred by a public higher education institution upon any person who has not-

(a) been registered as a student of such public higher education institution for the period prescribed by the senate of such institution; and

(b) completed the work and attained the standard of proficiency determined through assessment as required by the senate of the public higher education institution, subject to section 7.

[S. 65B added by s. 24 of Act 23 of 2001.]

65C Honorary degrees

(1) Subject to its institutional statute, a public higher education institution may, without examination, confer honorary degrees of master or doctor in any faculty upon any person whom the public higher education institution may deem worthy of such a degree.

(2) The award of a degree contemplated in subsection (1) does not entitle the holder to practice any profession.

[S. 65C added by s. 24 of Act 23 of 2001.]

66 Offences

(1) Any person other than a higher education institution, who, without the authority of a higher education institution-

(a) offers or pretends to offer any higher education programme or part thereof;

(b) purports to confer a qualification granted by a higher education institution, or in collaboration with a higher education institution; or

(c) purports to perform an act on behalf of a higher education institution,

is guilty of an offence and is liable on conviction to a sentence which may be imposed for fraud.

(2) Any person who pretends that a qualification has been awarded to him or her by a higher education institution, whereas in fact no such qualification has been so awarded, is guilty of an offence and is liable on conviction to a sentence which may be imposed for fraud.

(3) Any person who contravenes section 51 (1) (a), 54 (7) or 55 (2) is guilty of an offence and is liable on conviction to a fine or to imprisonment not exceeding five years or to both such fine and imprisonment.

[Sub-s. (3) substituted by s. 10 of Act 54 of 2000.]

(4) Any private higher education institution which does not comply with section 55 (1) is guilty of an offence and is liable on conviction to a fine not exceeding R20 000.

67 Limitation of liability

The State, the CHE and any person appointed in terms of this Act are not liable for any loss or damage suffered by any person as a result of any act performed or omitted in good faith in the course of performing any function contemplated in this Act.

68 Delegation of powers

(1) The Minister may, on such conditions as he or she may determine, delegate any of his or her powers under this Act, except the power to make regulations, and assign any of his or her duties in terms of this Act, to-

- (a) the council of a public higher education institution;
- (b) the CHE;
- (c) any employee of the Department of Education;
- (d) any organ of state.

(2) The council of a public higher education institution may, on such conditions as it may determine, delegate any of its powers under this Act or delegated to it in terms of subsection (1), except the power to-

- (a) make an institutional statute;
- (b) enter into an agreement contemplated in section 40 (2); or
- (c) perform an action contemplated in section 40 (3),

and assign any of its duties in terms of this Act or assigned to it in terms of subsection (1), to the other internal structures, the principal or any other employee of the public higher education institution concerned.

[Sub-s. (2) substituted by s. 11 of Act 54 of 2000.]

(3) The principal of a public higher education institution may, on such conditions as he or she may determine, delegate any of his or her powers under this Act and assign any of his or her duties in terms of this Act to any other employee of the public higher education institution concerned.

[Sub-s. (3) added by s. 9 of Act 55 of 1999.]

(4) The CHE may, on such conditions as it may determine, delegate any of its powers under this Act and assign any of its duties in terms of this Act to any of its committees or employees.

[Sub-s. (4) added by s. 9 of Act 55 of 1999.]

69 Regulations

The Minister may make regulations consistent with this Act on-

- (a) any matter which the Minister is empowered or required to prescribe by regulation in terms of this Act; and
- (b) any other matter in respect of which the Minister deems it necessary or expedient to achieve the objects of this Act.

70 Application of Act when in conflict with other laws

This Act prevails over any other law dealing with higher education other than the Constitution.

CHAPTER 9

TRANSITIONAL AND OTHER ARRANGEMENTS (ss 71-77)

71 Existing statutes and rules of public higher education institutions

The existing statute and rules of a public higher education institution in force at the commencement of this Act continue to apply to the extent that such statute and rules are consistent with this Act.

72 Existing technikons and universities

(1) Any technikon which was established or is deemed to have been established in terms of the Technikons Act, 1993 (Act 125 of 1993), and which existed immediately prior to the commencement of this Act, is deemed to be a technikon established in terms of this Act.

(2) Any university established or incorporated by a Private Act of Parliament continues to exist and is deemed to be a university established in terms of this Act, notwithstanding the repeal of such Private Act by the Higher Education Amendment Act, 2001.

[Sub-s. (2) substituted by s. 25 of Act 23 of 2001.]

(3) Subject to any other applicable law, all conditions of service or service benefits applicable immediately prior to the commencement of this Act to a university or technikon continue to exist until changed by the council of the public higher education institution concerned.

(4) Councils, senates and forums of technikons and universities which existed at the commencement of this Act continue to exist and perform the functions which they performed prior to such commencement, but must comply with the provisions of this Act within 18 months after the commencement of this Act.

73 Abolition of University and Technikons Advisory Council

(1) The University and Technikons Advisory Council established in terms of the University and Technikons Advisory Council Act, 1983 (Act 99 of 1983), continues to exist and to perform its functions as if that Act had not been repealed, until the CHE commences its functions in terms of this Act.

(2) The CHE commences its functions on a date determined by the Minister by notice in the Gazette.

74 Abolition of statutory status of Committee of University Principals, Matriculation Board and Committee of Technikon Principals

(1) The Committee of University Principals, the Matriculation Board and the Committee of Technikon Principals continue to exist and to perform their functions until the date or dates contemplated in subsection (2), as if the Universities Act, 1955 (Act 61 of 1955), and the Technikons Act, 1993 (Act 125 of 1993), had not been repealed.

(2) Subject to subsection (3), the Committee of University Principals, the Matriculation Board and the Committee of Technikon Principals cease to exist as statutory bodies on a date or dates determined by the Minister by notice in the Gazette.

(3) The Minister may only make a determination in terms of subsection (2)-

(a) after consulting SAQA and the body concerned; and

(b) after the Minister has considered the recommendations made by SAQA and the body concerned, as contemplated in section 15 (2) of the South African Qualifications Authority Act, 1995 (Act 58 of 1995).

(4) Notwithstanding subsection (3) (b) the Minister may make a determination in terms of subsection (2) if SAQA and the body concerned have not made recommendations as contemplated in subsection (3) (b) within a reasonable period after a written request by the Minister to do so.

(5) The Committee of University Principals and the Committee of Technikon Principals must determine the manner in which their assets and liabilities are dealt with upon their dissolution as statutory bodies.

(6) The joint statutes and joint regulations and rules made in terms of the Universities Act, 1955 (Act 61 of 1955), and the Technikons Act, 1993 (Act 125 of 1993), continue to exist until the date or dates contemplated in subsection (2).

75 Exemption of existing private higher education institutions

Sections 51 and 66 (3) and (4) do not apply to a person who provides higher education at the date of commencement of this Act, until a date determined by the Minister by notice in the Gazette.

76 Repeal of laws

(1) The University and Technikons Advisory Council Act, 1983 (Act 99 of 1983), is hereby repealed in its entirety.

(2) The Universities Act, 1955 (Act 61 of 1955), is hereby repealed in its entirety.

(3) The Technikons Act, 1993 (Act 125 of 1993), is hereby repealed in its entirety.

(4) The Tertiary Education Act, 1988 (Act 66 of 1988), is hereby repealed in its entirety.

(5) The Technikons Amendment Act, 1995 (Act 27 of 1995), is hereby repealed in its entirety.

[Sub-s. (5) added by s. 10 of Act 55 of 1999.]

(6) The Education Policy Act, 1967 (Act 39 of 1967), is hereby repealed in its entirety.

[Sub-s. (6) added by s. 10 of Act 55 of 1999.]

(7) The University Staff (Education and Training) Act, 1984 (Act 91 of 1984), is hereby repealed in its entirety.

[Sub-s. (7) added by s. 12 of Act 54 of 2000.]

77 Short title

This Act is called the Higher Education Act, 1997.

HIGHER EDUCATION AMENDMENT ACT 23 OF 200

[ASSENTED TO 30 OCTOBER 2001]

[DATE OF COMMENCEMENT: 2 NOVEMBER 2001]

26 Repeal of laws

(1) The laws listed in the Schedule are hereby repealed.

(2) Notwithstanding subsection (1), section 3 (4), (5) and (6) of the University of Cape Town (Private) Act, 1999 (Act 8 of 1999), continue to exist as if that Act had not been repealed.

Schedule

LAWS REPEALED

Rhodes University (Private) Act, 1949 (Act 15 of 1949);

University of the Orange Free State (Private) Act, 1949 (Act 21 of 1949);

University Laws Amendment Act, 1953 (Act 23 of 1953);

University of the Witwatersrand, Johannesburg, (Private) Act, 1959 (Act 15 of 1959);

University of South Africa Act, 1959 (Act 19 of 1959);

University of the Orange Free State (Private) Act Amendment Act, 1959 (Act 36 of 1959);

Universities Amendment Act, 1959 (Act 82 of 1959);

Rhodes University Act Amendment (Private) Act, 1960 (Act 6 of 1960);

University of Natal (Private) Act, 1960 (Act 7 of 1960);

Universities Amendment Act, 1961 (Act 46 of 1961);

University of the Orange Free State (Private) Act Amendment (Private) Act, 1962 (Act 29 of 1962);

University of Port Elizabeth Act, 1964 (Act 1 of 1964);

University of South Africa Amendment Act, 1964 (Act 13 of 1964);

Rhodes University (Private) Act Amendment Act, 1965 (Act 7 of 1965);

University of Port Elizabeth Amendment Act, 1965 (Act 40 of 1965);

Universities Amendment Act, 1965 (Act 43 of 1965);

Rand Afrikaans University Act, 1966 (Act 51 of 1966);

University of Port Elizabeth Amendment Act, 1967 (Act 31 of 1967);

University of South Africa Amendment Act, 1967 (Act 53 of 1967);

Universities Amendment Act, 1968 (Act 24 of 1968);

University of the Witwatersrand, Johannesburg, (Private) Amendment Act, 1968 (Act 32 of 1968);

University of Fort Hare Act, 1969 (Act 40 of 1969);

University of Zululand Act, 1969 (Act 43 of 1969);

University of the North Act, 1969 (Act 47 of 1969);

University of South Africa (Private) Amendment Act, 1969 (Act 62 of 1969);

University of Port Elizabeth (Private) Amendment Act, 1969 (Act 66 of 1969);

Universities Amendment Act, 1969 (Act 67 of 1969);

Rand Afrikaans University (Private) Amendment Act, 1969 (Act 70 of 1969);

Rand Afrikaans University (Private) Amendment Act, 1970 (Act 84 of 1970);

University of Fort Hare Amendment Act, 1971 (Act 28 of 1971);

University of the Orange Free State (Private) Amendment Act, 1971 (Act 70 of 1971);

Black Education Account Abolition Act, 1972 (Act 20 of 1972);

Rhodes University (Private) Amendment Act, 1972 (Act 81 of 1972);

Black Universities Amendment Act, 1973 (Act 6 of 1973);

Rhodes University (Private) Amendment Act, 1973 (Act 21 of 1973);

University of South Africa (Private) Amendment Act, 1973 (Act 22 of 1973);

University of the Orange Free State (Private) Amendment Act, 1974 (Act 69 of 1974);

Universities Amendment Act, 1975 (Act 67 of 1975);

Medical University of Southern Africa Act, 1976 (Act 78 of 1976);

University of Port Elizabeth (Private) Amendment Act, 1976 (Act 114 of 1976);

Black Universities Amendment Act, 1977 (Act 57 of 1977);

Universities Amendment Act, 1977 (Act 65 of 1977);

University of Natal (Private) Amendment Act, 1977 (Act 66 of 1977);

University of the Orange Free State (Private) Amendment Act, 1978 (Act 108 of 1978);

Universities for Blacks Amendment Act, 1979 (Act 52 of 1979);

Rhodes University (Private) Amendment Act, 1979 (Act 62 of 1979);

University of Natal (Private) Amendment Act, 1979 (Act 71 of 1979);

University of Port Elizabeth (Private) Amendment Act, 1979 (Act 86 of 1979);

University of the Witwatersrand, Johannesburg, (Private) Amendment Act, 1980 (Act 37 of 1980);

Rand Afrikaans University (Private) Amendment Act, 1980 (Act 49 of 1980);

Universities for Blacks Amendment Act, 1982 (Act 14 of 1982);

Rand Afrikaans University (Private) Amendment Act, 1982 (Act 93 of 1982);

Technikons (Education and Training) Amendment Act, 1983 (Act 48 of 1983);

University of Port Elizabeth (Private) Amendment Act, 1983 (Act 68 of 1983);

Rhodes University (Private) Amendment Act, 1983 (Act 69 of 1983);

University of Natal (Private) Amendment Act, 1983 (Act 71 of 1983);

University of the Western Cape Act, 1983 (Act 78 of 1983);

University of Durban-Westville Act, 1983 (Act 81 of 1983);

Universities Amendment Act, 1983 (Act 83 of 1983);

Rand Afrikaans University (Private) Amendment Act, 1983 (Act 107 of 1983);

Universities, National Education Policy and Technikons Amendment Act, 1984 (Act 75 of 1984);

Technikons (Education and Training) Amendment Act, 1984 (Act 77 of 1984);

Tertiary Education (Education and Training) Act, 1984 (Act 92 of 1984);

University of the Orange Free State (Private) Amendment Act, 1984 (Act 97 of 1984)

University Staff (Education and Training) Amendment Act, 1985 (Act 28 of 1985);

Universities and Technikons for Blacks, Tertiary Education (Education and Training) and Education and Training Amendment Act, 1986 (Act 3 of 1986);

Universities Amendment Act, 1986 (Act 86 of 1986);

Certification Council for Technikon Education Act, 1986 (Act 88 of 1986);

Technikons (National Education) Amendment Act, 1986 (Act 89 of 1986);

Rhodes University (Private) Amendment Act, 1986 (Act 99 of 1986);

Universities (Education and Training) Amendment Act, 1987 (Act 34 of 1987);

Rand Afrikaans University (Private) Amendment Act, 1987 (Act 44 of 1987);

Education Laws (Education and Training) Amendment Act, 1987 (Act 95 of 1987);

Education Laws (Education and Training) Amendment Act, 1988 (Act 31 of 1988);

Technikons (National Education) Amendment Act (House of Assembly) Act, 1988 (Act 33 of 1988);

University of Port Elizabeth (Private) Amendment Act, 1988 (Act 98 of 1988);

Rand Afrikaans University (Private) Amendment Act, 1989 (Act 33 of 1989);

University of the Orange Free State (Private) Amendment Act, 1989 (Act 34 of 1989)

Universities Amendment Act, 1989 (House of Assembly) (Act 64 of 1989);

Universities and Technikons (Education and Training) Amendment Act, 1990 (Act 41 of 1990);

University of Pretoria (Private) Act, 1990 (House of Assembly) (Act 106 of 1990);

Universities and Technikons Advisory Council Amendment Act, 1991 (Act 24 of 1991);

University of the Witwatersrand, Johannesburg, (Private) Amendment Act, 1991 (House of Assembly) (Act 78 of 1991);

Universities Amendment Act, 1991 (Act 123 of 1991);

University of the Orange Free State (Private) Amendment Act, 1992 (House of Assembly) (Act 68 of 1992);

University of Port Elizabeth (Private) Amendment Act, 1992 (House of Assembly) (Act 69 of 1992);

University of Stellenbosch (Private) Act, 1992 (House of Assembly) (Act 107 of 1992);

University of the North Amendment Act, 1992 (Act 150 of 1992);

Universities Amendment Act, 1993 (Act 21 of 1993);

University of Durban-Westville Amendment Act (House of Delegates), 1993 (Act 51 of 1993);

University of South Africa (Private) Amendment Act (House of Assembly), 1993 (Act 54 of 1993);

University of the Witwatersrand, Johannesburg, (Private) Amendment Act, 1993 (House of Assembly) (Act 78 of 1993);

Potchefstroomse Universiteit vir Christelike Hoër Onderwys (Private) Act (House of Assembly), 1993 (Act 80 of 1993);

University of the Orange Free State (Private) Amendment Act, 1993 (House of Assembly) (Act 81 of 1993);

University of Pretoria (Private) Amendment Act, 1993 (House of Assembly) (Act 158 of 1993);

Rhodes University (Private) Amendment Act (House of Assembly) Act, 1993 (Act 159 of 1993);

University of Natal (Private) Amendment Act, 1993 (House of Assembly) (Act 163 of 1993);

Certification Council for Technikon Education Amendment Act, 1993 (Act 185 of 1993);

University of North-West (Private) Act, 1996 (Act 17 of 1996);

University of Zululand (Private) Amendment Act, 1996 (Act 80 of 1996);

University of Transkei (Private) Act, 1996 (Act 81 of 1996);

University of Durban-Westville (Private) Amendment Act, 1996 (Act 82 of 1996);

University of Port Elizabeth (Private) Amendment Act, 1996 (Act 83 of 1996);

University of Venda (Private) Act, 1996 (Act 89 of 1996);

University of the Witwatersrand, Johannesburg (Private) Amendment Act, 1997 (Act 21 of 1997);

Medical University of Southern Africa (Private) Amendment Act, 1997 (Act 25 of 1997);

University of Durban-Westville (Private) Amendment Act, 1997 (Act 32 of 1997);

University of Cape Town (Private) Act, 1999 (Act 8 of 1999).

ANNEXURE C

GLOBAL TERTIARY ENROLMENT DATA

TABLE B. TERTIARY ENROLLMENT DATA

Country	Number of Tertiary Students					Number of Tertiary Students per 100,000 Inhabitants			
	1975	1980	1985 or closest yr.	1990	1995 or LYA**	1980	1985 or closest yr.	1990	1995 or LYA**
Afghanistan	12,256	20,279	22,306	24,333	26,360	142		147	
Albania		14,568	21,995	22,059	30,185	545	1,080	679	899
Algeria	41,847	79,351	132,057	285,930	347,410	530	798	1,146	1,236
Angola		2,333	5,034	6,534	8,784	33		71	
Argentina	596,736	491,473	846,145	1,008,231	1,069,617	1,741	2,792	3,293	3,117
Armenia		109,900	102,700	114,300	39,592	1,890	3,076	2,030	1,090
Australia	274,738	323,716	370,048	485,075	964,998	2,203	2,366	2,839	5,401
Austria	96,736	136,774	173,215	205,767	238,981	1,812	2,292	2,668	2,970
Azerbaijan		186,024	182,145	163,901	118,105	1,720	2,731	1,470	1,568
Bahamas, The		4,093	4,531	5,305	6,079	1,949		2,192	
Bahrain	703	1,908	4,180	6,868	7,676	550	1,011	1,365	1,445
Bangladesh		240,181	461,073	681,965	902,857	272		382	
Barbados		4,033	5,227	6,651	3,064	1,620	2,075	1,657	2,572
Belarus	314,603	339,800	342,400	335,284	313,800	1,760	3,425	1,700	3,031
Belgium	159,660	196,153	247,499	276,248	352,630	2,111	2,511	2,725	3,494
Belize		107,000	104,493	101,986	99,483				
Benin	2,118	4,822	9,063	10,873	11,227	139	225	235	208
Bermuda		608							
Bolivia	49,850	60,900	88,175	102,001	120,756	1,494		1,975	
Botswana	469	1,078	1,938	2,957	7,920	120	180	299	546
Brazil	1,089,808	1,409,243	1,451,191	1,540,080	1,716,263	1,162	1,052	1,074	1,094
Brunei		143	601	1,163	1,270	74	262	395	518
Bulgaria	128,593	101,359	113,795	188,479	250,336	1,144	1,270	2,096	2,942
Burkina Faso	1,067	1,644	4,085	5,425	9,388	24	52	60	90
Burundi	1,002	1,879	2,783	3,592	4,256	45	59	65	74
Cambodia		601	2,213	6,659	11,652				119
Cameroon		11,686	21,438	33,177	47,665	135		288	
Canada	1,079,960	1,172,750	1,639,410	1,916,801	2,011,485	4,035	6,320	5,102	6,984
Central African Republic	669	1,719	2,651	3,840	3,450	74		119	
Chad	547	1,470	1,643	2,242	3,446		38	70	54
Chile	149,647	145,497	197,437	261,800	342,788	1,305	1,639	1,938	2,412
China	500,993	1,662,796	3,515,485	3,822,371	5,621,543	117	328	186	461
Colombia	176,098	271,630	391,490	487,448	588,322	1,024	1,331	1,496	1,643
Comoros		316	281	248	348				
Congo, Dem. Rep. of	24,853	28,493	40,878	80,233	93,266	105	129	176	212
Congo, Rep. of	3,249	7,255	10,684	10,671	13,806	435	555	479	582
Costa Rica	33,239	55,593	63,771	74,681	78,819	2,434	2,414	2,461	2,919
Côte d'Ivoire	7,174	19,633	21,650	23,073	55,000	240	219		413
Croatia		64,966	55,886	72,342	86,357		1,250		1,917
Cuba	82,688	151,733	235,224	242,434	122,346	1,568	2,325	2,285	1,116
Cyprus	602	1,940	3,134	6,554	8,874	308	575		
Czech Republic	90,649	118,026	107,098	118,194	191,604		1,039		1,867
Denmark	110,271	106,241	116,319	142,968	166,545	2,074	2,275	2,625	3,188
Djibouti			53		130		10		22
Dominican Republic		42,400	123,748	123,724	176,995		1,941		2,223
Ecuador	170,173	269,775	280,594	206,541	174,924	3,321		1,950	
Egypt, Arab Rep. of	480,016	715,701	854,584	628,233	850,051	1,751	1,717	1,698	1,900
El Salvador	28,281	16,838	70,499	78,211	114,998	372	1,508	1,512	2,031
Eritrea					3,020				95
Estonia		25,500	24,680	25,900	39,726	1,723	1,625	1,636	2,670

TABLE B, *continued*

Country	Number of Tertiary Students					Number of Tertiary Students per 100,000 Inhabitants			
	1975	1980	1985 or closest yr.	1990	1995 or LYA**	1980	1985 or closest yr.	1990	1995 or LYA**
Ethiopia		14,368	27,338	34,076	35,027	37	66	68	62
Fiji	1,653	1,666	2,313	3,509		263		1,080	
Finland	114,272	123,165	127,976	165,714	213,995	2,577	2,611	3,326	4,190
France	1,038,576	1,076,717	1,278,581	1,698,938	2,091,688	1,998	2,318	2,995	3,600
French Polynesia		27							
Gabon	1,014	4,031	4,089	4,031	3,972	216		375	
Gambia, The					1,591				148
Georgia		140,578	144,400	148,391	155,033	1,680	2,731	1,900	2,845
Germany				2,048,627	2,144,169		2,581		2,628
Ghana	9,079	7,951	8,324	9,242	10,170	144		126	
Greece	117,246	121,116	181,901	283,415	329,185	1,256	1,831	1,927	3,149
Guam	3,800	3,217	5,134	7,052	8,969				
Guatemala	22,881	50,890	48,283	64,103	80,228	736	741		755
Guinea	12,411	18,270	8,801	5,366	7,722	410	176	122	105
Guinea-Bissau									
Guyana	2,852	2,465	2,328	4,665	7,680	325	294	588	926
Haiti	2,881	4,671	6,288	7,905	9,522	87			
Honduras	11,907	25,825	36,620	43,117	54,106	705	875	854	985
Hong Kong, China	44,482	38,153	76,844	85,214	97,392	1,201	1,425		1,635
Hungary	107,555	101,166	99,344	102,387	179,563	945	939	970	1,777
Iceland	2,970	3,633	4,724	5,225	7,483	1,593	1,957	2,049	2,756
India	3,043,865	3,545,318	4,470,844	4,950,974	5,695,780	515	582		613
Indonesia	278,200	543,175	1,277,684	1,590,593	2,303,469	367	749	838	1,167
Iran, Islamic Rep. of	151,905	184,442	239,300	312,076	1,048,093	317	469	858	1,533
Iraq	86,111	106,709	169,665	209,818	249,971	820		1,240	
Ireland	46,174	54,746	70,301	90,296	128,284	1,610	1,979	2,578	3,618
Israel		97,097	116,062	134,885	198,766	2,504	2,742	2,790	3,598
Italy	976,712	1,117,742	1,185,304	1,452,286	1,775,186	1,981	2,088	2,519	3,103
Jamaica	3,963	13,999	10,969	16,018	8,191	656	475	662	770
Japan	2,248,903	2,412,117	2,347,463	2,683,035	3,917,709	2,065	1,943	2,328	3,139
Jordan	11,873	36,549	53,753	80,442	99,020	1,713		2,230	
Kazakhstan		525,400	551,000	537,441	472,000	1,730	3,481	1,710	2,807
Kenya		12,986	21,756	31,287	67,371	78		140	
Korea, Rep. of	318,683	647,505	1,455,759	1,691,429	2,225,092	1,698	3,568	3,899	4,974
Kuwait	8,104	13,630	23,678	20,787	28,705	991	1,377	1,244	2,247
Kyrgyz Republic		64,595	71,330	57,563	49,744	1,510	1,777	1,330	1,115
Lao PDR		1,408	5,382	4,730	12,732	44	150	116	253
Latvia		47,230	43,914	45,953	44,064	1,863	1,692	1,712	1,737
Lebanon		79,073	79,500	82,497	81,588	2,963	2,980	3,071	2,712
Lesotho	529	1,188	1,771	2,029	4,384	141	113	263	216
Liberia	2,404	4,900	4,889	4,878	4,847	208		218	
Libya	13,427	20,166	30,000	50,471	106,541	663		1,548	
Lithuania		70,995	96,500	88,668	75,559	2,063	2,621	1,758	2,023
Luxembourg	483	748	759			207			
Macao		7,930	7,718	7,425	7,485				1,700
Macedonia, FYR	36,049	46,281	38,065	26,515	29,583		1,979		1,372
Madagascar	8,385	22,632	38,310	35,824	28,814	257	359	298	194
Malawi	1,903	2,591	3,057	4,829	5,561	56	42	63	58
Malaysia		57,650	93,249	121,412	191,290	419	595	679	971
Maldives									

TABLE B, *continued*

Country	Number of Tertiary Students					Number of Tertiary Students per 100,000 Inhabitants			
	1975	1980	1985 or closest yr.	1990	1995 or LYA**	1980	1985 or closest yr.	1990	1995 or LYA**
Mali	2,936	1,631	6,768	6,703	6,687	64		73	
Malta	1,425	947	1,474	3,123	5,805	292	428	791	1,595
Mauritania		5,378	4,526	5,339	8,496		256	281	374
Mauritius	1,096	1,038	1,161	3,485	6,799	107	114	208	609
Mexico	562,056	929,865	1,207,779	1,310,835	1,420,461	1,387	1,600	1,552	1,586
Moldova		110,200	113,800	104,800	87,700	1,270	2,700	1,250	1,976
Mongolia	9,861	34,543	40,099	31,434	38,643	2,234	2,101	1,416	1,569
Morocco	45,322	112,405	181,087	255,667	294,502	580	837	958	1,132
Mozambique		1,000	1,442	3,698	6,639	8	11	16	41
Myanmar	56,083	163,197	179,366	196,052	250,000	478	478	516	564
Namibia		558	1,523	4,157	11,344			280	738
Nepal	23,504	34,094	54,452	93,753	102,018	259	424	549	501
Netherlands	288,026	360,033	404,866	478,869	491,748	2,545	2,794	2,945	3,176
New Caledonia	178	438	761						
New Zealand	66,178	76,643	95,793	111,504	163,923	2,462	2,950	3,287	4,603
Nicaragua	18,282	35,268	29,001	30,733	50,769	1,259	905	836	1,231
Niger	541	1,435	2,863	3,684	5,867	26		60	
Nigeria	44,964	150,072	266,679	335,824	404,969	191		320	
Norway	66,628	79,117	94,658	142,521	180,383	1,936	2,279	3,357	4,164
Oman		18	990	6,208	9,664	2	670	391	438
Pakistan	127,932		267,742	336,689	371,162	182		266	
Panama	26,289	40,369	55,303	53,235	76,839	2,064	2,552	2,181	2,921
Papua New Guinea		5,040	5,068	6,397	13,663	163	147		318
Paraguay	18,302	26,915	32,090	32,884	40,913	855	889	769	1,031
Peru	195,641	306,353	452,462	681,801	755,929	1,771	2,321	3,450	3,268
Philippines	769,749	1,276,016	1,402,000	1,709,486	2,022,106	2,621	2,565	2,738	2,981
Poland	575,499	589,134	454,190	544,893	747,638	1,656	1,221	1,427	1,946
Portugal	79,702	92,152	129,277	185,762	300,573	944	1,305	1,882	3,060
Puerto Rico	97,517	131,184	142,407	153,680	164,854				
Qatar	779	2,269	5,344	6,485	8,271	991	1,494	1,559	1,509
Reunion									
Romania	164,567	192,769	159,798	192,810	336,141	868	703	711	1,479
Russian Federation	5,500,000	5,700,000	5,444,000	5,100,000	4,458,363	2,190	3,768	1,900	2,998
Rwanda	1,108	1,243	1,987	3,389	4,791	24		50	
Samoa	249	976	758	900	1,042				
Saudi Arabia	26,437	62,074	113,529	153,967	251,945	662	898	1,035	1,380
Senegal		13,626	13,354	18,689	24,081	246	209	253	297
Seychelles		144							
Sierra Leone	1,701	2,166	5,690	4,742	3,794	66		114	
Singapore	22,607	23,256	39,913	55,672	83,914	963	1,474		2,522
Slovak Republic		77,191	66,002	72,215	91,553		1,247		1,715
Slovenia		27,707	29,601	33,565	47,908		1,574		2,489
Solomon Islands									
Somalia	2,040	2,900	8,221	13,543	20,994	45			
South Africa		207,620		439,007	617,897				1,524
Spain	540,238	697,789	935,126	1,222,089	1,591,863	1,859	2,431	3,007	4,017
Sri Lanka	15,426	42,694	59,377	55,190	63,660	288	370	488	474
St. Kitts and Nevis		99	212	325	394				
St. Lucia		301	367	618	2,760				
St. Vincent and the Grenadines			736	677	618				

TABLE B, *continued*

Country	Number of Tertiary Students					Number of Tertiary Students per 100,000 Inhabitants			
	1975	1980	1985 or closest yr.	1990	1995 or LYA**	1980	1985 or closest yr.	1990	1995 or LYA**
Sudan	21,342	28,788	37,367	60,134	82,901	154		245	
Suriname		2,378	2,751	3,994	4,804	676		1,023	
Swaziland	1,012	1,875	2,732	3,198	3,497	332	421	426	408
Sweden	162,640	171,356	176,589	192,611	261,209	2,062	2,115	2,248	2,972
Switzerland	64,720	85,127	110,111	137,486	148,024	1,347	1,685	2,048	2,066
Syrian Arab Republic	73,660	140,180	179,473	221,628	215,734	1,611	1,726	1,740	1,559
Tajikistan		96,900	95,247	109,653	108,203	1,420	2,086	1,280	1,890
Tanzania	3,064	5,000	4,863	5,058	12,776	22	22	21	43
Thailand	130,965	361,400	1,026,952	952,012	1,220,481	1,284	2,009	1,763	2,096
Togo	2,353	4,750	5,230	8,969	11,639	182	173	226	285
Trinidad and Tobago	4,940	5,649	6,582	7,249	5,348	522	559	591	730
Tunisia	20,505	31,827	41,594	68,535	112,634	499	567	851	1,253
Turkey	327,082	246,183	469,992	749,921	1,174,299	554	934	1,339	1,960
Turkmenistan		69,800	75,800	76,000	76,200	1,240		1,130	
Uganda	5,474	5,856	10,103	17,578	30,266	45	68	100	154
Ukraine	1,570,100	1,683,500	1,662,000	1,651,700	1,541,000	1,760	3,263	1,700	2,977
United Arab Emirates		2,861	7,772	10,196	15,789	282	501	642	801
United Kingdom	732,947	827,146	1,032,491	1,258,188	1,820,843	1,468	1,824	2,170	3,135
United States	11,184,859	12,096,895	12,247,055	13,710,150	14,261,778	5,311	5,064	5,591	5,339
Uruguay	32,627	36,298	53,955	71,612	79,691	1,338		2,315	2,488
Uzbekistan		515,800	567,200	602,700	691,450	1,720		1,650	
Vanuatu									
Venezuela	213,542	307,133	443,064	550,030	551,912	2,044		2,847	
Vietnam	80,323	114,701	121,159	129,600	297,900	214	202		404
Yemen, Rep. of		7,811	26,673	45,536	65,675				419
Yugoslavia, FR (Serb./Mont.)					159,512				1,556
Zambia	8,403	3,425	14,492	15,343	10,489	131	221	189	241
Zimbabwe	8,479	8,339	30,843	49,361	45,593	117	368	496	626
World	40,267,422	50,758,289	58,394,175	68,275,579	80,459,713	1,021	1,335	1,318	1,531
Low and middle income	18,986,254	26,929,371	33,645,255	37,313,806	44,155,455	602	879	761	980
Sub-Saharan Africa	181,386	618,089	660,360	1,316,906	1,750,684	117	124	181	339
East Asia and Pacific	1,828,765	4,224,145	7,673,191	8,575,155	11,984,521	293	521	441	704
South Asia	3,222,983	3,882,888	5,335,794	6,142,904	7,161,837	445	574	338	608
Europe and Central Asia	9,209,689	11,649,860	11,453,615	11,579,161	11,547,310	1,656	2,539	1,608	2,436
Latin America and the Caribbean	3,590,200	4,945,840	6,389,251	7,267,699	7,923,878	1,346	1,493	1,706	1,638
Middle East and N. Africa	953,231	1,608,549	2,133,044	2,431,981	3,787,225	943	1,053	1,251	1,465
High income	21,281,168	23,828,918	24,748,920	30,961,773	36,304,258	3,033	3,197	3,701	4,071

**LYA Last year available.

Source: Column 1: UNESCO 1999a; columns 2 and 4: UNESCO 1999a, supplemented by Bloom and Rivera-Batiz 1999; columns 3 and 5: UNESCO 1998a, supplemented by Bloom and Rivera-Batiz 1999; columns 6 and 8: UNESCO 1993; columns 7 and 9: UNESCO 1998a.

ANNEXURE D

EDUCATION WHITE PAPER 3:

A PROGRAMME FOR TRANSFORMATION OF HIGHER EDUCATION

GENERAL NOTICE
NOTICE 1196 OF 1997
Education White Paper 3
**A PROGRAMME FOR THE TRANSFORMATION OF
HIGHER EDUCATION**
Department of Education
Pretoria
24 July 1997

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FOREWORD

The release of the Education White Paper 3 - A Programme for Higher Education Transformation, is the culmination of a wide-ranging and extensive process of investigation and consultation that was initiated with the establishment of the National Commission on Higher Education (NCHE) in February 1995 by President Mandela, and the subsequent release of the Green Paper on Higher Education in December 1996 and the Draft White Paper on Higher Education in April 1997.

This extended consultation is a concrete expression of the democratic will that is the motorforce of our emerging nation and reflects my Ministry's commitment to stakeholder participation in the development and formulation of policy. The consultative process has resulted in the building of an all-embracing consensus around the broad policy framework outlined in this White Paper and has ensured that it commands the support of all the key stakeholders in higher education. It has also laid the foundation, in line with my Ministry's commitment to cooperative governance, for all of us together, to jointly embark on the long and exciting journey towards the transformation of the higher education system. The transformation of the higher education system to reflect the changes that are taking place in our society and to strengthen the values and practices of our new democracy is, as I have stated on many previous occasions, not negotiable. The higher education system must be transformed to redress past inequalities, to serve a new social order, to meet pressing national needs and to respond to new realities and opportunities.

The White Paper outlines the framework for change, that is, the higher education system must be planned, governed and funded as a single national co-ordinated system. This will enable us to overcome the fragmentation, inequality and inefficiency which are the legacy of the past, and create a learning society which releases the creative and intellectual energies of all our people towards meeting the goals of reconstruction and development. I have no doubt that the journey is not likely to be easy. However, I am confident that if we collectively commit ourselves to completing it in the spirit of the consensus that has already been achieved, we will reach our destination, that is, a higher education system that contributes to the building of a better life for all.

CHAPTER 1

CHALLENGES, VISION AND PRINCIPLES

INTRODUCTION

- 1.1 South Africa's transition from apartheid and minority rule to democracy requires that all existing practices, institutions and values are viewed anew and rethought in terms of their fitness for the new era. Higher education plays a central role in the social, cultural and economic development of modern societies. In South Africa today, the challenge is to redress past inequalities and to transform the higher education system to serve a new social order, to meet pressing national needs, and to respond to new realities and opportunities. It must lay the foundations for the development of a learning society which can stimulate, direct and mobilise the creative and intellectual energies of all the people towards meeting the challenge of reconstruction and development.
- 1.2 This 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.

PURPOSES

- 1.3 Higher education has several related purposes. In the context of present-day South Africa, they must contribute to and support the process of societal transformation outlined in the Reconstruction and Development Programme (RDP), with its compelling vision of people-driven development leading to the building of a better quality of life for all. These purposes are:
 - To meet the learning needs and aspirations of individuals through the development of their intellectual abilities and aptitudes throughout their lives. Higher education equips individuals to make the best use of their talents and of the opportunities offered by society for self-fulfilment. It is thus a key allocator of life chances an important vehicle for achieving equity in the distribution of opportunity and achievement among South African citizens. .
 - To address the development needs of society and provide the labour market, in a knowledge-driven and knowledge-dependent society, with the ever-changing high-level competencies and expertise necessary for the growth and prosperity of a modern economy. Higher education teaches and trains people to fulfil specialised

social functions, enter the learned professions, or pursue vocations in administration, trade, industry, science and technology and the arts.

- To contribute to the socialisation of enlightened, responsible and constructively critical citizens. Higher education encourages the development of a reflective capacity and a willingness to review and renew prevailing ideas, policies and practices based on a commitment to the common good.
- To contribute to the creation, sharing and evaluation of knowledge. Higher education engages in the pursuit of academic scholarship and intellectual inquiry in all fields of human understanding, through research, learning and teaching.

NEEDS AND CHALLENGES

1.4 Assessing the current state of higher education in South Africa against the yardstick of these four general purposes, and the principles that are outline under 1.17 below, the Ministry finds reason for concern and an imperative for transformation. Despite acknowledged achievements and strengths, the present system of higher education is limited in its ability to meet the moral, political, social and economic demands of the new South Africa. It is characterised by the following deficiencies:

- There is an inequitable distribution of access and opportunity for students and staff along lines of race, gender, class and geography. There are gross discrepancies in the participation rates of students from different population groups, indefensible imbalances in the ratios of black and female staff compared to whites and males, and equally untenable disparities between historically black and historically white institutions in terms of facilities and capacities.
- There is a chronic mismatch between the output of higher education and the needs of a modernising economy. In particular, there is a shortage of highly trained graduates in fields such as science, engineering, technology and commerce (largely as a result of discriminatory practices that have limited the access of black and women students), and this has been detrimental to social and economic development.
- Higher education has an unmatched obligation, which has not been adequately fulfilled, to help lay the foundations of a critical civil society, with a culture of public debate and tolerance which accommodates differences and competing interests. It has much more to do, both within its own institutions and in its influence on the broader community, to strengthen the democratic ethos, the sense of common citizenship and commitment to a common good.
- While parts of the South African higher education system can claim academic achievement of international renown, too many parts of the system observe teaching and research policies which favour academic insularity and closed-system disciplinary programmes. Although much is being done, there is still insufficient attention to the pressing local, regional and national needs of the South African society and to the problems and challenges of the broader African context.
- The governance of higher education at a system-level is characterised by fragmentation, inefficiency and ineffectiveness, with too little co-ordination, few

common goals and negligible systemic planning. At the institutional-level, democratic participation and the effective representation of staff and students in governance structures is still contested on many campuses.

- 1.5 Despite the negative consequences of the apartheid legacy, some higher education institutions have developed internationally competitive research and teaching capacities. Their academic expertise and infrastructure are national assets. It would be detrimental to the national interest and the future provision of quality higher education if the valuable features and achievements of the existing system were not identified, retained and used in the restructuring process.
- 1.6 However, if higher education is to contribute to the reconstruction and development of South Africa and existing centres of excellence maintained, the inequities, imbalances and distortions that derive from its past and present structure must be addressed, and higher education transformed to meet the challenges of a new non-racial, non-sexist and democratic society committed to equity, justice and a better life for all.

The policy challenges of transformation, reconstruction and development

- 1.7 The transformation of higher education is part of the broader process of South Africa's political, social and economic transition, which includes political democratisation, economic reconstruction and development, and redistributive social policies aimed at equity. This national agenda is being pursued within a distinctive set of pressures and demands characteristic of the late twentieth century, often typified as globalisation. This term refers to multiple, inter-related changes in social, cultural and economic relations, linked to the widespread impact of the information and communications revolution, the growth of trans-national scholarly and scientific networks, the accelerating integration of the world economy and intense competition among nations for markets.
- 1.8 These economic and technological changes will necessarily have an impact on the national agenda given the interlocking nature of global economic relations. The policy challenge is to ensure that we engage critically and creatively with the global imperatives as we determine our national and regional goals, priorities and responsibilities.
- 1.9 In particular, the South African economy is confronted with the formidable challenge of integrating itself into the competitive arena of international production and finance which has witnessed rapid changes as a result of new communication and information technologies. These technologies, which place a premium on knowledge and skills, leading to the notion of the "knowledge society", have transformed the way in which people work and consume.
- 1.10 Simultaneously, the nation is confronted with the challenge of reconstructing domestic social and economic relations to eradicate and redress the inequitable patterns of ownership, wealth and social and economic practices that were shaped by segregation and apartheid. This has resulted in the emergence of a sophisticated urban

core economy with a relatively well-developed technological infrastructure and an increasingly highly educated skilled labour force, co-existing side-by-side with a peripheral rural and informal urban economy from which the majority of the population, previously denied access to education and training and restricted to unskilled labour, eke out a living.

1.11 Against this backdrop, higher education must provide education and training to develop the skills and innovations necessary for national development and successful participation in the global economy. In addition, higher education has to be internally restructured to face the challenge of globalisation, in particular, the breaking down of national and institutional boundaries which removes the spatial and geographic barriers to access.

1.12 These economic and technological changes create an agenda for the role of higher education in reconstruction and development. This includes:

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

1.13 In summary, the transformation of the higher education system and its institutions requires:

- *Increased and broadened participation.* Successful policy must overcome an historically determined pattern of fragmentation, inequality and inefficiency. It must increase access for black, women, disabled and mature students, and generate new curricula and flexible models of learning and teaching, including modes of delivery, to accommodate a larger and more diverse student population.
- *Responsiveness to societal interests and needs.* Successful policy must restructure the higher education system and its institutions to meet the needs of an increasingly technologically-oriented economy. It must also deliver the requisite research, the highly trained people and the knowledge to equip a developing society with the capacity to address national needs and to participate in a rapidly changing and competitive global context.

- *Cooperation and partnerships in governance.* Successful policy must reconceptualise the relationship between higher education and the state, civil society, and stakeholders, and among institutions. It must also create an enabling institutional environment and culture that is sensitive to and affirms diversity, promotes reconciliation and respect for human life, protects the dignity of individuals from racial and sexual harassment, and rejects all other forms of violent behaviour.

VISION

1.14 The Ministry's vision is of a transformed, democratic, non-racial and non-sexist system of higher education that will:

- promote equity of access and fair chances of success to all who are seeking to realise their potential through higher education, while eradicating all forms of unfair discrimination and advancing redress for past inequalities
- meet, through well-planned and co-ordinated teaching, learning and research programmes, national development needs, including the high-skilled employment needs presented by a growing economy operating in a global environment
- support a democratic ethos and a culture of human rights by educational programmes and practices conducive to critical discourse and creative thinking, cultural tolerance, and a common commitment to a humane, non-racist and non-sexist social order
- contribute to the advancement of all forms of knowledge and scholarship, and in particular address the diverse problems and demands of the local, national, southern African and African contexts, and uphold rigorous standards of academic quality.

1.15 This vision for higher education is located within the government's broader view of a future where all South Africans will enjoy an improved and sustainable quality of life, participate in a growing economy, and share in a democratic culture.

1.16 The Ministry's vision and programme for transformation are based on a set of underlying principles and goals which provide guidelines for assessing the higher education system.

PRINCIPLES

1.17 The Ministry regards 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

1.18 The principle of equity requires fair opportunities both to enter higher education programmes and to succeed in them. Applying the principle of equity implies, on the one hand, a critical identification of existing inequalities which are the product of policies,

structures and practices based on racial, gender, disability and other forms of discrimination or disadvantage, and on the other a programme of transformation with a view to redress. Such transformation involves not only abolishing all existing forms of unjust differentiation, but also measures of empowerment, including financial support to bring about equal opportunity for individuals and institutions.

Democratisation

1.19 The principle of democratisation requires that governance of the system of higher education and of individual institutions should be democratic, representative and participatory and characterised by mutual respect, tolerance and the maintenance of a well-ordered and peaceful community life. Structures and procedures should ensure that those affected by decisions have a say in making them, either directly or through elected representatives. It requires that decision-making processes at the systemic, institutional and departmental levels are transparent, and that those taking and implementing decisions are accountable for the manner in which they perform their duties and use resources.

Development

1.20 The principle of development means that conditions must be created to facilitate the transformation of the higher education system to enable it to contribute to the common good of society through the production, acquisition and application of knowledge, the building of human capacity, and the provision of lifelong learning opportunities.

Quality

1.21 The pursuit of the principle of quality means maintaining and applying academic and educational standards, both in the sense of specific expectations and requirements that should be complied with, and in the sense of ideals of excellence that should be aimed at. These expectations and ideals may differ from context to context, partly depending on the specific purposes pursued. Applying the principle of quality entails evaluating services and products against set standards, with a view to improvement, renewal or progress.

Effectiveness and efficiency

1.22 The principles of effectiveness and efficiency are related though distinct. An effective system or institution functions in such a way that it leads to desired outcomes or achieves desired objectives. An efficient system or institution is one which works well, without unnecessary duplication or waste, and within the bounds of affordability and sustainability. It does things correctly in terms of making optimal use of available means.

Academic freedom

1.23 The principle of academic freedom implies the absence of outside interference, censure or obstacles in the pursuit and practice of academic work. It is a precondition for critical, experimental and creative thought and therefore for the advancement of intellectual inquiry and knowledge. Academic freedom and scientific inquiry are fundamental rights protected by the Constitution.

Institutional autonomy

1.24 The principle of institutional autonomy refers to a high degree of self-regulation and administrative independence with respect to student admissions, curriculum, methods of teaching and assessment, research, establishment of academic regulations and the internal management of resources generated from private and public sources. Such autonomy is a condition of effective self-government. However, there is no moral basis for using the principle of institutional autonomy as a pretext for resisting democratic change or in defence of mismanagement. Institutional autonomy is therefore inextricably linked to the demands of public accountability.

Public accountability

1.25 The principle of public accountability implies that institutions are answerable for their actions and decisions not only to their own governing bodies and the institutional community but also to the broader society. Firstly, it requires that institutions receiving public funds should be able to report how, and how well, money has been spent. Secondly, it requires that institutions should demonstrate the results they achieve with the resources at their disposal. Thirdly, it requires that institutions should demonstrate how they have met national policy goals and priorities.

GOALS

1.26 The principles outlined above establish the steering mechanism for transformation of the higher education system. The goals are key targets and outcomes that should be pursued in implementing the transformation strategy.

1.27 At the national or system level the goals are:

1. To conceptualise, plan, govern and fund higher education in South Africa as a single, co-ordinated system.
2. To provide a full spectrum of advanced educational opportunities for an expanding range of the population irrespective of race, gender, age, creed or class or other forms of discrimination.
3. To diversify the system in terms of the mix of institutional missions and programmes that will be required to meet national and regional needs in social, cultural and economic development.

4. To facilitate horizontal and vertical mobility by developing a framework for higher education qualifications which incorporates adequate routes of articulation, as well as flexible entry and exit points.
5. To improve the quality of teaching and learning throughout the system and, in particular to ensure that curricula are responsive to the national and regional context.
6. To promote the development of a flexible learning system, including distance education and resource-based learning based on open learning principles.
7. To secure and advance high-level research capacity which can ensure both the continuation of self-initiated, open-ended intellectual inquiry, and the sustained application of research activities to technological improvement and social development.
8. To promote and develop social responsibility and awareness amongst students of the role of higher education in social and economic development through community service programmes.
9. To produce graduates with the skills and competencies that build the foundations for lifelong learning, including, critical, analytical, problem-solving and communication skills, as well as the ability to deal with change and diversity, in particular, the tolerance of different views and ideas.
10. To develop capacity-building measures to facilitate a more representative staff component which is sensitive to local, national and regional needs, and is committed to standards and ideals of creative and rigorous academic work.
11. To ensure transparent and cost-effective management aimed at optimal use of available resources.
12. To develop and implement funding mechanisms in line with the principles outlined above and based on need, affordability, sustainability and shared costs, and in support of the goals of the national higher education plan.

1.28 At the institutional level the goals are:

1. To transform and democratise the governance structures of higher education. New structures should provide for co-operative decision-making between separate but functionally interdependent stakeholders who recognise their different identities, interests and freedoms, while pursuing the common goal of a co-ordinated and participative polity and civil society.
2. To encourage interaction through co-operation and partnerships among institutions of higher education and between such institutions and all sectors of the wider society.
3. To promote human resource development through programmes that are responsive to the social, political, economic and cultural needs of the country and which meet the best standards of academic scholarship and professional training.
4. To establish an academic climate characterised by free and open debate, critical questioning of prevailing orthodoxies and experimentation with new ideas.

5. To demonstrate social responsibility of institutions and their commitment to the common good by making available expertise and infrastructure for community service programmes.
 6. To encourage and build an institutional environment and culture based on tolerance and respect.
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CHAPTER 2

STRUCTURE AND GROWTH

A SINGLE COORDINATED SYSTEM

- 2.1 Higher education must be planned, governed and funded as a single national co-ordinated system, in order to overcome the fragmentation, inequality and inefficiency which are the legacy of the past, and successfully address the present and future challenges of reconstruction and development. This is a fundamental point of policy on which all stockholders in the higher education system are agreed.
- 2.2 A key feature of a single co-ordinated system will be the broadening of the social base of the higher education system in terms of race, class, gender and age. The system will cater for a considerably more diverse body of learners than at present. They will become increasingly representative, at all levels of the system and in all programmes, of the racial and gender composition of the South African population. Access for disabled learners will increase. The system will open its doors, in the spirit of lifelong learning, to workers and professionals in pursuit of multiskilling and reskilling, and adult learners whose access to higher education had been thwarted in the past.
- 2.3 The structure and culture of the present system are not well suited to accommodate the varying backgrounds, needs, interests and abilities of the student body of the future, to enable them to realise their potential, and contribute the necessary range and quality of knowledge, insight, skill and capability to the development and reconstruction of our country. The system has no alternative but to re-make itself in order to realise the vision and achieve the goals set out in the previous chapter.
- 2.4 The most significant conceptual change is that the single co-ordinated system will be premised on a programme-based definition of higher education:
 - Higher education comprises all learning programmes leading to qualifications higher than the proposed Further Education and Training Certificate or the current Standard 10 certificate.

2.5 A programme-based approach

- recognises that higher education takes place in a multiplicity of institutions and sites of learning, using a variety of methods, and attracting an increasingly diverse body of learners
- is fully compatible with all the functions and integral components of higher education, which include learning and teaching, scholarship and research, community development and extension services.

2.6 A programme-based higher education system which is planned, governed and funded as a single, coherent, national system will enable many necessary changes to be undertaken.

- It will promote diversification of the access, curriculum and qualification structure, with programmes developed and articulated within the National Qualifications Framework (NQF), encouraging an open and flexible system based on credit accumulation and multiple entry and exit points for learners. This will remove obstacles which unnecessarily limit learners' access to programmes, and enable proper academic recognition to be given for prior learning achieved, thus permitting greater horizontal and vertical mobility by learners in the higher education system. It would also break the grip of the traditional pattern of qualification based on sequential, year-long courses in single disciplines.
- It will promote the development of a flexible learning system, progressively encompassing the entire higher education sector, with a diversity of institutional missions and programme mixes, a range of distant and face-to-face delivery mechanisms and support systems, using appropriate, cost-effective combinations of resource-based learning and teaching technologies.
- It will improve the responsiveness of the higher education system to present and future social and economic needs, including labour market trends and opportunities, the new relations between education and work, and in particular, the curricular and methodological changes that flow from the information revolution, the implications for knowledge production and the types of skills and capabilities required to apply or develop the new technologies.
- It will require a system-wide and institution-based planning process, and a responsive regulatory and funding system, which will enable planned goals and targets to be pursued. The process will ensure that the expansion of the system is responsibly managed and balanced in terms of the demand for access, the need for redress and diversification, the human resource requirements of the society and economy, and the limits of affordability and sustainability.

PLANNING IN A SINGLE CO-ORDINATED SYSTEM

2.7 At present, the size and shape of the higher education system is determined by uncoordinated institutional decisions on student enrolments and programme distribution. This is untenable in the context of fiscal constraints and the need for

- greater responsiveness of the higher education system to the national development agenda.
- 2.8 The development of a planning framework and process at the system-wide and institutional levels is critical to ensuring that the single co-ordinated system can successfully address the legacy of the past, respond to national needs, link labour market opportunities and higher education outcomes, and provide a more predictable and stable funding environment.
- 2.9 The key instruments in the planning process will be the development of an overall national and institutional three-year "rolling plans", indicative plans which facilitate the setting of objectives and implementation targets that can be adjusted, updated and revised annually. A participatory, multi-year planning process will avoid the inherent defects of the old top-down central budgeting system. This is in line with the government's budget development process as reflected in the Medium-Term Expenditure Framework. A three year planning cycle, with data, resource estimates, targets and plans annually updated, enables the planning of growth and change in higher education to be more flexible and responsive to social and economic needs, including market signals (while avoiding the rigidity of old-style "manpower planning"), permits adjustments to be made on the basis of actual performance, and introduces greater predictability and hence stability into the budget process.

National higher education plan

- 2.10 The national higher education plan will establish indicative targets for the size and shape of the system, overall growth and participation rates, and institutional and programme mixes, which advance the vision, principles and policy goals for the system. In particular, attention will focus on:
- establishing new programmes
 - discouraging obsolete programmes
 - building new capacities
 - reshaping the institutional landscape
 - promoting individual and institutional redress and equity goals.
- 2.11 The national plan will provide the framework within which institutional plans will be developed, and will in turn be influenced by regional and institutional concerns and proposals. This inter-active process will require entirely new consultative and negotiating processes, new databases and considerably enhanced modelling and computing capacities, at the national, regional and institutional levels.
- 2.12 The national plan will be developed by the Department of Education after consultation and on the advice of the new statutory advisory body, the Council on Higher Education (CHE).

Institutional plans

- 2.13 The three-year rolling institutional plans, will be developed within the framework of the national plan, according to procedures which will be negotiated between the

Department of Education and the institutions with the advice of the CHE.

2.14 Institutional plans will be expected to include the mission of the institution, proposed programmes, indicative targets for enrolment levels by programme, race and gender equity goals and proposed measures to develop new programmes and human resource development plans and developmental plans for new programmes. They will also include plans for academic development, research development and infrastructural development.

2.15 The Ministry will request the CHE to advise on the criteria to be used to assess the suitability and sustainability of institutional plans. In broad terms, there will have to be a fit between institutional plans and national policy and goals, as well as consistency with institutional missions and capacity.

2.16 In addition, emphasis will be placed on regional reviews of institutional plans as an integral part of the national planning process. This will be intended to promote regional co-ordination and collaboration as part of the national plan enhance articulation of programmes, mobility of learners between institutions, the sharing of resources, including scarce academic and technical staff, library and information facilities. It is also intended to reduce programme duplication and overlap. The Ministry will provide incentives to encourage and facilitate regional planning and co-ordination.

2.17 In cases where there is a mismatch between institutional plans and the national plan, adjustments to institutional plans will be negotiated by the Department of Education with the relevant institutions.

2.18 The approval of institutional plans will lead to the allocation of funded student places to institutions for approved programmes in particular levels and fields of learning. Individual institutions will determine student numbers for particular programmes within these levels and fields. They would also have the option of running new programmes or augmenting state-funded programmes from their own resources.

2.19 Institutional redress will play an important role in the planning process to ensure that inherited inequalities between the historically black and historically white institutions are not intensified, but diminished. This will require the Department of Education and the CHE proactively assisting institutions to develop planning capacity and appropriate institutional missions, as well as ensuring that new programmes are appropriately located within the existing institutional landscape. In this respect, redress funding will be allocated where needed to enable institutions to offer the agreed programme mix in an effective manner.

2.20 The planning process will also take into account that the historically advantaged institutions will require additional resources to deal with the learning needs of disadvantaged students as a result of the changing composition of the student body, with large and increasing numbers of black students enrolled in these institutions.

- 2.21 As each institution in the higher education system clarifies its institutional mission based on appropriate programme choices and combinations, as the body of learners diversifies, as the teaching, research and management profiles become more representative of our people, as quality promotion and quality assurance processes take hold, as the institutional landscape changes, as centres of excellence are recognised and promoted across the system, the distinction between historically advantaged and historically-disadvantaged will become less and less relevant.

EQUITY AND GROWTH

- 2.22 There is a clear case for the expansion of the higher education system if it is to meet the imperatives of equity, redress and development. According to the National Commission on Higher Education (NCHE), the total number of African students at universities and technikons increased by an annual average of 14% between 1986 and 1993, as against 0.4% for whites. However, the overall participation rates, that is the percentage of the 20-24 age cohort enrolled in higher education, which is the international norm adopted by UNESCO, continued to be characterised by gross inequalities. In 1993, the overall participation rate in all post-Standard ten programmes in public and private institutions was about 20 per cent. However, the participation rate for white students was just under 70 per cent, while that for African students was about 12 per cent (NCHE Report, 1996:64). Since 1993, such disparities have significantly diminished, but they are still substantial, especially when analysed on a programme basis, and by level of qualification.
- 2.23 What is not clear, however, is what increases in participation rates for black students, and overall, are possible within the foreseeable future in the context of the government's macro-economic framework and fiscal policies. The Department of Education is developing a planning model that will provide estimates of the cost of expanding the higher education system based on different scenarios, based on a variety of growth estimates and taking into account demographic and labour market indicators. After appropriate evaluation and consultation, the outcome of this study will inform the development of the first national higher education plan.
- 2.24 The Ministry of Education is committed to the planned expansion of the system. In this context, the twin goals of equity and development can be achieved through:
- ensuring that the composition of the student body progressively reflects the demographic realities of the broader society. A major focus of any expansion and equity strategy must be on increasing the participation and success rates of black students in general, and of African, Coloured and women students in particular, especially in programmes and levels in which they are underrepresented.
 - expanding career-oriented programmes at all levels, but in particular, in shorter cycle (one and two year) programmes at certificate and diploma levels, and in science, engineering and technology programmes
 - expanding enrolments in postgraduate programmes at the masters and doctoral levels, to address the high-level skills necessary for social and economic development and to provide for the needs of the academic labour market

- expanding the range of programmes and increasing enrolments based on open learning and distance education, especially for young and older adults, with particular emphasis on women
- 2.25 The focus on science, engineering and technology programmes is necessary to correct present imbalances, in particular, the shortage of trained personnel in these fields. However, this will not diminish the importance of programmes in the social sciences and humanities which contribute to knowledge production, in particular, to the understanding of social and human development, including social transformation. They also play an important role in career-oriented training in a range of fields such as education, law, private and public sector management, social development and the arts. In addition, in the context of the communications and information revolution, the social sciences and humanities, as well as the sciences and technologies, must contribute to the development of the analytic, intellectual, cultural and ethical skills and competencies necessary for participation in the knowledge society.

EQUITY AND REDRESS

- 2.26 The Ministry of Education's commitment to changing the composition of the student body will be effected through the targeted redistribution of the public subsidy to higher education. The relative proportion of public funding used to support academically able but disadvantaged students must be increased.
- 2.27 In addition, in the present context of limited real growth in public expenditure, making progress in achieving equity and redress goals will require institutions, in turn, to mobilise greater private resources as well as to reallocate their operating grants internally. This is already happening at many institutions in response to the recent rapid increases in black student enrolments.
- 2.28 The Ministry will require institutions to develop their own race and gender equity goals and plans for achieving them, using indicative targets for distributing publicly subsidised places rather than firm quotas.
- 2.29 Ensuring equity of access must be complemented by a concern for equity of outcomes. Increased access must not lead to a 'revolving door' syndrome for students, with high failure and drop-out rates. In this respect, the Ministry is committed to ensuring that public funds earmarked for achieving redress and equity must be linked to measurable progress toward improving quality and reducing the high drop-out and repetition rates.
- 2.30 This highlights the need to attend to the articulation gap between the demands of higher education programmes and the preparedness of school leavers for academic study. The effects of Bantu education, the chronic underfunding of black education during the apartheid era, and the effects of repression and resistance on the culture of learning and teaching, have seriously undermined the preparedness of talented black students for higher education.
- 2.31 The government has launched an ambitious programme to transform the school system in the medium to long term, to remedy the previous deficiencies and to improve the quality of school education. To cite examples, the RDP Presidential

Lead Projects, in particular the Primary School Nutrition Programme and the National School Building Programme, attend to the environment of learning, Curriculum 2005 will progressively introduce new outcomes-based learning programmes throughout the school system, and the national Campaign on the Culture of Learning, Teaching and Service seeks to empower communities, learners and educators to reclaim learning institutions for their true purpose, and develop a growing solidarity of all participants in the learning process around the disciplines and joys of learning, teaching and service.

- 2.32 In the short to medium term, in order to improve equity of outcomes, the higher education system is required to respond comprehensively to the articulation gap between learners' school attainment and the intellectual demands of higher education programmes. It will be necessary to accelerate the provision of bridging and access programmes within further education, but the learning deficits are so widespread that systematic changes in higher education programmes (pedagogy, curriculum and the structure of degrees and diplomas) will continue to be needed. The development and provision of student support services, including career guidance, counselling and financial aid services, are other essential requirements. In addition, an enabling environment must be created throughout the system to uproot deep-seated racist and sexist ideologies and practices that inflame relationships, inflict emotional scars and create barriers to successful participation in learning and campus life. Only a multi-faceted approach can provide a sound foundation of knowledge, concepts, academic, social and personal skills, and create the culture of respect, support and challenge on which self-confidence, real learning and enquiry can thrive.
- 2.33 Thus academic development structures and programmes are needed at all higher education institutions to promote the development of teaching skills, curricula, courseware and student support services as a mainstream programme development.
- 2.34 The Ministry will ensure that the new funding formula for higher education responds to such needs for academic development programmes including, where necessary, extended curricula. Such programmes will be given due weight and status as integral elements of a higher education system committed to redress and to improving the quality of learning and teaching.
- 2.35 The Ministry, in co-operation with the CHE, through its Higher Education Quality Committee, will initiate a thorough review of the structure and duration of degree, diploma and certificate programmes, aimed at achieving a more appropriate fit between the school, or (more broadly) further education and training, and higher education systems. The review will necessarily entail an assessment of the broad curriculum in higher education in terms of content, relevance, design and delivery.
- 2.36 The Ministry is highly receptive to the growing interest in community service programmes for students, to harness the social commitment and energy of young people to the needs of the Reconstruction and Development Programme, and as a potential component of the National Student Financial Aid Scheme (NSFAS). The Ministry will consult the CHE and the National Youth Commission on this matter. In principle, the Ministry will

encourage suitable feasibility studies and pilot programmes which explore the potential of community service

- to answer the call of young people for constructive social engagement
- to enhance the Culture of Learning, Teaching and Service in higher education, and
- to relieve some of the financial burden of study at this level.

RESTRUCTURING AND DIVERSIFICATION

Institutional landscape

- 2.37 The Ministry of Education favours an integrated and co-ordinated system of higher education, but not a uniform system. An important task in planning and managing a single national co-ordinated system is to ensure diversity in its organisational form and in the institutional landscape, and offset pressures for homogenisation. Such pressures exist at present, and will intensify as the demand for higher education places escalates, and as the system responds to the acknowledged needs to widen access and diversify the curriculum.
- 2.38 The risk the Ministry wishes to avoid is a laissez-faire proliferation of higher education programmes by an increasing range of providers, without benefit of a planning framework and without adequate safeguards to ensure the quality of provision. This would almost certainly result in the unplanned blurring of institutional roles and functions, and, given resource constraints, a strong tendency to over-provide low-cost programmes in low-priority curriculum areas.
- 2.39 The homogenising pressures, and risks of lowest-common-denominator expansion, can be avoided by
- recognising the broad function and mission of universities, technikons and colleges as three types of institutions offering higher education programmes
 - insisting on a rigorous planning and screening process for the approval of publicly-funded programmes, which must serve the mission and goals of the system, and
 - rigorous quality control of providers.
- 2.40 The three institutional types will not continue to be regarded as discrete sectors with mutually exclusive missions and programme offerings. What the Ministry seeks is an easing of the boundaries between colleges, technikons, and universities. This should facilitate a recognition of the scope for collaboration on the basis of common purposes and mutual interests, and of their distinctive roles.
- 2.41 The precise mix of programmes offered at particular institutions will be determined in the planning process on the basis of the fit between the institution's proposed programme mix and regional and national needs, as well as an assessment of current institutional missions and capacities. Such an assessment will include assessing the

need for an institution to develop or elaborate its mission, and the need for capacity-building strategies to redress the imbalances and distortions inherited from apartheid.

2.42 The programme-based approach to planning and development, by ensuring greater articulation between the different sectors of the higher education system, promoting flexibility and diversity in the range of programmes offered, and fostering co-operation between institutions, will result in structural changes and a reconfiguration of the institutional landscape in the medium to long-term.

2.43 The Ministry of Education encourages the development of regional consortia and partnerships involving a range of higher education institutions. They offer wide scope for collaboration in:

- developing and delivering programmes, including the production of courseware
- reducing the overlap and duplication of programme provision
- refocusing the institutional culture and missions of both Historically White Institutions (HWIs) and Historically Black Institutions (HBIs) within the national system
- helping build academic and administrative capacity where it is needed, especially in HBIs, and
- enhancing responsiveness to regional and national needs, for academic programmes, research, and community service.

2.44 The deeper import of such regional collaboration is that, by transcending the current divides in the system, it is a harbinger of new institutional and organisational forms.

2.45 A vital task, which the Ministry will undertake in collaboration with the CHE, is to assess the optimal number and type of institutions needed to meet the goals of a transformed higher education system. Many institutions either require consolidation or retooling for new missions and goals. Narrow self-interest cannot be allowed to preclude planning which may lead to institutional mergers and closures, and the development of new institutional forms where these are necessary. The new planning and governance systems will enable appropriate investigations to be undertaken, and consultation at national, regional and local levels. The Minister will then be in a position to make informed decisions on these matters in terms of the Higher Education Act.

Colleges

2.46 The Ministry is committed to ensuring that the integration of colleges into the higher education system will allow a range of organisational models to evolve based on regional and national needs, sound educational practice, and efficiency and cost-effectiveness criteria.

2.47 Access to higher education will be improved by a planned expansion of college-based programmes in targeted fields, especially access and foundation programmes. Colleges will also be expected to encourage a wider range of career-oriented education and training that is more relevant to the changing structure of

employment and social and economic needs. The flexibility provided by the NQF will ensure that students choosing college programmes are not precluded from pursuing more advanced study elsewhere, leading to degrees.

- 2.48 At present, higher education programmes are offered by a range of publicly funded post-secondary colleges, including colleges of education, nursing, agriculture, veterinary, forestry, police and military colleges.
- 2.49 In terms of the constitutional provision that tertiary education is an exclusive national competence (Schedule 4 of the Constitution of the Republic of South Africa, 1996, Act No. 108 of 1996), the Ministry is advised that all higher education colleges fall under the jurisdiction of the Ministry of Education. They will be planned, governed and funded as part of the single co-ordinated higher education system.
- 2.50 The colleges listed in 2.48 will in the interim, continue to be administered, controlled and funded by the departments under whose jurisdiction they presently fall. This will ensure stability while their future location is decided. The Ministry has opened discussions with the affected line ministries at both the national and provincial levels, and will institute a comprehensive review of the colleges in consultation with all stakeholders to determine their future role and location.
- 2.51 The Minister of Education will, however, discharge his constitutional responsibility to determine and monitor national policy with regard to all colleges that offer higher education programmes, and in particular to ensure that the necessary accreditation and quality assurance mechanisms are in place.
- 2.52 The colleges of education were previously a provincial responsibility and continue currently to be administered at the provincial level. They are now a national competence and their transfer to the national level will be transacted with the provincial ministries through the mechanism of the Council of Education Ministers (CEM) and the Heads of Education Departments Committee (HEDCOM).
- 2.53 Technical colleges, which primarily offer post-compulsory education programmes constitute part of the core of the proposed further education sector, whose institutional configuration, governance, funding and programme base is presently under investigation by the National Committee on Further Education and Training. They will therefore continue to be administered at the provincial level. However, it is expected that they will continue to offer higher education programmes in targeted fields, including access and bridging or foundation programmes and the existing technician-level higher education programmes (N4-N6). This will be subject to the planning and funding criteria and processes of the integrated higher education system.

Private institutions

- 2.54 There is a relatively well-established private higher education sector in South Africa, offering programmes under franchise from professional institutes or from local and international universities, and in some cases under their own auspices. The programmes offered range from certificates and diplomas in fields such as human resource development, business administration, communications and information technology (in particular, computing), to tuition leading to degrees awarded by

UNISA and universities based abroad. In 1995, according to the NCHE, there were some 150 000 learners enrolled in such programmes (NCHE Report 1996:159).

- 2.55 The Ministry recognises that private provision plays an important role in expanding access to higher education, in particular, in niche areas, through responding to labour market opportunities and student demand. The key challenge in expanding the role of private institutions is to create an environment which neither suffocates educationally sound and sustainable private institutions with state over-regulation, nor allows a plethora of poor quality, unsustainable 'fly by night' operators into the higher education market.
- 2.56 A regulatory framework will be established under the Higher Education Act, to ensure that only private institutions with the necessary infrastructure and resources to provide and sustain quality higher education programmes will be registered. Such programmes will need to be accredited through procedures established by the South African Qualifications Authority (SAQA) as part of the NQF.

Distance education and resource-based learning

- 2.57 Distance education and resource-based learning, based on the principles of open learning, have a crucial role to play in meeting the challenge to expand access, diversify the body of learners, and enhance quality, in a context of resource constraint. They enable learning to take place in different contexts, at a multiplicity of sites, at the learner's own pace, using many media and a variety of learning and teaching approaches.
- 2.58 In addition, the development of resource-based learning throughout the higher education system means that the quality and success of teaching need not be dependent upon staff levels rising in tandem with increased enrolments. In other words, by achieving a national framework of flexible learning, better use can be made of scarce and costly physical resources, scholarship and teaching expertise.
- 2.59 Distance education and resource-based learning are particularly appropriate for learners who are already in employment, or who need to earn in order to meet study costs. Many of these learners will offer prior learning and experience of an unconventional kind, and distance education and resource-based providers are ideally placed to pioneer the evaluation of prior learning and experience for access purposes.
- 2.60 Distance education and resource-based learning are well placed for expansion given the existing infrastructure in these fields, in both the public and private sectors. Clearly, expansion cannot take place without additional investment, especially in learning technology, staff development and student support. However, just as other parts of the higher education system have many deficiencies, the Ministry of Education is concerned about the efficiency, appropriateness and effectiveness of much current distance education provision. There is considerable evidence of self-examination and change among distance education providers, but major transformation requirements are still far from being met in many institutions, and there is still considerable work to do to re-focus institutional missions, modernise courseware, improve student support, and undertake essential efficiency reforms

and cost-effective planning, so that the quality of provision and performance is improved.

- 2.61 The Ministry supports the development of a national network of centres of innovation in course design and development, as this would enable the development and franchising of well-designed, quality and cost-effective learning resources and courses, building on the expertise and experience of top quality scholars and educators in different parts of the country.
- 2.62 In addition, contact and distance education institutions will be encouraged to provide effective and flexible learning environments on a continuum of educational provision, in which educators will be able to select from an increasing range of educational methods and technologies those that are most appropriate to the context within which they operate. This development, together with a regional network of learning centres, will not only broaden access, but also facilitate and enhance quality education, especially in rural areas and less well-endowed urban institutions.
- 2.63 In summary, distance education and resource-based learning approaches have huge potential for integrating lifelong learning into the basic shape and structure of higher education, and increasing access by learners to quality programmes. The Ministry of Education is committed to help harness the new teaching and learning technologies, especially through its technology enhanced learning initiative (TELI).
- 2.64 The viability of creating a coherent national framework for facilitating distance education and resource-based learning throughout the higher education system needs a nationally-sponsored study. The investigation must include a comprehensive audit of existing public and private distance education and resource-based learning provision, in terms of programme quality, cost-efficiency and effectiveness, in order to assess strengths and weaknesses. The outcome should be a clear agenda for improvement, and guidance on future policy, planning and investment. The Ministry will appoint a Task Team to undertake this investigation, in collaboration with the CHE, after appropriate consultation with the distance education and resource-based learning community.

A QUALIFICATIONS FRAMEWORK FOR HIGHER EDUCATION

- 2.65 Separate and parallel qualification structures for universities, technikons and colleges have hindered articulation and transfer between institutions and programmes, both horizontally and vertically. The impermeability of multi-year degree and diploma programmes is a further obstacle to mobility and progression. This is clearly untenable in the light of the new NQF and the programme-based approach to higher education, which is premised on enhancing horizontal and vertical mobility through flexible entry and exit qualifications.
- 2.66 The Ministry endorses the principle that a single qualifications framework should be developed for all higher education qualifications in line with the NQF. In principle, the framework should comprise a ladder set of qualifications at higher education certificate, diploma and degree levels, including intermediate exit qualifications within multi-year qualifications. In addition, all higher education programmes,

national or institutional, should be registered on the NQF, minimally at the exit level of whole qualifications.

- 2.67 The incorporation of academic qualifications within a national framework is not a straightforward matter and, quite properly, it has been the subject of intense debate. SAQA has determined that both unit standards and whole qualifications may be presented for registration on the NQF. This should meet the serious concern among many academic staff that unit standard methodology, and the construction of qualifications from multiple units of learning, are inappropriate foundations for certain academic programmes. The Ministry is confident that other issues of concern to the higher education system in the development of the NQF can be satisfactorily resolved within the relevant SAQA structures.
- 2.68 The establishment of SAQA with the full and active participation of higher education providers was a milestone and puts the evolution of the NQF in South Africa in the forefront of such systems world-wide.

A QUALITY ASSURANCE SYSTEM FOR HIGHER EDUCATION

- 2.69 The primary responsibility for quality assurance rests with higher education institutions. However, there is an important role for an umbrella national authority responsible for quality promotion and assurance throughout the system.

2.70 Accordingly, the Higher Education Act will provide for the co-ordination of quality assurance in higher education through a Higher Education Quality Committee (HEQC) which will be established as a permanent committee of the CHE. The establishment of the HEQC, its registration with SAQA and its modus operandi will be determined by the CHE within the framework and procedural guidelines developed by SAQA..

- 2.71 The functions of the HEQC will include programme accreditation, institutional auditing and quality promotion. It should operate within an agreed framework underpinned by:

- the formulation of criteria and procedures in consultation with higher education institutions
- a formative notion of quality assurance, focused on improvement and development rather than punitive sanction
- a mix of institutional self-evaluation and external independent assessment.

ADMISSION AND SELECTION PROCEDURES

- 2.72 The Ministry is committed to ensuring that the minimum statutory requirement for entry into all higher education programmes will in future be a pass in the proposed Further Education and Training Certificate (FETC). Institutions will continue to have the right to determine entry requirements as appropriate beyond the statutory minimum. However, in exercising this right, they should ensure that selection criteria are sensitive to the educational backgrounds of potential learners, and incorporate the recognition of prior learning which is an essential concept in the elaboration of the NQF.

- 2.73 The NQF provides for different routes--formal schooling, adult basic education and training and recognition of prior learning, or a combination of these--for obtaining the proposed FETC. However, many able, mature applicants for standard-entry and open learning programmes may not have had the chance to fulfil all the requirements for the FETC. The Ministry strongly supports developmental work and pilot projects which will help institutions to develop criteria to assess applicants' prior learning and experience, so that those with clear potential to succeed in higher education can be admitted.
- 2.74 In the period prior to the full operationalisation of the NQF and the introduction of the FETC, the existing matriculation requirements will remain in force, but the policy directions in 2.67 and 2.68 are just as applicable in the interim.
- 2.75 A National Higher Education Information and Admission Service (with regional centres) will be established to facilitate the administration of student applications, satisfy the information needs of applicants, and provide careers guidance, including information on labour market trends.
- 2.76 The Ministry recognises that establishing a national service of this sort will pose considerable problems of design and implementation, and it is therefore unlikely to be in operation in the short term. Accordingly, the Ministry favours regional initiatives that will serve as pilot programmes for a national service. The regional consortia and the CHE will have important roles in advising on their development.

LANGUAGE POLICY

- 2.77 The Constitution gives full recognition to the fact that South Africa is a multilingual country, and multilingualism is a prime objective of national language policy in general and further education, as determined by the Minister in terms of the South African Schools Act, 1996. South Africa's rich language inheritance offers many opportunities and challenges to the higher education sector, but thus far there has been no national policy framework within which the higher education institutions could establish their own institutional language policies and programmes, and which would enable the Ministry of Education to lend support to the achievement of national language goals.
- 2.78 The creation of an authoritative and representative Council on Higher Education will enable the higher education sector to take collective responsibility for investigating the language situation in higher education institutions and offering advice on language policy to the Ministry of Education. This matter is sufficiently urgent that the Ministry will request the Council to advise on the development of a national language framework for higher education as an integral component of the first national higher education plan. In doing so, the Council will be expected to seek the advice and collaboration of the Pan South African Language Board.
- 2.79 The new national framework will be founded on the constitutional language provisions, the vision, mission, principles and goals for higher education described in

chapter 1, and the final report of the Language Plan Task Group (LANGTAG), Towards a National Language Plan for South Africa (1996). The policy framework will need to address the following questions:

- the language or languages of learning (medium or mediums of instruction) in higher education institutions, bearing in mind the fundamental right of persons to receive education in the official language or languages of their choice in public educational institutions, where it is reasonably practicable to do so, and the duty of the state to ensure effective access to and implementation of this right (section 29(2) of the Constitution)
- the language or languages of communication within higher education institutions
- the role of higher education in promoting, and creating conditions for the development of, all South African languages, including the official languages, the Khoi, Nama and San languages, and Sign Language, and in elevating the status and advancing the use of the indigenous languages of our people
- the role of higher education in preparing sufficient language teachers, interpreters, translators and other language practitioners, to serve the needs of our multilingual society
- the role of higher education in promoting the language-based arts.
- the role of higher education in preparing South Africans for effective linguistic communication with the rest of Africa and the world in the fields of culture, diplomacy, science and business.

2.80 Once the national higher education language policy framework is approved, after full consultation, it will be given effect through the three-year rolling national higher education plan and the respective institutional plans, through which the public funding of higher education institutions will be negotiated.

2.81 Higher education institutions will be empowered, in terms of the Higher Education Act, to determine their institutional language policies, subject to the Constitution. In their institutional plans, they will have the opportunity to demonstrate how their institutional language policies will contribute to the achievement of the goals of the national higher education language policy framework.

RESEARCH

2.82 The production, advancement and dissemination of knowledge and the development of high-level human resources are core functions of the higher education system. Research plays a key role in both these functions. It is the principal tool for creating new knowledge. The dissemination of knowledge through teaching and collaboration in research tasks are the principal tools for developing academic and research staff through postgraduate study and training.

2.83 The current capacity, distribution and outcomes of research in the higher education system are cause for concern. In particular:

- there is insufficient articulation between the different elements of the research system, and between the research system and national needs for social, economic, cultural and intellectual reconstruction
- there is insufficient research capacity in higher education, and existing capacity is poorly co-ordinated and not adequately linked to postgraduate studies
- there are stark race and gender imbalances in the demographic composition of researchers in higher education, research councils, and private sector research establishments
- the distribution of research capacity in higher education institutions is skewed: under apartheid, the development of research capacity in black universities was severely limited, and the HDIs have only recently integrated research into their core functions; and a research mandate has only in recent years been included in the institutional mission of technikons.

2.84 At the same time, the nature of the research enterprise has undergone radical change through:

the development of multiple sites of research and knowledge production which are partly or wholly separated from higher education, including industrial laboratories, corporate research units, parastatals, statutory research councils, and NGOs, or through collaboration among these research organisations

- the impact of transdisciplinary and transinstitutional research
- new forms of communication--the information highway--which have accelerated and widened access to data and research findings.

2.85 The accountability processes that flow from the changing nature of the research enterprise are much wider than those associated with traditional research in the higher education system. The outcomes of research are not only measured by traditional tools such as peer-reviews, but also by a broader range of indicators such as national development needs, industrial innovation and community development.

2.86 In South Africa today, therefore, the research system faces two main challenges. It must redress past inequalities and strengthen and diversify research capacity. It must also keep abreast with the emerging global trends, especially, the development of participatory and applications-driven research addressing critical national needs, which requires collaboration between knowledge producers, knowledge interpreters and knowledge managers and implementers.

2.87 This has far-reaching implications for higher education, if it is to maintain and strengthen its pre-eminent role in the national research system and contribute to reconstruction and development. It needs to broaden its capacity to undertake research across the full spectrum, that is, traditional or basic research, application-driven research, strategic research, and participation-based research, in partnership with other stakeholders in the national research system.

2.88 There are encouraging developments in this direction which need to be further enhanced, such as the Technology and Human Resources for Industry Programme (THRIP) which comprises a partnership between higher education institutions,

business, industry and government. THRIP aims to develop the competitiveness of South African industry, small and large, through the development of skills in science, engineering and technology.

- 2.89 The capacity of the national research system to develop innovative projects that cut across the research spectrum is critically dependent on the continued growth and development of traditional or basic research within the higher education system. The importance of traditional or basic research must be underscored, as it is crucial in nurturing a national intellectual culture, generating high-level and discipline-specific human resources, and providing opportunities for keeping in touch with international scientific developments—all of which facilitates innovation. The higher education system is, in fact, an integral component of the National System of Innovation (NSI) described in the White Paper on Science and Technology (1996).
- 2.90 Strengthening the role of higher education in the national research system requires increasing current research capacity, protecting current research resources, finding new sources of research funding, and using all these resources more effectively. In addition, existing research capacity, in particular the nation's centres of research excellence, must be sustained, and essential new centres created, despite the pressures of numerical expansion, diversification and budget stringency.
- 2.91 The Ministry of Education therefore supports the following measures:

- The development of a national research plan which will identify national priorities for research and postgraduate training, processes for the identification and establishment of centres of excellence and niche areas, targets and performance indicators to achieve redress by developing a more representative research community, and incentives for collaboration and partnerships, especially at the regional level, in research and postgraduate training. The National Research and Technology Audit and the Research and Technology Foresight, currently being undertaken by the Department of Arts, Culture, Science and Technology (DACST) and the Industry Cluster Studies currently-being conducted by the Department of Industry (DTI), will provide valuable resources in the development of a national research plan.

For its part, the Ministry will request the CHE, in conjunction with the National Research Foundation (NRF), to provide early advice on the current state and future needs of research infrastructure and capacity, including institutional redress in the higher education system.

- Greater articulation and co-ordination of research activities and funding between different government departments and the Science Councils. In the case of the Department of Education and DACST, such articulation is given concrete expression by recognising the concurrent competencies of the two ministers in the establishment of the proposed NRF and recognising DACST, in the case of non-voting members and the NRF as stakeholders for purposes of nomination to the CHE.

- Increasing the proportion of private and public funding of research and development expenditure that is spent in higher education, through fostering partnerships between the relevant government departments, science councils, higher education institutions, NGOs and the private sector.
- Targeted expansion of the institutional base for research through redress funding for the HDIs, in line with national priorities and the overall development of an expanded and diverse higher education system. Earmarked funds for the development of the research capacity at technikons will also be considered.
- Prioritising access of black and women students to masters, doctoral and postdoctoral programmes, and designing a human resource development plan for higher education.
- The development of appropriate funding mechanisms (described in chapter 4).

CAPACITY BUILDING AND HUMAN RESOURCE DEVELOPMENT

2.92 The successful development of a single co-ordinated system requires more than a commitment to transformation. It is critically dependent on building and enhancing capacity in all spheres—academic, management, governance and infrastructural—to give effect to new policies and to ensure the efficient functioning of the expanded and transformed higher education system. In particular, attention will be paid to:

- management, including the management of change, leadership and strategic planning at institutional and national levels
- co-operative governance of the system at all levels
- development of Student Representative Councils
- development and maintenance of a management information system for higher education
- quality teaching and learning in the context of an expanded and diverse system
- promotion of research
- provision of administrative, infrastructural (including library and information technology) and other support for teaching, learning and research.

2.93 The Ministry recognises that while higher education institutions are primarily responsible for capacity-building, there is a need for national initiatives to facilitate and support institutional and regional capacity-building programmes. The Department of Education, in collaboration with the CHE, will develop a policy framework and funding mechanisms to support and promote institutional, regional and national capacity building programmes. These will be require partnerships between higher education institutions, NGOs, the private sector and international agencies, with support from the Department of Education.

2.94 Human resource development for the higher education system is particularly important. Unlike the changing student profile, especially in undergraduate programmes, the composition of staff in higher education fails to reflect demographic realities. Black people and women are severely underrepresented, especially in senior academic and management positions.

- 2.95 The Ministry recognises that the barriers to access are complex and that the building of human resource capacity poses the dual challenges of equity and development. The problem is broader than the redress of the apartheid legacy. In the case of women, it reflects deeply embedded sexist ideologies that cut across race and class. An enabling environment is needed which overcomes the social constraints that impede the mobility of women. These include inadequate or absent child-care facilities and inadequate maternity benefits.
- 2.96 Institutions will be required to submit human resource development plans, including equity goals, as part of their three-year rolling plans. HRD plans will need to include:
- staff recruitment and promotion policies and practices
 - staff development, including academic development, that is improved qualifications, professional development and career pathing, instructional (teaching) development, management skills, technological reskilling, and appropriate organisational environment and support
 - remuneration and conditions of service, taking into account the increasing competition from the public and private sectors for well-qualified black people, and women
 - reward systems, including sabbaticals, conference attendance, academic contact visits, and
 - the transformation of institutional cultures to support diversity.
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CHAPTER 3

GOVERNANCE

TRANSFORMATION

- 3.1 The transformation of the structures, values and culture of governance is a necessity, not an option, for South African higher education. Higher education institutions are vital participants in the massive changes which our society is undergoing, and in the intellectual, economic and cultural challenges of the new world order. For the first time in their history, our higher education institutions have the opportunity to achieve their full potential, but they will not do so until their system of governance reflects and strengthens the values and practices of our new democracy. Furthermore, wholly transformed governance arrangements are needed to chart and steer the development of a single, integrated national system of higher education. The transformation of governance in the national system and its institutions is therefore a fundamental policy commitment of the Ministry of Education.

A MODEL OF GOVERNANCE

- 3.2 Governance arrangements reflect values about the distribution and exercise of authority, responsibility and accountability. The Ministry is well aware that governance in higher education institutions continues to be characterised by struggles for control, lack of consensus and even conflict over differing interpretations of higher education transformation. Among employers, past students, parents, and other members of the wider community, many different views and expectations about higher education abound. Among those currently involved directly in the process of higher education--in particular, students, academic staff, administrative staff, service staff, and institutional managers--there are often competing views and priorities which give rise to tensions and sometimes to turmoil.
- 3.3 Good governance must be based on a recognition of the existence of such different interests and the inevitability of contestation among them, and must therefore create structures and encourage processes which enable differences to be negotiated in participative and transparent ways. Successful negotiation and co-operative practice depend on the parties reaching agreement about the mission of the institution and their joint responsibilities toward it.
- 3.4 Both local and international experience confirm the importance of governments working co-operatively with institutions of civil society in a spirit of partnership and mutual dependence. The challenges of modern societies cannot be met by either party acting alone. Thus our model of governance must be interactive.
- 3.5 At the same time, our democratically elected government has a mandate from its electorate and is responsible to Parliament for ensuring that the mandate is fulfilled. Ministers have a duty to provide leadership. When all the appropriate investigations and consultations have been completed, a Minister must decide, and must take responsibility for the consequences of the decision.
- 3.6 In this spirit, recognising the need to transcend the adversarial relations between state and civil society arising from the apartheid era, the Ministry of Education adopts a model of co-operative governance for higher education in South Africa based on the principle of autonomous institutions working co-operatively with a proactive government and in a range of partnerships.
- 3.7 Co-operative governance assumes a proactive, guiding and constructive role for government. It also assumes a co-operative relationship between the state and higher education institutions. One implication of this is, for example, that institutional autonomy is to be exercised in tandem with public accountability. Another is that the Ministry's oversight role does not involve responsibility for the micro-management of institutions. A third implication is that the Ministry will undertake its role in a transparent manner.
- 3.8 The Ministry will drive the transformation of the higher education system through policies and strategies that are guided by this view of the role of the government and its relationship to institutions of higher education.
- 3.9 The White Paper on Education and Training of 1995 affirmed the Ministry's commitment to uphold 'both the tradition and the legal basis of autonomous

governance' of higher education institutions. The Ministry reaffirms its commitment to academic freedom and institutional autonomy within the framework of public accountability as fundamental tenets of higher education and key conditions for a vibrant system.

GOVERNANCE AT SYSTEM LEVEL

3.10 To give effect to the transformation of higher education in the spirit of co-operative governance, the Ministry will enhance the capacity of the Higher Education Branch of the Department of Education, establish a Council on Higher Education (CHE), and enable reform of the governing structures of higher education institutions. These measures will provide opportunities for organised constituencies to express and negotiate their concerns, and will permit the government and the representative governance structures of the higher education sector to plan and transact the transformation and development of the system in an orderly way.

Legislative framework

3.11 The legislative framework of higher education will be established by the Higher Education Act, 1997, which establishes the legal basis of a single, national higher education system on the basis of the rights and freedoms of our democratic Constitution. The Higher Education Act replaces the Universities Act, 1995 (Act No. 61 of 1955), the Tertiary Education Act, 1988 (Act No. 66 of 1988), and the Technikons Act, 1993 (Act No. 125 of 1993). However, the Bill leaves intact the private university acts, which represent a legacy of the colonial and Commonwealth tradition of university governance.

3.12 In the view of the Ministry of Education, the continued existence of private university acts does not enhance the achievement of an integrated higher education system. In fact, it is anomalous, since neither technikons nor colleges will be governed in terms of private acts, nor has there been any suggestion that private acts should become the pattern of institutional governance for such institutions. The universities alone have private acts, and such acts may be amended by Parliament only at the instance of the respective university council. The process is cumbersome and, in a time of rapid institutional transformation, it may also be retrogressive.

3.13 It may be thought by some that the repeal of private university acts would constitute an assault on institutional autonomy. In the Ministry's view, this is not so, any more than the absence of private technikon or college acts presently constitute an assault on their institutional liberties. Institutional autonomy, for all higher education institutions, will be guaranteed by the Higher Education Act, within the context of public accountability, as discussed in this document. The Act is a framing measure, drawn in broad terms. It will provide that each institution is governed in terms of its own institutional statutes, where its distinct character and pattern of governance will be spelled out.

3.14 The Ministry of Education will request the Council on Higher Education to investigate and consult upon this matter and provide advice on the desirability or otherwise of

perpetuating private university acts, in the absence of such private acts for technikons and colleges.

The Council on Higher Education (CHE)

3.15 The Council on Higher Education will be a major statutory body established to provide independent, strategic advice to the Minister of Education on matters relating to the transformation and development of higher education in South Africa, and to manage quality assurance and quality promotion in the higher education sector.

3.16 The CHE will be supported by its own professional secretariat, headed by the Executive Officer, and will control its own operating budget.

3.17 The chairperson and most members of the CHE will be appointed by the Minister after a process of public nomination. The membership, taken as a whole, must be as representative as possible of the main stakeholder interests in the higher education system, and must be capable of providing advice of high quality to the Minister based on thorough research and consultation. The following criteria will therefore guide the Minister's appointment of the membership of the CHE:

- balance of stakeholder interests and expertise
- racial and gender representivity
- deep knowledge and understanding of higher education
- understanding of the role of higher education in reconstruction and development
- known and attested commitment to the interests of higher education.

3.18 The Minister will appoint the chairperson and members of the CHE in terms of the provisions of the Higher Education Act, which will specify the number of members to be appointed and their terms of office. Although most members will have been nominated by stakeholder bodies, they will be appointed to the CHE in their personal capacities, and will be expected to apply their minds to the interests of the whole sector, as well as their own particular field of experience. The Minister will consider nominations made by at least the following organisations or bodies:

- national organisations representing students
- national bodies representing academic staff
- national bodies representing non-academic staff
- national bodies representing university principals
- national bodies representing technikon principals
- national bodies representing principals of colleges of education
- national bodies representing other higher education colleges
- national bodies representing private institution principals
- national bodies representing the Further Education sector
- national bodies representing organised business
- national bodies representing organised labour

- the National Research Foundation
- the South African Qualifications Authority

3.19 The Minister may also appoint other members of the CHE, including persons external to the higher education sector from among persons nominated by the public, on account of their particular expertise.

3.20 Additional members may be co-opted by the CHE on account of their experience and expertise.

3.21 Non-voting members may be nominated by

- the Director-General: Education
- the provincial heads of education
- the Director-General: Arts, Culture, Science and Technology
- the Director-General: Labour.

3.22 An Executive Committee chaired by the Chairperson will guide the affairs of the CHE and direct the work of the Executive Officer.

3.23 The CHE will be required to provide relevant, timely and independent advice on matters concerning the condition and development of higher education. The Minister will receive advice on any other matters that the CHE deems necessary to advise about and specific matters referred by the Minister from time to time. The Ministry will be looking to the Council to play a leading strategic role in the envisaged transformation of the system, consistent with the vision and goals set out in Chapter 1.

3.24 The Minister will consult the CHE in the context of the principles and goals outlined in chapter one, on the planning of the national higher education system, major changes to the policy framework affecting the development of the higher education system, such as policy regarding public and private financing and provision, the level and distribution of public subsidies to higher education, forms of student financial assistance, language policy and policy affecting the development of the higher education sub-sectors.

3.25 In particular, the CHE will be responsible for advising the Minister on:

- a. the mission, needs and priorities, scale and shape of the higher education system, including the national and institutional plans, taking into account national economic and social requirements, student demand, demography, regional and national human resource needs, teaching and learning technologies and the availability of public and private resources
- b. the ways in which new learning, teaching and communication technologies should be harnessed in order to achieve improved integration, equity, cost-effectiveness and quality in the national higher education system
- c. the research capacity and performance of the system, including postgraduate training and research infrastructure and ways of developing research strength in historically disadvantaged institutions a language policy, especially the development of languages as academic languages at higher education institutions
- d. the governance of higher education institutions and the higher education system a the policies, principles and criteria that should govern the allocation of public funds

among higher education providers

- e. the policies and mechanisms for student support and academic development throughout the system and in particular for assisting educationally disadvantaged students to begin and complete programmes
- f. the policies and regulatory frameworks that should govern the private provision of higher education
- g. the promotion of the quality of the system and quality improvement among individual providers and programmes including the principles and procedures that should govern their accreditation in terms of the South African Qualifications Authority Act, 1995 (No. 58 of 1995)
- h. the qualifications structure of higher education, as part of the National Qualifications Framework at the extent and adequacy of cross-sectoral linkages, including articulation of programmes between schooling, further education and training, and higher education, procedures for the recognition of prior learning, and the portability of credits and qualifications in terms of the National Qualifications Framework
- i. the performance of the system, having regard to available performance indicators, to identify where efficiency gains have been made and need to be made, a regional collaboration among providers, and other options for rationalisation of the system, and where appropriate, the merger or closure of institutions, the re-classification of institutions and the establishment of institutions
- j. progress being made towards achieving national equity and human resource development goals and measures to overcome impediments to achieving transformation goals.

3.26 The CHE will be required to prepare annually a report to the Minister on the overall condition of the higher education system. This report will be tabled by the Minister in Parliament and made publicly available at an annual consultative conference of higher education stakeholders which will be convened by the Minister and the CHE in order to discuss the health of the system or of a particular sector of higher education.

3.27 The Minister will be obliged to take the advice of the CHE into account and, except in exceptional circumstances, provide reasons in writing if he or she does not accept its advice.

3.28 The CHE will be responsible for quality assurance and promotion in higher education, through its permanent committee, the Higher Education Quality Committee (HEQC), which will seek delegated authority from SAQA for this purpose. (See paragraphs 2.69-2.71 above.) The CHE will make the arrangements it deems appropriate to operate within the policy framework and procedural guidelines established by SAQA.

National Task Team on Transformation (NTTT)

3.29 The Ministry has established a National Task Team on Transformation (NTTT) in accordance with a resolution of the July 1996 Indaba summit on higher education. The Ministry has also adopted the National Framework Agreement on Transformation (NFAT), prepared by the NTTT on the basis of a draft referred to it

by the Summit, which it has recommended to institutions. Codes of conduct and conflict resolution mechanisms are recommended in the NFAT which the Ministry is committed to refining and strengthening in order to aid institutions in the process of transformation. The activities and programmes of the NTTT will be managed by the Department of Education. The NTTT will play a key role in convening the annual consultative stakeholders' summit, as well as in advising the Minister on the state of transformation in the institutions.

The Higher Education Branch of the Department of Education

3.30 The Ministry has established a new Higher Education Branch of the Department of Education, headed by a Deputy Director-General. The relevant functions of the Department regarding policy development and planning, resource allocation and financing, information collection and analysis, and monitoring and reporting on higher education, have been consolidated in the Branch, supported by other branches of the Department of Education. The Branch will augment its resources by contracting out as well as by the use of secondments from the higher education sector.

3.31 With regard to the objectives of transformation, the Branch in collaboration with other branches in the Department has the following main responsibilities:

advising the Minister on policy formulation and national planning for the higher education system, in the light of or in addition to advice already provided by the CHE advising the Minister on the state of institutional transformation specifying information to be provided by higher education institutions and the collection, recording, processing and analysis of such information, including the development of comparative performance indicators negotiating and allocating general and specific-purpose funds to institutions on the basis of institutional plans, having regard to the planned programme goals and profiles of student enrolments by fields and levels of study allocating earmarked funds for individual and institutional redress and to promote performance improvement developing the National Student Financial Aid Scheme (NSFAS) enforcing the criteria and procedures for the registration of private providers of higher education in terms of the Higher Education Act providing information services, including those required in support of the functions of the CHE commissioning research which will assist the Branch in the execution of its functions leasing with and providing assistance to organised higher education staff, student and management constituencies.

3.32 The Higher Education Branch and the Council on Higher Education will co-operate in undertaking their respective functions, sharing information and jointly participating in meetings and on projects as appropriate.

The Higher Education Branch will also be actively involved in inter-departmental activities that work to improve the coherence of the government's overall approach to social and economic development, including arts, culture, science and technology, research and development, labour supply and skills formation, health and social justice.

INSTITUTIONAL GOVERNANCE

- 3.33 It is the responsibility of higher education institutions to manage their own affairs. The Ministry has no responsibility or wish to micro-manage institutions. Nor is it desirable for the Ministry to be too prescriptive in the regulatory frameworks it establishes. Diversity and flexibility are important aspects of institutional responses to varying needs and circumstances. It is only in extreme circumstance that the Minister of Education, as the responsible representative of the elected government of the country, would consider intervening in order to assist to restore good order and legitimate governance and management in an institutions as contemplated in par. 3.45.

Councils

- 3.34 Councils are the highest decision-making bodies of public institutions. They are responsible for the good order and governance of institutions and for their mission, financial policy, performance, quality and reputation. To sustain public confidence, councils should include a majority of at least 60 per cent of members external to the institution. Councils ought not to be involved in the day-to-day management of institutions as that is the responsibility of their executive management, led by the vice-chancellor, rector or principal, who in turn is accountable to the council.
- 3.35 The transformation of councils through a participative democratic process involving all relevant and recognised stakeholders is a critical first step in creating strategies for the transformation of institutions. Transformed councils that enjoy the support and respect of all stakeholders will then be able to play an effective role in establishing the necessary policies and structures for the transformation of institutions.

Forums

- 3.36 The Ministry encourages the meaningful involvement of students and staff in all permanent governance structures of the institutions including councils. Their participation in the Broad Transformation Forum is not a substitute for membership and responsible participation in other formal governance structures of the institutions.
- 3.37 Nevertheless, the Ministry continues to support strongly the establishment and operation of Broad Transformation Forums. At their best, they have emerged as structures in and through which institutional stakeholders can unite to determine collectively the agenda, timetable and strategies of transformation, to prepare codes of conduct, agree and implement dispute resolution procedures, and draft new legislation. Where BTFs have not been established, have fallen into disuse, or have been disregarded, councils of institutions are enjoined to establish them and give them due status and recognition, within the framework of transformation policy described in this White Paper. The composition, functions and procedures of such forums would vary according to the needs and circumstances of institutions. The

lifespan of structures set up specifically for the transformation process may be limited, and may differ from institution to institution. Institutions may decide whether or not to give formal recognition to them in their private Acts or statutes.

3.38 However, the Ministry recognises the need for the establishment of permanent institutional forums whose functions could include the following:

- interpreting the new national policy framework
- identifying and agreeing on problem areas to be addressed
- involvement in selecting candidates for top management positions
- setting the change agenda, including the race and gender equity plans (see below)
- improving the institutional culture (see below)
- providing a forum for mediating interests and settling disputes
- participating in reforming governance structures
- developing and negotiating a code of conduct
- monitoring and assessing change (See NCHE, 1996:205.)

3.39 The Higher Education Act will provide for the establishment of a representative institutional forum as a committee of the Council of each higher education institution.

Student Services Council

3.40 "Student support services in higher education institutions provide personal, career, curriculum and educational guidance and counselling, life skills and sports programmes, health and financial aid services, and student housing facilities" (NCHE, 1996:205). The Ministry enjoins each institution to establish a Student Services Council with a policy advisory role in student services. This council should be democratically constituted but chaired by a senior executive member of the institution.

Institutional culture

3.41 The Ministry is seriously concerned by evidence of institutionalised forms of racism and sexism as well as the incidence of violent behaviour on many campuses of higher education institutions. It is essential to promote the development of institutional cultures which will embody values and facilitate behaviour aimed at peaceful assembly, reconciliation, respect for difference and the promotion of the common good.

3.42 The Ministry proposes that all institutions of higher education should develop mechanisms which will:

- create a secure and safe campus environment that discourages harassment or any other hostile behaviour directed towards persons or groups on any grounds whatsoever, but particularly on grounds of age, colour, creed, disability, gender, marital status, national origin, race, language, or sexual orientation

- set standards of expected behaviour for the entire campus community, including but not limited to administrators, faculty, staff, students, security personnel and contractors
- promote a campus environment that is sensitive to racial and cultural diversity, through extracurricular activities that expose students to cultures and traditions other than their own, and scholarly activities that work towards this goal.
- assign competent personnel to monitor progress in the above mentioned areas.

3.43 The Ministry is committed to an institutional culture in which there is gender equity. Institutions have a responsibility for creating an equitable and supportive climate for women students and staff. Priority areas affecting women's participation include women's representation in senior academic and administrative positions and institutional governance structures, child care facilities at institutions, affirmative action for women's advancement, and mechanisms to draw women students into post-graduate studies and into science and technology. Institutional information systems should incorporate mechanisms for monitoring and collecting data on women students and staff.

3.44 The Ministry deplores the many incidents of rape and sexual harassment on higher education campuses. Institutions are enjoined to develop and disseminate institutional policies prohibiting sexual harassment of students and employees, together with the establishment of reporting and grievance procedures incorporating victim support and counselling, confidentiality, protection of complainants from retaliation, as well as mechanisms for ensuring due process and protection for respondents.

Independent assessor

3.45 Consistent with the Ministry's responsibility to ensure accountability for the use of public resources and having regard to the reputation of the higher education system, the Higher Education Act will confer a legal right upon the Minister to seek an independent assessment and advice on the condition of a higher education institution when serious circumstances arise in an institution or institutions which warrant investigation in terms of the procedures prescribed by the Act. The CHE will be asked to prepare a panel of independent assessors from which the Minister will choose.

3.46 The right to send an assessor to an institution may be exercised where the council of an institution so requests, or in exceptional circumstances that involve financial or other maladministration of a serious nature, or which are seriously detrimental to the effective functioning of the institution, where the council has failed to resolve the situation, and such an appointment is in the best interests of higher education in an open and democratic society. An Independent Assessor will report to the Minister within 30 days of appointment, with findings and recommendations. The report will be made available to the council of the institution.

CHAPTER 4

FUNDING

EXPANSION, COSTS AND RESOURCES

- 4.1 The transformation of the higher education system to meet growth, equity and quality objectives will involve additional costs. The obvious question is: how are these costs to be met when significant real increases in public expenditure on higher education are unlikely to greatly exceed the real rate of economic growth?
- 4.2 There is substantial scope to improve the internal efficiency of the higher education system, even if it takes some time to generate significant savings. A concerted effort needs to be made to implement system-wide and institutional reforms that reduce wasteful expenditure, improve efficiency and enhance quality. Such measures include, for example:
- Reducing unit costs through an open and transparent allocation of public funds based on normative costs and performance criteria.
 - Reducing duplication and overlap in institutional, programme and service provision.
 - Broadening the use of high quality but less labour-intensive teaching and learning strategies, including distance education and resource-based learning.
 - Improving student throughput and completion rates, aided by effective academic development and student support systems, and more focused or targeted public funding measures.
- 4.3 South Africa's present level of public expenditure on higher education is rather high by international standards and has been growing at a somewhat faster real rate than in many other countries. It is unlikely that the recent trend of public expenditure growth rates in this sector can be sustained over the next decade, given other pressing social needs. However, given projected national economic growth estimates, there would be significant real expenditure increases if current levels of public and private spending on higher education as a proportion of GDP were maintained. The Ministry therefore believes that there is a good case for maintaining the current levels of public expenditure on higher education as a proportion of GDP. This is necessary if the goals of expansion, transformation and redress are to be met.
- 4.4 While it is possible to achieve rapid enrolment growth without extra expenditure, the penalties for doing so are harsh. Experience both internationally and at home shows that expansion without new investment results in overcrowded facilities, low morale of academic staff, poor quality programmes, a fall in research output and quality, and, ultimately, a loss of confidence by students, employers and funders in the devalued products of higher education.
- 4.5 Despite national fiscal constraints, and the government's commitment to fiscal discipline, the central role of higher education in developing high-level skills and

competencies essential for social and economic development requires sustained financial investment in the higher education system.

- 4.6 Substantial additional costs are associated with greater student participation, redress of current inequities, and the restructuring of existing programmes. These costs will have to be met from a strategic mix of funding sources. These will include system and institutional efficiencies, a greater volume of private contributions, and increased, redistributed and tightly targeted public sector outlays.
- 4.7 Fee-free higher education for students is not an affordable or sustainable option for South Africa. The knowledge and skills acquired in the course of achieving higher education qualifications generate significant lifetime private benefits for successful students as well as long-range social benefits for the public at large. Although higher education institutions admit an increasingly large proportion of students from poor families, students from middle-class and wealthy families still tend to be disproportionately well-represented. For all these reasons, the costs of higher education should be shared equitably between public and private beneficiaries.
- 4.8 It is important, however, that the direct cost to students should be proportionate to their ability to pay. As the profile of student enrolment becomes increasingly representative of the general population, the proportion of eligible students from poor families is rising steeply. Financial need should not be an insuperable barrier to access and success in higher education. A realistic fee structure must therefore go hand-in-hand with a sustainable programme of student financial assistance. This is discussed in more detail at para. 4.38 below.
- 4.9 The financing of higher education must increase equity in access and outcomes, improve quality and efficiency, and link higher education activities and national and regional development needs more purposefully. Diversity of mission, programmes and clientele are essential features of a thriving, integrated system. The funding framework will therefore support purposeful and equitable variety in the system.
- 4.10 The Ministry will adopt goal-oriented incentives as an integral part of the public funding framework. That is, explicit incentives will be used to steer the development of the higher education system in accordance with national goals.
- 4.11 This will be complemented by harnessing more private resources for higher education through, for example, various forms of employer contributions, bequests and donations, better management of institutional investments, contracts and consultancies, and an expansion of properly-regulated private higher education programmes and institutions.

GOAL-ORIENTED, PERFORMANCE-RELATED PUBLIC FUNDING

4.12 The new public funding framework must be equitable, performance-related, widely acceptable within the sector, and promote excellence. Over the next several years, advised by the Council on Higher Education, the Ministry will establish such a framework with:

- an appropriate balance between institutional autonomy and public accountability, and
- procedures that are simple, transparent, flexible and fair, and which are capable of

being managed within the available and foreseeable capability of the Department of Education and the institutional councils, management's and academic leadership.

4.13 The Ministry does not expect to depart significantly from the main approach and essential funding principles established in this chapter, but they are open to improvement and modification on the basis of experience and advice, including advice from the CHE.

4.14 Goal-oriented public funding of higher education institutions is intended to result in:

- more equitable student access
- improved quality of teaching and research
- increased student progression and graduation rates, and
- greater responsiveness to social and economic needs.

4.15 The specification of performance criteria will need to be done in consultation with the CHE. Performance-related funding must be introduced incrementally, in order to allow institutions to adjust their information and monitoring systems.

4.16 The new public funding framework will have two main elements:

1. a simplified mechanism for allocating general purpose, block funding to institutions on a rolling triennial basis, and
2. the provision of earmarked funds to achieve specific purposes, including targeted redress of inequities in access and capacity, student financial assistance, staff development, curriculum development, research development, libraries and information technology, capital works and equipment, and planned improvements in operational efficiency.

4.17 The subsidy formulae for universities and technikons currently determine on average about 85% of the public funding of these institutions. The remainder comprises funds for capital works, loan servicing and other ad hoc property-related charges, and the allocation of student financial aid. The Ministry is conscious of the need for institutions to obtain an adequate level of core funding to sustain their operations. However, it is evident that the current 15% share of funds provided through non-formula funding is too low to address urgent needs and to lay the foundations of a transformed system.

4.18 The Ministry therefore intends to increase the proportion of available funds for earmarked funding for each of the budget years 1998, 1999 and 2000. For instance, the level of funding provided for student financial assistance will need to rise. A targeted programme of institutional redress is also required. Several institutions have a backlog of buildings, overcrowded residences, poorly resourced libraries, inadequate information technology and other similarly quantifiable deficiencies. A redress programme could well operate on the basis of need for a defined period of time, and should take into account both need and institutional performance improvement plans and outcomes, so that internal inefficiencies are progressively reduced. Earmarked funds are also needed to drive an improvement in student completions, research

capacity building, postgraduate development, programme-related capital development, and the building of planning capacity, and regional collaboration.

4.19 The new framework will not, in itself, increase or decrease the total public funding to the sector, but will distribute it differently. With or without the new framework in place, it will still be necessary for the CHE and the Ministry to make the case for additional funding for the sector in line with GDP growth.

A NEW PUBLIC FUNDING FORMULA

- 4.20 The new public higher education funding framework will require goal-oriented planning at the institutional as well as at system levels. The Ministry will progressively devise and introduce a new formula for block operating grants to institutions to support their teaching and related recurrent costs. These block grants will be payable to institutions on the basis of their planned (full-time equivalent or FTE) enrolments in different fields and levels of study which will be related to their institutional missions and plans. As described in par 2.14 above, institutional plans will include the institutional mission, indicate enrolment targets by programme, race and gender equity goals and measures, human resource development plans, and plans for new programme development, academic development, research development and infrastructure development.
- 4.21 In the context of its broader public administration reforms, in particular its medium-term economic framework and new three-year budget planning, the Ministry intends to start publishing, as soon as the necessary systems are in place within the Department of Education and higher education institutions, three-year forward estimates of budget outlays by programme each fiscal year. The Minister of Education, accordingly, will issue an annual statement in the budget context that provides the estimated level of block grant funding to each higher education institution for each of the next three academic years.
- 4.22 Triennial plans of institutions will report all their planned FTE enrolments, whether supported by public subsidy or not. The plans will show the fields and levels of study in which institutions plan to expand or contract their enrolments according to their missions and goals and in response to changing demands.
- 4.23 Funding for an agreed number of publicly subsidised FTE enrolments will be announced three years in advance in order to give institutions a predictable basis for planning. The Ministry of Education will negotiate the number of publicly subsidised FTE places with institutions each year in respect of the following three years of the rolling triennium. Negotiations will take account of publicly available student demand estimates and long-range labour market signals on the one hand, and institutional capacity and performance on the other hand.
- 4.24 Institutions will be able to enrol students in addition to the agreed number of publicly-subsidised FTE student places, but they must be able to do so from funds raised by themselves, not from the government. Failure to meet FTE enrolment planning targets will make an institution liable to forfeit equivalent funds by way of reductions to its operating grants according to a publicly known procedure.

- 4.25 To maximise the flexibility of institutions under the new arrangements, institutions should determine their own fees for subsidised student places as well as for student places outside the publicly funded quota. The basis on which fee levels are established must be transparent and subject to proper scrutiny within the institution, and must satisfy reasonable equity criteria. However, the Ministry would expect institutions whose tuition fees were well above the nationally-determined price per subsidised student place, to explain why students should be expected to pay premium rates, and to describe how poor students would be assisted to pay.
- 4.26 Government funding rates per FTE student place will vary according to the broad field of study and level of study, but will be standard for all institutions. They will be based on index-linked estimates of the relative costs of teaching. Prices per student place at research levels of learning (typically masters and doctoral studies), will include the costs of research supervision, infrastructure and consumables integral to research, but not project costs per se. In addition research projects will continue to be funded separately by the National Research Foundation on a competitive peer review basis. and earmarked funding for research capacity development would also be available.
- 4.27 The establishment of a 'funding grid' of rand values against broad fields of study and levels of study requires analysis of the indicative average costs of such teaching and related activities, by broad fields and levels of study. These must have academic integrity and represent real cost differences. Prices can then be set for each cell in the grid. These matters, and the relationship between fields and levels of study, the NQF and South African Post Secondary Education (SAPSE) categories, will be referred to the Council on Higher Education for early advice.
- 4.28 The Ministry recognises the considerable cost differentials involved in teaching students from inadequate educational backgrounds and teaching students from advantaged backgrounds. The Ministry accepts that academic development, foundation and extended programmes should be incorporated in the funding formula.
- 4.29 The Ministry has considered the possible inclusion of student completions in the funding grid. While there is a need to improve institutional efficiency and effectiveness, the inclusion of student completions is inappropriate at this time given the different apartheid legacies of existing institutions and the need to adopt a forward-looking approach. In view of the wide variations in need and capacity, as well as the policy objective of encouraging diversity and quality improvement within the system, the Ministry will base its negotiations with institutions on their academic plans and on the progress they are making towards achieving the performance improvement targets outlined in their strategic plans. Student progression and graduation rates will be monitored in that context. Regard will also be given to the assessments of quality provided by the Council on Higher Education.
- 4.30 The Ministry adopts a policy of concentration and selectivity in the funding of research and research training. Negotiations on the number of places to be publicly funded at the research masters and doctoral levels will be informed by performance indicators of research capacity, competitive success and output by faculty. Within the funding grid, the Ministry will support and assist the expansion of postgraduate training in those parts of institutions (historically advantaged and historically

disadvantaged alike) where there is demonstrable strength. (Earmarked funding will be used to support the development of new institutional centres for postgraduate training and research where there is clear evidence of potential for success.)

4.31 The Ministry is persuaded that the funding formula should include provision for the recognition of measurable research output, since such recognition has proven incentive value in stimulating high quality research and publications, and in enabling institutions to monitor and compare the research performance of their scholars both internally (across fields) and externally (across institutions). The Ministry will seek advice from the CHE and the National Research Foundation with a view to revising the criteria for research recognition, in the light of international experience and taking into account the specific conditions of our own research and publications environment. Such a review is long overdue and will be widely welcomed.

4.32 In preparing for the introduction of the new funding formula, it is necessary to assess and explain the extent of disparities in programme costs among institutions. Preliminary analysis in the Department indicates that such disparities are widespread and, in many cases, extreme. Further work will involve notionally applying the new funding norms against the present profile of student enrolments and identifying aggregate variations among institutions.

Where redistribution is necessary to level the field for future formula-based allocation of block grants, a combination of measures, including adjustments to the number of publicly funded places and/or top-up allocations to relatively underfunded institutions, will be applied over the medium term, after the appropriate consultation with institutions and in the CHE.

EARMARKED FUNDING

4.33 Funding formulae cannot take account of all the differences between institutions without becoming too complex and unwieldy. Nor do funding formulae lend themselves to accommodating particular needs, especially if such needs are expected to fluctuate or diminish over time. The mechanism of earmarked funding, however, readily lends itself to meeting specific and often short-term needs, and is therefore the second major component of the proposed new public funding framework

Earmarked funds for institutional redress

4.34 There will be a programme of targeted funding to redress inequities and deficiencies experienced in particular by historically disadvantaged institutions. The function of the redress programme is to target specific needs related to access and capacity which derive from the educational deficits and other forms of deliberate disadvantage suffered by learners or institutions as a result of past government policies. As a mechanism to aid the development of institutions or programmes, it will in time become superseded by the goal-oriented subsidy process and by other categories of earmarked funding.

- 4.35 Institutions applying for funding under the redress programme will be required to document the specific needs for which the funds will provide relief or a remedy, and the planned outcomes. For each project for which funding is sought, institutions will need to indicate the measures they will use to evaluate their success in applying the funds to achieve stated outcomes.
- 4.36 Funds provided through this programme will be available to support improvements in the following areas: management capacity development, staff development, academic development, curriculum development, library holdings, student amenities, buildings and the development of institutional capacity.
- 4.37 The Ministry will conduct an audit of those institutions eligible for funding through this programme in the 1998-2000 triennium. The audit will be undertaken to establish benchmarks for comparing the relative disadvantages of institutions and reference points for monitoring progress in ameliorating deficiencies. Institutions will be required to produce:
- a financial statement of revenues, expenditures, assets and liabilities
 - a profile of staff by post levels and qualifications, age, race and gender
 - a profile of student enrolments by race, gender and educational background.

The audit will produce:

- a financial projection and risk assessment
 - an inventory of buildings, residences and equipment (including information technology) by age, condition, utilisation and maintenance and replacement costs.
- 4.38 The allocation of earmarked funds for redress purposes will be based on the needs identified in the institutional audits, the performance improvement plans of institutions and the following criteria:
- a viable business plan, including actions to diversify institutional sources of income
 - realistic plans and demonstrable indicators of progress towards rationalising and diversifying program offerings and student enrolments; and
 - definite steps towards improvements in internal efficiency.

Earmarked funds for student financial aid

- 4.39 The Ministry of Education is fully committed to a flexible, responsive and sustainable National Student Financial Aid Scheme (NSFAS), seen as part of the total funding policy for the higher education sector. The Ministry endorses an approach to higher education funding based on a sharing of costs between private beneficiaries (students) and the State, representing the public interest. At the same time the Ministry is aware that there are severe limits to the capacity of many students and their families to pay, particularly first generation students from poor families. To ensure that capable students are not excluded from access to higher education

- because of poverty, it is essential to have in place a well-functioning, comprehensive student financial aid scheme.
- 4.40 An adequate and effective programme of financial assistance for students is an essential condition of a transformed, equitable higher education system, operating on businesslike principles in a stable financial environment. Student financial aid is not an optional extra for a viable modern higher education system, but an integral part of the public and private investment in the nation's high-level human resource development. It must therefore be planned and managed professionally, and with an appropriate mechanism for accountability. Neither is student financial aid a substitute for responsible self-help by students, but a valid form of supplementary support, especially for the majority of young South Africans whose family support-systems can bear only a fraction of the cost of current higher education programmes. A sustainable system must be based on transparent and defensible criteria for eligibility, built-in incentives to encourage disciplined effort, rewards for academic success, and sanctions against failure or default.
- 4.41 The Department of Education has benefited by the extensive analysis and consultation on this matter which was undertaken by the National Commission on Higher Education, the advice of the group of eminent business and academic leaders appointed by the Minister to assist him to mobilise domestic and external support, and reports on current provision and future options.
- 4.42 It is now clear beyond doubt that the idea of a single, capitalised public endowment or trust fund, whose proceeds would support annual disbursements and which would be replenished (or even become self-supporting) through loan repayments, is not viable and cannot be supported by the government. The initial capitalisation required would be far too great for the state to contemplate. Actuarial estimates indicate that such a fund, if established, could not be self-sustaining but would require massive periodic re-capitalisation if insolvency were to be avoided. That option is therefore off the table.
- 4.43 The Department of Education, in co-operation with the Department of Finance, is now focusing its attention on the alternative of a public fund similar in concept to the present scheme, based on planned annual budgetary allocations made in terms of the three-year rolling budget framework. The scale of the annual allocations needs to be computed on the basis of far better data and projections of student needs than are currently available, and must be linked to the total goal-generated public subsidy to higher education institutions. The Department is currently working on such projections.
- 4.44 The financial aid offices of higher education institutions, rather than a central funding agency, are best placed to identify those students who most need assistance and will benefit most from it, in terms of publicly known and reasonably uniform criteria. Allocations to institutions by the funding agency from the earmarked fund for student financial aid will need to be based on the equity profiles of institutional enrolments and have regard to their student progression and graduation rates.
- 4.45 A significant proportion of student financial assistance currently flows into institutional revenues as fee payments. The inter-relationship of the scale of student

assistance per institution, the level of fee tariffs, the financial health and (in some cases) the viability and social stability of an institution, argue for an increase in the volume of student financial assistance from public funds.

- 4.46 The Ministry of Education bears no liability for debts contracted between students and their institutions or funding agencies, but accepts that a study of the scope and dynamic of student debt in relation to institutional debt and liquidity has become necessary. The Department of Education will therefore build this element into its investigation of student finance.
- 4.47 Annual budgetary allocations are only one element in a complex equation, and the Ministry accepts that a multifaceted approach to student financial aid is essential. A sustainable long-term scheme will include loans and bursaries, as the present scheme does, and may well include scholarships to reward academic excellence, and student and community self-reliance programmes, such as work-study and community service. The Ministry is actively supporting an investigation into these alternatives.
- 4.48 The most suitable mechanism of collecting loan repayments is still under examination. Not enough is known about the current scale of privately-funded sponsorships and bursary programmes, both domestic and from external sources, or of student loans financed by the commercial banking sector for those who can provide the required security and are prepared to contemplate the terms of repayment. With a well-considered advocacy and marketing approach, the scale of private sector investment in higher education students through loans, bursaries and sponsorships might well increase substantially.
- 4.49 The Department's studies, which will underpin the policies discussed in this section, will be completed before the end of 1997. Until an amended or a substitute scheme is in place, the Ministry will continue to operate the National Student Financial Aid Scheme (NSFAS), and has reappointed the Tertiary Education Fund of South Africa (TEFSA) to administer the allocation of loans and bursaries from government and donor funds. TEFSA operates under a Board which is extensively representative of stakeholder interests, and has achieved significant expertise in the administration of student assistance, as well as in institutional capacity-building. Without pre-empting the shape of the new system, the Department expects to draw on the experience of the TEFSA Board and its professional staff in developing its proposals for the future NSFAS.

Earmarked funds for other specific purposes

- 4.50 In addition to funding for redress and student financial aid, there is a need to encourage innovation and adaptation, and to build capacity in new areas. Institutions applying for funds through this programme will be required to relate their submissions to their strategic plans.
- 4.51 For the triennium 1998-2000, funding through this programme will focus on six specific purposes: improving student completions, research capability development, postgraduate training, capital works, development in planning capacity, and regional collaboration.

- 4.52 *Improving student completions.* Incentives to encourage institutional success in improving the progression and graduation of students from disadvantaged backgrounds will be provided on a performance basis through earmarked funding. This would include successful academic development programmes, including staff development and curriculum development.
- 4.53 *Research capability development.* The development of research capability in South Africa's higher education institutions is of fundamental importance to national self-reliance. However, good scholarship (which should characterise all higher education academic staff) is not the same as research competence (which a minority of academic staff in the sector as a whole will either need or possess). While individual excellence in teaching is often assisted by and associated with an active research portfolio, it is not dependent on research experience. This is particularly, but not exclusively the case in the higher education colleges, where good teaching is particularly important but research is not a common part of the college mission.
- 4.54 In view of the national strategic importance of research, and in order to ensure that the relatively scarce funds available for the development of research capability are well targeted, public funds for participation in research, whether basic or applied, should not be spread across all faculties or schools in all institutions but should rather be concentrated in those areas where there is demonstrable research capacity or potential, in both HDIs and HWIs. To give practical effect to this view, the Ministry will provide earmarked funds:
- to preserve and strengthen existing areas of research excellence
 - to develop new areas and centres of research excellence
 - to develop research links with industry and to facilitate industry-related collaborative research,
 - to facilitate inter-institutional research collaboration,
 - to facilitate collaborative research and technology development with Science, Engineering and Technology Institutions (SETIs), as defined in the White Paper on Science and Technology.
- 4.55 The Ministry recognises the need for the co-ordination of research activities and their funding in higher education. The White Paper on Science and Technology, in particular, the National System of Innovation, provides a framework for the development of a national research plan. The Ministry of Education will collaborate with the Ministry of Arts, Culture, Science and Technology and the proposed National Research Foundation (NRF) in this endeavour.
- 4.56 *Postgraduate training.* The Government recognises the urgent need to increase the supply of postgraduates to the academic and general labour markets. The attrition and ageing of well-qualified academic staff and the emigration of graduate labour compels attention. Current low levels of enrolment in and graduation from doctoral programmes are insufficient to satisfy future requirements. Gross race and gender inequities are obvious at the postgraduate level. Mobility of students nationally and internationally to undertake postgraduate studies is an important means of adding to the skills base. While the new block funding mechanism will support student places at research-based

postgraduate levels of study in fields where institutions have demonstrable research training capacity, institutions will be able to apply for earmarked funds to enhance the infrastructure necessary to support expanded postgraduate training.

- 4.57 Capital works. The expansion and diversification envisaged for the higher education sector requires new capital works projects. The existing capital stock needs to be adequately managed, efficiently utilised and maintained. Funding for capital works will be contingent on institutions developing a capital management plan which describes the total floor area, its condition and usage, its replacement value, and planned expenditures for maintenance and refurbishment and cash flow requirements for new construction projects.
- 4.58 Planning capacity development. The new funding framework establishes new requirements for planning and information collection, analysis and reporting. These demand more sophisticated information systems for institutional and system management, and substantial skill in planning. An element of the earmarked funding programme will therefore be directed to assisting institutions to improve their technical planning capacity and management information systems, including full participation in the new higher education management information system which will progressively replace SAPSE.
- 4.59 Regional collaboration. Incentive funding will be available on a selective basis to support the costs involved in regional collaboration among institutions which aim to consolidate, merge, share or otherwise collectively improve the efficient use of their facilities and resources for learning, teaching, research or community service.

ACCOUNTABILITY

- 4.60 The basis for improving public accountability in higher education is making public funding for institutions conditional on their Councils providing strategic plans and reporting their performance against their goals. The plans will provide a framework for continuous improvement within institutions and a reference point for quality assurance.
- 4.61 The provision of goal-oriented public funding is intended to result in more equitable student access, improved teaching, learning and research, increased student progression and graduation rates, and greater responsiveness to social and economic needs. Public funding will be conditional on institutions developing plans for their future development and providing evidence of the progress they are making to realise these goals. Institutions will be required to prepare a comprehensive strategic plan comprising:
- a distinctive mission statement
 - an academic development plan (including three-year forward projections of student enrolments and graduations by field and level of study)
 - an equity plan
 - a capital management plan, and
 - a performance improvement plan.

4.62 The plans will contain measurable goals and target dates supported by key performance indicators. The Ministry, in consultation with the Council on Higher Education, will publish guidelines for the development of and reporting on these plans. Copies of the plans will be held by the institution, the Ministry and the Council on Higher Education.

ANNEXURE E

EXPENDITURE ON TERTIARY EDUCATION

Source : The Task Force on Higher Education

TABLE E. EXPENDITURES ON TERTIARY EDUCATION

Country	Public Current Spending on Higher Education as % of Total Public Current Spending on Education		Tertiary Expenditure per Student as % of GNP per Capita	
	1985 or closest yr.	1995 or LYA**	1980	1995
Afghanistan		10.3		36
Albania				
Algeria				
Angola				
Argentina	19.2	21.0	10	17
Australia	13.2		19	
Austria	30.5	29.8	30	30
Bahamas	16.6	21.4	38	32
Bangladesh		7.8		13
Barbados, The				
Belize				
Bhutan				
Bolivia	10.4	7.9	47	30
Bosnia and Herzegovina	22.3			
Brazil	14.0	11.0	33	20
Bulgaria	16.7	20.3	35	35
Burkina Faso	2.3	7.4		
Burundi		18.8		240
Cambodia	21.4	28.7		67
Cameroon	17.2		665	
Canada			0	
Cape Verde	12.4	15.8		21
Central African Republic	30.7		3,371	
Chad	19.8	15.6		941
China				
Cote d'Ivoire	27.4		363	
Croatia	28.7	34.7*	28	36
Cuba	18.8	24.0		
Cyprus		9.0		234
Czech Republic	20.3*	18.1		21
Denmark	21.8	15.4		81
Dominican Republic	21.2	18.5	41	29
Dominican Republic, Dem. Rep. of	28.7	17.2	749	
Dominican Republic, Rep. of	34.4	28.0		224
Dominican Republic	41.4	30.9	76	44
Dominican Republic	17.1	16.4		
Dominican Republic	12.9	15.4	29	
Dominican Republic	4.2	6.5		
Dominican Republic		14.7		41
Dominican Republic	21.9	22.8		55
Dominican Republic				
Dominican Republic	20.8	9.0		5
Dominican Republic	17.8	18.1	22	34
Dominican Republic		35.4		108
Dominican Republic		7.2	103	8
Dominican Republic		17.6		40

TABLE E, continued

Country	Public Current Spending on Higher Education as % of Total Public Current Spending on Education		Tertiary Expenditure per Student as % of GNP per Capita	
	1985 or closest yr.	1995 or LYA**	1980	1995
Ethiopia	14.4	14.9		592
Fiji				
Finland	18.7	28.8	28	46
France	12.9	17.0	22	24
French Polynesia				
Gabon				
Gambia, The	13.8	10.9		235
Georgia		18.5		28
Germany		22.6		35
Ghana	12.5			
Greece	20.1	22.6*	27	29
Guam				
Guatemala		15.5		33
Guinea	23.5	17.2		498
Guinea-Bissau				
Guyana	17.8	7.7		
Haiti	10.8		65	
Honduras	21.3	16.6	72	59
Hong Kong, China	25.1	37.1		52
Hungary	16.9	18.3	75	73
Iceland		20.8		
India	15.3	13.7		78
Indonesia				
Iran, Islamic Rep. of	10.7	22.9		62
Iraq	25.0*			
Ireland	17.7	22.6	39	38
Israel	18.9	18.2	52	31
Italy	10.2	15.0		23
Jamaica	19.4	23.1	167	193
Japan		12.1	21	16
Jordan	34.1	34.9		111
Kazakhstan		12.5		20
Kenya	12.4	13.7	808	540
Korea, Rep. of	10.9	9.5*	7	6
Kuwait	16.7	29.9	28	
Kyrgyz Republic	8.8	8.3		49
Lao PDR		4.0		55
Latvia	10.3	12.2*		45
Lebanon				
Lesotho	22.3	17.0	642	399
Liberia				
Libya				
Lithuania		18.0		51
Luxembourg	3.3	4.8		
Macao				
Macedonia, FYR		22.2		
Madagascar	27.2			
Malawi	23.3	20.5	1,133	979
Malaysia	14.6	16.8	149	77
Maldives				

TABLE E, continued

Country	Public Current Spending on Higher Education as % of Total Public Current Spending on Education		Tertiary Expenditure per Student as % of GNP per Capita	
	1985 or closest yr.	1995 or LYA**	1980	1995
Albania	13.4	17.7		522
Algeria	8.2	12.7		
Antigua and Barbuda	17.5	20.1	163	157
Argentina		17.2		61
Australia				
Austria	17.3	17.9		74
Azerbaijan	17.1	16.5		74
Bahamas				
Bangladesh		11.7		21
Barbados		9.4		86
Belize	33.4	17.3	272	156
Belgium	26.4	29.9	54	44
Bermuda				
Bhutan	28.3	29.4	33	39
Bolivia	23.2		86	
Bosnia and Herzegovina			1,493	
Brazil			345	
Brunei Darussalam	13.5	27.1	29	50
Bulgaria	15.3	5.8		
Burkina Faso	18.2	13.2	236	
Burundi	20.4	24.8	29	47
Cambodia				
Cameroon	23.8	19.7		52
Canada			5	
Cape Verde	22.5			
Cayman Islands	18.2	14.6*		42
Czechia	12.7	16.4		25
Dominican Republic				
Dominica				
Ecuador		15.9*		40
Egypt				
El Salvador	11.5			
Equatorial Guinea				
Eritrea				
Estonia				
Ethiopia				
Fiji	27.1	17.8		63
Ghana	19.0	23.2		
Guam				
Guatemala				
Guinea				
Guinea-Bissau				
Hong Kong	15.1			
Honduras	27.9	34.8	31	32
Hungary				
Iceland		16.7		39
India		16.9		38
Indonesia				
Israel				
Italy				
Jamaica				
Japan	24.8	15.4		59
Jordan				
Kazakhstan		15.1		18
Kenya	9.8	12.2	62	64
Kiribati	2.1	11.6		
Korea, Republic of	4.5	12.5		
Kuwait				
Kyrgyzstan				
Laos				
Latvia				
Lebanon				
Lesotho				
Liberia				
Lithuania				
Luxembourg				
Madagascar				
Malawi				
Malaysia				
Maldives				
Mali				
Malta				
Martinique				
Mauritania				
Mauritius				
Mexico				
Moldova				
Mongolia				
Montenegro				
Morocco				
Mozambique				
Namibia				
Nepal				
Netherlands				
Netherlands Antilles				
New Zealand				
Nicaragua				
Niger				
Nigeria				
North Macedonia				
North Korea				
Oman				
Pakistan				
Palestine				
Panama				
Papua New Guinea				
Paraguay				
Peru				
Philippines				
Poland				
Portugal				
Porto Rico				
Romania				
Russian Federation				
Rwanda				
Samoa				
Saudi Arabia				
Senegal				
Seychelles				
Sierra Leone				
Singapore				
Slovak Republic				
Slovenia				
Solomon Islands				
Somalia				
South Africa				
Spain				
Sri Lanka				
St. Kitts and Nevis				
St. Lucia				
St. Vincent and the Grenadines				

TABLE E, *continued*

Country	Public Current Spending on Higher Education as % of Total Public Current Spending on Education		Tertiary Expenditure per Student as % of GNP per Capita	
	1985 or closest yr.	1995 or LYA**	1980	1995
Sudan			441	
Suriname	7.7	7.6		
Swaziland	21.0	27.5		
Sweden	13.1	27.7*	26	76
Switzerland	18.1	19.7	56	
Syrian Arab Republic	33.6*	25.9*		
Tajikistan	7.7	10.3	30	39
Tanzania	12.7		2,195	
Thailand	13.2	19.4		25
Togo	22.8	32.9	892	521
Trinidad and Tobago	8.9	13.3	55	77
Tunisia	18.2	18.8	194	89
Turkey	23.9	34.7	108	51
Turkmenistan				
Uganda	13.2			
Ukraine	13.5	10.7	39	20
United Arab Emirates				
United Kingdom	19.8	23.7*	80	44
United States	25.1	25.2*	48	23
Uruguay	22.4	27.0		28
Uzbekistan		9.7		28
Vanuatu		6.4		
Venezuela			57	
Vietnam				
Yemen, Rep. of				
Yugoslavia, FR (Serb./Mont.)		21.8		
Zambia	18.3	23.2	762	160
Zimbabwe	9.0	17.3*	260	234
World	18.8	16.0	163	77
Low and middle income	18.5	15.7	259	91
Sub-Saharan Africa	19.1	16.7	802	422
East Asia and Pacific	21.4	15.4	149	76
South Asia	15.3	13.1	143	74
Europe and Central Asia	17.3	18.3	67	36
Latin America and the Caribbean	19.5	18.1	19	43
Middle East and N. Africa	15.9	25.5	194	82
High income	20.3	18.2	39	26

*Data include capital expenditures. These data are not included in regional and world aggregations.

**LYA Last year available.

Source: Columns 1 and 2: UNESCO 1998a; columns 3 and 4: World Bank 1998.

ANNEXURE F

APPRAISING INVESTMENT DECISIONS

Source : Higher Education Funding Council of England)

Appraising investment decisions

March 1999

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Foreword

The Council has a responsibility to ensure that public money is spent effectively. Conducting effective option appraisals is one of the ways of ensuring good value for money. We have expertise in our own finance, audit and estates functions, and we have experience of good practice in the higher education sector and in the private sector from our involvement with public/private partnership projects. This guide aims to share this experience, and assist institutions and their advisers in structuring their analysis of investment decisions. It has been developed in consultation with the sector.

Taking informed investment decisions is a key facet of the governance and management of higher education institutions. The outcome may have significant impact strategically and financially, both in the short term and far into the future. The decision process must be well-structured, and the information presented in a clear and logical manner.

The principles of option and investment appraisal are not new. However, much of the published advice is directed at decisions that are purely commercial. Guidance for the public sector is useful, but not all of it can be applied directly to the higher education sector.

This guide is designed to provide advice specific to the higher education sector, to help institutions structure their investment decisions. It sets out a framework for the appraisal process which institutions can use for all kinds of decision making. The details may vary but the same principles apply across a whole range of decisions. They are as valid for a decision about setting up a new course as for one about property options, and institutions can tailor the process to suit their individual circumstances.

HEFCE guides are designed to cover a wide range of institutions. We are of course aware that a number of universities and colleges will have arrangements which fully match these guidelines, but we hope that institutions will find value in the systematic approach presented here.

Introduction

1. Appraisal is a technique for obtaining value for money by systematic comparison of alternative investment options. All major investment decisions should be supported by a thorough option appraisal. This guide sets out the basis of the HEFCE's policy on appraisals. It also reflects the recommendations of the National Audit Office's study of the management of building projects at English higher education institutions.
2. Decisions must be justified: the reasons for them must be analysed and supported by evidence. To obtain maximum value from the appraisal process it is necessary to understand the assumptions on which the decisions are based, and also the circumstances which might lead to a different outcome. Consequently the assessment of risk and uncertainty will be as important as the base estimates for each option, and this should be reflected in the appraisal.

Using this guide

3. The process of option appraisal can involve people at all levels in an institution. It is not confined to those in the finance and estates functions, since option appraisal can and should be applied to many decisions besides those involving property. Some will already be familiar with the appraisal process, and look for specific guidance on only a few points. Others will be new to the techniques and will seek more detailed guidance.
4. We have not attempted to provide a basic textbook on investment appraisal. In setting out this guide we have used existing Treasury advice as our starting point. 'The Green Book - Appraisal and Evaluation in Central Government - Treasury Guidance' (H M Treasury, 1997) sets out the principles to be followed. The Green Book is the main authority and this guidance should be read in conjunction with it.
5. We have included a detailed case study in this guide, which is designed to illustrate the key points. However, while institutions may find this useful as a model of the process, they should beware of following it slavishly, or believing that it only applies to property issues. We have included an outline scenario in a second case study, as an example of another decision which could be analysed using similar techniques. Institutions must decide for themselves what level of detail is needed for their particular case, judged on the significance of the decision they are taking. Different investment decisions may require consideration of a wide range of factors, depending on the nature of the decision, and so it is not possible to generate a single all-embracing model to cover all eventualities. Therefore it would not be appropriate to provide a pro forma, or even to specify a threshold value at which any particular procedure becomes necessary.

When is appraisal required?

6. Our Financial Memorandum with institutions requires them to demonstrate the value for money to be generated by a project when this is financed from borrowing and where the level of borrowing requires prior written Council consent. An appraisal is also required when we invite applications for grant support for specific projects.
7. However, we would also expect appraisal techniques to be applied to:
 - a. Any investment involving HEFCE funds, or Exchequer-funded assets, even if the proposal does not require consultation or consent.
 - b. Options in an estate strategy.
 - c. Any other investment proposal, even if it is funded entirely from an institution's private sources.
8. There is a tendency to think of option appraisal just as a means of deciding between different ways of acquiring a physical asset. Property is a costly and often inflexible resource, and a properly conducted appraisal for property is an essential element in a business case. Examples of property decisions which require appraisal include:
 - a. Relocation, or consolidation of an institution's activities onto a single site.
 - b. Moving from one building to another, new construction, acquiring additional accommodation, or retaining accommodation that would otherwise be released.
 - c. Reducing the amount of accommodation required, leading to options of complete or partial disposal.
 - d. Whether to improve or refurbish existing buildings, perhaps as an alternative to building or acquiring new property.
 - e. Whether to buy or lease.
 - f. Replacement of existing equipment, or the supply of new equipment.
9. However, institutions can and should follow the same principles in making any investment decision, such as setting up a new course, or acquiring a service or an item of intellectual property. Options need not involve purchase of assets or services outside the institution: the techniques are just as valid for choosing between options that place demands on internal resources such as staff time. Examples include:
 - a. Providing services, which may involve contracting out.
 - b. Providing contracted-out services, which may also involve providing the associated assets.
 - c. Possible changes to teaching methods, such as increased use of information technology.
 - d. Investing in a joint venture or a subsidiary business venture.
 - e. Developing the academic portfolio.
 - f. Developing quality of service.
 - g. Improving the competence of staff.
 - h. Early retirement schemes.
 - i. Possible partnerships or mergers.
 - j. Research projects.
 - k. Bidding for new business contracts.

How detailed should the appraisal be?

10. All appraisals should follow the same principles, but institutions will have to make their own decisions about how much detail is appropriate. The effort that goes into the appraisal should be judged against the significance of the investment decision. Obviously the size of the institution will be a factor - what is a key decision for a small institution might be seen as relatively insignificant by a large one - so it is not possible to lay down any hard and fast rules. It would not be sensible to suggest there is any threshold where institutions should start to use a particular appraisal technique, or to set out a pro forma to be completed for projects above a certain size. The structure of each appraisal will be very similar, but the decision may be one to be taken by the governing body, or it may be delegated. Ultimately it is for each institution to decide

how much detail it requires to inform its decisions, but in any case managers should use the appraisal process as a proactive tool to inform their decisions and recommendations.

Basic principles

11. The Green Book is written for Government departments, and institutions will need to modify its approach; particularly in the scope of their appraisals, the way they treat taxation, and the discount rates used in their appraisals. This guide is intended to supplement the Green Book by explaining those differences, and expanding on some other points that are known to give difficulty. It includes at Annex A a checklist of the main questions to be asked in formulating a good appraisal, and at Annex B a case study illustrating the points set out below. Annex C provides an outline of another scenario to illustrate where appraisal techniques might be applied in a situation where property is not the main issue.
12. Appraisal and evaluation are often taken to be synonymous. However, the Green Book makes the distinction between appraisal carried out to inform a decision before it is made, and evaluation carried out subsequently to review the decision. This guide follows the same convention.

Basic steps of appraisal

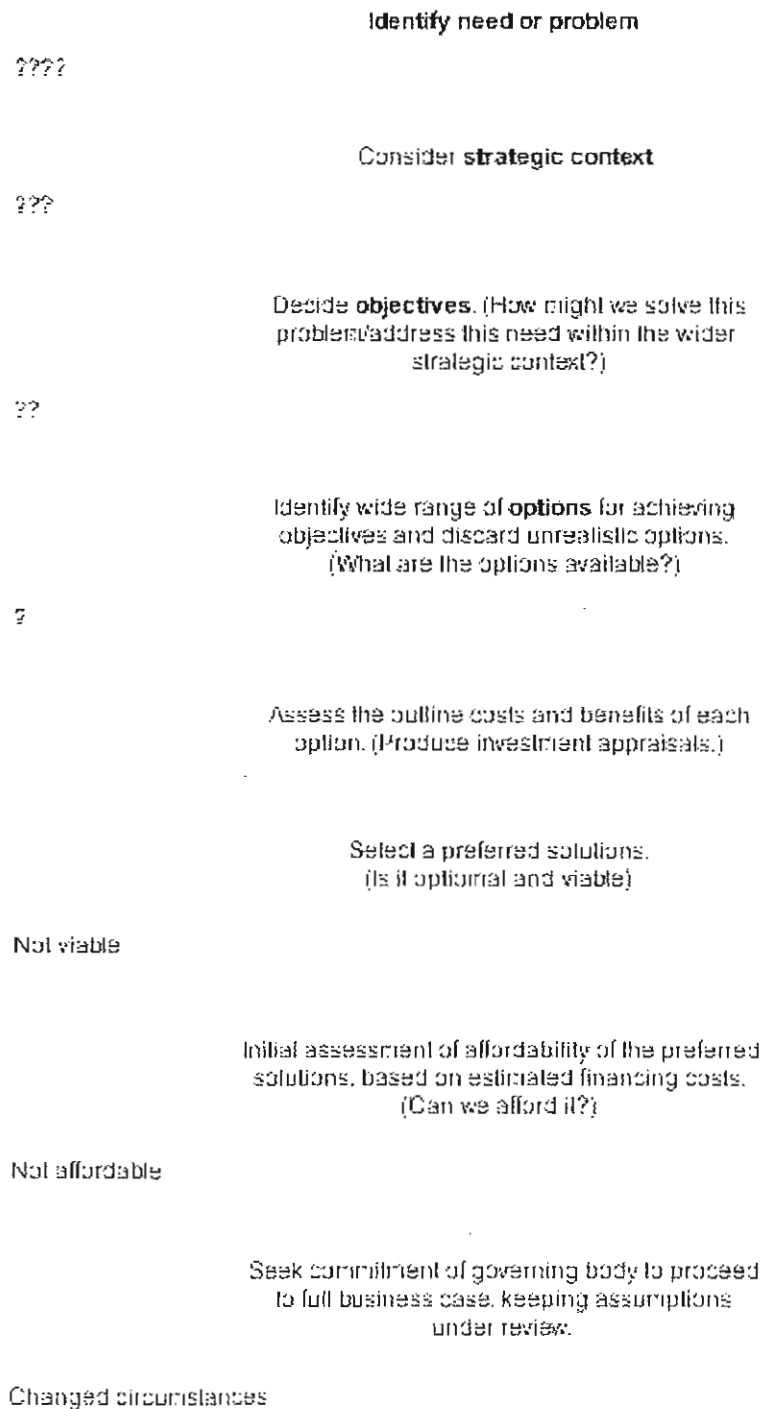
13. The Green Book describes the following steps in the appraisal process:
 - a. Define the objectives.
 - b. Consider the options.
 - c. Identify, quantify and where possible value the costs, benefits, risks and uncertainties associated with each option.
 - d. Analyse the information.
 - e. Present the results.
14. However, to be useful to higher education institutions, these steps alone will not be sufficient. The Green Book's approach is one of deciding between competing options, when affordability is often a matter of deciding spending priorities between a number of different projects. By contrast, an institution will need to decide what it can afford within a limited budget, where the project may be a significant factor in terms of overall spending, as well as deciding between competing priorities.
15. For institutions, appraisal needs to be seen in the context of developing a business case. This is an iterative process. It should be carried out at an early stage when broad strategic options are being considered, and refined when a detailed solution is being chosen. Institutions may have to re-appraise their options as new information comes to light, or if major developments affect the assumptions underlying the appraisal. At each stage they may have to go back to the start and revise the initial assumptions.
16. For the purpose of developing this guide, we have assumed that institutions will go through at least two stages: first to produce an outline business case, and then again to refine it into a full one. They might build an outline business case using their own resources, before engaging outside advisers to develop it in more detail. Many of the steps are common to both processes, varying only in the level of detail. This guide therefore describes the steps in developing the outline and full business cases, before providing more detailed advice on some of the requirements of the appraisal process. However, institutions need not follow the process dogmatically. A simple decision could well be taken with both stages combined into a single process. By contrast, a significant project might require further iterations before the institution felt it had completed a sufficiently detailed appraisal to proceed with confidence.
17. A case study of the process is at Annex B. It is designed to show the key features, but should not be taken as a representative full worked example. In particular, in the interests of clarity, it analyses fewer options than might normally be acceptable in a

satisfactory appraisal.

Establishing the outline business case

18. The development of an outline business case is illustrated in Figure 1.

Figure 1 Development of the outline business case



Identify the need or problem

19. At the outset, the institution will have determined that there is a problem to be solved or a need to be satisfied. This must be clearly defined, since it will form the basis of the whole analysis. As the analysis develops, it may call into question whether the problem or need does in fact exist, and as a first step institutions should be sure that their requirements cannot be met from re-allocating existing resources. This will be obvious if the problem is clearly stated in the first place.

Consider the strategic context

20. The starting point for the appraisal should be a statement of its strategic context. This should refer to the aims and objectives of the institution, the strategic plan, the estates strategy, and other relevant policy documents.

Decide objectives

21. The statement of objectives sets a firm boundary to the appraisal. It provides the criteria against which options will be judged, and against which the success of the project will be evaluated. Experience has shown that it is a crucial factor in the subsequent steps of the appraisal. Objectives should not be so narrowly defined as to prevent consideration of a range of options, nor so loosely defined as to generate unnecessary work. And of course they should be consistent with the strategic aims and objectives of the institution. The Green Book, Chapter 2, provides more advice on defining objectives.
22. The objectives should include the scope - a statement of the range of activities which the project will be expected to provide, and the context - the facilities or services needed to carry out these activities. Institutions may find it useful to express their objectives in terms of time, cost and quality requirements, against which they can measure possible solutions. They will also find it useful to prioritise project objectives to help them judge the balance between conflicting requirements. Technical constraints should not be unduly binding. In all cases institutions must guard against over-specification of requirements. Matters such as the standard of the services or facilities provided, their location, whether it is new-build or refurbishment, and procurement methods such as lease or purchase, should all be treated as options rather than objectives wherever possible.

Identify the options

23. It is important, particularly for major expenditure decisions, to consider a wide range of options, even though many may be rejected at an early stage. Rarely will there be no realistic choice of options. Institutions must keep an open mind, and be prepared to 'think the unthinkable'. They will construct a much more convincing case if they can show that they were prepared to be innovative in their search for a solution. Experience indicates that institutions gain considerable value from using a wide-ranging multi-disciplinary team, and involving the end-users in the development of the project from an early stage. They may also need external professional advice to help them identify options: for instance, estates surveyors to identify locations for new facilities, or specialists to advise what information technology solutions might be

feasible.

24. Institutions must include a 'do nothing' option as a baseline, even if it falls short of the operational requirement. It will be the basis for comparing the costs and benefits of all the other options, and for determining the priority to be attached to the proposal.
25. Where a 'do nothing' option is clearly unacceptable, then a 'do minimum' option should be considered. This situation is very rare, but might occur, for instance, if there was a statutory obligation to make safe a derelict building.
26. The appraisal should consider timing changes - such as postponement for various periods, or phased delivery of the project - since the timing of payments will affect the value of the project. It may also be possible to structure the project in different ways, for instance by contracting out some aspects of service delivery.
27. Before proceeding to a first assessment of costs and benefits, some options can be discarded if they are clearly unrealistic. There must be good grounds for rejecting them: the process must not be used to rule out options just because they do not fit with preconceived ideas.

Assess outline costs and benefits

28. Appraisal is concerned with obtaining the best use of resources. Where the costs and benefits of a project will accrue exclusively to the institution, then that is all that needs to be included in the appraisal. However, there may be occasions where a project is financed jointly by the institution and another body. For example, an institution might receive support from a lottery board, for a project intended to bring benefits to the public at large, as well as meeting the needs of the institution. Alternatively, it might consider a joint venture with a commercial organisation. In cases such as these the costs and benefits to the wider community, or to other interested parties, will need to be included in the appraisal. Other external costs and benefits, such as environmental advantages and penalties, should be included where they are relevant to the objectives of the proposal.
29. An appraisal should contain a list of the factors to be considered in each option, even when it is not possible to quantify them, or value them in monetary terms. Appraisals are often primarily concerned to identify the best value option for a particular standard provision, such as teaching accommodation, but even then the benefits may vary. For instance, the quality of accommodation may affect performance - measured by attendance, actual output or staff turnover. Other relevant benefits may include a convenient location, and reducing work on split sites. The appraisal should assess, and where possible quantify and value, all such benefits.

Select a preferred solution

30. At this stage, many of the costs and benefits will be difficult to define and quantify precisely. More detailed advice on how to handle these aspects is given in paragraphs 50-58. The main object is to select a preferred solution that can be tested for affordability, so that the institution can decide whether it has an option to take forward for more detailed analysis. Of course, this more detailed analysis will have to consider competing options as well, since the relative costs and benefits may change when examined more closely. However, those that are clearly non-competitive can be discarded at this stage.
31. The preferred solution must be viable. For instance, there would be no point in continuing to analyse what purported to be the preferred solution if it assumed a building could be provided in an unrealistic and therefore unacceptable timescale.

Initial assessment of affordability

32. At this stage, it is unlikely that the institution will have explored all the procurement options available, or how they might be financed. For a first assessment of affordability, the institution will need to estimate the financing costs to see how they might fit its overall financial strategy. This may indicate that the preferred solution is unaffordable, even though it may appear to give the best value for money. In these circumstances, the institution may have to consider the next best option, or look again at how the option might be financed.

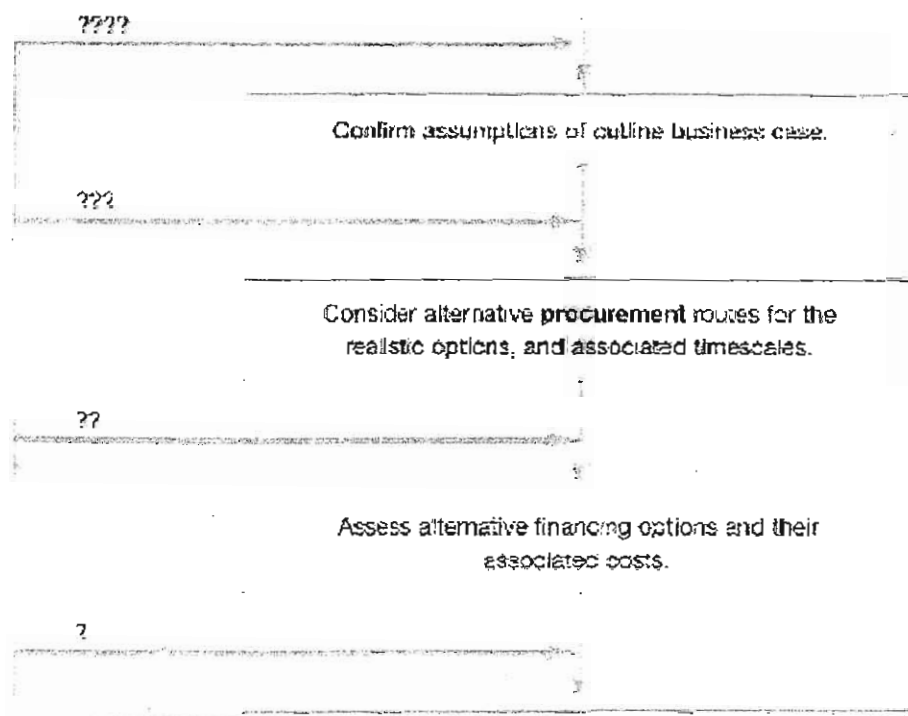
Seek commitment of the governing body

33. Before proceeding to a full business case, institutions should seek the approval of their governing body or the appropriate delegated authority. The decision makers must have an exposition of the business case at an appropriate level of detail to match the scale of the project. It is not sufficient for them to be presented with a 'take it or leave it' decision: they must understand the range of choices open to the institution, and the logic behind the selection of the preferred option. Further advice on the responsibilities of governors is available in the HEFCE publication 'Effective financial management in higher education' (HEFCE 98/29), and in the 'Guide for Members of Governing Bodies of Universities and Colleges in England, Wales and Northern Ireland' published by the Committee of University Chairmen (HEFCE 98/12).

Developing the full business case

34. The steps involved in developing a full business case are shown in Figure 2. Institutions should plan to complete all the steps in the appraisal before they commit themselves to a preferred option and agree the final deal, so as to optimise their negotiating position.

Figure 2 **Development of a full business case**



Reassess the relative costs, benefits, timings, risks, and uncertainties of each option, and select a **preferred procurement/financing solution**.

Not viable

Model the impact of the preferred solution on the institution's financial situation and assess **affordability**. (Is it viable? Can we afford it?)

Not affordable

Seek final approval of the governing body.

Keep assumptions under review

Changed circumstances

Consider procurement routes

35. With the commitment of its governing body, the institution can devote more resources to exploring the appraisal options in detail. In particular it will want to explore the practicality of different procurement routes. For instance, for a building procurement these might include a PFI solution based on service delivery, and a conventional design and build contract. There may be a number of further stages to consider, since each option may have a number of different procurement routes with different costs and benefits.

Assess financing options

36. At this point the institution will need to explore in more detail the financing options and their associated costs. In some cases, such as PFI, the financing method is closely linked to the procurement route. For more traditional procurement, a number of options will still be available, from the use of reserves to a wide choice of short-term and long-term borrowing arrangements.

Reassess and select preferred solution

37. In analysing the various combinations of options, procurement routes and financing options, institutions will need to consider in detail the risks and uncertainties associated with each. More detailed advice on how these should be treated is given in paragraphs 84-94. At this level of analysis, it is likely that the prospective solutions will have different levels of risk, and so comparisons will have to be made on a risk-

adjusted basis. This is particularly true if PFI solutions are being considered, when transfer of risk is one of the benefits being sought.

Financial impact

38. The institution will need to re-assess the impact of its preferred solution on its overall financial situation, in the light of the increased level of detail available in the full business case. This will be the basis for the analysis of affordability that it will present to the governing body for final approval.

Approval and review

39. In considering the full business case, the governing body needs enough detail to be able to appreciate the implications of proceeding. Governors will need to understand the logic behind the choice of the preferred solution, but also the risks and sensitivities that go with it. Even when approval has been given, the management of the institution should advise the governing body if any of the assumptions are invalidated and this has a material effect on the decision.

Valuing the costs, benefits, risks and uncertainties of each option

40. All the implications of each option must be accounted for. This will involve considering all the costs and benefits, including the non-financial benefits and penalties. It will also involve analysing the effect of variations in timing, and any risks and uncertainties involved.
41. For a typical project relevant costs might include:
 - a. Capital costs - such as land, demolition, construction or refurbishment costs, fees and expenses, equipment, commissioning and handover costs.
 - b. Running costs - such as rates, water and sewerage charges, maintenance, power, heating, lighting, staff costs, and payments for contracted-out services.
 - c. Costs of other features that are affected. These may be associated with ease and availability of access, operational convenience, ease of communication, flexibility, environmental factors, and costs of retaining and disposing of vacated accommodation.
42. Relevant benefits would typically include:
 - a. Fee income from further student enrolment.
 - b. Research income.
 - c. Rental or conference income.
 - d. Income from third party use of facilities.
 - e. Capital receipts - such as proceeds from disposal of the building being replaced.
 - f. Residual value at the end of the appraisal period.
 - g. A reduction in rental payments if a leased building is no longer required, and can be surrendered.
43. All relevant costs and benefits should be included, even where the costs do not involve cash expenditure. For example, the value of an asset should be included even when it is already in the institution's ownership. Such an asset could be used for other purposes or sold if it were not employed in the project being appraised, and therefore there is a cost involved in using it, the size of which depends on the alternative uses. This is known as the opportunity cost. For property, the opportunity cost is normally taken as the market value or the value in alternative use, whichever is higher. Similarly benefits, in the form of cost savings or an improved quality of output, should be included even where they do not produce a cash flow.
44. Some assets will have a value at the end of the appraisal period - the residual, exit, or disposal value - which should be counted as a benefit. These assets may not be just

land or buildings: ongoing businesses and intellectual property rights (IPR) can also have a residual value. Such values should be assessed in prices current at the date of the appraisal.

45. When calculating residual value, land and buildings should be considered separately. Buildings will generally depreciate over their lifetime, at a rate depending on standards of maintenance, but possibly also reflecting obsolescence. On the other hand the site value may remain constant, or even appreciate. Accordingly the usual assumption is that the value of the site remains unaltered in real terms. Actual increases in land prices should not normally be counted as benefits if they would have occurred even if the project had not taken place, since they would be realised equally by the 'do nothing' option. The building's residual value will be that which gives the highest figure from the range of options, including refurbishment, alternative use and site value.
46. There are complex issues associated with property valuation. The Royal Institution of Chartered Surveyors Appraisal and Valuation Manual gives a detailed framework and guidance. This is an area where institutions may need professional advice.
47. Many types of cost or benefit can be included under a number of heads, but their value must only be counted once. Examples of a double counting error are the inclusion of both rents and capital values for the same building in the same cash flow; or including what is a cost in one option as a benefit in another. The 'do nothing' option provides a common baseline to avoid this sort of mistake, since each option in the appraisal should represent a change from the base case.
48. Costs and benefits which can be valued in monetary terms should be allocated to the time period in which they are expected to occur. It is generally sufficiently accurate to treat all costs incurred in a particular year as falling at mid-year. However, longer-term variability in timing can have a significant effect on the appraisal, and the range of options might include possible scheduling variants for the same idea. Even if monetary values cannot be assigned, it is important to indicate how the timing of impacts will be spread over the appraisal period.
49. Estimates of costs and benefits should be accompanied by assessments of any risks or uncertainties. It is helpful to list them all in a risk register, to ensure that none are over-looked. This can then be used as a checklist to ensure the analysis makes proper allowance for the significant ones. Risk and uncertainty are dealt with in paragraphs 84-94 below.

Appraising non-financial aspects

50. In an environment such as higher education, many of the benefits of an investment decision will not be realised as a cash flow. Even more difficult to analyse will be those benefits which cannot be expressed in financial terms at all. In many cases, institutions will have to make a judgement as to the desirability of an investment's outcomes, and what is a fair price to pay for them. However, such decisions are easier if the relative merits of different decisions can be presented in a rational way.
51. Appraisals will have to handle non-financial aspects differently, depending on how easily they can be measured. They can be categorised as:
 - a. Benefits which can be valued.
 - b. Benefits which can be measured in some other way.
 - c. Benefits which cannot be measured at all in conventional terms.
52. In practice it may be possible to put values on the benefits and costs of a decision, even though there is no market value for them that can be realised in cash terms. For instance, investments that save staff time can be compared by putting a value on the time saved: locations for a student residence might be compared by including the costs to the students of using public transport.
53. If institutions use this method of comparing alternatives, they must be careful to distinguish between the notional values, which will influence their decision on which option offers best value for money, and the actual costs which will have to be met from

their budget. There is no sense in selecting an apparently attractive option if it proves to be unaffordable in cash terms. Further advice on assessing affordability is given in paragraphs 97-100.

54. There may be costs and benefits which can only be assessed in non-financial terms, but which can nevertheless be quantified. For example, options may deliver more or less of an outcome, whether it is units of student accommodation, seats in a lecture theatre, or shelf space for books. Institutions can use such data to inform their decisions. It is often helpful to understand what is the incremental cost of a particular feature. In such cases, institutions will have to decide what is a reasonable price to pay for the additional benefit.
55. A different problem is posed by attributes which cannot be measured in conventional terms. For instance, alternatives may offer different levels of satisfaction under headings such as:
 - o the contribution to an institution's long-term strategy
 - o flexibility for the future
 - o political acceptability
 - o enhancement of the institution's academic image
 - o compliance with planning constraints
 - o protecting an institution's market position.
56. Institutions will often have to make qualitative judgements of this kind. Their appraisal will carry greater conviction if the basis for the decision is made clear. They should therefore be quite explicit about the criteria used, and how they assess each option. The simplest analysis defines the criteria that are significant in the appraisal, and ranks the options in order of preference. The institution will have to reconcile the perceived benefits with the cost of each option.
57. A scoring system, even a subjective one, can help to clarify the decision process and give it more rigour. The institution must first decide what criteria are significant and how to score them; scores can be weighted to reflect their relative importance. The results are only an aid to decision making, and can never relate to any absolute measure. However, even if the scores and weightings are fundamentally subjective, the institution will be in a better position to explain the rationale for its decision.
58. A sample of such a scoring system is included in the example in Annex B. The Green Book, Annex C, gives further advice.

Taxation

59. The Green Book is written from the point of view of Government departments, and some of its advice is not appropriate for higher education institutions. In particular, when appraising investment decisions for bodies which are totally dependent on public funds, taxation can normally be ignored since any charges will be reflected in a direct benefit to the public purse. Therefore when a Government department assesses the value for money from public expenditure, it will generally use market prices, without adjustments for the effects of VAT or other indirect taxation. Similarly it will make no adjustments to market prices for direct taxes such as income and corporation tax.
60. Higher education institutions will need to treat tax differently. In their appraisal, institutions must include all the cash flows they will actually incur, even if they might be dismissed as transfer payments in a Government appraisal. Taxes fall under this heading, as do charges arising from the occupation of property which vary according to location, such as business rates and water and sewerage charges. In formulating cash flow statements and in determining its own preferred solution, the institution should consider the impact of VAT on both capital and recurrent items. Even when they are totally dependent on public funds, institutions must still be aware of the effect of taxation on their cash flows. They may have to conduct their appraisal twice, once without taxation to establish best value for money from public funds, and a second time to check affordability.

Appraisal period

61. The appraisal period should normally be the period for which the service is required, or the remaining economic life of the main asset.
62. For buildings it is essential to distinguish between the physical life of a building and the period during which it has occupational value, which may be much shorter. A new building may typically have a physical life of over 60 years providing it is properly maintained. Its occupational value will fall during that period. However, at several points during its physical life, reduction in the occupational value can be restored by refurbishment. At these points an appraisal will be required to confirm continuing need and to determine the relative merits of refurbishment, redevelopment or disposal.
63. In the absence of any other determining factor, it is sensible to use an appraisal period of 25 years for buildings, unless there are compelling reasons for choosing another figure. Since 25 years is traditionally the length of a property lease, this assumption will facilitate comparisons between freehold and leasehold.
64. In exceptional circumstances, where buildings are constructed for a specific purpose, and no market exists for the property, it may be appropriate to appraise a building over its physical life. If a property option is appraised over more than 25 years, it should be scrutinised carefully, and the cost of refurbishment or the replacement of major elements needed to retain its physical life should be included.
65. If, exceptionally, the project exceeds the remaining economic life of its building, then the appraisal must still consider all the costs for the whole life of the project. These may include the costs of decanting from the building, and of refurbishment or redevelopment.

Procurement Options

66. Each option being appraised may be associated with a range of procurement methods. These may also include a range of financing options, as well as different forms of public/private partnership. Institutions should be careful to distinguish between the cash flows associated with funding the procurement method, such as loans and interest payments, and those associated with the costs and benefits of each option. Financing options might include:
 - o financing capital expenditure from internal funds
 - o loans
 - o finance leases
 - o operational leases
 - o private finance initiatives (PFI)
 - o joint ventures
 - o contracting out.
67. Where any form of external finance is involved, the source should only be selected after a competitive procurement exercise. Similar considerations will apply to nearly all forms of procurement, and in many cases the institution will be subject to the European Union Procurement Rules. There are a few exceptions. For instance, if the institution receives an approach from the private sector for a joint venture, then the deal can only be negotiated with the proposer of the scheme. If in doubt, institutions should take legal advice on whether EU Procurement Rules apply.
68. If a PFI solution is to be considered, then there may not be enough cost data in the early stages to make an appraisal. Under these circumstances, institutions should cost a 'reference project' based on supplying the same outputs procured conventionally, to provide the comparator for assessing the viability and affordability of the project.
69. The full range of procurement options may not apply in every case, but the appraisal should consider all realistic combinations. For example, the decision on whether property is to be purchased or leased should be determined on value for money

grounds. Projects involving leasing property should also be appraised on the basis of buying the freehold interest in the property if it is available. If not, buying an alternative property should be included among the options, even if the institution believes there are compelling reasons for preferring a leasehold option. Similar principles apply to equipment and other types of investment decision.

70. Buying equipment or a building may offer better value for money than leasing; capital finance costs may be lower than rentals and freehold ownership has a residual value. But in some cases there may be no property available for purchase immediately. In others, differences in quality, the earlier availability of leasehold or its greater flexibility, including the option of short-term use, may offset the benefits of purchase. When comparing freehold and leasehold options institutions should allow for the effects of tenure on running costs. For instance the leasehold option may assign some costs or risks to the owner. Options such as PFI can offer even greater opportunity for risk sharing.
71. Some appraisal exercises will involve looking at solutions that may not be recognised as procurement options in the conventional sense. For instance, an institution could be faced with a choice between developing different teaching methods, which require the investment of staff time; or having to decide between a number of different research projects. In both cases, staff time represents a resource which has an opportunity cost, and the institution is effectively appraising options for procuring teaching or research.

Analysing the results

72. The principles to be applied in calculating the results of an investment appraisal are generally well understood. They are covered in other literature, and in the Green Book. Examples of discounting are in Annex B of this document. The following notes provide additional advice on specific points that sometimes give difficulty.

Calculating the present value of costs and benefits

73. Even when all the costs and benefits, including cost savings, are expressed in real terms it will generally not be possible to compare options directly because the costs and benefits are spread over time. Almost all expenditure proposals produce benefits later than the costs. With proposals for achieving the same objective, the choice is often between extra investment expenditure now and extra operating costs in later years. To compare options, costs and benefits must be discounted so that a single figure - the net present value - can be calculated for each option. Examples of these calculations are given in Annex B.
74. To give more weight to earlier, rather than later, costs and benefits, a discount rate is applied. The discount rate determines how rapidly the value today (the 'present value') of a future pound falls away through time, just as a real rate of interest determines how fast the value of a pound invested now will increase. It is related to the 'time preference' of money - the fact that normally people would rather have cash now than later, and would prefer to pay bills later rather than sooner - and must not be confused with inflation. A fuller explanation of the rationale behind discounting is presented in an Appendix to Annex G of the Green Book.
75. Where an investment uses public money, the Government specifies a standard rate of discount. This rate is currently 6 per cent and should be used in appraisals involving HEFCE funds or Exchequer-funded assets. For further discussion, and for some exceptions, see the Green Book, Annex G.
76. It is more likely that an institution will be funding an investment without public funds. In this case, the discount rate used should be one which reflects the institution's normal real long-term cost of borrowing. For institutions with existing borrowing, this is usually best expressed as a weighted average of the rates they currently pay. Institutions without a track record of borrowing may need to investigate the market to

establish a realistic rate to apply. Borrowing rates are normally quoted in nominal terms, which reflect inflation, but the rate to use in the discount calculations is the real rate of interest after inflation adjustments have been removed.

Comparing financial options

77. All other things being equal, the most beneficial option will be the one with the highest net present value (NPV) or lowest net present cost. This is the appropriate basis for comparison. In the simplest cases, the costs and benefits of each option can be expressed as differences from the 'do nothing' values. However, this can lead to confusion in more complicated cases, particularly where the structure of the costs and benefits varies significantly from option to option, and from the structure of the 'do nothing' case. It can be difficult to keep track of all the variables, and there is a significant risk of double counting, with the same change being listed as a cost in one option and credited as a benefit to another. As a general rule, it is better to list the costs and benefits of each option separately, including those of the 'do nothing' option.
78. Besides comparing NPV or net present cost, the private sector uses two other decision-making methods. However, they both have limitations, particularly for projects which will never deliver a financial benefit that outweighs the costs.
 - a. The internal rate of return (IRR) is the discount rate at which the net present value is zero. This can be compared with the cost of capital to see whether the project proposal represents a worthwhile investment. An institution would set a threshold IRR level against which it could carry out the same sort of comparison. In theory, this measure should provide the same answer as comparing net present values. It can be helpful in comparing the relative merits of project options when capital is rationed. However, if the costs of the project do not yield a net financial benefit it will not produce a meaningful measure.
 - b. The payback method measures the number of years required to produce a return on the original investment. It provides a crude measure of project risk. An institution could set a target payback period as a criterion to appraise investments. Like the IRR, this method will only produce a result when the discounted financial benefits of the project outweigh the discounted costs. It has a further disadvantage, in that it takes no account of costs which occur after the payback point has been reached.
79. Use of the NPV or net present cost measure has the additional advantage of focusing attention on the actual costs and benefits derived from the project year by year. This is particularly helpful for institutions in appraising project options where affordability will also be a key factor in decision making.

Handling inflation

80. Normally, net present values are calculated by expressing all costs and benefits in present value terms, and applying a real discount rate. This approach is valid so long as all the factors included in the calculation are affected equally by inflation. Costs and benefits should be expressed at prices applying when the appraisal is carried out. The figures will usually need to be reviewed and revised as part of the iterative process of investment appraisal, so it is important that the cost base used is clearly stated. This information is also required later for evaluation.
81. However, if there are grounds for expecting some prices to increase at a significantly faster or slower rate than general inflation, this should be taken into account in the calculation. For example, any variation in the fuel prices relative to the general price level will influence the real cost of heating a building. Another factor is pay, which in many sectors has risen in real terms in the longer run. Construction costs may rise or fall during the course of a project if the contract contains price variation clauses. Any such anticipated price changes which differ from those of the general price level will

have to be justified.

82. Some leases provide for rent reviews, typically at five yearly intervals and upwards only. Where the resulting rents represent a real rise or fall in costs, this must be allowed for in the appraisal.
83. There are two ways of handling inflation:
 - a. The simplest and the preferred method is to use present values and a real discount rate. Where costs and benefits follow the general rate of inflation, any changes can then be ignored. Those costs and benefits which do not follow the general inflationary trend are adjusted to reflect the relative change.
 - b. The alternative is to use nominal values throughout, showing the effect of inflation on all costs and benefits at the appropriate rates. This method makes relative changes less obvious, and so it is more prone to error. However, it is easier to apply when many of the elements of the appraisal change at a rate other than general inflation. Under these circumstances, the discount rate used must also be a nominal rate which reflects anticipated general inflation.

Valuing risk and handling uncertainty

84. Estimates of costs and benefits always involve assumptions about the future. Changes in assumptions can seriously affect the balance of advantage between options, so it is important to take account of them in the appraisal. The risk register, compiled to show all the areas of risk and uncertainty, is a good starting point. In considering how they can be handled, it is helpful to distinguish between risk and uncertainty.

Risk

85. Risk is the product of probability and consequence. If these two factors can be quantified, then the overall effect can be measured, and a risk assessment made. Depending on the procurement method, risks will have different effects. For instance, a design and build contract will transfer the financial risks of construction to the contractor. If PFI procurement is used, many more risks can be shared with the private sector. In deciding what risks to allow for, it is helpful to construct a risk matrix showing the different options under consideration and, for each one, where the effect of each risk will fall.
86. A number of techniques exist to incorporate risk in an investment appraisal, but in most cases a simple risk adjustment will be most appropriate. For each variable, a cost or value can be calculated by assessing the financial impact multiplied by the probability of the event occurring. For instance, if late completion of a new building will result in a consequential cost, then the effect can be expressed in financial terms. Analysis of this sort depends on having sufficient data to estimate the probability and consequences of the event. This might be from the institution's own experience of similar projects, or perhaps from published sources.
87. Institutions are likely to find this simple risk adjustment technique the most useful. It is particularly relevant when appraising a number of options representing different levels of risk to the institution, such as options which include procurement using PFI. It makes the effects of sharing risk readily apparent, and allows comparison between options that transfer different amounts of risk.
88. Institutions may encounter two other techniques for assessing risk:
 - a. Where more data are available, risk can be evaluated by 'Monte Carlo' techniques, using a probability distribution to calculate the range of possible outcomes and their effects. The specialised computer software required for such analysis is increasingly available, but the data are unlikely to be available to most institutions without support from professional advisers.
 - b. A simple assessment of the impact of risk can be achieved by applying a higher, risk-adjusted discount rate to the project cash flows. However, this technique is a

blunt instrument. It relies on experience of how the finance market might view the risk of the investment option, and is unlikely to be helpful unless there are examples of similar projects to draw on.

89. If a PFI option appears to be the most favourable, institutions will need some sort of comparator to check that the successful bid still represents better value for money than a conventionally procured alternative. In public sector procurement this is called the public sector comparator (PSC), though in the higher education sector a more appropriate title is conventionally procured comparator (CPC). The CPC is a costing of the equivalent level of service delivery procured by conventional means or, if the same level cannot be achieved, the next best option. Because the PFI supplier is likely to take a different level of risk, the comparison must be made on a risk-adjusted basis. The CPC must also include the cost of financing conventional procurement.

Uncertainty

90. Where the probability element of risk cannot be quantified, uncertainty remains, and there is still scope for testing the effects of altering key assumptions by sensitivity analysis. An appraisal should indicate the accuracy of all cost and benefit estimates. Unless the figures are certain, the effects of variability should be assessed. One way is to ensure that all possible abnormal effects have been identified, and a view taken on their significance. Another is to scrutinise critically the cost and benefit estimates, using expert advice as necessary, and taking into account experiences of cost and time over-runs for similar completed projects.
91. Sensitivity analysis involves repeating the appraisal calculation with the value of the cost or benefit set at the upper or lower end of the range of likely estimates, and possibly at some intermediate values. In addition, some account should be given of the effect of different combinations of individual elements.
92. For instance, in an appraisal of a leasehold option with a five-yearly rent review, it might be appropriate to consider cases in which the rental growth in real terms varied about the central estimate. The range used must represent a realistic assessment of the range of possibilities. It may be prudent to assume that initial estimates will be subject to the same degree of error as occurred on average in the past, unless there are special reasons for thinking that they are more accurate. Such reasons should be explained and justified.
93. Income expectation is also subject to uncertainty. For example, if an option depends on additional student numbers, then sensitivity analysis should be used to assess what might happen if student numbers fell. Similarly, where the project assumes income from disposing of a property, then sensitivity analysis should address the effect if it realises more or less than its valuation.
94. It is important to minimise, and where possible remove, the likelihood that costs turn out higher than expected, or benefits and cost savings lower than expected. It may be necessary to draw a distinction between different project options, and different methods of procurement and financing, which can bring additional sensitivities to be considered. For example, some financing options are sensitive to inflation, such as loan repayments that are indexed to a specific percentage or the rate of inflation, whichever is greater. Institutions also need to assess what might happen if inflation falls, leaving them with repayments which increase in real and in cash terms.

Choice of options

95. In some appraisals, analysis of the options will result in a clear-cut recommendation. Often this will not be possible: for example when there are significant uncertainties attached to costs, benefits or both; or when there are significant elements which cannot easily be valued in monetary terms, or even quantified at all, such as environmental factors. Sensitivity analysis may also indicate that some options are

more robust than others.

96. Where no clear-cut optimal solution is available, or the choice between two or more options is finely balanced, the appraiser should present the balance fairly, so that the decision-takers can make an informed judgement.

Assessing affordability

97. So far, this guide has concentrated on assessing the competing merits of investment alternatives taken in isolation. However, there would be little point in adopting a solution that the institution could not afford. Therefore the institution must assess the impact of the preferred option on its overall financial position. This will involve looking ahead over the life of the proposal. The institution must be careful to distinguish between those costs and benefits which have a direct impact in cash terms, and those such as opportunity costs which impact on value for money but have no effect on affordability.
98. In particular, the institution will need to look at:
 - a. The income and expenditure generated by the project, and its impact on the income and expenditure account of the institution.
 - b. The effect of depreciation on the income and expenditure account.
 - c. The effect on the institution's cash flow, broken down into sufficient detail to show the amount and timing of any shortfalls.
 - d. The funding of the project, the timing of receipts and their relationship with the cash flow.
 - e. The project and its funding in the context of the overall capital expenditure programme, to keep track of the total level of proposed investment.
 - f. The effect on the balance sheet.
 - g. The desirability of the project when compared with others, particularly if available capital is limited and capital rationing decisions are required.
99. The institution will also need to consider how the project can be reconciled with its financial strategy, and how its current policies on borrowing levels and contributions from the revenue budget might be affected.
100. The institution will have to draw on the appraisal's earlier work on risk and uncertainty, since it needs to know the possible financial impact of the best and worst case, as well as the planned outcome. It will also need to know whether there are any implications for its Financial Memorandum with the HEFCE, and whether any additional approvals will be required. The strength of the institution's covenant - how its credit-worthiness is perceived by the financial sector - may influence its ability to make use of the full range of finance options, as well as their cost.

Presenting the results

101. The results of an appraisal should be set out in a report covering:
 - o the strategic context
 - o the objectives
 - o the options considered
 - o the results obtained, in both financial and non-financial terms
 - o the preferred option(s)
 - o how the preferred option(s) compare with the alternatives
 - o how the risks have been evaluated
 - o the sensitivities of the preferred option(s) to variations in key assumptions
 - o the impact on the institution's financial position
 - o how and when the project will be monitored and evaluated.

A more detailed checklist is provided in Annex A.

102. The important features of the appraisal must be set out clearly, in a logical order, and all the relevant assumptions should be made clear. The appraisal should indicate how the costs are to be borne. It should also include discussion of the major unquantifiable costs and benefits, and contain sensitivity analyses of the effects of changing key assumptions. Tables setting out in detail the costs and benefits of each option should be available. In addition, it is important to record such details as the price basis and the base date for discounting.
103. Even after they have taken a decision, institutions will need to keep their appraisal under review. The initial appraisal will of necessity be based on coarse data which can be refined as the project progresses. Institutions will need to confirm their initial estimates as they reach key decision points, and check that their assumptions are still valid. This is an iterative process. In the early stages, not much will be lost if re-appraisal leads to changes in key decisions; however, scope for manoeuvre will become more limited as a project progresses.
104. The report should set out clearly the effect of the preferred option on the overall financial position, by presenting forecasts of its effect on the income and expenditure and cash flow. The impact of changes in key assumptions should be modelled, showing the effect of best and worst case scenarios. The effect on key financial indicators and budgets should be made explicit.

Monitoring and evaluation

105. At the time of the appraisal it is important to plan for monitoring and post-project evaluation of the decision. This will be a good management discipline, and provide feedback into future decisions. Evaluation might cover the extent to which the project met the objectives set, any cost and time overruns, the relationship between estimated and actual costs and benefits, and any implications for future decisions.
106. The appraisal report should specify the monitoring data which will be collected in the course of implementation. This will serve as a management tool while the project is underway, and provide the main information input into the evaluation. The appraisal report should also outline how a full evaluation might be carried out. The decision whether to proceed with a full or partial evaluation can be taken at a later stage.
107. The evaluation should usually be carried out when the investment stage is complete and when enough experience has been accumulated of operation and maintenance.

Annex A

Appraisal checklist

Specifying the objectives

- How does this appraisal relate to the strategic aims of the institution?
- Is the problem clearly defined?
- Are the objectives supported by adequate background information, such as a strategic plan?

Identifying the options

- Has a sufficiently wide range of options been considered?
- Has the 'do nothing' or 'do minimum' option been explicitly considered?
- Have all realistic procurement options been appraised (including PFI and other

innovative forms of procurement)?

Valuing costs, benefits, timing, risks and uncertainties

- Has account been taken of all the direct costs and benefits accruing to the institution?
- Are there any wider considerations?
- Have all relevant costs, income streams and benefits (over the life of the project) been included?
- Has allowance been made for running costs over the life of the project?
- Have maintenance costs over the life of the project been taken into account?
- Does the appraisal take account of assets that are already owned (opportunity costs)?
- Does the valuation of the property represent the opportunity cost?
- Is there any double-counting of costs and benefits?
- What allowance has been made for non-financial aspects?
- Have uncertainties in key assumptions been identified and tested?
- Have risks been assessed and valued?

Analysing the results

- Has the net present value been calculated for each option?
- Are the price base and the base date for discounting explicitly defined?
- Has an appropriate discount rate been used?
- Are all costs expressed in real terms?
- Is there a relative price effect to take into account?

Assessing affordability

- Has the impact on the institution's overall financial position been assessed?
- Can the institution accept the best and worst case scenarios?
- Does the preferred solution require HEFCE approval?

Presentation of results

- How does the chosen option compare with the alternatives?
- Are the results set out clearly, in an appraisal report, in a logical order and with all relevant assumptions made clear?
- Are tables available showing the details of costs and benefits for all options?
- Do they show the effects of risks?
- Do they show the influence of sensitivities?
- Is the overall financial impact clear?

Monitoring and evaluation

- Is provision made for monitoring project performance?
- Are proposals included in the appraisal report for evaluating the project and its performance once implemented?
- Is the timescale for evaluation defined?

Annex B - Example case study

This example is a case study of a hypothetical project. In the interests of brevity, much of the detailed justification that would be expected of a real-life submission has been omitted.

Outline business case

Identifying the need

1. The University of Atlantis is on the outskirts of the city. It is largely based on one campus but has some accommodation on three other smaller sites within a five mile radius of the main one. Sargasso House occupies one of these sites. It is a former office block which is rapidly reaching the end of its useful life and is becoming increasingly expensive to maintain. In addition, the building is very badly configured, makes inefficient use of the space and has limited disabled access. The University of Atlantis owns the freehold of the building, which currently houses the Department of Pelagic Thaumaturgy. The main site is 15 minutes' walk away.
2. Pelagic Thaumaturgy is an expanding area of study, and courses are over-subscribed. The University of Atlantis has a particularly high reputation in this field. However, because of the limitations of the building it is unable to respond to the increasing demand for places. As a result, it cannot take advantage of the potential income from overseas students, nor can it expand its range of services. The project has two aims:
 - a. To rectify the deficiencies in the existing building.
 - b. To provide additional space for expansion of the department's activities.
3. The existing building provides 4000 m² of usable space. Providing an additional 1000 m² would enable the university to accept an additional 100 overseas students. There would be additional administration and staff costs, but the additional students would bring an extra net annual income of £180,000.

The strategic context

4. The overall strategy of the university focuses on a number of key aims which are relevant to this project:
 - a. The university has a commitment to become a regional centre of excellence. The provision of high quality, flexible space has been identified as key to its continued success.
 - b. The continued development of Pelagic Thaumaturgy is one of the key elements of the university's corporate strategy. The department has become increasingly successful and popular, and the university is now receiving national recognition for its work in this area.
 - c. The university is committed to improving access for disadvantaged minorities, including people with disabilities.

Estates strategy

5. The key relevant objectives of the university's estates strategy are:
 - a. To provide a high quality environment for students and staff that makes the best use of its physical assets.
 - b. As a long-term aim, to locate all its teaching accommodation on or close to its main campus. One of the highest priorities within the strategy is expanding the space for Pelagic Thaumaturgy.
 - c. To recognise that any new accommodation should be suitable for current and planned requirements, but should retain sufficient flexibility to adapt to future changes as the shape of HE continues to evolve.

Key objectives

6. Replacement accommodation needs to be:

- o high-tech, high quality and flexible
- o low maintenance, with reduced running costs
- o fully accessible to people with disabilities
- o close to or on the main campus.

Identification of options

7. A number of options to solve the problem have been identified:

a. Option 1: Status quo - carry out essential maintenance and repair works only. This is not seen as an acceptable option due to the extent of work required and the increasingly unsatisfactory nature of the accommodation. However, this option has been included to provide a base case against which to assess other alternatives.

b. Option 2: Major refurbishment of Sargasso House. Stripping the building back to its shell and carrying out substantial reconfiguration and refurbishment could deliver the level of quality and flexibility sought, but would not overcome all the restrictions of the building nor address the location issue.

c. Option 3: Demolish Sargasso House and rebuild on same site. Demolishing Sargasso House and constructing new purpose-built accommodation would deliver improvements in quality and flexibility. However, proximity to the main site would still be an issue, and planning restrictions would mean that no extra floor area could be provided.

d. Option 4: Dispose of Sargasso House and purchase alternative accommodation. A search for alternative accommodation within a five mile radius of the main site has only identified one possible building (three miles from the main campus). However, it is virtually twice the size of the existing building so would probably only be viable if the university had a use for the additional space.

e. Option 5: Dispose of Sargasso House and lease alternative accommodation. The city contains a number of vacant office blocks, and there is at least one developer who is willing to refurbish one to the university's requirements.

f. Option 6: Dispose of Sargasso House and build new accommodation on another site. The city contains a number of development sites which the university could buy, on which to build a new building of the size it needs. However, none of the sites are any closer to the main campus than Sargasso House.

g. Option 7: Dispose of Sargasso House and build new accommodation on the main campus. There is potential to build on the main campus between two existing buildings, but space is restricted. Some reconfiguration of existing buildings used by other departments would be required, such as relocating entrances, and they would be denied all opportunities for further expansion.

h. Option 8: Dispose of all three satellite sites and purchase alternative accommodation. A possible building was identified under option 4 that is large enough to accommodate the activities from all three satellite sites. However, the other two sites currently operate quite effectively as satellite sites and do not suffer from the problems faced at Sargasso House. In addition the disposal value of these two sites is limited due to restrictions in use, so the proceeds of all three sites would leave a substantial funding gap for the university. This option was not pursued further, on the basis that it would run directly contrary to the university's long-term aim of consolidating its operations on or near the main site.

i. Option 9: Dispose of all three satellite sites and build replacement accommodation next to the main site. The current site could not accommodate additional accommodation of this size. Space next to the main site exists on a site already owned by the university, but because of an existing tenancy agreement this will not be available for another five years. A temporary arrangement would be required in the interim. The university recognised that this might be an option in the longer term but would not solve the immediate problem, so it decided not to pursue it further.

Initial option appraisals

8. Having discarded options 8 and 9, the seven remaining options were subject to an initial appraisal.
9. The financial costs and benefits of each option are set out in Appendix 1. There are a number of quantifiable benefits which accrue to one or more of the options:
 - a. Overseas students. There is considerable potential for recruiting additional students from overseas, which could generate a net income if they could be taught alongside the existing student body. Residential space would not be a problem, since there is a thriving local market in private rented accommodation. However, no teaching space can be provided for them on the existing site.
 - b. Postgraduate students. The department's ability to accommodate postgraduate students is severely constrained by the existing building. A new building on the same site would deliver more income from postgraduate teaching, and a building on any other site would allow still greater scope.
 - c. Contract income. There is a demand for contract research work which the department is unable to fulfil in its existing premises. A rebuild on the same site would allow part of this demand to be met, and it could all be met on another site. There would be additional running costs associated with this work, but a small net income.
 - d. Kiosk. The existing building contains a small book-selling and newsagents kiosk which provides a rental income. A new or refurbished building would allow a slightly higher rent to be charged; a development on the main site, which would bring in more business, would offer double the rent.

Discount rate

10. The university has a proven track record of borrowing at 9.5 per cent. Its financial advisers assess the long-term inflation rate to be 3 per cent, indicating that the university's real interest rate is 6.3 per cent. This rate has been used in the net present value calculations. (Note that the relationship between these rates is correctly expressed as $1.095/1.03 = 1.063$, giving the real rate of 6.3 per cent. The simpler calculation $9.5 - 3 = 6.5$ is only an approximation.)

Non-financial aspects

11. The university recognised that there are a number of other factors which might influence the choice of options. To structure the decision process, it carried out an appraisal of the non-financial aspects of each option, using a scoring system, as set out in Appendix 2.

Selection of the preferred option

12. The results of this initial appraisal are summarised in Table I.

Table I. Initial appraisal of options

Option	NPV (£000)	NPV relative to Option 1	Weighted s
1: Status quo	-7,499	-	188
2: Refurbishment	-6,683	816	218
3: Rebuild on existing site	-8,003	-504	268
4: Purchase alternative building	-9,368	-1,868	272
5: Lease alternative building	-7,553	-54	310
6: New building on new site	-5,885	1,614	316
7: New building on main campus	-6,621	878	340

13. As a result of this initial appraisal, four options were seen as worthy of further consideration, to compare with the status quo ('do minimum') option. These are:
- o option 2 - major refurbishment of the existing building
 - o option 5 - dispose of Sargasso House and lease alternative accommodation
 - o option 6 - dispose of Sargasso House and build new accommodation on another site
 - o option 7 - dispose of Sargasso House and build new accommodation on the main campus.
14. The above summary indicates that option 6 offers the best overall value for money, so it was selected as the preferred option. However, both options 2 and 7 were judged to be worth further investigation, and option 5 was retained in case any of the other alternatives proved not to be affordable in cash terms.

Initial assessment of affordability

15. All the options selected for further investigation show a positive NPV when compared with the status quo. However, to check affordability, the university needed to look at the associated cash costs. Certain elements of the option appraisal are not relevant in this assessment, notably the initial opportunity costs, and possibly also the residual values. In any case, residual values need to be treated with caution since they are based on a very long-term prediction. In this case, the preferred option involves a significant initial capital investment. The university has limited internal funds, and would almost certainly need to borrow to finance the capital expenditure. Therefore the preferred option cannot be properly assessed for affordability without considering the financing arrangements.
16. As a guide to affordability, the university looked at option 5, which is based on lease payments. The initial appraisal indicates that the annual cost of this option would be about £130,000 more than the status quo in a typical year. There would also be fitting-out costs in the first year, but the university's advisers indicated that it might be possible to negotiate an initial rent-free period to compensate. This option was deemed to be affordable within the university's existing operating budget.
17. If the university decides to pursue one of the other options, to refurbish the existing building or to build new, then financing costs will have to be considered. This is an

intrinsic part of developing the full business case, when alternative procurement routes will be investigated for all the options still under consideration.

Recommendation

18. At this stage the Finance Committee was able to recommend the project to the Board of Governors, on the basis that there were options which appeared to be affordable and better value for money than the status quo. They based this recommendation on the fact that there was more than one option which appeared to offer benefits in financial terms, and on an assessment of the potential non-financial benefits. The Board agreed to support the project on the basis of the initial appraisal, and gave its approval to proceed to a full business case.

Full business case

19. The project was developed in greater detail to explore the various procurement and financing routes available to the university, depending on which option it chose. At this stage, the lease option already had an identified funding method associated with it. However, the refurbishment and new-build options offered scope for alternative financing and procurement techniques, which might be combined in innovative forms of procurement such as PFI.

Potential for PFI

20. The potential for a PFI solution for the project depends on whether it can be expressed as a service requirement, in terms of an output specification. Obviously the core activities of providing teaching and research would remain the responsibility of the university. The main services in the project are the provision of space, and the ongoing maintenance and servicing of the building, including cleaning, security and portering. There is also scope to run a small element of peripheral services on a purely commercial basis, in the form of the kiosk for a bookshop and newsagent.
21. The proposed location of a possible new building, in both the new-build or refurbished options, is as a stand-alone facility remote from the main campus. The university therefore accepted that an independent supplier might be able to offer a competitive alternative, and that it should explore a PFI option in these two cases. *(Further advice on PFI, and on using a soft market test to explore PFI options is available in the HEFCE's publication 'A practical guide to PFI for higher education institutions (revised November 1998)', HEFCE 98/69.)*
22. For the new-build option on the main site, where the facilities would form an integral part of the existing campus, the potential for an external supplier to offer a competitive deal is much reduced. This is because the supplier would have to absorb the full cost of the service provision, whereas the university already operates on the rest of the site and can provide the same services at marginal cost. The university has a history of difficult industrial relations on its main site, and was reluctant to consider outsourcing some or all of its existing service provision there. For this reason, it decided that the new-build option on the main site was not an appropriate candidate for PFI. *(In real life, institutions will have to make their own assessment of factors such as these)*

Other procurement options

23. To assess the conventional procurement options available to the university, it was first necessary to identify the criteria and constraints for the project. These included the timescale in which the space needed to be provided, the need to keep a tight control on costs, and the complexities of the location of the new building. However, the university

was also aware that some of its members expected to see a high quality solution reflecting the standing and prestige of the department. The university already has a strong in-house project management team, which has recently overseen the completion of a student residence development, to time and budget. *(Further advice on conventional procurement routes for buildings is available in 'Procurement guidelines for higher education: building and engineering projects'. This is produced by the Joint Procurement Policy and Strategy Group and published by CVCP.)*

Financing options

24. Because the university was considering conventional procurement options, and had insufficient reserves to meet the capital cost of a major building project, it needed to investigate the availability of financing for the project. The university recognised the importance of securing the funding package before fully committing to the project. It sounded out a selection of leading financial institutions to assess interest in financing the project. This demonstrated that there would be sufficient interest in the finance sector to achieve a competitive deal, and confirmed that the university could borrow at a nominal rate of 9.5 per cent over 25 years. This rate was used in the following appraisals.
25. The university then undertook a more detailed appraisal of the following options:
 - a. Option 1: Status quo - carry out essential maintenance and repair works only.
 - b. Option 2a: Major refurbishment of existing building. To be undertaken by conventional procurement methods.
 - c. Option 2b: Major refurbishment of existing building. To be carried out under a PFI contract.
 - d. Option 5: Dispose of Sargasso House and lease alternative accommodation.
 - e. Option 6a: Dispose of Sargasso House and occupy alternative accommodation. To be built on a new site.
 - f. Option 6b: Dispose of Sargasso House and occupy alternative accommodation. To be carried out under a PFI contract.
 - g. Option 7: Dispose of Sargasso House and build new accommodation on the main campus. The university normally uses design and build contracts for conventional procurement, to provide protection against cost increases during the construction period.
26. The true costs of a PFI alternative will not be known until a deal is struck, though the university would be able to get some idea when it starts to investigate the market. To estimate the costs of the PFI alternatives before reaching this stage, the university had to construct a 'shadow PFI bid'.
27. The shadow PFI bid is based on the assumption that a PFI supplier would face much the same capital and operating costs as the university. In reality one might expect a PFI supplier to achieve lower life-cycle costs from better integration of capital and running costs, or from taking advantage of other benefits such as economies of scale. In generating a shadow bid, the university made a modest assumption that these might total 5 per cent of the maintenance and utilities costs. This generates a slightly lower NPV for the PFI option when the same discount rate is applied.
28. However, the costing of the shadow bid also has to recognise that private sector bidders will require a higher rate of return to compensate them for the risks they bear in this form of procurement. The NPV of the shadow bid therefore has to be converted into annual payments which reflect this higher return. For this estimate, the university assumed that a private sector bidder would have to pay about 6 per cent in real terms for debt financing, since funders would see the same sort of risk in funding the project infrastructure whether it was built by the private sector or by the university. However the private sector would also look for a return of 30 per cent on the equity, which would make up 10 per cent of the total finance package. The shadow bid therefore assumes the bidder would require an overall return of 8.5 per cent (a weighted average

of the two rates). By applying this rate of return to the NPV, the university can calculate the annual payments that a notional PFI supplier would require. Details are shown in Appendix 3.

29. Appendix 4 gives the full appraisal of the options. In summary, the NPVs of the options are shown in Table II.

Table II. Summary of net present value (NPV) for each option

Option	NPV (£000)	NPV rela to Optio
1: Status quo	-7,499	-
2a: Refurbishment using conventional procurement	-6,683	816
2b: Refurbishment using PFI	-8,002	-503
5: Lease (alternative site)	-7,553	-54
6a: New-build (new site)	-5,885	1,614
6b: New-build (new site) - PFI option	-7,244	256
7: New building on main campus	-6,621	878

30. It is clear that building on a new site (option 6a) is still the most attractive choice. The PFI variant of this option appears considerably more expensive. However, the university recognised that a straight comparison along these lines is not realistic, since it does not take account of the greater risk transfer associated with PFI.

Risk transfer assessment

31. The university identified the risks it would be bearing if it undertook a straightforward refurbishment of the existing building, or built a replacement on a new site, and was responsible for all aspects of operation and maintenance. These were costed, and used to adjust the NPV of these options for comparison with the PFI alternatives. The methodology is set out in Appendix 5. On the basis of these calculations, the comparison between the various options can be adjusted to reflect the value of the risk transferred under PFI. The adjusted NPVs are summarised in Table III.

Table III. Risk-adjusted net present value (NPV)

Option	NPV (£000)	NPV relative to Option 1	Risk adjustment	Adjus relati NPV
1: Status quo	-7,499	-	-	-
2a: Refurbishment using conventional procurement	-6,683	816	0	816
2b: Refurbishment using PFI	-8,002	-503	1,164	661
5: Lease (alternative site)	-7,553	-54	695	641

6a: New-build (new site)	-5,885	1,614	0	1,61
6b: New-build (new site) - PFI option	-7,244	256	1,910	2,16
7: New-build (main campus)	-6,621	878	0	878

Sensitivity analysis

32. The university recognised that there were other uncertainties which could affect the project. Two in particular gave cause for concern:
- Given the politically volatile climate in the pelagic region, there is a serious danger that some of the income from overseas students might not materialise.
 - The rate of inflation might change. PFI deals are typically index-linked. The unitary charge (the regular payment in a PFI deal) would rise to keep pace with inflation, and so the real cost would be unaffected. PFI deals can also be subject to regular benchmarking, so that they follow falling inflation as well, albeit not immediately. However, a conventionally procured option might be linked to fixed-rate finance. This would be vulnerable to a fall in inflation, which would effectively increase the real interest rate.
33. Either variable could give rise to an affordability problem, as well as affecting the relative merits of the options under consideration. Both were subjected to a sensitivity analysis (Appendix 6). The analysis was applied to options 2a, 6a, 6b and 7, as the four most attractive and viable options in financial terms. The results are summarised in Table IV.

Table IV. Summary of Sensitivity Analysis

Variable	Cost of options - NPV relative to Option 1 (£000)			
	Option 2a	Option 6a	Option 6b	Option 7
Base case	816	1,614	2,166	878
Overseas student income halved	816	579	1,130	-78
Inflation falls 1%	520	888	2,166	288
Inflation falls 1% and income halved	520	-148	1,130	-67

34. The sensitivity analysis indicates that option 6b probably remains the most attractive choice from a financial point of view. Although some circumstances might reduce the relative NPV, it would still remain positive. The university would be wise to check that it is still affordable under these conditions. If the university wished to make a more conservative choice, then it might pursue option 2a.

Assessment of affordability

35. Before taking the final decision to proceed with this project, the university carried out a further affordability assessment based on the latest and more detailed costs, proposed

procurement method and financing arrangements. In this particular example, the affordability assessment is based on a hypothetical PFI option. If the project proceeds further, the university will find it useful to carry out a soft market test, to confirm that the private sector takes a similar view about the viability of the project.

36. If a conventional procurement option had been chosen, it would be appropriate at this stage to explore competing financing options, to confirm that the university's initial assessment of financing costs still reflected what it could secure in the market.
37. In a full assessment of affordability, the starting point is the institution's existing position, as if the project were not to be undertaken. The institution should base the assessment of affordability on its projections of income and expenditure, cash flow and balance sheet position, looking as far ahead as it can reasonably forecast. It will look at how the project affects all these areas, considering the cumulative impact as well as the incremental changes year on year. In the longer term it may be acceptable to consider the annual effects, but it should look more closely at the impact in the early years. For instance, if loan finance is used to undertake a project by conventional procurement, the institution may need to analyse the effect on its financial position month by month, having regard to the drawdown facilities of the loan.
38. In this case 10-year projections of income and expenditure, cash flow, and balance sheet position were produced for both the PFI and conventional procurement options, to confirm that the project was affordable in terms of both capital and revenue. It was confirmed that the annualised servicing costs of the new facility would take the total to 2.3 per cent of total income, still comfortably within the threshold set by the Financial Memorandum with the HEFCE.

Confirmation of decision to proceed

39. With all the information available, the Board re-examined the case for proceeding with the project. It reviewed the non-financial benefits that would result, and understood the risks and sensitivities inherent in the case. As in all cases where the underlying NPV is negative, it is ultimately a matter of judgement whether the university is paying a fair and reasonable price for the benefits that the project will deliver, particularly when few of these benefits can be expressed in financial terms. In making this judgement, the Board will look particularly at the changes from the status quo, and the relative costs and benefits of the options under review. Presenting the costs and benefits of each option in a structured way helps to establish that the final decision is based on a clear understanding of what the project involves, what benefits it will deliver, and why a particular option was chosen. The Board also needs to be satisfied with a clear explanation of how the project is to be financed, and how it can be afforded.
40. The Board examined the proposals for managing the project, to satisfy itself that the project was properly resourced. It also looked at the project plan, to get an assurance that it provided for regular reports to the Board on progress, and further consultation at key decision points.
41. With a full understanding of what the project entailed, the Board gave its approval to proceed. This approval was conditional on being advised of any significant changes in the assumptions underlying the appraisal. Since the chosen route was a PFI option, good practice dictates that the institution should establish the underlying viability and affordability of the project, before initiating the PFI process with an advertisement in the Official Journal of the European Communities (OJEC). The existence of a robust option appraisal provides the private sector with an assurance that the project is commercially viable and affordable, and this can be reinforced by subjecting the project to the HEFCE signing off procedure (Circular Letter 8/98).

Appendix 2 - Appraisal of non-financial benefits

To give a structure to its qualitative appraisal, the university identified seven criteria against which to judge the options. These were:

- academic image, to reflect the standing of the Department of Pelagic Thaumaturgy
- flexibility, to provide scope to react to changing requirements in the future
- quality, to meet the need for a work environment of a high standard
- proximity to the main campus, in support of the long-term aim of bringing the university's estate together on one site
- continuity (lack of disruption) in the work of the department and other faculties
- timescale, to deliver an acceptable solution
- access for people with disabilities.

Each criterion was given a weighting, to reflect its perceived relative importance. Then each option was marked on a scale of ten for each of the criteria. The results of this exercise are shown in the following table, showing the raw (R) and weighted (W) scores.

Appraising non-financial benefits															
		Options													
		1		2		3		4		5		6		7	
Criteria	Weight	R	W	R	W	R	W	R	W	R	W	R	W	R	W
Academic image	10	2	20	5	50	8	80	6	60	5	50	8	80	8	80
Flexibility	8	5	40	5	40	5	40	6	48	8	64	6	48	4	32
Quality	8	2	16	4	32	6	48	5	40	5	40	6	48	7	56
Proximity	8	4	32	4	32	4	32	2	16	6	48	6	48	10	80
Continuity	6	4	24	2	12	2	12	8	48	8	48	6	36	6	36
Timescale	6	8	48	6	36	4	24	6	36	6	36	4	24	4	24
Access	4	2	8	4	16	8	32	6	24	6	24	8	32	8	32
Weighted total															

R = raw score

W = weighted score

Annex C

Appraising investment decisions - non-property example

This case study is presented as an example of an institution faced with a problem which is not wholly related to buildings or equipment. It shows how the problem can still be resolved into a choice between several options, which can be the subject of a financial analysis. However, there are also a number of non-financial and non-quantifiable aspects to be considered.

1. In the unusual aquatic environment of Atlantis, biological studies represent a particular challenge. Nearly all teaching is dependent on a fundamental understanding of the biology of the jabberwock.
2. Dissection of the common jabberwock has long been an intrinsic part of every foundation course in natural sciences. Every student is provided with an individual jabberwock to dissect, under the supervision of a staff of expert demonstrators. Such is the importance of the demonstrator's role that it is seen as a fundamental element of a successful academic career.
3. However, this policy is now being challenged on two grounds:
 - a. Many students, and some members of the teaching staff, question the morality of a policy that depends on the death of a living creature.
 - b. Despite its name, the common jabberwock is becoming increasingly rare. Furthermore, the university has hitherto acquired nearly all the specimens it requires from those that die trapped in the nets of fishermen. The widespread implementation of 'jabberwock friendly' fishing methods means that fewer specimens are available.
4. From a practical point of view, dissection specimens which were once available at a nominal cost as a by-product of the fishing industry are becoming increasingly expensive, and it is difficult to ensure a regular supply.
5. It has been suggested that the crested jabberwock would be an acceptable substitute. An aggressive scavenger, originally introduced to provide an environmentally friendly method of waste disposal, the crested jabberwock is largely responsible for displacing the common jabberwock from its natural feeding grounds. It is generally unloved, and regarded as a pest. However, it has significant disadvantages as a laboratory specimen:
 - a. It has never been bred successfully in captivity, and its feeding habits mean it is rarely caught in fishermen's nets, so a special trapping programme would be required.
 - b. Largely because of its revolting feeding habits, it acquires an obnoxious smell which makes it particularly unpleasant to handle, even when dead.
6. The other alternative specimen might be the spotted jabberwock. This docile creature is the result of many years of captive breeding. Prized for its decorative appearance, it is often kept as a child's pet. It would be entirely feasible to set up a breeding programme to provide laboratory specimens. However, this would be likely to exacerbate the moral objections to killing creatures to provide a teaching aid, particularly through an unfortunate association with the popular cartoon character 'Spot the Jabberwock'.
7. A number of technical alternatives have been proposed. Perhaps the simplest is to depart from the policy of 'hands on' dissection by students, and substitute a programme of teaching by demonstration. However, the delicate nature of jabberwock biology would make it difficult to provide an adequate demonstration without considerable investment in additional visual aids. Many academic staff argue that teaching standards would suffer, even if the most sophisticated closed circuit television equipment were used.
8. The department of computing science has suggested two alternative routes:
 - a. To supply each student with a demonstration on compact disc, which could be viewed as many times as required using the computer facilities available to every student. This would make most of the existing dissecting facilities redundant. More significantly, there would be considerable resistance from the existing staff

- of demonstrators, who see their livelihood disappearing.
- b. To develop a 'virtual reality dissection experience'. The department of computing science is particularly keen to develop its expertise in this field. However, there are considerable doubts whether a suitably realistic solution could be made available in a sensible timescale. Cynical detractors suggest that this proposal is principally focused on satisfying the grandiose aspirations of the head of the department rather than providing a service to the natural sciences faculty. It is likely to be extremely capital intensive and have considerable set up costs.

Options for analysis

9. The university identified the following options for analysis:
 - a. The status quo. If no action is taken, it is likely that student numbers will fall, due in part to moral objections but also because there is a possibility that the learning experience will be diminished if insufficient dissection specimens are available.
 - b. Use the crested jabberwock. There are likely to be fewer moral objections to the use of a creature widely regarded as a pest. However, the university will have to set up a trapping programme. More importantly, the noxious nature of the creature will require significant improvements to the ventilation systems in the dissection laboratories, if staff and students are not to be overcome.
 - c. Use the spotted jabberwock. Moral objections may lead to a fall in student numbers. The university will have to set up a breeding programme to provide the specimens. Because of the widespread public criticism that may ensue, it will have to finance a public relations programme to explain its actions, and even then it will have to provide enhanced security for both the new breeding premises and the existing laboratories.
 - d. Substitute demonstrations for hands-on dissection. This will require the provision of specialist audio-visual equipment, and significant reconfiguration of the existing dissection laboratories to suit the new teaching techniques. Some demonstrators may become redundant, though there is a possibility they can be retrained, at a cost, as equipment maintainers. There will still be some ethical concerns over the death of live specimens.
 - e. Produce a compact disc as a teaching aid. It is anticipated that this will require significant investment in specialist support, and also considerable time from academic staff. The extent of co-operation from the existing demonstrators is doubtful, and in any case this option will have to include provision for redundancy payments. Retraining demonstrators for a very different teaching support role may be possible, but is likely to be expensive.
 - f. Develop the virtual reality experience. Despite the enthusiasm of the department of computing studies, there is little information on the possible costs of this option, and the timescale to achieve an acceptable substitute is difficult to determine.

Risks and uncertainties

10. The university has identified that it will have to address the following areas of risk and uncertainty:
 - o student numbers
 - o timescale
 - o reaction of existing staff
 - o supply
 - o unproven technology.

Non-quantifiable aspects

11. The university will also have to consider a number of non-quantifiable aspects:
- o moral acceptability
 - o environmental impact
 - o public perception of university
 - o quality of teaching/learning experience
 - o staff career development.

In this case study we have indicated the issues to be considered, but we have stopped short of developing the full details of the appraisal process and generating financial data. These aspects are illustrated in Annex B.