A QUALITATIVE ANALYSIS OF THE COST AND MANAGEMENT ACCOUNTING CURRICULA AT HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA

By

LUAN ROODT
20311835

Submitted in partial fulfilment of the requirements for the degree Magister Technologiae: Cost and Management Accounting in the Faculty of Business and Economic Sciences at the Nelson Mandela Metropolitan University

Promoter: Prof L Jooste
Co-Promoter: Prof M Struwig

NOVEMBER 2009
DECLARATION

“I, Luan Roodt, hereby declare that:

The work in this thesis is my own original work;

All sources used or referred to have been documented and recognized; and

This thesis has not been previously submitted in full or partial fulfillment of the requirements for an equivalent or higher qualification at any recognized education institution.”
ACKNOWLEDGMENTS

- Professor F.W. Struwig, my research supervisor, for her professional guidance and support.

- Professor L. Jooste, my promoter, for her guidance and assistance.

- My wife, Kendra-Lynn, for her support as well as the typing of this study.

- My family for all the encouragement and support during my study.

- My Lord Jesus Christ, for blessing me with the talent and ability, and Whom without none of this would have been possible.
ABSTRACT

The democracy in South Africa brought about many changes and new challenges. One such challenge was to transform the Higher Education institutes in South Africa. The National Commission on Higher Education (NCHE) resulted in the proposed National Plan for Higher Education in 2001. This referred to the restructuring of Higher Educational Institutes in South Africa.

The National Plan for Higher Education listed priorities within section 6, which deals with the restructuring process. Some of these priorities referred to the reduction of duplications and overlaps in the programmes offered. Prior to 2005, Technikons offered the course National Diploma: Cost and Management Accounting over three years. Former Technikons developed their curricula for Cost and Management Accounting to utilise career orientated training in order to provide students with the necessary knowledge and skills for careers in financial and cost and management accounting as was applied in commerce and industry. Before the transformation and restructuring of the South African higher education institutions, Technikons in South Africa was part of a National system where a National curriculum was developed and implemented by all Technikons in South Africa. Curriculum development took place on a national level. Therefore, the programmes offered at these former Technikons were similar.

Some of the former Technikons still offer the National Diploma in Cost and Management Accounting but in a different format. Students registering for this programme, register for a National Higher Certificate (NHC) in Accountancy. The duration of this NHC is two years where after students can complete a third year to graduate with a National Diploma in Cost and Management Accounting. The NHC in Accountancy was also developed on a national level and the curricula are similar at the higher education institutions offering it in South Africa.

Since the merger of higher education institutions in South Africa, the responsibility to develop new programmes shifted from a national level to an institutional level. The newly merged institutions carry the responsibility to develop new programmes which suites the specific institution and serves the need of the specific communities. The
primary objective of this study is to analyse the Cost and Management Accounting curricula in South Africa with the intention to propose a new curriculum for this diploma. To suggest a proposed curriculum, the old curricula of the various South African institutions were considered using qualitative research methods. The four South African institutions and the two Australian institutions were analysed and a balanced curriculum proposed out of this information.

The proposed curriculum for the diploma in accounting, combined subjects that have been offered previously and subjects that could further expand graduate employability. Five companies were selected to evaluate the proposed curriculum. After considering the views of all the interviewed employers, a final curriculum was suggested for the Diploma in Accounting.

As a result of this study it was clear that in-service training should be added to the Diploma in Accounting. Eighty percent of the interviewed potential employers suggested that practical experience in third year studies would significantly enhance student employability.

Cost and Management Accounting has long been used by accountants to help managers understand the different costs of running a business. It is important for managers to identify certain areas of the business process where costs can be cut and the profitability increased. From this study it is clear that the proposed curriculum is acceptable to employers as they found that students will benefit from it.
TABLE OF CONTENTS

DECLARATION          i
ACKNOWLEDGEMENTS         ii
ABSTRACT           iii
TABLE OF CONTENTS         v
LIST OF TABLES         xi

CHAPTER 1

BACKGROUND AND PURPOSE OF THE RESEARCH

1.1 INTRODUCTION

1.2 THE RESEARCH PROBLEM

1.3 SUB-PROBLEMS

1.4 DEFINITIONS OF TERMS AND CONCEPTS

1.4.1 Career orientated programmes

1.4.2 Cost and Management Accounting

1.5 METHODOLOGY

1.5.1 LITERATURE STUDY

1.6 OBJECTIVES

1.7 SIGNIFICANCE OF THE RESEARCH

1.8 CHAPTER BREAKDOWN

v
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 INTRODUCTION</td>
<td>9</td>
</tr>
<tr>
<td>2.2 DEFINITION OF COST AND MANAGEMENT ACCOUNTING</td>
<td>9</td>
</tr>
<tr>
<td>2.3 THE DEVELOPMENT OF THE DISCIPLINE OF COST AND MANAGEMENT ACCOUNTING</td>
<td>12</td>
</tr>
<tr>
<td>2.4 THE RESTRUCTURING OF SOUTH AFRICAN HIGHER EDUCATION INSTITUTIONS</td>
<td>18</td>
</tr>
<tr>
<td>2.4.1 The green paper</td>
<td>19</td>
</tr>
<tr>
<td>2.4.2 The white paper</td>
<td>21</td>
</tr>
<tr>
<td>2.4.3 The National Plan for Higher Education in South Africa</td>
<td>22</td>
</tr>
<tr>
<td>2.5 CHALLENGES AS A RESULT OF RESTRUCTURING OF HIGHER EDUCATION INSTITUTIONS</td>
<td>23</td>
</tr>
<tr>
<td>2.6 THE HIGHER EDUCATION SYSTEM</td>
<td>24</td>
</tr>
<tr>
<td>2.6.1 The Higher Education Quality Committee and the National Qualifications Framework and their roles within the South African Qualifications Authority</td>
<td>25</td>
</tr>
<tr>
<td>2.6.2 National Qualifications Framework</td>
<td>26</td>
</tr>
<tr>
<td>2.6.3 The Higher Education Qualifications Framework</td>
<td>27</td>
</tr>
</tbody>
</table>
CHAPTER 3
OVERVIEW OF COST AND MANAGEMENT CURRICULA

3.1 INTRODUCTION

3.2 DEFINITION OF CURRICULA

3.3 CURRICULUM DEVELOPMENT

3.3.1 Curriculum Development at the NMMU

3.4 HISTORICAL OVERVIEW OF COST AND MANAGEMENT CURRICULA IN SOUTH AFRICA

3.4.1 The Cost and Management curriculum at Technikon RSA

3.4.2 The Cost and Management curriculum at Vaal Triangle Technikon

3.4.3 Central University of Technology (Free State Technikon)

3.4.4 Nelson Mandela Metropolitan University (Port Elizabeth Technikon)

3.5 AN OVERVIEW OF THE SANTED PROJECT TO ASSIST IN THE DEVELOPMENT OF NEW CURRICULA FOR THE SCHOOL OF ACCOUNTING
3.6 COST AND MANAGEMENT ACCOUNTING IN AUSTRALIA

3.6.1 Gunung-William-Balluk Learning Centre at Kangan

3.6.2 Cengage Education

3.7 SUMMARY

CHAPTER 4

QUALITATIVE RESEARCH AND THE METHODOLOGY USED

4.1 INTRODUCTION

4.2 QUALITATIVE RESEARCH

4.3 RESEARCH DESIGN

4.3.1 Sampling

4.3.2 Data Collection Methods

4.3.2.1 Interviews

4.3.2.2 Focus groups

4.3.2.3 Observation

4.3.2.4 Text and Documents

4.3.3 Data Analysis
CHAPTER 5

RESEARCH RESULTS

5.1 INTRODUCTION

5.2 INDUSTRIES EMPLOYING COST AND MANAGEMENT ACCOUNTING GRADUATES

5.3 PROPOSED CURRICULUM FOR THE DIPLOMA IN ACCOUNTING

5.4 EMPLOYER EVALUATION OF THE NEW CURRICULUM

5.5 RESULTS

5.6 IMPLICATIONS OF THE RESULTS

5.7 FINAL PROPOSED CURRICULUM

5.8 SUMMARY

CHAPTER 6

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

6.1 INTRODUCTION

6.2 ADDRESSING THE RESEARCH PROBLEMS

6.3 SUMMARY

6.4 LIMITATIONS OF THE STUDY
6.5 RECOMMENDATIONS

6.6 CONCLUSIONS

REFERENCE LIST

ANNEXURE A – QUESTIONNAIRE
ANNEXURE B – COPY OF E-MAILS SENT TO EMPLOYERS
ANNEXURE C – EMPLOYERS RESPONSES
LIST OF TABLES

**TABLE 2.1:** A COMPARISON OF MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING 11

**TABLE 2.2:** THE CHANGE IN CONTENT OF COST AND MANAGEMENT ACCOUNTING TEXTBOOKS 14

**TABLE 2.3:** STRUCTURE OF THE NATIONAL QUALIFICATION FRAMEWORK PRIOR TO 2009 28

**TABLE 2.4:** STRUCTURE OF THE NATIONAL QUALIFICATION FRAMEWORK EFFECTIVE SINCE 1 JANUARY 2009 30

**TABLE 3.1:** CURRICULUM OF NATIONAL DIPLOMA COST AND MANAGEMENT ACCOUNTING FOR TECHNIKON RSA 43

**TABLE 3.2:** CURRICULUM ON NATIONAL DIPLOMA COST AND MANAGEMENT ACCOUNTING FOR VAAL TRIANGLE TECHNIKON 44

**TABLE 3.3:** CURRICULUM ON NATIONAL DIPLOMA COST AND MANAGEMENT ACCOUNTING CENTRAL UNIVERSITY OF TECHNOLOGY 45

**TABLE 3.4:** CURRICULUM OF NATIONAL DIPLOMA COST AND MANAGEMENT ACCOUNTING FOR NELSON MANDELA METROPOLITAN UNIVERSITY 46

**TABLE 3.5:** A SUMMARY OF THE COST AND MANAGEMENT CURRICULA AS OFFERED AT THE FORMER TECHNIKONS 47

**TABLE 3.6:** THE CURRICULUM OF THE NATIONAL HIGHER CERTIFICATE: ACCOUNTANCY OFFERED AT THE NELSON MANDELA METROPOLITAN UNIVERSITY 48
TABLE 3.7:  THE CURRICULUM OF THE DIPLOMA IN ACCOUNTING OFFERED AT THE GUNUNG-WILLIAM-BALLUK LEARNING CENTRE AT KANGAN 50

TABLE 3.8:  THE CURRICULUM OF THE DIPLOMA IN ACCOUNTING OFFERED AT CENGAGE EDUCATION 51

TABLE 4.1:  DIFFERENCES BETWEEN INDIVIDUAL INTERVIEWS AND GROUP INTERVIEWS 61

TABLE 5.1:  RANKING OF IDEAL EMPLOYERS 70

TABLE 5.2:  PROPOSED CURRICULUM FOR THE ACCOUNTING DIPLOMA AT THE NMMU 72

TABLE 5.3:  THE OUTCOMES OF THE PROPOSED CURRICULUM 73

TABLE 5.4:  FINAL PROPOSED CURRICULUM FOR THE ACCOUNTING DIPLOMA AT THE NMMU 79

TABLE 5.5:  THE OUTCOMES OF THE FINAL PROPOSED CURRICULUM 80
CHAPTER 1

BACKGROUND AND PURPOSE OF THE RESEARCH

1.1 INTRODUCTION

Cost and Management Accounting is important to any business around the world. This can clearly be seen in the fast growing number of students registering and studying to become members of the Chartered Institute of Management Accounting (CIMA, 2007).

According to Myburgh (2005) one of the central tasks of managers is cost management. Managers use the Cost and Management background and principles to explain and validate the decisions they make to control the cost of the entity or the different departments within the entity. Therefore the employers of Cost and Management Accounting students are concerned with employing competent and valuable employees that will increase the value of their entity.

According to Fireside (1990: 15), choosing a career may be one of the most important decisions influencing the amount of success that a human being achieves. It is therefore important to decide on an appropriate field of study and skills required to increase employability. Furthermore potential employers have certain expectations and require skills to fulfill certain positions.

In South Africa there have been changes in the educational system, both for schools and for tertiary institutions. According to Hyland and Merrill (2003: 1) the expansion and development of the education sector means that educational institutions have to cope with ever-evolving government regulations and policies. However, because of all these compulsory changes, there is also the need to change and adapt the curriculum of programs offered at these institutions. This must be done to fulfill the needs of employers and increase the value of graduates.
This research is aimed at gaining knowledge on as well as an overall understanding of all the different Cost and Management Accounting curricula offered at different institutions across South Africa and selected foreign institutions.

From here many different questions arise:

1. What is the core content of a Cost and Management curriculum?
2. Why are certain modules (courses) included in the Cost and Management curriculum?
3. Why are certain modules (courses) excluded from a Cost and Management curriculum?
4. Is the core content of Cost and Management curriculum developing the skills necessary for a career in Cost and Management?
5. What does a career in Cost and Management entail?

Myburgh (2005: 35) analysed some of the most important factors why first year students become accountants. He further stated that the supply and demand of quality accountants have become a problem not only the firms they will potentially work for, but also the institutions providing their education.

Similar to Myburgh (2005) the objective of this study is to analyse the curricula of the Cost and Management curricula offered and the fulfillment of the employers’ needs they provide.

In this chapter it will be motivated why this topic were chosen to be researched and the objectives will be defined. An indication will be made of the universities/institutions to be included in the studies as well as the foreign institutions.
1.2 THE RESEARCH PROBLEM

The democracy in South Africa brought about many changes and new challenges. One such challenge was to transform the Higher Education institutes in South Africa.

The National Commission on Higher Education (NCHE) resulted in the proposed National Plan for Higher Education in 2001. This referred to the restructuring of Higher Educational Institutes in South Africa.

The National Plan for Higher Education listed priorities within section 6, which deals with the restructuring process. Some of these priorities referred to the reduction of duplications and overlaps in the programmes offered.

This led to the evaluation of these programmes offered by the Higher Education Institutions. From this, the opportunity arose to conduct this study.

One of the most frequently asked questions mentioned by learners when they are about to start an education is, “Which form of education should I pursue?” (Aaron, 2007). Furthermore the choices to further any learner’s education have increased.

In the modern era there are different educational institutions, which offer a variety of courses. Therefore, it sometimes becomes too difficult for students to decide which course to enroll for. Educational training should equip a student with knowledge suitable for employment in their chosen field. Therefore it is the responsibility of educational institutions to provide students with relevant and suitable knowledge in such a way to equip them for future employment in the field.

This is evident in a study completed by Tuchtenhagen (Aaron, 2007) on employers’ perspectives or perceptions of educational attainment. He found that employers still place a high value on employees that have completed degrees and diplomas at universities.
As a result of this, the opportunity arose to do a qualitative study of the different Cost and Management Accounting curricula offered in South Africa and selected foreign educational institutions. The intention is to establish what content such Cost and Management curricula should have.

In a very competitive environment the different educational institutions will try to earn more “business” than their competitors. There are a vast number of institutions all promoting their study courses as the best and the most sufficient way to get jobs and gain financial freedom.

This makes it difficult for employers to decide between hundreds of applications and be happy that the chosen candidate was in fact the best choice. When it is so vital for the survival of these organisations, this becomes even more complex.

According to a study done by Tuchenhagen (Aaron, 2007) employers are still very much concerned with the curricula of the courses offered by educational institutions. Therefore employers also want to employ people that will add value to their firm and it must be beneficial for their business to employ this person because of the knowledge gained through their studies.

1.3 SUB-PROBLEMS

To address the main problem of determining the content of Cost and Management Accounting curricula, the following sub-problems are formulated.

- Who are the potential employers of graduates of the career-orientated Cost and Management Accounting programmes?

- Who are responsible for curricula development and how are they evaluated?

- Who are all the different role players in course development?
• Do all the different universities offer the same syllabus and what and why are their deviations if any?

• What is the perception of potential employees of the Cost and Management Accounting programmes?

1.4 DEFINITIONS OF TERMS AND CONCEPTS

1.4.1 Career orientated programmes

Programs or fields of study offered at the NMMU side formerly known as the PE Technikon. When the study is completed the students receive a National Diploma, with the option of completing their degree (Baccalaureus Technologiae) by undergoing another year of study.

1.4.2 Cost and Management Accounting

Drury (2005: 4) defines Management Accounting as, “being concerned with the provision of information to people within the organisation to help them make better decisions and improve the efficiency and effectiveness of existing operations”.

1.5 METHODOLOGY

This study will be conducted making use of a qualitative study. A literature study will be done to gather data on the history of education and the transformation thereof as well as the different syllabi offered at various institutions. This study will be conducted using a document study to gather information as well as ethnographic studies through individual interviews with identified employers of cost and management accounting students. The research methodology will be discussed in Chapter 4.
1.5.1 LITERATURE STUDY

Secondary data regarding Cost and Management Accounting were obtained through a thorough literature study.

Many different textbooks, financial journals, thesis from previous studies at the Nelson Mandela Metropolitan University, articles published in accounting journals and the Internet will be used.

A literature study will be conducted which will specifically deal with all the requirements for the Cost and Management Accounting course. This will be done to obtain all the different syllabuses offered by the different institutions. An interview will also be conducted with Education experts to discuss the different role players in course and curriculum development.

1.6 OBJECTIVES

According to Hyland and Merrill (2003: 15) one positive change in the educational sector is the general improvements of qualifications and the service that is offered to students. However, the scramble for growth means that the emphasis rather falls on quantity rather than quality.

After considering this, the primary objective of this study is to investigate and evaluate the different Cost and Management Accounting curricula offered at South African higher Education Institutions.

The secondary objectives of this study are:

- To compare the different curricula at various South African Higher Education Institutions.
- To compare the South African curricula with international curricula in this regard.
- To suggest a possible curriculum that may be beneficial to students.
• To establish whether prospective employers belief that the proposed programme will be beneficial to the students to obtain future employment.

1.7 SIGNIFICANCE OF THE RESEARCH

In a fast growing economy, more and more emphasis is getting placed on quality of employment, studies and products and services.

Similarly, the rapid changes that were made to our educational sector, by means of the merging of universities and technikons in certain areas have placed a lot of emphasis on the quality of programs presented. Therefore it is the responsibility of these institutions to educate their students in such a way that they will add value to the entity they will be employed at in future.

Managers have to determine the necessary skills and knowledge these employees need to possess?

In the light of this, this research will reveal the current content of the Cost and Management Accounting courses and whether it should be improved. Therefore the research will assist the tertiary institutions in creating a Cost and Management Accounting program that will be of a high standard.

According to Jump (2007) educational institutions are not entirely successful in some parts. In his study he states that educators are successful in teaching and sharing knowledge, but that will not generate an income for the student. He also states that the students will be better off doing more practical work at universities, but recognises the fact that a good practical offering can only be offered if students have the necessary theoretical knowledge.

Through this study it will be possible for the tertiary institutions to find the balance between practical and theoretical study methods that will help contribute to training people for real world working experience. It is therefore important for any institution to identify the need of the business world and potential employers of their graduates. This study will allow potential employers
the opportunity to express their feelings about the curriculum for Cost and Management Accounting students. Therefore this will contribute to the increase in value of Cost and Management Accounting students to the various companies they will end up working for.

1.8 CHAPTER BREAKDOWN

Chapter 1 describes the research problem and the sub-problems that are derived from it. It also states what the objectives and significance of the research are.

Chapter 2 will provide a background to the development process of educational programs and how it is done in South Africa. It will also provide information of the HEI in South Africa and the challenges facing universities in South Africa. The process of curriculum registration will also be described.

In Chapter 3 the different role players in the development of curricula will be discussed. The role of the HEQC in the South African quality assurance will also be outlined. The qualitative analysis of the curricula of Cost and Management Accounting programs of the various educational institutes that were selected included in the study is provided.

Chapter 4 outlines the different research methodologies and identifies the methods used in conducting this study.

Chapter 5 the results of the qualitative analysis of the programmes and a proposed curriculum will be discussed. The validity and reliability of the research method employed will also be discussed.

Chapter 6 the conclusion and recommendations are made. Proposals for future researchers will also be made.
In chapter 2 the transformation and development of educational programmes in South Africa will be discussed as well as the challenges the transformation process will bring.
CHAPTER TWO

AN OVERVIEW OF HIGHER EDUCATION IN SOUTH AFRICA AND COST AND MANAGEMENT ACCOUNTING

2.1 INTRODUCTION

The primary objective of this study is to analyse the Cost and Management Accounting curricula in South Africa. To achieve this objective it is important to first look at what Cost and Management Accounting entails as well as the South African environment in which this qualification is offered.

According to Nightingale and O’Neil (1997:7), Higher Education is a multifaceted phenomenon which plays a role in society and combines a variety of institutions, different students and various functions.

The past decade represents a new era for South Africa and the South African Higher Education in general where democracy brought with it many changes and challenges. One of these changes was the transformation of the Higher Educational System.

This chapter will firstly look at a definition for Cost and Management Accounting, and then describe the history of the development of this discipline. Thereafter the restructuring of South African Higher Education Institutions will be outlined. To conclude the South African higher education system will be discussed.

2.2 DEFINITION OF COST AND MANAGEMENT ACCOUNTING

The definition of Cost and Management Accounting can be found somewhere between the definitions of management accounting and cost accounting. The term management accounting form the base from which cost and management accounting can be derived. Drury (2005) defines Management Accounting as “a process dealing with the use of accounting information to provide managers
of businesses with information that will allow them to make informed decisions about financial aspects in their business”. Management Accounting is thus used as a method of equipping managers with financial information to control their business.

Islam and Kantor (2005) also emphasise the importance of management accounting to provide managers with the competitive edge in making decisions in the financial sector. Management Accounting can thus be seen as the most important financial tool for managers that make these decisions on a daily basis.

Cost Accounting is regarded as part of Management Accounting and is used to prepare budgets and actual cost of different operations within the organisation. Managers use Cost Accounting as a form of support for decision making and also to establish areas within their organisations where cost can be reduced to fundamentally improve their profitability. In a strong contrast with Financial Accounting, Cost Accounting’s primary use is normally for internal managers to make decisions with and not for external users. Cost Accounting is also forward-looking instead of historical like Financial Accounting (Islam & Kantor, 2005).

The Chartered Institute of Management Accounting defines Management Accounting as “the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information used by management to plan, evaluate and control within an entity and to assure appropriate use of and accountability for its economic resources” (CIMA, 2007).

A person that is a Cost and Management accountant will therefore be able to keep records of the costs of production and distribution and then use this information to inform management or make informed financial decisions with the information.

Drury (2005: 4) describes Management Accounting as the provision of financial and costing information to managers within an organisation to assist them in
making more accurate decisions and thus improve the effectiveness of their operations.

To effectively define Cost and Management Accounting, it is important to understand the difference between management accounting and financial accounting. Drury (2005) states that the first big difference between management accounting and financial accounting is that financial accounting is concerned with supplying information to parties outside the organisation. Management accounting provides information solely for managers inside of an organisation. The second aspect that differs financial accounting and management accounting is the fact that financial accounting provides information of past happenings and management accounting provides information on future probabilities.

Table 2.1 will highlight some of the major differences between financial accounting and management accounting.

**TABLE 2.1: A COMPARISON OF MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING.**

<table>
<thead>
<tr>
<th>A comparison of management accounting and financial accounting</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial accounting</strong></td>
<td><strong>Management accounting</strong></td>
</tr>
<tr>
<td>Reports to:</td>
<td>Reports to management for purposes of:</td>
</tr>
<tr>
<td>• investors</td>
<td>• planning</td>
</tr>
<tr>
<td>• employees</td>
<td>• directing and motivating</td>
</tr>
<tr>
<td>• lenders</td>
<td>• controlling</td>
</tr>
<tr>
<td>• suppliers and other creditors/customers</td>
<td>• performance assessment and evaluation</td>
</tr>
<tr>
<td>• government agencies</td>
<td></td>
</tr>
<tr>
<td>• The public</td>
<td></td>
</tr>
<tr>
<td>Financial accounting</td>
<td>Management accounting</td>
</tr>
<tr>
<td>----------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Emphasis on summaries of financial consequences of past activities and decisions</td>
<td>Emphasis on decisions and activities affecting the future</td>
</tr>
<tr>
<td>Emphasis on objectivity and verifiability of data</td>
<td>Emphasis on relevance of data</td>
</tr>
<tr>
<td>Precise information is required</td>
<td>Timeous information is required</td>
</tr>
<tr>
<td>Summarised data are prepared for the entire organisation</td>
<td>Detailed segment reports are prepared on departments, products, customers and employees</td>
</tr>
<tr>
<td>Must adhere to international financial reporting standards</td>
<td>Need not adhere to international financial reporting standards</td>
</tr>
<tr>
<td>Mandatory for external reports of companies</td>
<td>Not mandatory for company reports</td>
</tr>
</tbody>
</table>

*Source: Garrison, Noreen and Brewer (2007).*

When analysing the definitions in Table 2.1 and considering the differences between Cost and Management Accounting and Financial Accounting as set out, Cost and Management Accounting can be defined as: The use of different methods to gather information on future financial happenings which can be reported internally to managers to make accurate financial decisions.

Over the years Cost and Management Accounting have developed and changed extensively with different methods being used. The following section will look at the development of Cost and Management Accounting and the difference between traditional and innovative Cost and Management Accounting practices.
2.3 THE DEVELOPMENT OF THE DISCIPLINE OF COST AND MANAGEMENT ACCOUNTING

Cost and Management Accounting has long been used by accountants to help managers understand the different costs of running a business. It is important for managers to identify certain areas of the business process where costs can be cut and the profitability increased.

According to Montagna (1997: 133) the development of Management Accounting has been documented in a number of different historical works which can be traced back to the early 1800s. Hopper and Armstrong (1991) explain how the changes in scientific management played a big role in developing Management Accounting techniques even though it preceded the later by several decades. Some modern Cost Accounting techniques originated during the industrial revolution when the focus fell on the development of systems for tracking costs to assist managers in making informed financial decisions. The methods worked well over the years for managers and did not alter significantly.

Horngren (1989) suggested that management accounting curricula placed too much emphasis on financial accounting. He further suggested that this was even more pronounced in the 1940s and 1950s. The emphasis during these years fell on cost-volume-profit relationships such as inventory valuation. There was a clear shift in the teaching of cost and management accounting during the late 1950s to the 1970s. Focus shifted to the decisions that managers have to make and how to provide them with relevant information to make these important decisions. Hansen and Mowen (1994: 8) state that accounting information is vitally important for managers to make decisions and without it, decision making becomes virtually impossible. It is therefore clear that the shift in management accounting towards management decision making. Table 2.2 shows evidence of the change in cost and management accounting education over the years.
**TABLE 2.2: THE CHANGE IN CONTENT OF COST AND MANAGEMENT ACCOUNTING TEXTBOOKS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of books examined</td>
<td>7</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Inventory Valuation %</td>
<td>73</td>
<td>64</td>
<td>46</td>
</tr>
<tr>
<td>Cost Control %</td>
<td>21</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Management Decision-making %</td>
<td>6</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Horngren (1989).*

From Table 2.2 one can see that topics such as Inventory Valuation received far less attention during the 1970s than in the 1940s. In contrast topics such as Management Decision-making were emphasised more in later years.

In a study conducted by Mahar (2001) it was concluded that Management Accounting research started to increase during the 1960s and 1970s in the United States of America. The Accounting Review was the only academic accounting journal during the 1950s and was one of the major factors for the lack of published Management Accounting articles. The number of published Management Accounting articles in The Accounting Review, increased from fifty nine in the 1950s to one hundred and twenty three in the 1960s.

Mahar (2001) further suggested that there was a clear shift in attention for all the publishers of Management Accounting articles. Between 1950 and 1970, Management Accounting researchers did not rely on outside disciplines such as mathematics. In 1970 however, the majority of Management Accounting articles that were published in *The Accounting Review* and the *Journal of Accounting Research* were based on outside disciplines. This was a productive period for Management Accounting as a whole with an increase in
research articles and new developments in the techniques used in practice and the learning institutes.

During the late 1970s and 1990 the number of Management Accounting articles that were published in the United States of America dropped significantly. According to Mahar (2001) Management Accounting research can no longer be considered a growing industry in the USA and is declining as a proportion of accounting research. He further states that Management and Cost Accounting textbooks make little to no reference to research literature and therefore does not encourage research in this field.

Abdel-Kader and Luther (2004) report on the status of Management Accounting in the United Kingdom and reported that the Management Accounting employed by industrial companies is not sophisticated and that the new techniques are not widely used. Management Accounting in the United Kingdom receives more exposure in the industry and in research than in the USA.

Abdel-Kader and Luther (2004) stated that since the 1990s Management Accounting techniques have been developed and improved across a range of different industries. A number of these new developments came under criticism from different sources. The new techniques have been designed to support modern developments and management processes. Abdel-Kader and Luther (2004) further identified four phases to describe the development of Management Accounting through the years.

- Phase 1 – Cost Determination and Financial Control (Pre 1950)
- Phase 2 – Information for management planning and control (by 1965)
- Phase 3 - Reduction in waste of resources in business processes (by 1985)
- Phase 4 - Creation of value through the effective use of resources (by 1995)
The four phases provide a clear picture of how Management Accounting has evolved up to the fourth phase.

The different firms that were used in the study by Abdel-Kader and Luther (2004) where grouped into the four identified phases according to their use of Management Accounting techniques. The findings were as follows:

• 19% of firms were found to be in phase 1
• 41% of firms were found to be in phase 2
• 30% of firms were found to be in phase 3
• 13% of firms were found to be in phase 4

Management Accounting in the United Kingdom is mowing slowly towards the creation of value through the effective use of resources thus showing that development is taking place.

Islam and Kantor (2006) researched the Management Accounting practices in China and concluded that the reigning culture and values that is being practised by organisations in China influence the development of Management Accounting practices. This leads to a lack of understanding for Management Accounting practices in other countries and in particular the western Management Accounting techniques.

Islam and Kantor (2006) suggest that one way to assist China in Management Accounting development is for the Chinese government to include Management Accounting as an academic programme in their higher educational institutions. The fact that organisations in China increasingly use Management Accounting to increase the value of their firm and to gain a competitive advantage will encourage the Chinese government to strongly consider such a change, but currently the development of Chinese Management Accounting practices is on the slow side.

Management Accounting development is an international process although the United Kingdom plays the most active role. The Chartered Institute of
Management Accounting is currently based in the United Kingdom, which is one of the main reasons for the continuous development of new techniques in the United Kingdom. The trend is very similar in the USA, China and the United Kingdom with the focus in all of these countries shifting to value creation. Management Accounting in all these countries can be seen as a method of adding value to all organisations that use these new techniques on a regular basis.

In the late 1980s accounting practitioners and educators came under fire for the fact that Management Accounting practices had changed little over the past sixty years even though radical changes took place in the business world. Educators were criticised for the fact that the curriculum taught to accounting students where the same every year and no new trends appeared (Mahar, 2001).

The difference between traditional and innovative Management Accounting techniques can clearly been seen in the cost control techniques used by cost and management accountants. Traditionally the principal technique that was used by Management Accountants was variance analysis. Variance analysis is a systematic approach to the comparison of the actual costs to budgeted costs of materials and labour used during the production process for a specified period.

With the new innovative Management Accounting techniques there is still some form of variance analysis although it is now used in conjunction with new techniques such as life cycle cost analysis and activity-based costing (ABC). These techniques are designed with the altering business world in mind and allows for accurate allocation of costs to different departments or areas of the production process. In lifecycle costing managers recognise the importance of their ability to influence the cost of manufacturing products in the early stage of development. By making small alterations to the costs of products in the design stage of a product, it can lead to big cost savings at a later stage.
In activity based costing the importance is moved to the different activities responsible for the manufacturing process. The costs related to the manufacturing of the products are directly linked to the number of activities and therefore the key is to manage the efficiency of these activities.

The development of new Cost and Management Accounting techniques forced higher education institutions to change the curricula that were taught to Cost and Management Accounting students. The following section will deal with the transformation of the higher education sector and the restructuring thereof.

### 2.4 THE RESTRUCTURING OF SOUTH AFRICAN HIGHER EDUCATION INSTITUTIONS

During the 1990’s, the South African government made proposals to change the face of South African Higher Education Institutions, which resulted in the restructuring of these institutions.

The process of restructuring the South African institutions started with the National Commission on Higher Education (1996) (NCHE). In 1996 the NCHE proposed that the system of higher education had to be reshaped to serve a new social order, meet all the countries needs and to be able to respond to new realities and opportunities.

The commission also stressed the importance of transformation and the opportunities and challenges created by it.

The National Commission on Higher Education (1996) highlighted three key features of the proposed transformed higher education system, namely:

- **Greater participation of matriculating students in furthering their academic careers (up to 30% by the end of 2005);**
- **Increased responsiveness to socioeconomic demands;**
- **Increased co-operation and partnerships between the government and different higher education institutes.**
These changes were a clear indication that many major changes were forthcoming for South Africa’s educational system. It also led the way for many new policies and proposals to follow, which became the backbone for the transformation process.

The importance of transformation is clearly indicated by the National Commission on Higher Education in their goals and values required the South African educational system. Higher Education can promote the research, training of skilled personnel and the creation of useful knowledge to develop South African people to be competitive on a national and global front. Therefore, the transformation strategies were developed by the National Commission on Higher Education in three phases including the responsibilities and roles of all the various educational institutes, structures and bodies.

2.4.1 The green paper

The National Commission on Higher Education resulted in the Green Paper on Higher Education Transformation (1996). This Green Paper used the National Commission on Higher Education as its primary resource, in its process to communicate and to consult with all the stakeholders involved in the Higher Education programmes.

The Green Paper also signalled the intentions of the Department of Education with regard to the reconstruction, transformation and development of Higher Education in South Africa. The difficulty was stated by the Department of Education in undergoing this task, by reminding stakeholders that transformation and expansion must take place within the reality of their limited resources. Emphasis was also placed on the fact that the South African Higher Education system should be planned and funded as a single coordinated system.

According to the minister of education (Green paper, 1997) believed that the following key objectives had to be achieved in order to ensure success in the South African Higher Educational System:
- The provision of assistance to enable all institutions to submit statements of current situations and action plans;
- The appointment to review diplomas, degrees and certificates offered by institutions;
- The investigation of distance education institutions and a plan to create a single distance education provider;
- The development of an integrated qualifications framework to form part of the National Qualifications Framework (NQF);
- Development of a quality assurance system for higher education;
- An audit of Higher Education institutions should be carried out as a basis for assessment criteria for all funding;
- Undergoing technical studies to implement the new goal-orientated strategies and identifying performance indicators in higher education;
- A task team must be appointed to investigate and evaluate the research infrastructure.

The green paper emphasised structure and continuous growth. The structure proposed by the green paper was also based on the proposed single coordinated system. The department of education believed that the only way in which the consequences of transformation and growth can be planned and managed effectively, was through the creation of single coordinated system. This system would include universities, technikons, colleges and public providers. The size and structure of this system would also require a national higher education plan that coordinated student enrolments by levels of studies and fields of learning.

The green paper also proposed that the different programmes offered by the various educational institutions would have to be registered on the NQF and that a new quality assurance system had to be developed.

Subsequent to the National Commission on higher education, the Green Paper gave clearer guidelines in achieving the goal of transforming the South African Educational System, which was aimed at changing the face of South Africa’s higher educational institutions (Green Paper on higher education transformation, 1996).
2.4.2 The white paper

The green paper of 1996 was followed by the white paper in 1997, which is a programme for the transformation of higher education. It is the next step after the Green paper in the development of the new system for education in South Africa.

The Minister of Education believed that the White Paper has laid the foundation to embark on a joint process of transforming the South African Higher Education. The White Paper, similar to those of its predecessor, placed emphasis on the development of a single coordinated system with all the new governing, planning and funding arrangements (The White Paper, 1997).

According to the White Paper the transformation process required the following:

- **Increased and diversified participation** to accommodate different races and genders of the students.
- **A policy that will meet the needs of an increasingly technologically-orientated economy.**
- **Cooperation and partnerships between the different stakeholders and institutions involved with higher education** (Department of education, White Paper, 1997: 6).

The principal aim of the White Paper can be summarised in the following principles:

- **Equity and redress** – Requires fair opportunities to enter higher education programmes and to succeed in them.
- **Democratisation** – The system of higher education and individual institutes should maintain a well-ordered and peaceful community life.
- **Development** – Creating conditions to facilitate transformation and enabling contribution to society.
- **Quality** – Meeting all specified requirement and striving for excellence.
- **Effectiveness and efficiency** – A system that works well and leads to the desired outcomes.
- **Academic freedom** – Restriction of any outside interference in pursuit and practice of academic work.
- **Institutional autonomy** – Refers to a high degree of self-regulation and administrative independence.
Public accountability – This implies that institutions are answerable for their actions and decisions to their own governing bodies and society in general (White Paper, 1997: 8).

The release of the Education White Paper was the culmination of an extensive process of investigation and consultation that initiated with the National Commission on Higher Education and later the release of the Green Paper on Higher Education.

2.4.3 The National Plan for Higher Education in South Africa

The next phase in the educational transformation process was the National Plan for Higher Education in South Africa (2001). The National Plan provides the framework and mechanisms for the restructuring of the higher education system and to achieve the visions and goals of the higher education system outlined in the White Paper (1997).

Section six of the National Plan for Higher Education deals with the restructuring of the institutional landscape of Higher Education in South Africa.

The National Plan for Higher Education (2001) aimed to promote collaboration between different institutions at a regional level and listed the following priorities for this process:

- To reduce the duplication and overlapping in programmes and the provision of services.
- To promote the joint development and delivery of programmes.
- To enhance responsiveness to regional and national needs for academic programmes, research and community service.
- To help build academic and administrative capacity.
- To refocus and reshape the institutional culture and missions of institutions as South African institution (National Plan for Higher Education, 2001: 79).

According to the Minister of education, the restructuring should allow for the following:

- Eleven Universities, of which two would be expected to develop career-focused technikon-type programmes to address regional needs;
Six Universities of technology
Six Comprehensive Institutions, of which four would be established through the merger of a technikon and a university and two through the redevelopment and refocusing of an existing university; and
Two National Institutes for Higher Education (Government Gazette, 2002).

The ministry of education believed that institutional co-operation remained the most important factor for solving social, educational, economical and political problems caused by the transformation process.

The restructuring of the Higher education institutions in South Africa inevitably led to some challenges.

2.5 CHALLENGES AS A RESULT OF RESTRUCTURING OF HIGHER EDUCATION INSTITUTIONS

According to Fourie (1999:1) South Africa’s restructuring of the higher education system and the process of transformation are located within the country’s political and socio-economic change to democracy. Fourie (1999) also identifies five issues that cause challenges to universities in South Africa and to the academic staff brought about by the transformation of Educational system:

- Democratising the governance structures of institutions
- Increasing access for disadvantage students, both educationally and financially
- Developing a new curriculum
- Fulfilling needs in research and community service
- Altering the imbalance in terms of race and gender

Cloete, Fehnel, Maassen, Moja, Perold and Gibbon (2002: 453) also identify problems associated with the transformation process. Firstly, the lack of systematic capacity in terms of skills and manpower is identified. Secondly, the
lack of an efficient information base to work from and understand institutional trends was also a cause of concern for the Higher Education Council.

One of the problems that need immediate attention is the development of new curricula for the alternative and current programmes offered by South African Higher Education Institutions.

The development and altering of these programmes is a complex process that includes different procedures. There are also different role players involved in this ongoing process.

2.6 THE HIGHER EDUCATION SYSTEM

According to the Minister of Education (National Plan for Higher Education, 2001), the curricula for the programmes offered by South African Higher Education Institutions have to change to offer equal opportunities to all South Africans. This could only be achieved by assisting disadvantage students on an educational and financial level. By doing this, South African students would be prepared on national and international levels for different challenges that the business world could offer.

To ensure that this high quality would become a reality, the Council on higher education (CHE) used the White Paper and Higher Education Act of 1997 to establish a permanent sub-committee. This sub-committee was called the Higher Education Quality Committee (HEQC). The HEQC is responsible for promoting and auditing quality or higher education programmes. The HEQC used the National Qualifications Framework (NQF) to register programmes on different required levels.
2.6.1 The Higher Education Quality Committee and the National Qualifications Framework and their roles within the South African Qualifications Authority

The South African Qualifications Authority (SAQA) is a body of 29 members appointed by the Departments of Education and Labour. These members are nominated by certain key shareholders in education in South Africa.

The functions of the SAQA with regards to the National NQF are essentially twofold. The first function is to oversee the development of the NQF. They do this by formulating policies and criteria to help establish bodies that will be responsible for establishing standards and qualifications. These qualifications and standards must be monitored and audited in terms of NQF set standards.

The second function of SAQA is to oversee the implementation of the NQF. SAQA does this by ensuring the registration and accreditation of function to the responsible bodies. They must also register national standards and qualifications on the framework.

Apart from the NQF, SAQA has also set the following objectives (Phillips, 1996:1):

- *To facilitate access to training and career paths.*
- *To enhance the quality of Education and training.*
- *To accelerate the redress of past unfair discrimination in education, training and employment opportunities.*
- *To contribute to personal development of each learner and social and economic development of the nation at large.*

SAQA enables South Africa to develop its own National Qualifications Framework (NQF). Based on the functions of SAQA, the NQF is one of their main projects.
2.6.2 National Qualifications Framework

The aim at NQF is to cover all types of learning and achievements of learners in South Africa. This will be done through the setting of clear standards for all programs and the establishment of quality management systems to ensure that the identified standards are implemented. Qualifications and standards registered on the NQF are presented in terms of learning outcomes that learners are expected to have demonstrated. The NQF is therefore committed to a system of education and training that is based on the notion of learning outcomes.

According to Phillips (1996:3), the NQF is a foundation for the educational and training system which is designed in such a way that learners earn credits towards national qualifications. The NQF’s single qualifications system will streamline the current qualifications, and integrate secondary education, training and tertiary education. Higher education institutes can use this to design educational programs to achieve their different visions, missions and plans, as well as the needs of their clients and communities.

Therefore, the NQF operates with a single, but differentiated higher education system. NQF applies to all higher education programs and qualifications offered in South African institutions.

The NQF have the following objectives (Government Gazette, 2007:3):

- *Bring together the variety of qualifications already in existence.*
- *Provide a structure to which new qualifications can easily be added.*
- *Ensure that all existing and new qualifications meet the quality requirements.*
- *Ensure that international education and business networks and new opportunities can be developed now and in the future.*

The NQF offers benefits to the South African Higher Education system, especially equipping learners to compete on national and international level by showing the standard of qualifications. This allows workers from abroad to have their qualifications assessed for equivalence against South African
qualifications registered on the NQF. This will also make detailed and credible reporting of individual attainment available to employers or providers.

According to the Minister of Education, the NQF has certain key features on which the whole system is based:

- A coherent framework of ten levels encompassing all types of education and levels of achievement. These levels provide an understandable and logical framework.
- A flexible unit standards approach.
- An assessment program based on the clearly defined standards. These programs will assist in effective monitoring of all programs for compliance with standards.
- Accessibility and inclusion of the existing workforce and current learners.
- The necessary quality systems.

*Source: Getting to grips with the NQF- Phillips (1996: 9)

The assessment and monitoring of Higher Education programs is possible only because of the framework that is clearly set out by the NQF.

2.6.3 The Higher Education Qualifications Framework

The Higher Education Qualifications framework is an integral part of the NQF. According to the Government Gazette (2007), the Higher Education Qualifications framework is designed to:

- Be sufficiently flexible to accommodate different types of higher education institutions and allow them to pursue their own curriculum goals.
- Assist graduates to contribute to social, cultural and economic development of South Africa as well as participation in the global economy.
- Enhance the development of a vibrant, high quality research system.
- Be compatible with international frameworks and standards to allow comparisons and international recognition for national programs.
- Be flexible to allow the development of new programs and qualifications as they become relevant and needed.
- Be easily understandable and clear to all possible users. The framework must be as user-friendly as possible for the higher education system as well as all possible clients.
- Articulate with the rest of the NQF.
The NQF is organised as a series of different levels of learning achievements organised from level one to level eight (SAQA, 2008). Each level on the NQF is described by a statement that acts as a guideline to differentiate between different levels. The purpose of these level descriptors is to act as broad descriptions of achievements or outcomes that are appropriate to earn qualification on that level. This clearly indicates the level of knowledge a learner requires to successfully achieve a specific standard. The NQF was recently updated to ten different levels, compared to the eight different levels that were used prior to implantation of the new levels in January 2009. A comparison will now be made between the old and the new NQF levels.

2.6.3.1 The National Qualifications framework prior to 2009

The different NQF levels consist of three sub-sections, namely:

- General Education (level 1 – schooling up to grade 9),
- Further Education and Training (levels 2-4 – grade 10-12), and
- Higher Education (levels 5-8).


The structure of the NQF prior to 2009 with all the different levels and sublevels are outlined in Table 2.3.
### Table 2.3: Structure of the National Qualification Framework prior to 2009

<table>
<thead>
<tr>
<th>NQF Level</th>
<th>Sub-Section</th>
<th>Qualification Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Higher education</td>
<td>* Post-doctoral research degrees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Doctorates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Masters Degrees</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>* Professional Qualifications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Honours Degrees</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>* National First Degrees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Higher Diplomas</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>* National Diplomas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* National Certificates</td>
</tr>
<tr>
<td>4</td>
<td>Further Education and Training</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>* National Certificates</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>General Education and Training</td>
<td>* Grade 9 National Certificates</td>
</tr>
</tbody>
</table>

*Source: SAQA (2008).*
2.6.3.2 The new National Qualifications Framework levels

The new qualifications framework allows for comparability between different qualifications across the system over ten levels. Higher education qualifications are relevant to six levels of the NQF, from level five to ten.

Levels five to seven are for undergraduate qualifications and levels eight to ten are for postgraduate qualifications. According to the Minister of education (Government Gazette, 2007: 11) the framework allows for nine qualification types that is mapped onto the six levels of the NQF applicable to higher education.

The framework consists of the following qualification types (Government Gazette, 2007: 11)

Undergraduate

- Higher Certificate
- Advanced Certificate
- Diploma
- Advanced Diploma
- Bachelor’s Degree

Postgraduate

- Postgraduate diploma
- Bachelor Honours degree
- Master’s Degree
- Doctoral Degree

The structure of the new NQF with all the different levels and qualification types are outlined in Table 2.4.
Table 2.4: STRUCTURE OF THE NATIONAL QUALIFICATION FRAMEWORK EFFECTIVE SINCE 1 JANUARY 2009

<table>
<thead>
<tr>
<th>NQF Level</th>
<th>Qualification type</th>
<th>Qualification descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Postgraduate</td>
<td>• Doctoral Degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Masters Degree</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>• Postgraduate Diploma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bachelor Honours Degree</td>
</tr>
<tr>
<td>8</td>
<td>Postgraduate</td>
<td>• Professional Bachelor’s Degree</td>
</tr>
<tr>
<td>7</td>
<td>Undergraduate</td>
<td>• Advanced Diploma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bachelor’s Degree</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>• Advanced Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Diploma</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>• Higher Certificate</td>
</tr>
</tbody>
</table>

* Source: Gerber (2009).

The minister of education has the right to approve a new qualification type and descriptor if the need for it arises. All higher education programmes and qualifications must comply with this policy by a date that will be determined by the minister of education by notice in the Government Gazette.

2.6.4 The implementation of the NQF

Followed by the HEQF that was gazetted in October 2007, the Department of Education (DOE) and the Council on Higher Education (CHE) turned their intention to implementing the NQF. The NQF and the implementation thereof
has significant implications for all the different stakeholders involved. The interested stakeholders are the DOE, the Council on Higher Education (CHE) and its permanent quality committee, the HEQC, SAQA and all Higher Education Institutes.

In particular the implementation of the NQF will result in a number of important changes in purposes, characteristics of qualifications and the credit values of qualifications. The nature of processes in higher education does not allow these proposed changes to be introduced overnight. Cautious of this and the problems the fast implementation might bring about, the DOE, CHE and SAQA have been working together to develop a phased approach to the implementation at the NQF.

The implementation date of the Qualifications framework for Higher Education Institutions is the 1st of January 2009. The implementation however, will have no immediate or significant impact on institutions. Higher Education Institutions will need some time to phase out their existing qualifications. In this regard, Higher Education Institutes will continue to alter current programs and qualifications as registered by the DOE and approved by the SAQA on the NQF.

The only change that will occur in 2009 is the admission requirements and process of students into higher education with the National Senior Certificate.

The second party that plays a significant role in program development is the HEQC. The HEQC is a permanent sub-committee of the Council on Higher Education (CHE, 2009).

The HEQC has three main functions which include quality promotion, institutional audits and program accreditation. Program accreditation is an important part of developing new institutional qualifications. The HEQC has minimum standards that academic programs have to adhere to.
The standards and criteria set out by the HEQC are intended to be used by Higher Education Institutions in applying for the accreditation of new programs or the re-accreditation of existing programs. They are also used by students as clear indicators of what the HEQC requires for the quality of different programs offered.

The criteria of the HEQC for program accreditation should be used as the basis for self-evaluation of programs by institutes, as well as setting additional benchmarks. The HEQC will use their criteria, the self-evaluation reports and any other evidence provided by institutions in the evaluation of application for program accreditation.

2.7 SUMMARY

In this chapter Cost and Management was defined as the use of different methods to get financial information on the cost of manufacturing products and then using that information to make accurate financial decisions. Cost and management accounting is an effective tool for reducing cost of manufacturing products and thus increase profits.

The historic development of the discipline was outlined and the difference between traditional and innovative costing methods where discussed. Thereafter the restructuring process of the South African Educational landscape was discussed along with all the educational documents that were used in the transformation and restructuring of the higher education in South Africa.

In Chapter 3 an overview of Cost and Management curricula will be provided as well as the different international trends regarding cost and management accounting practices around the world.
CHAPTER 3
OVERVIEW OF COST AND MANAGEMENT CURRICULA

3.1 INTRODUCTION

In chapter two Cost and Management Accounting were defined and a history of the development of the discipline given. A background was also provided to the transformation and the restructuring of South African Higher Education Institutions and the South African Education System was explained.

In this chapter, a definition of curricula will first be given. Thereafter the history of the various curricula in Cost and Management Accounting in South Africa will be given. The development of new curricula will be discussed, as well as how it differs in different countries. To conclude an investigation of some curricula on offer internationally will be provided.

3.2 DEFINITION OF CURRICULA

“All educational ideas must find expression in curricula before we can tell whether they are day dreams or contributions to practice. Many educational ideas are not found wanting because they cannot be found at all.” (Stenhouse, 1980)

This statement highlights the importance and centrality of curriculum in any form of education. New ideas and concepts can only be made practical and introduced into education through a well developed curriculum.

The primary goal of education is to ensure that all students completing programs are successful and that they become fully participating members of their societies and in their respected fields (Nightingale and O’Neil, 1997).

The goals of education can be specific to their own societies and all goals work towards success in their identified areas. These goals of education can only be
achieved if curriculum development is successful and the curriculum is relevant to business practice.

According to Proctor (1985) the word curriculum is taken from the Latin vocabulary and has the meaning “race-course”. The Latin expression provides a very descriptive picture of the definition of curriculum. Many students will find education to be a race that has to be completed with many obstacles along the way. These obstacles can be in the form of all the different subjects and practicals that have to be passed to complete the “race” and therefore earn a qualification.

In the modern era, students that decide to enter into higher education, have some degree of choice in pursuing a career. Higher education institutions offer a wide variety of programmes and students have the important decision of which programme will suite their choice of career. Higher education institutions normally have an individual curriculum for their programmes which will allow students to attain a degree or specialise in certain fields. Therefore the institution offering a programme must take responsibility for the curriculum of their programmes.

Curricula have numerous definitions which can be slightly contradicting. A curriculum can be defined in a broad or narrow terms. According to Proctor (1985), a curriculum in formal education can be described as the set of programmes and their content that is offered at learning institutes. This broad definition can be helpful to attract students at higher education level because of the diversity a curriculum can offer.

To provide clarity on what constitutes a curriculum, one has to clearly differentiate between a curriculum and a syllabus. A syllabus refers to the content of a certain subject within a curriculum. A syllabus can be used to identify all the content within a subject that can be examined and the learning outcomes of that subject. A syllabus therefore forms part of a curriculum with consists of various syllabi within subjects that are required to complete a programme.
A curriculum can also refer to a defined programme of study aimed at specifically identifying the content of this programme. This can refer to all the courses (subjects) a student must pass to attain a diploma or degree in their identified field of study. A curriculum can therefore assist in allowing a person to enter a specialised field and by following the planned curriculum the person will acquire a qualification relevant to their desired field of expertise (Marsh, 2004: 3).

A curriculum can also be described as all the classes outlined and presented by institutions as a requirement for the completion of a degree or diploma in a certain field (Kelly, 2004: 7).

The following is identified as different types of curriculum by (Wilks, 2005: 15).

- The written curriculum – Includes the statement of purpose, aims, content, experiences and materials.
- The operational curriculum – The way in which the curriculum paper is put into practise. This includes what the lecturer teaches in class as well as the learning outcomes.
- The hidden curriculum – Includes the behaviours, knowledge and performance that the learner identifies as being important.
- The null curriculum – Consists of what is not taught and are bot included in the curriculum.
- The extra curriculum – Refers to the planned experiences outside of the specified educational session.
- The formal curriculum – Refers to the written document that were approved by a committee and are used to guide the lecturing process
- The informal curriculum – Includes those activities that are not designed and planned by the institution.

Goodson (1996: 4) describes a curriculum as “a multifaceted concept, constructed, negotiated and renegotiated at a variety of levels and in different arenas.”
Jenkins and Shipman (1976) describes a curriculum as having three levels of responsibility.

“A curriculum is the formulation and implementation of an educational proposal to be taught and learned within a school or other institution and for which that institution accepts responsibility at three levels, its rationale, its actual implementation and its effects."

Through this definition it is clear that higher education institutions carry the responsibility of developing the actual curriculum, conveying the curriculum to students in classrooms and providing support for the students understanding of certain aspects of the curriculum.

The term curriculum is often defined in two different ways by educational specialists. Firstly, a curriculum can indicate a rough plan for the education of students in a certain field. Secondly, a curriculum is used to identify a certain field of study (Pinar & Reynolds, 1995: 8).

In summary, a curriculum can be seen as an interrelated set of procedures and experiences that a student have to follow under the guidance of an institution to complete a programme in their desired field.

Continuous curriculum development will provide students with the opportunity to graduate with relevant and up to date knowledge that will assist them in being successful in the business world. Curriculum development can be seen as an important part in transforming higher education in South Africa.

In the next section curriculum development will be discussed as well as how curriculum development differs from country to country.
3.3 CURRICULUM DEVELOPMENT

Curriculum development in Higher Education plays a vital role in finding efficient ways of educating students.

Roux (2006) argues the development of curricula can be effective and successful if it is approached holistically. The importance of this approach lies in the fact that all possible stakeholders affected by the development of new curricula should be included in the process. The opinions of students, lecturers and researchers are vital in ensuring successful curriculum development.

Curriculum development can be described as the process of organising, combining and co-ordinating the various programmes at institutions which form the curricula so that they lead to different levels of knowledge and qualifications. Such process also includes experimentation, evaluation of content and effectiveness, as well as selection of appropriate teaching and learning methods and materials to keep students informed (Slattery, 2006: 2). Curriculum development can be assisted by outside expertise to ensure higher education is in line with business expertise.

Carl (2002) agrees with the fact that all the key stakeholders should be involved in curriculum change. He states that the teacher however, is the principal role player. Carl highlights the fact that the South African education system does not always involve the teacher in curriculum development. The teacher’s main task in South Africa is mainly to implement a curriculum and strategy that was developed elsewhere. Tisani (2004) describes the importance of curriculum development for the South African education system. According to him, curriculum development is the core of the changing education system. Tisani (2004) states that it remains the responsibility of teachers to develop and integrate new curricula into the education system, so they can add value to the people of South Africa.
Ramparsad (2001) believes that teachers should be trained to be able to assist in curriculum development and that a strategy should be put into place to assist teachers to evaluate the new curricula.

Curriculum development is a vital part of the transformation of Higher Education in South Africa. The identification of key stakeholders to assist in this process is equally important to increase the possibility of success. From the opinions of all of the above mentioned writers, it is clear to see that teachers need to play a pivotal role in curriculum development for it to be successful. Curriculum development is a continuous process which cannot be neglected for long periods of time.

According to Williamson and Lemmer (2003) the South African curriculum changes and policy changes was informed by the Australia education system. In 1975 Australia also went through transformation similar to that of South Africa. They changed from a predominantly white continent to a multi cultural country with new challenges. This political transformation brought about major changes in their educational system. Australia also established a framework, namely the Australian Qualification Framework (AQF). The framework was used to establish twelve different levels for evaluating the quality of offered programs from school level to university level.

South Africa’s transforming higher education can be driven by the development of new curricula. However, the first ten years of democracy left more questions than answers. According to Tisani (2004), the post democracy curriculum development initiative have been followed with questions on whether outcome based education will be applicable to higher education. Many debates have taken place on this topic, with most of them ending in favour of outcome based education.

Williamson and Lemmer (2003) emphasise that curriculum development should be a combined activity between lecturers, students and business expertise. He also believes that the curricula in Higher Education should be reviewed regularly.
to meet student needs. In South Africa currently, curriculum development is seen as important and receives attention, especially at higher education level.

As previously mentioned, Higher Education like many other sectors in South Africa, is being transformed through a series of papers and policies that altered Higher Education significantly. Moore (2003) stipulates that a central goal of all these policies has been to increase the control of the state over the Higher Education system to bring about economic and social development. The state intended to enhance their control over Higher Education by creating academic programmes. These programmes will be a method through which the system can be controlled and will bring about a different form of curriculum.

The new academic programmes brought about new requirements. Academics have to specify their learning outcomes and assessment criteria for the public. They are also required to work in programme teams when developing new curricula and cooperation across departments and disciplines were encouraged.

Moore (2003) further highlights the importance that different departments agree on graduate identities that will be suitable for the business world and use this to establish outcomes that the curricula should achieve.

The programme policy forced a shift in lecturing practices. Academics were asked to respond to priorities from outside their departments to meet the requirements set by the state. Moore (2003) also states that academics have to negotiate across departments and identify curricula with colleagues from other disciplines.

3.3.1 Curriculum Development at the NMMU

The development of new learning programmes at the NMMU, is a lengthy process which consists of eleven steps:

- Step1 – Complete a series of forms from the Department of Education, the HEQC and SAQA that is required for approval of new programmes.
Step 2 – The documentation needs to be submitted to the Faculty committees for approval

Step 3 – The documentation needs to be submitted to the Faculty board for their approval.

Step 4 – Documents must then be submitted to the Programme Screening committee (PSC)

Step 5 – The documentation must then be submitted to the Academic Planning Quality Committee (APQC) for approval

Step 6 – The next approval have to be completed by the Executive Committee of SENATE

Step 7 - New programmes also need approval from SENATE and may also be referred to EMCOM if any financial implications exist.

Step 8 – After the SENATE meeting, the programme proposal is submitted to the university council for final institutional approval.

Step 9 - The documentation is then submitted to the Department of Education for approval.

Step 10 – Documentation is then submitted to SAQA. If the qualification is not registered on the new NQF, information on the qualification must be submitted to SAQA.

Step 11 – The final step in the programme accreditation is to submit the new programme online to the HEQC.

* Source: Quality Management Unit of the Nelson Mandela Metropolitan University: 2009

The history of Cost and Management Accounting curricula that was offered previously at former technikons will be outlined in the paragraphs below.
3.4 HISTORICAL OVERVIEW OF COST AND MANAGEMENT CURRICULA IN SOUTH AFRICA

Prior to 2005, Technikons offered the course National Diploma: Cost and Management Accounting over three years.

Former Technikons developed their curricula for Cost and Management Accounting to utilise career orientated training in order to provide students with the necessary knowledge and skills for careers in financial and cost and management accounting as was applied in commerce and industry.

Before the transformation and restructuring of the South African higher education institutions, Technikons in South Africa was part of a National system where a National curriculum was developed and implemented by all Technikons in South Africa. Curriculum development took place on a national level. Therefore, the programmes offered at these former Technikons where very similar.

Currently some of the former Technikons still offer the National Diploma in Cost and Management Accounting but in a different format. Students registering for this programme, register for a National Higher Certificate (NHC) in Accountancy. The duration of this NHC is two years where after students can complete a third year to graduate with a National Diploma in Cost and Management Accounting.

The NHC in Accountancy is also developed on a national level and the curricula are similar at the higher education institutions offering it in South Africa. Evidence of the curricula offered at the different institutions is provided later in the chapter.

Since the merger of higher education institutions in South Africa, the responsibility to develop new programmes shifted from a national level to an institutional level.
The newly merged institutions carry the responsibility to develop new programmes which suits the specific institution and serves the need of the specific communities.

In the following section the National Diploma: Cost and Management Accounting curricula will be outlined. The curricula used at the former institutions that will be outlined include the following institutions:

- Technikon RSA
- Vaal Triangle Technikon
- Central University of Technology (Free State Technikon)
- Nelson Mandela Metropolitan University (Port Elizabeth Technikon)

Although there are more Technikons that offer the National Diploma in Cost and Management Accounting, these four institutions will be analysed as it will provide the necessary information to see whether these programmes are similar or not.

### 3.4.1 The Cost and Management curriculum at Technikon RSA

Table 3.1 provides the curriculum offered at the Technikon RSA in 2002

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MODULE</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 and 2</td>
<td>Financial accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Business law 1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>End user computing 1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Theoretical</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Practical</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Or</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Information systems 1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Theory</td>
</tr>
<tr>
<td>YEAR</td>
<td>MODULE</td>
<td>SUBJECT</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>2</td>
<td>1 and 2</td>
<td>Financial accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Corporate law 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Cost and management accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Internal auditing 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Internal control and code of ethics</td>
</tr>
<tr>
<td>3</td>
<td>1 and 2</td>
<td>Taxation 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Cost and management accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Quantitative techniques 1</td>
</tr>
<tr>
<td>4</td>
<td>1, 2 and 3</td>
<td>Financial accounting 3</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Cost and management accounting 3</td>
</tr>
</tbody>
</table>

*Source: Technikon RSA Prospectus (2002).*

### 3.4.2 The Cost and Management curriculum at Vaal Triangle Technikon

Table 3.2 outline the curriculum at the Vaal Triangle Technikon in 2002

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MODULE</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 and 2</td>
<td>Cost and management accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Financial accounting 1</td>
</tr>
<tr>
<td>YEAR</td>
<td>MODULE</td>
<td>SUBJECT</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Business law</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Quantitative techniques 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>End user computing</td>
</tr>
<tr>
<td>2</td>
<td>1 and 2</td>
<td>Cost and management accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Financial accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Corporate law 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Internal auditing 1</td>
</tr>
<tr>
<td>3</td>
<td>1 and 2</td>
<td>Cost and management accounting 3</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Financial accounting 3</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Taxation 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Economics 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Or</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Business management 1</td>
</tr>
</tbody>
</table>

*Source: Vaal Triangle Technikon Prospectus (2003).*

### 3.4.3 Central University of Technology (Free State Technikon)

Table 3.3 outlines the Cost and Management curriculum at the Free State Technikon in 2002.

**Table 3.3: CURRICULUM ON NATIONAL DIPLOMA COST AND MANAGEMENT ACCOUNTING CENTRAL UNIVERSITY OF TECHNOLOGY**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MODULE</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 and 2</td>
<td>Cost and management accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Financial accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Business law</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Quantitative techniques 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Business Management 1</td>
</tr>
<tr>
<td>2</td>
<td>1 and 2</td>
<td>Cost and management accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Financial accounting 2</td>
</tr>
<tr>
<td>YEAR</td>
<td>MODULE</td>
<td>SUBJECT</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>1 and 2</td>
<td>1 and 2</td>
<td>Corporate law 2</td>
</tr>
<tr>
<td>1 and 2</td>
<td>1 and 2</td>
<td>Internal Control and Code of Ethics</td>
</tr>
<tr>
<td>1 and 2</td>
<td>1 and 2</td>
<td>End-User Computing</td>
</tr>
<tr>
<td>3</td>
<td>1 and 2</td>
<td>Cost and management accounting 3</td>
</tr>
<tr>
<td>1 and 2</td>
<td>1 and 2</td>
<td>Financial accounting 3</td>
</tr>
<tr>
<td>1 and 2</td>
<td>1 and 2</td>
<td>Taxation 1</td>
</tr>
</tbody>
</table>

* Source: Calendar of the Free State Technikon (2002).

3.4.4 Nelson Mandela Metropolitan University (Port Elizabeth Technikon)

Table 3.4 provides the curriculum offered at the Nelson Mandela Metropolitan University (Former Port Elizabeth Technikon).

**TABLE 3.4: CURRICULUM OF NATIONAL DIPLOMA COST AND MANAGEMENT ACCOUNTING FOR NELSON MANDELA METROPOLITAN UNIVERSITY**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SEMESTER</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 and 2</td>
<td>Business law 1 (2 modules)</td>
</tr>
<tr>
<td>Year</td>
<td>Business management 1</td>
<td></td>
</tr>
<tr>
<td>1 and 2</td>
<td>Business management 1</td>
<td></td>
</tr>
<tr>
<td>1 and 2</td>
<td>Cost and management accounting 1 (2 modules)</td>
<td></td>
</tr>
<tr>
<td>1 and 2</td>
<td>Financial accounting 1 (2 modules)</td>
<td></td>
</tr>
<tr>
<td>1 and 2</td>
<td>Internal auditing 1 (2 modules)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Year</td>
<td>Corporate law 2</td>
</tr>
<tr>
<td>1 and 2</td>
<td>Cost and management accounting 2 (2 modules)</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>End-user computing</td>
<td></td>
</tr>
<tr>
<td>1 and 2</td>
<td>Financial accounting 2 (2 modules)</td>
<td></td>
</tr>
<tr>
<td>1 and 2</td>
<td>Quantitative techniques 1 (2 modules)</td>
<td></td>
</tr>
<tr>
<td>1 and 2</td>
<td>Additional subject (compulsory)</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Communication in English A</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1 and 2</td>
<td>Cost and management accounting 3 (2 modules)</td>
</tr>
</tbody>
</table>
If one analyse the historical curricula of Cost and Management Accounting that were offered at the former Technikons in South Africa, it is clear that these institutions offered courses that were very similar to each other – the subjects in the curricula is basically the same for all the institutions as outlined in Table 3.5.

Table 3.5 provides a summary of the different curricula of cost and management accounting courses offered at the former technikons in South Africa.

**TABLE 3.5: A SUMMARY OF THE COST AND MANAGEMENT CURRICULA AS OFFERED AT THE FORMER TECHNIKONS**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MODULE</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 and 2</td>
<td>Financial Accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Cost and Management Accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Business Law 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Business Management 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Internal Auditing 1</td>
</tr>
<tr>
<td>2</td>
<td>1 and 2</td>
<td>End-user computing</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Financial Accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Cost and Management Accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Corporate Law 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Quantitative Techniques 1</td>
</tr>
<tr>
<td>3</td>
<td>1 and 2</td>
<td>Financial Accounting 3</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Cost and Management Accounting 3</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Taxation 1</td>
</tr>
</tbody>
</table>

* Source: *Port Elizabeth Technikon Prospectus (2003).*
The Cost and Management Accounting curricula were more or less the same for all the different technikons prior to the merger of the different higher education institutions. As can be seen from the table above, emphasis was placed on Financial Accounting and Cost and Management Accounting as this was offered for all three years of the duration of the programme.

The national Diploma in Cost and Management Accounting was altered in 2005 to allow for the National Higher Certificate in Accountancy. As previously explained in this chapter, the NHC in Accountancy is still being offered by some of the former technikons in the format that it was nationally developed. For this reason the curricula for the NHC in Accountancy is similar at the different institutions. After completing the 2 year NHC in accountancy, students enrol for the National Diploma in Cost and Management Accounting to graduate.

Table 3.6 provides the curriculum of the National Higher Certificate: Accountancy offered at the Nelson Mandela Metropolitan University.

**TABLE 3.6: THE CURRICULUM OF THE NATIONAL HIGHER CERTIFICATE: ACCOUNTANCY OFFERED AT THE NELSON MANDELA METROPOLITAN UNIVERSITY.**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MODULE</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Business Information Systems 1 – Module 1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Commercial Law for Accountants 1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Cost Accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Economics 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Financial Accounting 1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Business Calculations 1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Communication 1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Entrepreneurial Skills</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Auditing 2</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Commercial Law for Accountants 2 – Specific Contracts</td>
</tr>
</tbody>
</table>
3.5 AN OVERVIEW OF THE SANTED PROJECT TO ASSIST IN THE DEVELOPMENT OF NEW CURRICULA FOR THE SCHOOL OF ACCOUNTING

The SANTED project managers together with senior academics in Accounting School proposed a new structure for Accounting qualifications at NMMU in November 2008. According to this proposal a new common Diploma in Accounting will be developed. This new diploma will replace the three current National Diplomas offered in the Accounting School at the NMMU, which include the National Diploma: Cost and Management Accounting (SANTED, 2009).
According to this proposal the route forward for Cost and Management Accounting Students will be as follows:

- Student will be able to complete the new common Diploma in Accounting after a minimum of three years.
- Diploma graduates will then be able to proceed with an Advanced Diploma in Cost and Management Accounting. The duration will be one year.
- Graduates from the Advanced Diploma in Cost and Management Accounting will then be able to continue with the Postgraduate Diploma: Management Accounting.
- Graduates from the Postgraduate Diploma in Management Accounting will be able to complete a Masters degree
- Lastly, graduates from a Masters degree can complete a Doctoral degree.

This proposal is still under discussion and may only be implemented in 2011.

3.6 COST AND MANAGEMENT ACCOUNTING IN AUSTRALIA

The Australian higher education institutes has followed a similar pattern to that of South Africa in that they aim to offer a course in accounting that covers the Cost and Management Accounting topics. Two institutions in Australia have been identified to provide a syllabus for their Diploma in Accounting.

These institutions are:
- Cengage Education
- Gunung-William-Balluk Learning Centre at Kangan

The different syllabi for these two institutions will be provided in the following tables.
3.6.1 Gunung-William-Balluk Learning Centre at Kangan

Table 3.7 will provide the syllabus offered in the Accounting Diploma at the Gunung-William-Balluk Learning Centre at Kangan.

**TABLE 3.7 THE CURRICULUM OF THE DIPLOMA IN ACCOUNTING OFFERED AT THE GUNUNG-WILLIAM-BALLUK LEARNING CENTRE AT KANGAN**

<table>
<thead>
<tr>
<th>SUBJECT TITLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide financial and business performance information</td>
</tr>
<tr>
<td>2. Prepare income tax returns</td>
</tr>
<tr>
<td>3. Manage budgets and forecasts</td>
</tr>
<tr>
<td>4. Prepare financial reports for a reporting entity</td>
</tr>
<tr>
<td>5. Establish and maintain accounting information systems</td>
</tr>
<tr>
<td>6. Implement and maintain internal control procedures</td>
</tr>
<tr>
<td>7. Provide management accounting information</td>
</tr>
<tr>
<td>8. Analyse financial markets and information</td>
</tr>
</tbody>
</table>

*Source: Kangan Education (2008).*

3.6.2 Cengage Education

Table 3.8 will provide the syllabus offered in the Accounting Diploma at Cengage Education.

**TABLE 3.8 THE CURRICULUM OF THE DIPLOMA IN ACCOUNTING OFFERED AT CENGAGE EDUCATION**

<table>
<thead>
<tr>
<th>SUBJECT TITLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communicate in the workplace</td>
</tr>
<tr>
<td>2. Use technology in the workplace</td>
</tr>
<tr>
<td>3. Apply health and safety practices in the workplace</td>
</tr>
<tr>
<td>SUBJECT TITLES</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4 Prepare income tax returns</td>
</tr>
<tr>
<td>5 Develop and use complex spreadsheets</td>
</tr>
<tr>
<td>6 Prepare bank receipts</td>
</tr>
<tr>
<td>7 Set up and operate a computerised accounting system</td>
</tr>
<tr>
<td>8 Prepare financial reports</td>
</tr>
<tr>
<td>9 Maintain financial records</td>
</tr>
<tr>
<td>10 Manage budgets and forecasts</td>
</tr>
<tr>
<td>11 Implement and maintain internal control procedures</td>
</tr>
<tr>
<td>12 Provide management accounting information</td>
</tr>
<tr>
<td>13 Establish and maintain accounting information systems</td>
</tr>
<tr>
<td>14 Establish business networks</td>
</tr>
<tr>
<td>15 Process journal entries</td>
</tr>
<tr>
<td>16 Apply principles of professional practice to work in the financial service industry</td>
</tr>
</tbody>
</table>


The Australian curriculum for the Diploma in Accounting differs from that of South Africa in that the Australian curriculum provides more opportunity for computerised information systems. Most of the subject outcomes are very similar to those of South African Institutions, especially the management accounting subjects, although the subject names might sound very different.

### 3.7 SUMMARY

In Chapter 3 curricula was defined as an interrelated set of procedures and experiences that a student have to follow under the guidance of an institution to complete a qualification in their desired field. Curriculum development and the procedures there of were also provided.

The curriculum development process was discussed and a summary of the curricula offered for the National Diploma in Cost and Management Accounting
at the previous technikons were provided. The current curricula for the National Higher Certificate in Accountancy were also provided as well as the curricula of two institutions in Australia. To conclude a brief outline of the SANTED project to develop new curricula in the School of Accounting were provided.

In chapter 4, Qualitative Research and the methods used within this research will be discussed. The qualitative research method that will be used in this study will also be identified.
CHAPTER 4

QUALITATIVE RESEARCH AND THE METHODOLOGY USED

4.1 INTRODUCTION

In the previous chapter, the current curricula of the National Diploma in Cost and Management Accounting offered at various institutes in South Africa were discussed.

This chapter will describe the methodology used by the researcher and the theoretical basis for conducting this type of research. Firstly, qualitative research and the research design will be outlined.

Secondly the application of qualitative research will be discussed and lastly the research methodology in general and the reasons for choosing a particular method will be discussed.

4.2 QUALITATIVE RESEARCH

Research, according to Welman and Kruger (1999: 2), refers to the process in which scientific methods are used to expand people’s knowledge on a particular topic or in an identified field.

Leedy and Ormrod (2001: 3) define research as the systematic process of collecting and analysing data in such a way that it creates a better understanding of the researched phenomena.

Mouton and Marais (1992: 7) define research as a collaborative human activity in which social reality is studied objectively with the aim at increasing understanding of the topic.

There are two main types of research that researchers use in their studies. To understand data collection for the different forms of research, it is important to
distinguish between the two broad approaches that can be followed, namely qualitative and quantitative research.

According to Hancock (1998) the early forms of research originated in natural sciences and were mostly concerned with investigating things that can be measured in one way or the other. This process is referred to as quantitative research.

Later on, researchers started doing research in social sciences. These researchers focused on studying humans and human behaviours in their social world, but they found it difficult to explain human behaviour in simple measurable terms. Hancock (1998) explains that research that is aimed at increasing understanding of our social world and why people act in certain ways is referred to as qualitative research.

While quantitative research looks to describe, explain and predict a certain topic, quantitative research aims to understand and interpret data for the topic. Normally the sample size for qualitative research is much smaller than that of quantitative research.

According to Thomson (2007), qualitative research is primarily concerned with answering the question “why” something happened. It involves a detailed gathering of data on people or systems through interaction, interviews and observing of the subjects.

Strauss and Corbin (1998: 10) describe qualitative research as any form of research that will produce findings that were not derived from statistical procedures or any other means of quantification. There are many different methods used for gathering data for qualitative research including interviews with different people as well as making observations.

According to Delattre, Ocler, Moulette and Rymeyko (2009) the main objective of qualitative research is to create a methodology for approaching, understanding, analysing and explaining management phenomena at a social or company level.
Qualitative research is concerned with finding explanations of social phenomena. It aims at helping people understanding why things are the way they are in the world we living in.

Strauss and Corbin (1998) stipulate that there are three major components of qualitative research, namely:

- **Data** – The data can come from various sources including interviews, observation, documents, records and films.
- **Procedures** - The methods used by researchers to analyse and interpret the data to make it understandable.
- **Written and verbal reports** – This can be done in the form of articles, books and in presentations.

According to Hancock (1998) qualitative research will answer questions like why?, how?, in what way? and others. Quantitative research will answer questions like how much?, how many?, how often? and others.

Qualitative research is used to gain insights into people’s attitude, behaviour and value systems. Focus groups, in-depth interviews and content analysis are some of the approaches used to gather data for the research.

According to Cooper and Schindler (2008: 162) describes qualitative research as an array of different techniques that are used to describe the meaning not the frequency of social phenomena. Qualitative research are aimed at understanding all the different situations.

Cooper and Schindler (2008: 164) defines quantitative research as an attempt to precisely measure something, including behaviours, opinions and attitudes for quantitative researchers a survey is considered to be the dominant methodology. According to Hancock (1998), qualitative research aims at gaining a better understanding of human behaviour and the factors that lead to such a form of behaviour.
In summary, qualitative research can be described as being interpretative and naturalistic in that it seeks to understand and explain beliefs and behaviours within the context they occur.

4.3 RESEARCH DESIGN

Qualitative research design is a method of experimentation used extensively by researchers studying human behaviour and habits. Research design addresses the planning of scientific inquiry and designing a strategy for finding out something.

Bless and Higson-Smith (1995: 63) describes research design as the planning of any scientific research from the first to the last step. Research design can be seen as a programme to guide the researcher in planning, collecting, analysing and interpreting data to make it useful.

Hancock further identifies four major research designs for qualitative research:

- Phenomenology – The study of phenomena. This type of research normally begins with realising that a gap exists in our understanding of a certain event or situation and that people will benefit through the clarification thereof.
- Ethnography – The term means “portrait of a people” and it is a methodology for descriptive studies of cultures and people. It is very important that the people under investigation have something in common.
- Ground theory – The important feature of this design is that a new theory must be developed through the collection and evaluation of data on a certain topic.
- Case study – Through case studies, the researcher can capture many different variables to identify how a set of circumstances produce a certain outcome.

According to Babbie and Mouton (1998: 279) qualitative research normally has the following features:
• Normally requires a detailed engagement with the object of the study
• Select a small number of cases to be studied
• Multiple sources of available data
• Flexible design features that will allow the researcher to alter the study whenever it becomes necessary

This study will be conducted using a document study to gather information as well as ethnographic studies through individual interviews with identified employers of cost and management accounting students.

In the next section of this chapter the amount of individuals that will be selected or sampled for the conduction of this study will be discussed.

4.3.1 SAMPLING

Before any of the data collection methods can be used, it is important to decide on the sample that will be used as well as the sample size.

When using sampling to establish the method of data collection for qualitative research, Cooper and Schindler (2008) identifies the following guideline: Keep sampling as long as your depth of knowledge on the subject keeps expanding. As soon as the researcher gains no new knowledge, sampling must stop.

According to Bless and Higson-Smith (1995:87) good sampling implies

• A well-defined population
• An adequate chosen sample
• An estimate of how representative of the whole population the sample is.

De Vos, Strydom, Fouche & Delport (2002: 203) identifies two major groups of sampling:
• Probability sampling
• Non-probability sampling

Probability sampling determines that sampling unit or person has the same known probability of being selected. Some examples of probability sampling include systematic sampling, cluster sampling and panel sampling.

Cooper and Schindler (2008: 169) defines non-probability sampling as a method of sampling where little attempt is made is to generate a representative sample. Non-probability sampling is not based on the occurrence of an equal chance of selection for sampling units. Qualitative research involves non-probability sampling and some of these types of sampling include:

• Accidental sampling – Any case that happens to cross the path of the researcher, that has nothing to do with the phenomenon.
• Purposive sampling – Researchers choose participants for their unique characteristics, experiences, attitudes, or attributes. These characteristics must be representative of the chosen population.
• Quota sampling – Draws a sample that is as close to a replica of the chosen population as possible.
• Target sampling – In target sampling the researcher develop control lists of specified populations within identified geographical areas.
• Snowball sampling – Participants refer researchers to others, who may have similar characteristics, experiences or attitudes.
• Convenience sampling - Participant can be any available person that the researcher can find.

Most qualitative studies will make use of purposive/purposeful sampling and this study is no exception. Purposeful sampling is purely based on the judgment on the judgment of the researcher regarding the characteristics of the representative sample. The
strategy for this sampling will be to pick individuals that will be the most representative of the population under study.

This method can be of great value, especially if it is used by an expert who is very familiar with the population under study.

Patton (1990:169) identifies the following different types of purposeful sampling:

- **Extreme or deviant case sampling** – Learning from highly unusual manifestations of the phenomenon.
- **Intensity sampling** – Information-rich cases that manifest the phenomenon intensely but not extremely
- **Maximum variation** – To identify common patterns that cut across variations.
- **Homogeneous sampling** – For facilitation of group interview
- **Typical case** – To identify what the average or norm is
- **Critical case** – Permits logical generalisation of information to other cases.
- **Criterion sampling** – Selecting the cases that meet the predetermined criteria.
- **Theory-based sampling** – Finding a theoretical construct of interest so as to examine the construct
- **Opportunistic sampling** – New opportunities arise through new findings in certain fields
- **Politically important cases** – Can often attract attention to the study
- **Convenience sampling** – To save money, time and effort. This however could cause a study to lose credibility.
- **Combination sampling** – To meet multiple needs and interests.

A survey performed on the Nelson Mandela Metropolitan University in 2007 was used in identifying companies where students that graduate at the university were likely to be employed. This study was also used in identifying the sample for this study and it will be outlined in the next chapter.
4.3.2 DATA COLLECTION METHODS

Hancock (1998: 9) highlights that there are four main methods of collecting qualitative data, namely:

- interviews
- focus groups
- observation
- text and documents.

4.3.2.1 Interviews

Interviews are one of the primary data collection methods in qualitative methodologies. When using interviews as a method of data collection, the process requires the interviewer to be well trained with good communication skills, especially in qualitative research. Interviews involve direct personal contact with participants who is asked to answer questions.

Cooper and Schindler (2008: 171) stipulate that interviews can be conducted individually or in groups and provides Table 4.1 to explain the difference between the two:

**TABLE 4.1: DIFFERENCES BETWEEN INDIVIDUAL INTERVIEWS AND GROUP INTERVIEWS**

<table>
<thead>
<tr>
<th>Individual Interview</th>
<th>Group Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Objective</strong></td>
<td><strong>Research Objective</strong></td>
</tr>
<tr>
<td>• Explore life of individual in depth</td>
<td>• Orient the researcher to a field of inquiry and the language of the field</td>
</tr>
<tr>
<td>• Create case histories through repeated interviews over time</td>
<td>• Explore a range of attitudes, opinions and behaviours</td>
</tr>
<tr>
<td>• Test a survey</td>
<td>• Observe a process of consensus and disagreement</td>
</tr>
<tr>
<td></td>
<td>• Add contextual detail to quantitative findings</td>
</tr>
<tr>
<td>Individual Interview</td>
<td>Group Interview</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Topic Concerns</strong></td>
<td></td>
</tr>
<tr>
<td>• Detailed individual experiences, choices, biographies</td>
<td>• Issues of public interest or common concern</td>
</tr>
<tr>
<td>• Sensitive issues that might provoke anxiety</td>
<td>• Issues where little is known or of a hypothetical nature</td>
</tr>
<tr>
<td><strong>Participants</strong></td>
<td></td>
</tr>
<tr>
<td>• Time-pressed participants or those difficult to recruit (e.g., elite or high-status participants)</td>
<td>• Participants whose backgrounds are similar or not so dissimilar as to generate conflict or discomfort</td>
</tr>
<tr>
<td>• Participants with sufficient language skills (e.g., those older than seven)</td>
<td>• Participants who can articulate their ideas</td>
</tr>
<tr>
<td>• Participants whose distinctions would inhibit participation</td>
<td>• Participants who offer a range of positions on issues</td>
</tr>
</tbody>
</table>

*Source: Cooper & Schinder (2008).*

Table 4.1 has indicated that clear differences exist between individual and group interviews can provide researchers within depth details on sensitive issues, where group interviews are normally used when data is needed on issues of public interest.

After the researcher has decided on the type of interview to be used for data gathering, a decision has to be taken on the structure of the interview. Interviews can be structures, semi-structured or unstructured.
Structured interviews – This method is based on an established questionnaire where participants will receive indications on how exactly the questions must be answered. This is often done in the form of multiple choice questions or scale questions (Bless & Higson-Smith, 1995: 107).

Semi-structured interviews – In semi-structured interviews, the questions might be in the form of structured questions which might be followed by probing questions where the participant will have room to express his/her feelings.

Unstructured interviews – In an unstructured interview no specific questions will be discussed. Each interview can be adjusted to comply with the situation or participant being interviewed.

Most qualitative researchers will make use of semi-structured or unstructured interviews. The wealth and quality of data that will be gathered might differ from participant to participant. Therefore the interviewer is required to be creative and skillful to gather the necessary data from the interview. The interviewer needs to use all his skills to create clarity on answers.

4.3.2.2 Focus groups

According to Silverman (2004: 177) focus group research has gained popularity over the past decade. He describes focus groups as a way of collecting qualitative data by involving a small number of people in an informal group discussion. The discussion needs to be focused on a particular topic or concern.

Bless & Higson-Smith (1995: 113) defines focus groups as an interview with several people simultaneously in the form of group discussions. Focus groups bring together six to ten participants which will be led by a facilitator in discussing a certain topic. The facilitator needs to guide the group in sharing and exchanging experiences and ideas related to the discussion topic.

One of the main advantages of using focus groups as a data collection method is the flexibility it offers. Focus groups can bring together pre-existing
groups (e.g. a company and family etc.) or groups of people identified for the specific research. These identified groups can be representative of a particular population or age group.

Other advantages of focus groups include the following:

- Data can be collected relatively quickly and from a large number of people.
- Allows for communication and reasoning with participants.
- Allows participants exposure to opinions of other participants and allow time for response to those opinions.

4.3.2.3 Observation

Bryman and Bell (2007:404) describes observation as a method where the researcher is placed in a social setting for a certain amount of time to observe the actions and views of people within the social setting. Bless and Higson-Smith (1995:106) identifies two types of observation:

- Non participant observation – The researcher observes from the outside without the participants knowing they are being observed.
- Participant observation – The researcher (observer) hides the real purpose of their presence among the participants by becoming one of them.

Observation has some for the fact that participants may act differently if they know they are being observed.

4.3.2.4 Text and documents

Existing records and documents often provide insights into a topic or group of people that cannot be observed in any other way. Documents include books, journals, articles, newspapers etc.

Bryman and Bell (2007:554) believes that the use of documents to gather data is very valuable especially if the research topic have been covered and
documented before. They also highlight that the gathering of these documents might be time consuming it also requires immense skill of interpretation to reveal the true meaning and value of the data.

The main categories of documents identified by Bryman and Bell (2007) are:

- **Personal Documents**

  In qualitative research, personal documents can be used as the main source of data collection. Examples of personal documents include letters, autobiographies, letters and diaries.

- **Public Documents**

  The state can provide valuable information for researchers on certain happenings in the past that might be similar to the topic of the researcher. An example of public documents might include certain legal investigation documents.

- **Official Documents**

  Official Documents are mostly drawn from organisational sources and can be very important for any form of business research. Examples of official documents include annual reports, financial statements, company policies or any internal documentation.

- **Mass Media Outputs**

  These types of documents are readily available to members of the public and include newspapers, magazines, articles in journals and television programmes.
• Virtual Outputs

The fast growing internet has become a source of information that is being used by many researchers. One of the primary reasons therefore is the vastness of the information, the availability and the cost saving aspects linked to internet usage. Documents and articles appear freely on the internet and can be a valuable source of data.

In conducting this study, two procedures will be used to gather data. These two methods are individual interviews and a text and document study.

The document study will be used to gather data on the background of higher education in South Africa as well as all the different syllabi offered at various higher education institutions. The document study will also be used to propose a syllabus for a new programme in cost and management accounting that will be started in the future.

Once the curriculum has been proposed, it will be presented to possible employers of cost and management accounting students to establish the employers’ thoughts on this. This information will be gathered through personal interviews with these employers. The interview will consist of three questions, namely:

• Do they agree with the proposed syllabus?
• If not, what subject would they like to add or take away?

These unstructured questions formed the basis of the interviews, but different questions and discussions arose as the interview progressed.

The data collected by the interviewer through making notes during the interview. Straight after the interview the notes were checked by a second party to assure no important meanings were lost.
Once all the data have been collected, the data have to be analysed and interpreted, which will be discussed in the next section.

4.3.3 DATA ANALYSIS

According to Collis and Hussey (2003:253) qualitative data analysis holds many different challenges. The main challenge is that there is no clear set of conventions for analysis compared to that of quantitative data. Another challenge that faces the researcher in analysing qualitative data is to reduce the data to draw final conclusions.

Collis and Hussey have identified two main methods for analysing qualitative data:

- Quantifying methods
- Non-quantifying methods

Quantifying data is a process of turning qualitative data into numerical data which will make the data understandable. The following are identified methods of quantifying data:

- Informal – The process of reducing or examining repeating or patterned behaviour. The frequency of occurrence can be used to determine whether an event is the norm or a rarity.
- Content analysis - A method of systematically converting documents and texts into numerical variables for analysis.
- Repertory grid technique – It provides a mathematical representation of the perceptions an individual uses to understand and manage their own world.

Certain studies may make it unpractical to use quantifying methods for analysing data. The following has been identified as methods of non-quantifying methods of data analysis.
• General analytical procedure
• Cognitive mapping
• Data displays
• Grounded theory

In this study content analysis will be used to analyse data.

4.4 SUMMARY

In this chapter, the different forms of research were defined and the research paradigm namely qualitative research, were discussed. Qualitative research was defined as being interpretative and naturalistic in that it seeks to understand and explain beliefs and behaviours within the context they occur.

There after the research design was outlined and the different methods of sampling were discussed. Purposeful sampling was identified as the sampling method for this study.

Lastly the methods of data collection for qualitative research were discussed and two methods were used for this study. These two methods are personal interviews as well as a document study.

In the next chapter a curriculum will be proposed for a new accounting programme that will be offered at the Nelson Mandela Metropolitan University. This curriculum will be presented to possible employers of cost and management accounting students for their approval. If employers do not agree with the curriculum, their opinion of which subject to remove or add will be acquired.
CHAPTER 5

RESEARCH RESULTS

5.1 INTRODUCTION

In chapter four, qualitative research and the research design were outlined as well as the characteristics of qualitative research were described. Thereafter the research methodology that will be used to gather data for this study were identified and discussed.

In this chapter a curriculum will be suggested for a new cost and management accounting programme to be offered at universities. The suggested curriculum will then be evaluated by five companies in Port Elizabeth, with the potential of employing Cost and Management Accounting graduates from the Nelson Mandela Metropolitan University.

The aim of this chapter is to establish whether potential employers of cost and management accounting graduates agree with the proposed syllabus, and if they disagree, what would they alter. The intention is to propose a new syllabus based on the employer feedback. In the following paragraph the industries that may employ cost and management accounting graduates will be identified.

5.2 INDUSTRIES EMPLOYING COST AND MANAGEMENT ACCOUNTING GRADUATES

In a survey performed on the Nelson Mandela Metropolitan University, graduates were asked to rate industries that were perceived as ideal employers (Magnet Graduate survey, 2007:51). Table 5.1 lists the ranking of the companies found attractive for students to be employed by.
**Table 5.1: Ranking of ideal employers**

<table>
<thead>
<tr>
<th>IDEAL EMPLOYER RANKING</th>
<th>Ranking 2007</th>
<th>% 2007</th>
<th>Ranking 2006</th>
<th>% 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>South African Breweries*</td>
<td>1</td>
<td>17</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>Volkswagen*</td>
<td>2</td>
<td>15</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>BMW</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Coca Cola*</td>
<td>4</td>
<td>12</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Sasol</td>
<td>5</td>
<td>11</td>
<td>42</td>
<td>4</td>
</tr>
<tr>
<td>Deloitte</td>
<td>6</td>
<td>11</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Anglo Platinum</td>
<td>7</td>
<td>11</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Absa</td>
<td>8</td>
<td>11</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>SABC</td>
<td>9</td>
<td>10</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>PricewaterhouseCoopers</td>
<td>10</td>
<td>9</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Murray &amp; Roberts*</td>
<td>11</td>
<td>9</td>
<td>58</td>
<td>2</td>
</tr>
<tr>
<td>De Beers</td>
<td>12</td>
<td>9</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>General Motors*</td>
<td>13</td>
<td>9</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>KPMG</td>
<td>14</td>
<td>9</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Petro SA</td>
<td>15</td>
<td>9</td>
<td>47</td>
<td>3</td>
</tr>
<tr>
<td>SA Reserve Bank</td>
<td>16</td>
<td>9</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Vodacom</td>
<td>17</td>
<td>8</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Aspen Pharmacare*</td>
<td>18</td>
<td>7</td>
<td>27</td>
<td>6</td>
</tr>
<tr>
<td>Anglo American</td>
<td>19</td>
<td>7</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Microsoft</td>
<td>20</td>
<td>7</td>
<td>17</td>
<td>8</td>
</tr>
</tbody>
</table>

*Companies based in the Nelson Mandela Metropole.

*Source: The Magnet Graduate Survey (2007).*

Six of the companies listed in Table 5.1 are companies based in the Nelson Mandela Metropole, which also employs Cost and Management Accounting graduates. The six companies that are based in the Nelson Mandela Metropole...
can be selected to present the curriculum to. The suggested curriculum from this chapter will be presented to managers of the financing departments of the selected companies for scrutiny, insight and recommendations of the curriculum. The aim is to evaluate the suitability of the curriculum for potential employers.

5.3 PROPOSED CURRICULUM FOR THE DIPLOMA IN ACCOUNTING

As discussed in chapter 3, the NMMU is currently developing a new curriculum framework for accounting programmes. This new curriculum will replace the National Diplomas that is currently being offered at the university which includes the National Diploma in Cost and Management Accounting. The aim of this section is to propose a curriculum for this new framework, relying on the document study that was conducted in chapter 3 on all the former curricula at various institutions.

To be able to suggest a proposed curriculum, the old curricula of the various South African institutions were considered. The four South African institutions and the two Australian institutions were analysed and a balanced curriculum proposed out of this information.

The proposed curriculum for the diploma in accounting, combined subjects that have been offered previously and subjects that could further expand graduate employability.

Table 5.2 provides the framework for the proposed curriculum of the new accounting programme at the Nelson Mandela Metropolitan University.
The proposed syllabus for the Diploma in Accounting as depicted in Table 5.2 can be completed in three years of full time study. This proposed curriculum will be presented to five possible employers of cost and management accounting students within the Nelson Mandela Metropole. The intention is to get their perceptions of whether the new proposed curriculum will produce students that they can employ.

The subjects in the propose curriculum (See Table 5.2) may mentioned above include the outcomes as shown in Table 5.3.

### TABLE 5.2: PROPOSED CURRICULUM FOR THE ACCOUNTING DIPLOMA AT THE NMMU

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MODULE</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 and 2</td>
<td>Accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Management Accounting 1</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Computer Skills</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Business Law</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Business Management 1</td>
</tr>
<tr>
<td>2</td>
<td>1 and 2</td>
<td>Accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Management Accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Taxation 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Auditing 1</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Financial Management</td>
</tr>
<tr>
<td>3</td>
<td>1 and 2</td>
<td>Accounting 3</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Management Accounting 3</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Taxation 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Auditing 2</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Information Systems</td>
</tr>
</tbody>
</table>
### TABLE 5.3: THE OUTCOMES OF THE PROPOSED CURRICULUM

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>Business performance information, Financial Reports and maintaining financial records</td>
</tr>
<tr>
<td>Management Accounting</td>
<td>Budgeting and forecasts, Payroll and material handling, Cost Volume Profit analysis</td>
</tr>
<tr>
<td>Taxation</td>
<td>Process business taxation requirements and preparation of income tax returns</td>
</tr>
<tr>
<td>Business Law</td>
<td>Understanding commercial and company law</td>
</tr>
<tr>
<td>Business Management</td>
<td>Business theories and calculations</td>
</tr>
<tr>
<td>Auditing</td>
<td>Internal control procedures as well as external auditing</td>
</tr>
<tr>
<td>Financial Management</td>
<td>Analyse financial markets and internal financial information</td>
</tr>
<tr>
<td>Computer skills</td>
<td>End user computer skills (Microsoft office programs) and the use of complex spreadsheets</td>
</tr>
<tr>
<td>Information systems</td>
<td>Set up and operating of a computerised accounting system, establish and maintain accounting information systems and establish business networks.</td>
</tr>
</tbody>
</table>

The information in Table 5.3 can be used to develop a graduate profile for the Diploma in Accounting students. The graduate profile will indicate the skills and knowledge the graduates will be able to apply in the business environment.
Considering the outcomes the graduate profile for students in the Diploma in Accounting can be:

- Exhibit broad knowledge in the Accounting field.
- Apply Accounting and Management Accounting skills in practice.
- Ability to make financing and investment decisions.
- Apply broad taxation knowledge.
- Have skills and competencies in internal and external auditing.
- Problem solving and decision making in an accounting environment.

The graduate profile will assist employers of these graduates to determine the ability and levels of skill these graduates possess. Employers will therefore be able to evaluate whether such students will be employable or not.

The proposed curriculum, outcomes and graduate profile will be presented to possible employers for their evaluation and feedback.

5.4 EMPLOYER EVALUATION OF THE NEW CURRICULUM

Five companies were selected to evaluate the proposed curriculum. These companies are:

- Transwerk
- Volkswagen
- Atlas Security
- Aspen Pharmacare
- MC Design

As mentioned in paragraph 5.2, these companies employ the most Cost and Management Accounting students and are situated in Port Elizabeth. Some of the companies used in the study do not appear on the Magnet Survey top twenty. Certain companies on the list was unavailable, therefore other available companies that qualify in that they have employees that graduated from the
NMMU, were used in the survey. These companies are Transwerk, MC Design and Atlas Security.

The process in obtaining feedback from all the different employers was as follows:

First contact was made through telephone calls to the different companies. Once it was established whether they were willing to assist in the survey, an e-mail was sent to them. The e-mail was sent to employers to allow them time to go through the proposed curriculum, outcomes and graduate profile. A request was made for a personal interview as soon as they had time to analyse the document.

After allowing them time to analyse the document, a personal appointment were arranged according to their availability. The personal interview allowed the option of personal interaction and questioning. The questionnaire had only two structured questions to be answered:

- Do the employers agree with the proposed curriculum?
- If not, what subject or outcomes would the employer want to add or remove from the proposed curriculum?

The interviews took between twenty and thirty minutes. All the personal interviews took place at the premises of the employers. Most of the respondents were in the finance departments of their respective companies. Four of the five respondents were males.

At the interviews, the researcher took notes and ensured that the notes was correct by verifying it with the respondents. All of the notes were then analysed to look for repeating themes.

In Annexure A, a copy of the e-mail send to employers is provided. In Annexure B, a copy of the questionnaire given to the interviewed employers is provided. Annexure C is a copy of the summary of the interviews with these employers.
5.5 RESULTS OF THE INTERVIEWS WITH EMPLOYERS

From the notes compiled at the interviews the following can be concluded:

Two of the five companies interviewed feel that the curriculum is efficient and that no other subjects must be added.

Four of the interviewed companies feel that an in service training program will enhance the employability of graduates in the Diploma: Accounting. Two of four companies felt that in-service training must be compulsory.

One of the companies interviewed feels that in service training will not be necessary, as long as the graduates have all the basic knowledge.

Two of the interviewed companies are willing to offer in service training for third year students before the graduation in their management accounting department.

In terms of the subject auditing, one of the interviewed companies feel that more emphasis should be placed on External Auditing, while another company felt that only Internal Auditing is important. One company feels internal and external auditing is very important.

Three of the interviewed companies are happy about the fact that Taxation can be offered over two full years and with four modules and that Taxation forms a critical part in any financial programme.

One of the interviewed companies feels that emphasis should be placed on contribution analysis in Cost and Management Accounting.

Two of the interviewed companies suggested that Economics should be added to the curriculum.
Two of the companies feel that the addition of Business Management will enhance student employability. They feel that communication and time management skills can also form part of the Business Management syllabus.

One of the interviewed companies feels that Human Resource Management can also be added to the curriculum. The company feels that the broad basics of Human Resource Management will be helpful in the working environment.

One of the interviewed companies feels that the computer skill that is offered is too basic and that Management Accounting techniques should be practised on computers.

Three of the interviewed companies agreed that Information Systems should be part of the curriculum and that accounting techniques should be offered on a computer basis.

Two of the interviewed companies suggested that training in the SAP integrated information system would be enhancing the student’s employability.

5.6 IMPLICATIONS OF THE RESULTS

In-service training or training programmes is one of the opportunities that most of the interviewed companies suggested would enhance the employability of graduates in the accounting diploma.

Two of the interviewed companies offered to allow final year students to do in-service training at their companies. This can be seen as a major opportunity for any institution and its students, because it is not easy to find companies willing to assist in this matter.

A second subject that is important to employers is information systems. Most of the interviewed employers suggested that the practice of Accounting Systems on computers will be vital for students in the business world. Integrated information systems like SAP were seen as effective training systems for graduates.
The third subject that was mentioned in most interviews is Taxation. Taxation was previously offered over a year only and the fact that Taxation in the proposed curriculum will be offered over two years and four modules was very well accepted by the employers.

Some of the other skills that were mentioned by employers that could enhance graduate employability include:

- Communication skills
- Leadership skills
- Time management skills

The information gathered through the interviews with employers will be used to propose a curriculum for the Diploma in Accounting, considering the employers contribution.

5.7 FINAL PROPOSED CURRICULUM

After considering the views of all the interviewed employers, a final curriculum will be suggested for the Diploma in Accounting.

If a change to the curriculum was mentioned by three or more of the interviewed employers, it was considered to be important to alter the suggested curriculum to accommodate the change.

Table 5.4 outlines the final suggested curriculum for the Diploma in Accounting.
**TABLE 5.4: FINAL PROPOSED CURRICULUM FOR THE ACCOUNTING DIPLOMA AT THE NMMU**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MODULE</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 and 2</td>
<td>Accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Management Accounting 1</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Computer Skills</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Business and Labour Law</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Business Management 1</td>
</tr>
<tr>
<td>2</td>
<td>1 and 2</td>
<td>Accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Management Accounting 2</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Taxation 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Auditing 1</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Financial Management</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Computer based information Systems</td>
</tr>
<tr>
<td>3</td>
<td>1 and 2</td>
<td>Accounting 3</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Management Accounting 3</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Taxation 2</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Auditing 2</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Computer based Information Systems</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>In service training</td>
</tr>
</tbody>
</table>

* Underlined subjects are new subjects.

The different outcomes of the subjects in the final proposed curriculum are provided in Table 5.5
<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>Business performance information, Financial Reports and maintaining financial records</td>
</tr>
<tr>
<td>Management Accounting</td>
<td>Budgeting and forecasts, Payroll and material handling, Cost Volume Profit analysis</td>
</tr>
<tr>
<td>Taxation</td>
<td>Process business taxation requirements and preparation of income tax returns</td>
</tr>
<tr>
<td>Business and Labour Law</td>
<td>Understanding commercial and company law</td>
</tr>
<tr>
<td></td>
<td>Understanding labour law</td>
</tr>
<tr>
<td>Business Management</td>
<td>Business theories and calculations</td>
</tr>
<tr>
<td></td>
<td>Time management, leadership and communication skills</td>
</tr>
<tr>
<td>Auditing</td>
<td>Internal control procedures as well as external auditing</td>
</tr>
<tr>
<td>Financial Management</td>
<td>Analyse financial markets and internal financial information</td>
</tr>
<tr>
<td>Computer skills</td>
<td>End user computer skills (Microsoft office programs) and the use of complex spreadsheets</td>
</tr>
<tr>
<td>Computer based Information systems</td>
<td>Set up and operating of a computerised accounting system, establish and maintain accounting information systems and establish business networks.</td>
</tr>
<tr>
<td>In-service training</td>
<td>A six month in-service training contract with identified institutions with relevant practical experience.</td>
</tr>
</tbody>
</table>
5.8 SUMMARY

In chapter 5 the different employers of Cost and Management Accounting students and the five companies that were used in the survey were identified.

The proposed curriculum, subject outcomes and the graduate profile for the Diploma in Accounting were identified and presented to the identified employers for evaluation and feedback.

The research results and implications were provided where after a final proposed curriculum, considering the employers’ feedback, were provided.

In chapter 6 the conclusion and recommendations for this study will be provided and possible future studies will be identified.
CHAPTER 6

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

6.1 INTRODUCTION

In chapter 5 the research results were summarised to propose a syllabus for the Diploma in Accounting that can be offered in the future at NMMU. The companies that were used in the survey, which employ Cost and Management Accounting graduates, were also identified.

The objectives of this chapter are to summarise the key elements of the research. This include the reasons for the research and how the main and sub problems were addressed.

In this chapter the conclusions from the findings will be summarised as well as the limitations of the study. Lastly the recommendations for future studies will be provided.

6.2 ADDRESSING THE RESEARCH PROBLEMS

The objectives of this study is to do a qualitative study of the different Cost and Management Accounting curricula offered at South African and Australian Higher Education institutions. This objective achieved by addressing the main problem identified in this study. The main research problem was to identify what content a Cost and Management Accounting programme should have. From here, many sub-problems arose and by addressing these sub-problems, the study objective was achieved.

- Who are responsible for curricula development and how are they evaluated and who are the different role players in course development?

The council on Higher Education together with SAQA are responsible for overseeing the quality of current and newly developed programmes. They use
the NQF, shown in Table 2.4, to register programmes on different levels of quality. When Higher Education institutions want to develop and introduce new programmes or curricula, it must first be given accreditation by the HEQC. The HEQC have minimum standards that academic programmes must adhere to. The criteria of the HEQC for programme accreditation should be used as the basis for self-evaluation of programmes by institutions. The HEQC can then use the self-evaluation reports when institutions apply for programme accreditation. The steps in curriculum development are identified in paragraph 3.3.1 in chapter 3.

- Do all the universities offer the same syllabus and what and why are their deviations if any?

Prior to the merger of the different Higher Education institutions, the Cost and Management Accounting curricula were the same at all the institutions, because in was nationally developed. A summary of this curricula can be seen in Table 5.3. In 2005 the National Diploma in Cost and Management Accounting was altered to allow for the National Higher Certificate in Accountancy to be introduced. This programme is still being offered and is also developed nationally. Currently the NMMU, through the SANTED project, is developing a new curriculum framework for the Accounting School. If the current curricula of South African institutions are compared to Australian institutions, there are differences. The main difference is that the Australian institutions provide more opportunity for computerised information system training.

- Who are the potential employers of graduates of the career-orientated Cost and Management Accounting programmes?

A survey was done in 2007 to identify ideal employers according to graduates at the NMMU. The Magnet Graduate Survey (2007: 51) then identified a top twenty for possible employers of NMMU graduates. There rankings of these companies can be seen in Table 5.1 in chapter 5.
• What is the perception of potential employees of the Cost and Management Accounting programmes?

The current development of a new accounting framework at the NMMU, together with the SANTED project, allowed for the opportunity to propose a new curriculum for the Diploma in Accounting. The proposed curriculum is summarised in Table 5.2 in chapter 5. The proposed curriculum was presented to potential employers of graduates in the National Diploma in Accounting for their evaluation and feedback. The employers’ perceptions of the proposed curriculum were very positive. All of the employers that were interviewed were full of confidence that the proposed curriculum will enhance graduate employability. All the employers’ responses can be seen in Annexure C. The valuable inputs of these employers were then used to adjust the proposed curriculum and to develop a final proposed curriculum of the Diploma in Accounting. This curriculum can be seen in Table 5.4.

6.3 SUMMARY

In this study the curricula of different South African and international Higher Education institutions’ cost and management programmes were identified. Thereafter a possible curriculum for a new Diploma in Accounting were proposed and presented to potential employers of these graduates for their evaluation and feedback. Using all of this information, a final curriculum was proposed for the Diploma in Accounting.

6.4 LIMITATIONS OF THE STUDY

• Sample size

A small sample of potential employers was questioned in this study. The feedback from these potential employers were very similar, therefore it is debatable whether a bigger sample size would yield different results.
• International curricula

The international curricula for the Diploma in Accounting that were identified in this study, were from Australian institutions only. This was seen as sufficient for comparative reasons.

6.5 RECOMMENDATIONS

As a result of this study it was clear that in-service training should be added to the Diploma in Accounting. Eighty percent of the interviewed potential employers suggested that practical experience in third year studies would significantly enhance student employability.

This would present the opportunity for a future study. What would the impact of in-service training opportunity be on graduates in the National Diploma in Accounting and what would be the ideal length of this in-service training?

6.6 CONCLUSION

The objectives of the study were to do a qualitative national and international Cost and Management Accounting curricula and then propose a new curriculum for a Diploma in Accounting. The proposed curriculum then had to be presented to potential employers of these students for evaluation. Using the feedback of potential employers, a final curriculum was proposed for the new Diploma in Accounting. All of these objectives were achieved during this study. It is also clear that the courses included in the proposed accounting curricula are acceptable to employers as they found that students will benefit from it.
REFERENCE LIST


Calendar of the Free State Technikon. (2002). Marketing document used at the Free State Technikon.


Nelson Mandela Metropolitan University (NMMU). (2005). Faculty of business and economic sciences prospectus. Marketing document used at the NMMU.


Port Elizabeth Technikon prospectus. (2003). Marketing document used at the Port Elizabeth Technikon.


Quality management unit of the Nelson Mandela Metropolitan University (2009). Internal Document used at the NMMU.


Technikon RSA Prospectus. (2002). Marketing document used at the Technikon RSA.


Annexure A – Copy of email send to employers

11 July 2009  
Nelson Mandela Metropolitan University  
Po Box 77000

Dear Sir/Madam

Our university strives to be responsive to the needs of our stakeholders. As an employer of our students, you were identified to participate in this survey to evaluate the introduction of a new Cost and Management Accounting curriculum.

The aim of this study is to analyse the curriculum of the National Diploma in Cost and Management Accounting and the transformation thereof.

I am requesting a personal interview with you and in this regard I am already sending the information in advance for your perusal and consideration.

The purpose of this interview is to obtain your opinion of whether this curriculum will produce graduates that will be favourable for employment.

Attached please find a copy of the proposed syllabus, outcomes and graduate profile.

Kind Regards

Luan Roodt  
Lecturer  
Applied Accounting  
Nelson Mandela Metropolitan University
Dear ……

Our university strives to be responsive to the needs of our stakeholders. As an employer of our students, you were identified to participate in this survey to evaluate the introduction of a new Cost and Management Accounting curriculum.

The aim of this study is to analyse the curriculum of the National Diploma in Cost and Management Accounting and the transformation thereof.

I am requesting a personal interview with you and in this regard I am already sending the information in advance for your perusal and consideration.

The purpose of this interview is to obtain your opinion of whether this curriculum will produce graduates that will be favourable for employment.

The proposed curriculum for the Diploma in Accounting is outlined in Table 1.

<table>
<thead>
<tr>
<th>PROPOSED CURRICULUM</th>
<th>MODULE</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAR 1</td>
<td>1 and 2</td>
<td>Accounting 1</td>
</tr>
<tr>
<td></td>
<td>1 and 2</td>
<td>Management Accounting 1</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Computer Skills</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>Business Law</td>
</tr>
</tbody>
</table>
The different outcomes for subjects in the proposed curriculum are provided in Table 2.

**TABLE 2: THE OUTCOMES OF THE SUBJECTS IN THE PROPOSED CURRICULUM**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Accounting</td>
<td>• Business performance information, Financial Reports and maintaining financial records</td>
</tr>
<tr>
<td>• Management Accounting</td>
<td>• Budgeting and forecasts, Payroll an material handling, Cost Volume Profit analysis</td>
</tr>
<tr>
<td>• Taxation</td>
<td>• Process business taxation requirements and preparation of income tax returns</td>
</tr>
<tr>
<td>• Business Law</td>
<td>• Understanding commercial and company law</td>
</tr>
<tr>
<td>• Business Management</td>
<td>• Business theories and calculations</td>
</tr>
<tr>
<td>• Auditing</td>
<td>• Internal control procedures as well</td>
</tr>
</tbody>
</table>
Students that graduate with a Diploma in Accounting will have the following graduate profile:

- Exhibit broad knowledge in the Accounting field.
- Apply accounting and management accounting skills in practice.
- Ability to make financing and investment decisions.
- Apply broad taxation knowledge.
- Have skills and competencies in internal and external auditing.
- Problem solving and decision making in accounting environment.

Would you be so kind as to consider the above information to answer the following questions during our personal interview:

1. Do you think the proposed curriculum, outcomes and graduate profile will produce the graduates that you can employ in future?
2. Would you like to make any additional comments on this that will assist us in preparing graduates that will meet your expectations?

<table>
<thead>
<tr>
<th>Financial Management</th>
<th>as external auditing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer skills</td>
<td>Analyse financial markets and internal financial information</td>
</tr>
<tr>
<td>Information systems</td>
<td>End user computer skills (Microsoft office programs) and the use of complex spreadsheets</td>
</tr>
<tr>
<td></td>
<td>Set up and operating of a computerised accounting system, establish and maintain accounting information systems and establish business networks.</td>
</tr>
</tbody>
</table>
Yours faithfully
Mr. L. Roodt
Lecturer: Applied Accounting
Nelson Mandela Metropolitan University

Supervisors: Prof L. Jooste & Prof M. Struwig
Annexure C – Employer Interview summaries

1. **Volkswagen**

- Do not think that it is necessary to add any subjects to the curriculum.
- Suggests an addition of a six month in-service training as part of the diploma curriculum. The employer feels that practical experience will be important to prepare graduates for the business world.
- The employer was willing to offer in-service training for third year students before their graduation.
- The employer suggested that the focus in auditing should be internal, especially internal controls.
- Agrees with the fact that taxation should be offered over two years. The employer believes taxation should be an important part in any financial course.
- Also suggest that emphasis should be placed on contribution analysis in cost and management accounting.

2. **MC Design**

- The employer suggested that a semester of compulsory in service training must be offered for all graduates.
- The employer is willing to offer a in service training opportunity for accounting students in the cost and management accounting department.
- The employer also feels that the computer studies are too basic. More focus should be put on doing management accounting on the computer.
- The employer also indicates that management skills should be included in business management, because graduates normally lack time management and communication skills.
• The employer feels that Human Resource Management could also be added as a subject, even if it is only the broad basics.

3. Aspen Pharmacare

• The employer suggested that economics should be added as a subject. Graduates will need knowledge on fields such as foreign exchange rates and other basic business principles.
• The employer also agrees with the different law subjects that are included in the curriculum.
• Feels that graduate in-service training before graduation is not necessary, as long as the students have the basic knowledge.
• The employer also agrees with the fact that internal and external auditing will be covered in the curriculum.
• The employer also strongly agrees with the addition of business management to the curriculum for accounting students. Feels that cost and management accounting students needs thorough business knowledge.

4. Transwerk

• The employer gave his approval of the curriculum and added that he will employ any graduate with the knowledge stated in the graduate profile.
• The employer feels that in-service training will improve the employability of these graduates.
• The employer also mentions that economics could be added as a subject, but it is not critically important.
• Strongly agrees with the fact that taxation can be offered over two years with four modules. The employer feels that taxation is an important part of any accounting curriculum.
• The employer states that information systems is important for accounting graduates, and he feels that computer based programmes in this field must be offered to graduates.
• He suggested that SAP system training could also increase the value of graduates.

5. **Atlas Security**

• The employer was happy with the outcome and the subjects in the suggested curriculum.
• The employer agrees that graduates must undergo a compulsory in-service training of at least six months.
• The employer suggested that more emphasis should be placed on external auditing, especially if graduates want to complete their articles.
• Computer-based systems are also very important and the employer suggested that cost accounting and financial accounting computer systems could be used in practical classes. This includes Pastel and SAP training.
• Communication and leadership skills can be added as a subject.