POLYTECHNIC OF NAMIBIA



(School of Business and Management Studies)

HAROLD PUPKEWITZ GRADUATE SHCOOL OF BUSINESS RESEARCH TITLE

An Empirical Study of The Planning and Implementation of Competency Based Education and Training in Vocational Education Training Centers in Namibia: The Case of Namibia Training Authority

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This project will be submitted in fulfillment of the requirements for a Masters Degree in Leadership and Change Management at the Harold Pupkewitz Graduate School of Business in the Polytechnic of Namibia

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December 2013

DECLARATION OF ORIGINAL WORK

I, Lukas Jakobus Bock, declare that this Thesis/Mini-thesis is my own unaided work. Any assistance that I have received has been duly acknowledged in the thesis/mini-thesis.

It is submitted in partial fulfillment of the requirements for the degree of Master of Leadership and Change Management at the Polytechnic of Namibia through the Harold Pupkewitz Graduate Business School (HP-GBS), Windhoek, Namibia. It has not been submitted before for any degree or examination at this or any other Institution of Higher Learning.

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ACKNOWLEDGEMENTS & DEDICATION

First of all, I would like to give praise to out Almighty God for allowing me to complete this journey, without Him, it would have not be possible.

Secondly, I would like to extent my sincerest gratitude towards the NTA for approving the request to involve its managers as agents of change; sharing their knowledge and experiences with the implementation of a CBET programme at VTC's in Namibia.

Lastly, to my supervisors, Prof. Barkhuizen, Prof., Witt, and Doctor Whyte for their input, guidance and support; thank you.

LIST OF ABBREVIATIONS AND ACRONYMS

ETSIP Education and Training Sector Improvement Programme

CBET Competency Based Education and Training

CCE Centre for Cooperative Education

CGI Global Competitiveness Index

NAMCOL Namibian College of Open Learning

NCCI Namibia Chamber of Commerce and Industry

NEF Namibia Employer's Federation

NTA Namibian Training Authority

SME Small and Medium Enterprises

VET Vocational Education and Training

VTC's Vocational Training Centres

WEF World Economic Forum

TVET Technical and Vocational Education and Training

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ABSTRACT

Namibia is currently undergoing a dramatic reform of its overall development strategy through its national statement, Vision 2030. As part of the response to make Vision 2030 a reality, the government came up with an Education and Training Sector Improvement Programme (ETSIP), which represents the education and training sector's response to the call of Vision 2030. Its key purpose is to substantially enhance the sector's contribution to the attainment of strategic national developmental goals and to facilitate the transition to a knowledge-based economy.

The emphasis, according ETSIP, is on enhancing the quality of life for all and that calls for the intended rapid economic growth to be accompanied by equitable social development, according to Vision 2030. These twin goals of growth with equity are to be pursued within a broader strategic framework of transforming the economy into a knowledge-based economy (ETSIP, 2006).

However, a critical impediment to the acceleration of growth, according to ETSIP, is the sluggish and sometimes even declining productivity in some of the sectors. This could be ascribed to the shortage of skilled workers on various levels and of various areas within industry. Without acceleration of economic growth, it is difficult for Namibia to create jobs to curb the current 51% unemployment rate, especially jobs that signal productivity growth, reduce poverty and attain equitable social development. Employers note the shortage of qualified artisans and technical staff as a constraint on increasing their productivity (ETSIP, 2006).

One way of addressing this burning issue of skills shortages and unemployment, by the Namibian government, was the establishment of The Namibian Training Authority (NTA) under the Vocational, Education and Training Act (2008), with the aim of taking over management and direction of Vocational Education Training (VET) in Namibia. One of the strategic objectives for the restructuring is to improve the quality of VET, by establishing a Competency Based Education and Training (CBET) Programme (NAMCOL, 2011).

The purpose of this case study was thus, to uncover the perceived (understood) effectiveness, of the transformation process of developing and implementing the CBET Program as a method of training in vocational training centres in Namibia by the NTA.

An interpretive philosophical overview with a qualitative approach was found suitable for this study. The research design was a case study; and the specific research method for data collection was semi- structured interviews that were conducted at the research site; the NTA. A non-probability sampling technique was chosen and participants were selected purposively. The unit of analysis were those managers directly involved in the transformation process.

Data were organised, categorised and interpreted in such a way that it would reflect the issues covered by the data obtained from the six subjects, which can then be adequately summarised in order to draw conclusions, for the purpose of making relevant recommendations.

Looking at the change management strategies utilised (or not) by NTA in the transformation process, will hopefully, promote an understanding or inform practice in similar situations. It could, furthermore, be useful for investigating how an individual or programme changes over time, perhaps as the result of certain circumstances or interventions.

The results could be used as a guiding tool to inform others of some of the realities that could be expected and how these realities can be dealt with when going through a process of change. It could also put other change agents at ease knowing that, there are companies out there experiencing similar obstacles as those faced by them and yet they were able to pull through successfully.

The effectiveness could only be determined in terms of the research questions formulated by the main research question. From the findings, it can be deduced that the implementation of the new system was not totally ineffective, but also not a hundred percent effective. Research question four was not achieved at all, meaning that in the absence of a proper change management model or strategic plan the implementation was not really successful. Recommendations were given by the participants themselves on how to improve the effectiveness there off.

CHAPTER 1: BACKGROUND AND PROBLEM STATEMENT

1.1 Introduction

Namibia is currently undergoing a dramatic reform of its overall development strategy through its national statement, Vision 2030. Vision 2030 sets a very ambitious target that, by 2030:

'Namibia should join the ranks of high income countries and afford all its citizens a quality of life that is comparable to that of the developed world' (ETSIP, 2006, p. 1).

As part of the response to make Vision 2030 a reality, the government came up with an Education and Training Sector Improvement Programme (ETSIP), which represents the education and training Sector's response to the call of Vision 2030. Its key purpose is to, substantially enhance the Sector's contribution to the attainment of strategic national developmental goals and to facilitate the transition to a knowledge-based economy. Amongst other things, Namibia's transition to a knowledge-based economy will demand a skilled, competitive workforce. A skilled workforce is, therefore, fundamental to the attainment of these objectives of increased export-oriented manufacturing and improved economic competitiveness (ETSIP, 2006).

However, according to the World Bank, Namibia needs to improve productivity throughout their economy, if they are to compete successfully in an era of rapid economic and technological change, in order to make Vision 2030 a reality. Improved productivity requires not only capital investment, but also a workforce that has the flexibility to acquire new skills for the new jobs created, as the structures of economies and technicians, is a key determinant of the labour force flexibility and productivity. Skilled workers and technicians enhance the quality and efficiency of product development, production, maintenance and they supervise and train workers with lesser skills, thereby, providing natural up-skilling of individuals in their natural job setting (NAMCOL, 2011).

According to Links (2010), it is clear that the issue of skills deficiency is an urgent strategic concern across various sectors. The survey executed by Namibia's Employment Federation in 2010, was an attempt to obtain a clearer picture of the skills

situation, in particular, whether skills shortages/scarcities exists, by evaluating the responses of various organisations/companies/institutions.

Outcomes of the research conducted by the NEF highlighted the following:

- The inability of the country's training authorities to produce graduates with skills of the right type and quality has become something of a contentious topic in Namibia over the last decade.
- Major employers in various local industrial sectors import expatriate skills into the various local industrial sectors.

This report further reveals that, Namibia is ranked very low in terms of innovation and the availability of specialised skills (i.e. scientists and engineers). Looking at the latest GCI report, 2010-2011, in terms of 'capacity for innovation', the country is ranked 113th out of the 139 countries and with regard to 'availability of scientists and engineers, the country ranks 135th out of 139.

According to Links (as cited in Sasman, 2010), about 70% of the companies surveyed indicated that they had critical vacancies that could not be filled by local skills, of which the most crucial ones included, physicists, chemists and related professions, computing professions, architects, engineers, surveyors and cartographers, health professionals, jurists, physical and engineering science technicians, and department management.

This is clearly an indication that the education and training system fails to meet labour market skills requirements. This according to Links (2010), could be ascribed to the narrow pipeline of good-quality senior secondary school graduates, especially those with English, mathematics, science, and ICTs. The low quality and quantity of the secondary school throughput limits the potential for post-secondary education and training institutions to respond to current labour market needs and to supply the high-level skills required in key growth sectors.

Shaanika, of the Namibian Chamber of Commerce and Industry (NCCI) (as cited in Mathews, 2011), stated that, although the Namibian government could ensure that everybody had access to an education, it fails at ensuring the quality and relevance of its

educational services. He is of the opinion that Namibia has itself to blame, failing to acquire the skills needed to compete internationally over the past twenty years, and creating skills, which according to him, would take a long time to bear fruition.

Links (as stated in Sasman, 2010), argues that this skills issue and in particular the perceived inability of tertiary and vocational training institutions to produce graduates with skills of the right type and quality, presents a unique challenge in the quest to upskill the Namibian workforce.

According to Shaanika (as cited in Mathews, 2011), this skills problem can only be fixed by addressing the issue of competiveness within the economy by, 1) giving as many young Namibians as possible the 'relevant' training and 2) importing skills wherever it can be found (Matthews, 2011). Fourie (as cited in Sasman, 2010), postulates that this skills shortage should be addressed by simplifying procedures for work permits for scarce and skilled staff and to promote technical and business skills training in academic institutions and industry.

Another contributing factor, according to Carva (2013), is the fact that Namibia's skills shortage dilemma is often used as a convenient crutch and it is not receiving the practical attention it deserves. This lack of skilled workers has become a regular complaint from most industries, and yet, there still appears to be little resolve from those complaining to address the issue (Pop, 2013). One of the responses to this issue is the availing of bursaries by companies to outside parties to gain qualifications or required skills but that only covers 36% of the skills shortage (Links, 2010).

One way of addressing this burning issue of skills shortages and unemployment by the Namibian government, was the establishment of The Namibian Training Authority (NTA) as enshrined in the Vocational, Education and Training Act (2008), which provides the legislative background for the reform of the Namibian Vocational Education and Training system, to assist the Namibian people in both the formal and informal economy, to realise their potential, by developing the skills required by Namibian industry and the Namibian community, to assist Namibian businesses to develop and successfully compete in local, regional and international markets and assist the government in providing high quality services in Namibia. One of the strategic objectives of the restructuring is to improve the quality of Vocational Education and

Training (VET), by establishing a Competency Based Education and Training (CBET) Programme (NAMCOL, 2011).

Astley and Van de Ven (1983) identified four different views of organisation and management of which the structural approach was identified to be the most preferred.

These are as follow:

The Natural Selection View

This view includes school of thought such as population ecology and industrial economics, economic history, amongst others, where change is triggered by environmental selection pressure and competition. Change is viewed as "a natural evolution of environmental variation, selection and retention. The economic context circumscribes the direction and extent of organisational growth", (Astley & Van de Ven, 1983, p. 247). The role of the manager is regarded as inactive.

The Collective-Action View

This view includes school of thought such as human ecology, political economy and pluralism, amongst others, where change is viewed as a result of "collective bargaining, conflict negotiation, and comprise through partisan mutual adjustment" (Astley & Van de Ven, 1983, p. 247). The role of the manager is regarded as interactive.

The Strategic Choice View

This view includes schools of thought such as the action theory, contemporary decision theory and strategic management; where people and their relationships organise and socialise to serve the choices and purposes of people in power. According to Astley and Van de Ven (1983), the environment and structure enacts and embodies the meanings of action of the people in power. The role of the manager is regarded as proactive.

The System-Structural View

This view includes schools of thought such as the systems theory, structural functionalism and contingency theory, where change is based on the roles and positions hierarchically arranged to efficiently achieve the function of the system. According to

them, change is seen as dividing and integrating roles to adapt subsystems to changes in environment, technology, size, and resource needs (Astley & Van de Ven, 1983, p. 247). The role of the manager is regarded as reactive.

For the purpose of this study, the researcher opted for the system structural approach as one of the strategic objectives of restructuring VET in Namibia is to improve the quality of Vocational Education and Training, by establishing a Competency Based Education and Training (CBET) Program due to the following:

- The efficiency and effectiveness in the VET system of both human and capital resources was questionable and there was little accountability for the use (or misuse) of public resources.
- Training costs were exceptionally high and unaffordable.

A more effective and efficient way of training was required, through the introduction of competency-based training in all vocational training institutions, is the focus of ETSIP (2006) program.

In this case effectiveness is being defined by Nikel and Lowe (2010), to the extent to which (educational) aims are met. These might be aims indicating an impact (desirable change) on society or individual at any level of an education system. Efficiency on the other hand refers to whether such a system could be introduced at low costs.

Based on the background given above, the main aim of this study was, to uncover the perceived (understood) effectiveness, of the transformation process of developing and implementing the CBET Program as a method of training in vocational training centres in Namibia by the NTA.

1.2 Problem Statement

Vocational training skills development contributes to economic growth through their direct link to labour productivity. The emphasis, according the Education Training Sector Improvement Plan (ETSIP), is on enhancing the quality of life for all, which calls for the intended rapid economic growth to be accompanied by equitable social development, according to Vision 2030 (ETSIP, 2006).

However, a critical impediment to the acceleration of growth, according to ETSIP, is the sluggish and sometimes even declining productivity in some of the sectors. This could be ascribed to the shortage of skilled workers on various levels and types. Without acceleration in economic growth, it is difficult for Namibia to create jobs to curb the current 51% unemployment rate, especially jobs that signal productivity growth, reduce poverty and attain equitable social development. Employers note the shortage of qualified artisans and technical staff as a constraint on increasing their productivity. The continual development and constant upgrading of market-relevant skills are therefore, critical factors in realising Namibia's goal of accelerated economic growth through productivity growth (ETSIP, 2006).

Currently, there are concerns about the mismatches in the demand and supply of skills, to address the ever-growing skills shortages and this has resulted in industry having less and less confidence in the public VET system. VET qualifications have had little credibility and there has been almost no articulation of credits, which meant that trainees had to retrain and/or repeat subjects to obtain qualifications from other institutions (NTA, 2010). Unrealistic expectations, inefficient administration and exclusion of the private sector inhibit the adequate skills training, to increase productivity and a quality of life that is comparable to that of the developed world (NAMCOL, 2011).

Over the years, the VET system has been running in isolation from most Namibian industries. The management system of VTC's has been centralised and the only training providers have been to the VTC's, which had very little autonomy as an institution. This lack of autonomy has made them less able to respond to changing economic and technological conditions and to meet industry demands (NTA, 2010). At present much of the vocational training tends to be taught ineffectively. Curricula are based on standard blocks of time spent, rather than competencies acquired. In addition, instructors are not easily held accountable for the level of trainee achievements. A more effective and efficient way of training is to focus on competencies acquired, in modules. Introduction of competency-based training in all vocational training institutions is the focus of this programme (ETSIP, 2006).

Furthermore, the efficiency and effectiveness in the VET system of both human and capital resources was questionable and there was little accountability for the use (or

misuse) of public resources. Training costs were exceptionally high and unaffordable. The lack of credibility within the system made vocational training a 'last choice' for trainees who could not gain entry into other fields. Many trainees subsequently dropped out of VET programs. Another problem was that, many workers in industry and businesses obtain their competencies through work and on-the-job training; they have had no opportunities for their skills to be formally recognised and to gain the extra training needed to become fully qualified and paid accordingly (NTA, 2010).

Towards the realisation of Vision 2030, Namibia has embarked on several policies and initiatives for integrated and sustainable local, regional and national goals and economic development. This includes, the restructuring of the VET system by establishing CBET programme in VTC's in Namibia. Namibia is currently reforming its technical and vocational education system to make it more effective and accessible to disadvantaged sectors of society, which in turn, will foster the development of a skilled workforce for both modern industry and contribute to self-employment in the informal and small and medium enterprise (SME) sectors of the economy.

1.3 Research Aim and Objectives

Based on the problem statement given above, the main aim of this study was, to uncover the perceived (understood) effectiveness, of the transformation process of developing and implementing the CBET Program as a method of training in vocational training centres in Namibia by the NTA, through semi-structured interviews with members of management. The focus was to uncover how members of management feel about, experienced and made sense of the planning and implementation of CBET in VTC's in Namibia.

The main objective that frames this study was to:

 Uncover the effectiveness (according to the subjects' views) of the planning and implementation of Competency Based Education and Training (CBET) in Vocational Education Training Centres in Namibia. According to the perspective chosen by the managers 'perceived effectiveness', the following four sub-objectives were investigated:

- To determine driving forces for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia
- To determine the factors that acted as enablers to the process of implementing CBET in VTC's in Namibia
- To identify the factors that acted as challenges to inhibit the process of planning and implementing CBET in VTC's in Namibia and how were these dealt with?
- To establish the effectiveness of the change management support strategies/models employed by the change agent in the implementation of CBET in VTC's.

1.4 Research Questions

The research was based on the following research question:

 How effective, according to the subjects' views, was the planning and implementation of Competency Based Education and Training (CBET) Program in Vocational Education Training Centres in Namibia?

The main research question is being supported by the following sub questions:

- What were the driving forces for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia?
- What were the factors that acted as enablers to the process of implementing CBET in VTC's in Namibia?
- What factors acted as challenges to the process of planning and implementing CBET in VTC's in Namibia and how were these dealt with?
- What change management support strategies/models were employed by the change agent in the implementation of CBET in VTC's?

1.5 Motivation for the Study

Looking at the change management strategies utilised (or not) by NTA in the transformation process will, hopefully, promote an understanding or inform practice in similar situations. It could, furthermore, be useful for investigating how an individual or program changes over time, perhaps as the result of certain circumstances or interventions (Leedy & Ormrod, 2010).

The results could be used as a guiding tool to inform others of some of the realities that could be expected and how it could be dealt with during a period of change. It could also put other change agents at ease, knowing that there are other companies experiencing similar obstacles as those faced by them and yet they were able to pull through successfully.

1.6 Limitations of the Study

This study comprises a case study, which means that its focus was narrowed down to the experience of one single case, for a defined period of time, resulting in learning more about a little known or poorly understood situation. Therefore, the researcher cannot generalise the findings to other institutions dealing with changes (Leedy & Ormrod, 2010).

Since the NTA, was established to take over management and direction of VET systems in Namibia, by developing and implementing the CBET system as the preferred method of training in all VTC's in Namibia, the scope of the study would thus include the NTA, as the only agent of change.

It should furthermore, be stressed that since the term, case study, pertains to the fact that a limited number of units of analysis (often only one) is studied intensively, (Welman, Kruger, & Mitchell, 2012). The units of analysis in this study included only a few individuals from only one institution regarded as the agent of change (NTA). The units of analysis comprises of six members of management out of the eight members of management; excluding one manager who did not want to take part in the study and the acting CEO, as this individual was only part of the organisation for a few months, at the time the study was conducted.

Another limitation to the study was the fact that, triangulation could not be done, as the researcher did not make use of three different data collection instruments, to corroborate the findings but rather only two, a semi-structured interview with those members of management identified for the study as well as document analysis and appropriate secondary data, in the form of literature identified in relation with the main research question and sub questions.

The last limitation lies within the type of sampling techniques used for selecting the participants. Although purposive sampling may be very appropriate for certain research problems, it can result in sample bias, as the selection of the participants is determined by the researcher. It is therefore, impossible to evaluate the extent to which such samples represent the relevant population, thus, not possible to generalise the results (Welman et al., 2012).

1.8 Definitions of Key Concepts

Autonomy	The ability or requirements of individuals, groups and organisations to act independently and proactively, and without seeking permission of higher authority, when pursuing organisational goals.
Benchmarking	This is the term given to the process of comparing an organisation's performance, or the performance of part of the organisation, e.g. product or service against a range of internal and external comparators.
Change	Can be defined as a planned, systematic process that takes time to come to fruition, is affected by individuals and is highly personal experience.
Change Agent	These are the people or entities responsible for directing, organising, and facilitating change in organisations.
Change Management	An approach to plan, design, implement, manage, measure, and sustain changes in business processes and work.
Competencies	Typical behaviours (which include attitudes and beliefs, knowledge and skills) that individuals demonstrate when undertaking job relevant tasks to produce job-related outcomes

	within a given organisational context.
Curriculum	The learning programme strategy or broad plan of action for achieving the learning programme outcomes by enabling learners to master these learning outcomes.
Driving Force	Forces affecting a situation that are pushing in a particular direction; they tend to initiate a change and keep going.
Effectiveness	The achievement of goals.
Efficiency	The ratio of effective output to the input required to achieve effectiveness.
Emergent Change	This approach to change is based on the assumption that change is a continuous, open-ended and unpredictable process of aligning and realigning an organisation to its changing environment.
Performance Criteria	A set of predetermined outcomes against which assessment of learning is done in CBET.
Planned Change	This term was coined by Kurt Lewin, in the 1940's, to distinguish change that was continuously embarked upon and planned by an organisation, as opposed to types of change that might come about by accident or by impulse or that be forced on an organisation.
Restraining Forces	These are forces of resistance or factors that tend to oppose or undermine change.
Transformational Change	This type of change is dramatic in form and rapid in impact and will, ultimately, radically change the entire culture of the organization.
Unintended Consequences	Unintended consequences (challenges), are normally forces that affect the change process either positively or negatively.
Unit Standard	A registered statement of desired education and training outcomes and their associated assessment criteria. It describes the scope and context within which the learner's competence is assessed.

1.9 Thesis Outline

Chapter 1: Introduction

Chapter 1 will give an overview of the background of the study, where the research problem will be discussed that consequently leads to the research question and sub-questions. It will also look at the research design and limitations and delimitations of the study. Lastly, a motivation and significance of the study will be given.

Chapter 2: The Literature Review

Chapter 2 provides a comprehensive literature review that will revisit theory and other secondary research findings, journal articles' and books that can directly or indirectly lead to important areas of the researcher's topic about facilitating change. It will cover secondary data about the planning and implementation of a new curriculum called Competency based Education and Training (CBET).

The review will look at the following variables; an historical overview of VET as it forms the foundation for CBET, the history and origin of CBET, NTA as agent of change, a general approach to change (transformation), identifying the unintended consequences of the transformational change as well as the strategies employed to ensure the smooth implementation of transformational change.

Chapter 3: Research Design and Methodology

Chapter 3 presents the methodology used in the present study. This chapter focuses on the approach and design that will be subsumed in this study, as these are the most important elements that will have a direct bearing on what methods of data collection will be employed to investigate the research topic, as well as how sampling will be done.

Chapter 4: Presentation and Analysis

Chapter 4 presents the findings and analysis of data. It will include the presentation of findings of data gathered by instruments suggested for this study. These would be a semi-structured interview with members of management and an open-ended questionnaire with other staff members directly involved in the planning and implementation of the new curriculum by the NTA.

Chapter 5: Discussions of the Findings

Chapter 5 includes a discussion of the findings in relation to the key research question and its sub-questions as well as the literature reviewed in chapter 2. Recommendations to the company identified for this research, were done based on the findings of the data, which was based on the key research question and its sub questions.

Chapter 6: Summary of Main Findings, Conclusion and Recommendations

Chapter six concludes the study with recommendations for for possible topics or areas for further research as well as limitations of the study.

1.10 Conclusion

This chapter strives to set the scene on how the study was conducted and what areas were covered within each segment of the study. The next chapter will look at relevant literature consulted as guided by the research objectives.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The aim of this chapter is to explore the processes, procedures and outputs of the literature on the chosen topic, which in research is viewed as the backbone of the study. The literature review will revisit theory and other secondary research findings, journal articles' and books, that can directly or indirectly lead to important areas of the researchers' topic; to determine the perceived effectiveness of the transformation process of developing and implementing a Competency Based Education and Training Programme (CBET) in Vocational Education Training Centres in Namibia.

How often are we aware that something is crying out to be changed? Yet, somehow the sheer inertia of 'the system' proves too great to overcome? Since managers are there to make things happen, how is it that they so often fail to achieve significant, timely or orderly change? Is it a question of merely complying with what is enforced by authorities and/or do they really understand what is expected of them to facilitate and spear head the process of change?

In the past, most training was aimed at helping managers to manage the status quo more efficiently but as the environment becomes more turbulent, so it becomes more important to develop their skill in coping with change and indeed in steering it (Everard, Morris, & Wilson, 2004).

Based on the information given above, the main focus of this study was to determine the extent to which NTA, as an agent of change, has succeeded in planning and implementing the CBET system at VTC's in Namibia. Thus, this literature review will cover data from secondary sources about the planning and implementation of a new curriculum called Competency Based Education and Training (CBET). The review will look at the following variables; an historical overview of VET as it forms the foundation for CBET, the history and origin of CBET, NTA as agent of change, a general approach to change (transformation), identifying the unintended consequences of the transformational change as well as the strategies employed to ensure the smooth implementation of transformational change.

2.2 An overview of Vocational Education and Training in an independent Namibia

TVET systems in Africa differ from country to country and are delivered at different levels in different types of institutions, including technical and vocational schools (both public and private), Polytechnics', enterprises, and apprenticeships training centers. The general socio-economic environment and the contextual framework in which TVET delivery currently operate on the continent is characterized, in general by:

- weak national economies, high population growth, and a growing labour force,
- shrinking or stagnant wage employment opportunities, especially, in the industrial sector,
- huge numbers of poorly educated, unskilled and unemployed youth,
- · uncoordinated, unregulated and fragmented delivery systems,
- Low quality,
- Geographical, gender and economic inequities, poor public perception,
- Poor public perception,
- Weak monitoring and evaluation mechanisms and
- Inadequate financing, poor management and ill-adapted organizational structures.

(African Union, 2007).

Therefore, one of the most important features of TVET is its orientation towards the world of work and the emphasis of the curriculum on the acquisition of employable skills. TVET delivery systems should, therefore, be well placed to train the skilled and entrepreneurial workforce that Africa needs to create wealth and emerge out of poverty. Different countries should respond to the different training needs of learners from different socio-economic and academic backgrounds and prepare them for gainful employment and sustainable livelihoods.

With independence, the Namibian government inherited an education system that was one-sided and unbalanced with a section of the workforce unskilled and illiterate, resulting in a high unemployment rate (Stoermer, as cited in Brunette, 2006).

The VET system in Namibia was decentralized. Industries had their own training institutions according to their needs, for example, fishing, mining, and agriculture. There were some technical institutions run by government, under the Ministry of Basic Education. Their status, however, was at not a level to continue with a higher education and training, (Shaketange & Nitscke, 2008). The provision of education and training was characterized by inequalities and was fragmented along racial and ethnic lines. Also, the curriculum did not address the needs of the entire population of the country, (Grossman & Naanda, 2006).

The VET sector has been characterized by a highly- centralized and inflexible curriculum, which focuses on a relatively limited range of male-dominated blue-collar trades and occupations, with restricted growth towards curriculum diversification and the inclusion of emerging occupations in the manufacturing and service and knowledge oriented industries, such as hospitality, tourism, information technology, food processing and financial services, (Mushauri & Durango, 2008).

Until recently, the vocational training system, in Namibia, was not well suited to learners utilizing the system, as it took for granted the time that people had to dedicate to training and also the level of schooling that learners would have had prior to commencing vocational training. It was also isolated from the market needs of the private sector (Kukler, 2007).

After independence in 1990, one of the government's primary objectives was to reverse the inequalities of the past, to engage in a process of national reconciliation (Grossman & Naanda, 2006). VET in Namibia was the responsibility of the, then Ministry of Labour and Manpower Development, now the Ministry of Labour.

This Ministry was tasked with:

 Protecting, developing and utilizing the country's human resources to their fullest potential. The promotion and provision of comprehensive and systematic manpower development programs provided work-related training, in accordance with the needs of the economy as a whole and that of the individual's education level. The statuses of these programs however, were not elevated sufficiently to allow for further education and training (Shaketange & Nitscke, 2008).

2.3 Competency-Based Education and Training

2.3.1 Historical Overview of CBET

Since Independence, the Government of the Republic of Namibia has actively pursued policies to ensure education for all. Vision 2030 supports this, by driving forward a wholly integrated, unified, flexible and high quality education and training system, which provide equal access to excellent educational and vocational training institutions, which prepares Namibians to take advantage of the rapidly changing global environment, thus, contributing to the economic and social development of the citizens. This is supported by a system of continuing education.

Barriers to access and participation, imposed by the previous government, have been dismantled. The NTA, in the execution of this mandate as provided by the VET Act, 1 of 2008, was then established to take over management and direction of VET systems in Namibia, by developing and implementing the CBET system, as method of training in all VTC's in Namibia (NTA, 2010).

Through this new establishment, Namibia has embraced the CBET approach to VET. Under this approach, unit standards which describe the outcomes demanded by industry and the community form the basis for curriculum, assessment and qualifications in the national VET system. The decision to adopt this approach was made on the basis that overriding purpose of vocational education and training is to produce competent workers. These are workers who are able to apply their knowledge, skills and attitudes to perform work activities to the standard expected in the world place (Mushauri & Durango, 2008).

CBET is used as an important strategy in most technical and vocational education programs in countries such as Australia, New Zealand, USA, the UK and now

also in Namibia through the NTA. It not only promotes the quality of the programs but ensures their viability and sustainability in today's dynamically complex learning and working environment. Consistent with the rationale behind TVET, CBET prime focus is on life-long learning, holistic and integrated pedagogy, whole-person development, multi-skilling, flexibility and world class workforce. With proper constructed benchmarks, CBET has the potential to produce intellectual and skills capital that is competent in terms of what the industry, employees and clients need. Some of these competencies include efficiency, effectiveness and quality performance (Sharma & Naisele, 2008).

The concept of the CBET system is both an old an evolving idea, an approach that has been developed in the field of vocational training in the late 1970 (Power & Cohen, as cited in Bowden, 2005). The notion of competency-based education programs was first introduced in the USA. It began with teacher education in the late 1960s and evolved through applications to other professional education programs in the USA in the 1970s; vocational training programs in the UK and Germany among others in the 1980s and vocational training and professional skills recognition in the Australia in the 1960s (Bowden, 2000).

This trend seems to be a global initiative, investigating and discussing CBET from all regions of the world. Popular in the United States in the 1970s in the performance-based vocational teacher education movement, competency approaches rode a new wave in the 1990s with the Vocational qualifications (NQVs) system in England and Wales (begun in 1986), New Zealand's National qualifications Framework, the competency standards endorsed by Australia's National Training Board (NTB) and the Secretary's Commission on Achieving Necessary Skills (SCANS) and the National Skills Standards initiative in the United States. According to Kerka, (1998) competency standards are propelled by a strong political impetus as the way to prepare the work force for the competitive global economy.

Competency-based education descended from the 'behavioural objectives movement' in the 1950s in the United States (Bowden, 2005). Its' origins are found in the thinking of educators such as, Benjamin Bloom. According to Hodge (2007), the behavioural objectives movement, sought to focus attention on the intended outcomes of learning programs and in particular, to encourage teachers to express their

instructional objectives as changes in observable student behaviours. An important feature for the movement was the desire for reliability in terms of observation and judgment. The behavioural movement of the late 1950s and 1960s gave rise in the 1970s to four related developments: mastery learning (Bloom 1974); criterion-referenced testing (Popham, 1978); minimum competency testing (Jaeger & Titte 1980); and competency-based education (Burke, 1975).

The main contributions to the learning process in CBET came from behaviourism and 'mastery learning' theory. Tyler's, understanding of the importance of educational objectives and their role in the design of learning, was elaborated in the work of, Bloom (1956). Bloom's taxonomy was deemed important, as it structured the entire field of educational goals into the 'cognitive', 'affective' and 'psychomotor' domains, a structure which is closely related to the contemporary concept of competency as made up of knowledge, attitude and skill components (Hodge, 2007).

Mastery learning originated from criticisms by Kornhauser (as stated in Hodge, 2007) about the allocation of fixed periods of time to the development of skills in apprentices. Kornhauser, proposed that provision be made for wide differences in ability between individual apprentices and that the progress of an individual apprentice be determined by level of ability and that as a result, no set period of time was to be allocated for any part of the training (as cited in Hodge, 2007).

Bloom, further supports the mastery learning model provided by Carrol (as cited in Hodges, 2007), who distinguishes five factors that stem from individual learning: aptitude, quality of instruction, ability to understand instruction, perseverance and time allowed for learning. 'Behaviourism' and the 'mastery learning' theory, led to the widely accepted principles and elements of CBET.

2.4 What is Change?

Our era is a period of change. This is not unusual in the history of mankind. Change is a difficult concept to define. In simple terms, it means altering the status quo, changing a state of stability or instability, moving from the predictable to the unpredictable, or from the known to the unknown. The type of change, mentioned in chapter one, refers to a change in curriculum, from a traditional modular examinations driven type of curriculum, to a more flexible competency industrial-based change.

Reasons being that, curricula were based on standard block of time spent, rather than competencies acquired. As given in Chapter one, it is more a change from the known to the unknown, meaning from the traditional modular examinations driven type of change to a more flexible competency based curriculum (ETSIP, 2006).

According to Erasmus, Loedloff, Mda, and Nel (2010), change usually takes place as a result of an adjustment to the environment, workplace, customers, and worker relationships. It may include changed legislation and regulations (establishing the NTA and with the execution of its mandate as provided by the VET act no 1 of 2008 to take over management and the direction of VET systems in Namibia), of central authorities, joint utilization or resources by several departments, the implementation of more effective systems, methods and procedures (substituting the old modular curriculum with that of CBET) and the rationalization of services.

It is immeasurable and it causes uncertainty. No one factor is responsible for change and it occurs in specific areas and societies in various ways and at different rates. It can either be planned or unplanned, emergent, revolutionary or evolutionary. Furthermore, the rate of change often has a more profound effect on the environment than the actual direction of change. Change is therefore, a process of continual innovation in every conceivable area of the society (Smith, de J Cronje, Brevis, & Vrba, 2011).

According to Theron (as cited in van der Westhuizen, 2008) change is a deliberate effort to alter the status quo, by influencing or modifying the functions, structure, technology and/or purpose of an organization; as demonstrated by the NTA taking over the management and direction of VET in Namibia. It is a complicated process that requires thorough strategic planning (change management plan) in order to reach prescribed goals. According to Glutter (as cited in van der Westhuizen, 2008), the aim of change is about improvement (to strengthen the quality, effectiveness and efficiency of the general education and training system, ETSIP (2006). It is a systematic, sustained effort aimed at altering the process of learning and related matters with the sole purpose of attaining goals. Thus, change can be defined as a planned, systematic process that takes time to come to fruition, is affected by individuals and is a highly personal experience.

Van der Waldt and Knipe (2002), see change as a continuous process, where both management and employees must be taught to think out of the box on how they must make a paradigm shift. The Chief Executive Officer (CEO), as the figure around which much of the institution's activities revolve, to a great extent, determines the institution's successes and failures when change is implemented. Herman and Herman (as cited in van der Westhuizen, 2008, p. 192) express the view that:

"(a)n educational leader must act as agents of change – not merely the subject to it".

2.5 Driving Forces to Change

The critical success factors for the implementation of CBET in VTC's in Namibia are the discussed under the following headings:

- Forces of change
- Sources of change
- Types of change

2.5.1 Forces of Change

Organisational change deals with the interaction between the various forces that bring about change. According to Lewin (as cited in Burnes, 2009), planned change has four individual elements – Field Theory, Group Dynamics, Action Research and the Three-Step model. Lewin (as cited in Mathews, 2011), saw them as a unified whole, with each element supporting and reinforcing the others and all of them necessary to understand and bring about planned change, whether it be at the level of the individual, group, organization or even society. The first two elements are the most important to determine the forces that leads to change.

2.5.2 Field Force Theory

Field Force Theory is an approach to understanding group behavior, by identifying and mapping the totality and complexity of the field in which the behavior takes place. In this case, the field is referred to as the VTC's in which the change should be implemented. In order to achieve successful implementation, it is necessary for the NTA to identify the restraining and driving forces that tend to alter existing

circumstances (pressure to change) and forces of resistance or factors that tend to oppose or undermine the change.

Lewin maintains that in order to understand any situation, it is necessary to analyse the current situation, namely, the status quo. The status quo can only be maintained because forces driving change are in balance with forces restraining change. Driving forces are those forces affecting a situation that are pushing in a particular direction; they tend to initiate a change and keep going. Restraining forces are forces acting to restrain or decrease the driving forces (Purdassee, 2008).

According to Davis, Newstrom, and Richie (as cited in van der Westhuizen, 2008) there are three ways in which the motion of the forces of change can be altered, namely:

- to increase these forces,
- to reduce the resisting forces or
- to create new forces.

Lewin (as cited in van der Westhuizen, 2008), points out that increasing the forces of change without reducing resistance to them, will result in tension and conflict. Reducing the resisting forces will result in a reduction of tension and conflict.

2.6 Sources of Change

Burnes (2009) and Robbins (as cited in Purdassee, 2008), identify six specific sources of change that are acting as stimulants of change, depicted in table one below:

Table 2.1: Forces of change

Force	Example
Nature of the workforce	More cultural diversity
	Increase in professionals
	Many new entrants with inadequate skills
	Increased immigration and outsourcing

Technology Faster, cheaper, and more mobile computers and handheld devices TQM programs Re-engineering programs Emergence and growth of social networking sites Economic Rise and fall of global housing market Financial sector collapse Global recession Industrial demand Competition/Globalisation **Global Competitors** Mergers and consolidations Increased government regulation of commerce **Social Trends** Increased in environmental awareness More multitasking and connectivity **Political** Sudden internal and external hostility Government regulations Amendments of policies New policies

Source: adapted from Burnes (2009) and Purdassee (2008)

The changing nature of the workforce: is based on the fact that almost every organisation must adjust to a multicultural environment, changing demographics, immigration and outsourcing.

Technology: is continually changing jobs and organisations. It is not hard to imagine the very idea of an office becoming an antiquated concept in the near future.

Economic: Extraordinary economic shocks can lead to the elimination, bankruptcy or acquisition of the best companies, leading to the loss of thousands of jobs and a global recession. Another element that should be taken in consideration is the demand from industry for competent employees.

Competition/ Globalisation: The nature of competition is changing due to globalisation. Competitors are as likely to come from across the ocean as from across town. Successful organisations will be fast on their feet, capable of developing new products rapidly and getting them to markets quickly. In other words, they'll be flexible and will require an equally flexible and responsive workforce.

Social trends: don't remain static. Consumers now meet and share information in chat rooms and blogs. Companies must continually adjust products and marketing strategies to be sensitive to changing social trends.

Political: Political factors that may affect the implementation of CBET include, government regulations and legal issues, based on formal and informal rules under which NTA must operate. These may include tax policy, employment laws, environmental regulations and political stability: Vocational, Education and Training Act (2008).

2.7 Types of Change

French and Bell (as cited in Meyer & Botha, 2004), distinguish between the following types of change:

2.7.1 Planned Change versus Unplanned Change

Change can be deliberate (**planned**) or accidental (**unplanned**). An example of an unplanned change is a reaction to a new competitor unexpectedly entering the

market, while deliberate change could be a proactive approach to prevent change management problems in the future.

Planned change is defined by, Robbins and Judge (2011), as change activities that are intentional and goal oriented. It seeks to improve the ability of the organization to adapt to changes in the environment as well as to change the behavior of the employee. According to, Burnes (2009), planned change is defined as, change that is consciously embarked upon by an organization. As opposed to unintended changes, such as those that might come about by accident, by impulse, by misunderstanding or that might be forced on an unwilling organization (unplanned). Unplanned change is often unexpected, managers may respond to it in a reactive way. This approach is usually hurried and poorly planned and is sometime called crisis management.

However, planned, in this case, does not mean that someone sits down in advance and writes a plan detailing what will take place, when and how. Rather, it means that an organization identifies where it believes change is required and undertakes a process to evaluate and if necessary, bring about change. Smith et al. (2011), view planned change as a process that is planned and executed in anticipated of future events and changes. It involves the entire organization, or at least a major part of it. They are of the opinion that, managers must understand how change affects the organization and they must know when and how to set a change process in motion. A logical and planned process is more likely to be successful than an ill-conceived effort.

2.7.2 Large versus Small Change

Change can be **large** or **small**. Examples of large-scale change include cultural change programs, right sizing, reengineering, company-wide workforce upgrading or employing equity. Small changes can include installing a new telephonic system or office moves, French and Bell (as cited in Meyer & Botha, 2004).

2.7.3 Revolutionary versus Evolutionary

According to, Smith et al. (2011), to be able to manage change, we need to understand the difference between evolutionary versus revolutionary.

Change can be fast (abrupt, revolutionary), or slow (evolutionary). A company take-over is an example of a revolutionary change, while a three year leadership

development program provides an example of an evolutionary change. Evolutionary change can either be described as participative evolution (adaptive) or forced evolution (gradual).

Participative evolution was used for minor adjustments in the enterprise when time is available and key groups support it. Forced evolution is used for minor enterprise adjustments, when time is available and key groups oppose it. Revolutionary change, on the other hand, is used when the enterprise needs to make major adjustments and no time for large-scale consultation exists and no support for radical change exists. However, radical change is critical for the enterprise to survive and meet its basic objectives Erasmus et al. (2010).

2.7.4 Transformational versus Incremental

Van der Westhuizen (2008) defines incremental changes, as the preferred choice when a school (VTC) is operating well but the stakeholders agree that, minor changes will improve current operations further. Incremental change is based on ongoing improvements resulting in significant changes over time. It is associated with low risk and relatively low cost investment and has a high demand of participation from all levels of the organization (Meyer & Botha, 2004).

Transformational change, on the other hand, is defined by the same author, as the only radical change to be made when a school is working poorly or when external or internal forces insist on radical changes in instruction or support services. It can also occur when there is, for example, a curriculum renewal to a system of equal opportunities. This type of change is dramatic in form and rapid in impact and will ultimately radically change the entire culture of the organization. Transformational change processes are radical, non-incremental, usually associated with high risk, and demanding significant investments in terms of energy and money, Meyer and Botha (2004).

In order to implement such changes the type of change would largely dictate the management style that needs to be applied by managers. Issues that necessitate change could be so-called 'first-order change' or 'second order change' (see table two below). First order change is when, a 'change in' a given state takes place and little change takes

place. A 'second order change' of a given state takes place and introduces something that previously did not exist, which is a fundamental change that takes place.

In such a case, extensive change (transformational or so-called 'second order change') will be required, instead of small-scale incremental or so-called 'first-order change'. A 'second order change' is, therefore, radical and often disruptive, which is difficult to prepare managers for and which requires innovative management development in order to be successful in equipping managers to deal with it.

Fourie (1999), views transformation as a process by which the form, shape and/or nature of institutions are completely altered. It conveys a sense of radical change, of a metamorphosis which needs to take place, and implies much more than cosmetic change, window-dressing or strategic moves; it is a moral imperative, deeply rooted in and driven, the will-to-truth.

Table 2.2: Change Management Strategies

Strategy	Developmental incremental	Radical transformational
Mode/Style	change strategies (First-order change being shallow)	change strategies (Second-order change being deep)
Collaborative/consultative	Participative evolution	Charismatic change
Representing soft	(adaptation)	strategies
management style: Very people sensitive and inclusive	Used for minor enterprise adjustments when time is available and key groups support it.	(metamorphosis) Used when there is little time and major adjustments are needed in the enterprise and there is no time for extensive consultation, but is supported in terms of radical change within the enterprise.
Directive/coercive modes	Forced evolution (gradual	Distortional transformation
Representing hard	change)	(revolutionary)
management style: minimal inclusion from people as it is	Used for minor enterprise adjustments and when time is	It is used when the enterprise needs major adjustments and

in response to crisis	available, but key groups are	no time for large-scale
	opposed to it	consultation exists and no
		support for radical change
		exists. However, radical change
		is critical for the enterprise to
		survive and meet its basic
		objectives

Source: Erasmus, Loedloff, Mda, and Nel (2010).

For the purpose of this study, the researcher will concentrate on transformational but planned change, as it is a direct result of a combination of the sources given above; for example, to make major adjustments and no time for large-scale consultations exists and no support for radical change exist, or when a school is working poorly, or when external or internal forces insist on radical changes in instruction or support services, or, for example, curriculum renewal such as implementing CBET.

For change to be taken seriously and to contribute significantly to the success of the business, emphasis should be put on the notion of improvements and increasing effectiveness of the organization, through transformation, which is the strengthening of quality, effectiveness and efficiency of the general education and training system, ETSIP (2006). It is therefore essential, for the change process to be fully integrated in the day-to-day activities of the people in the organisation (instructors at VTC's). As long as the change process is seen as something "extra", something to do over and above the day-to-day "real work", it will remain on the back burner and will not be entrenched as part of the culture of the organization (Meyer & Botha, 2004).

Cummings, Worley, and Duffy (as cited in Duffy, 2004), have identified seven features of fundamental change. According to them, transformation is:

- triggered by disruptions in an organisation's environment or within itself;
- systematic and revolutionary;
- requires a new organisation paradigm;
- driven by senior executives and line management;

- requires continuous innovation and learning;
- requires a reshaping of an organisation's culture and lastly,
- requires courage, passion and visionary leaders.

The following three features of fundamental change are the ones that will be concentrated on as they have direct impact on the study underhand. The first feature is:

Transformation is triggered by disruptions:

Tushman, Newman, and Romanelli (as cited in Duffy, 2004), suggest that transformational change is stimulated by disruptions in an organisation's external and internal environment. The discontinuities for an education system (VET) are categorised as follow:

- *Industry Discontinuities*: In education (VTC's), these discontinuities include unexpected legal, political, economic and technological conditions.
- **Product Life Cycle Shifts**: In education, teachers (Vocational Instructors) are knowledge workers. As knowledge workers, they have two levels of work outcomes. The first-level outcome is their personal knowledge and skill. The second level and primary outcome of their work is educated students (trainees). This outcome emerges as instructors organizing and presenting what they know, in skillful ways, to help trainees construct their own knowledge. New knowledge and skills represent discontinuities and if the education system perceives them as important and valued, then the instructors will need to unlearn old knowledge and skills and learn new ways of doing things (CBET). If these discontinuities are perceived as significant, they can even trigger the transformation of the education system.
- Transformation is driven by Senior and Line Management
- According to, Waldersee and Pettigrew, as cited in Duffy (2004), senior executive (CEO of NTA) and other line managers (Head of Institutions) must drive transformation. Without the unequivocal and visible leadership of these heads, transformational change in VTC's will fail. Tushman, Newman, and Nadler (as

cited in Duffy, 2004), explain three key roles for executive leaders during times of transformational change:

- Envisioning: articulating a clear and credible description of a new strategic
 orientation for an organisation; setting new and challenging performance
 standards to move forward and appreciating an organisation's past
 accomplishments.
- *Energizing*: demonstrating personal excitement for an unequivocal commitment to the new strategic direction and its related goals and communicating early success to build energy to support the transformation.
- *Enabling*: providing resources (human physical, financial and time) needed to complete the transformation; rewarding performance that supports the transformation; building a new management team with a transition manager to lead the transformed organisation and developing management systems to support the transformation.

Transformation requires Courageous, Passionate, and Visionary Leaders

Duffy (2004), postulates that courageous, passionate and visionary leadership, must begin at the highest level of the VTC system (the CEO and management) and then spread throughout. Courage helps leaders stand their ground in the face of adversity. Passion gives them the psychological and emotional energy they need to persevere toward the goal of transformation. A vision marks a destination to move toward.

Courage, passion and vision are useless in isolation. They must be simultaneously present in a leader. A leader can have courage but not have passion or vision. A passionate leader might lack the courage of his or her convictions and cave in to political pressure to give up the dream. A visionary leader without courage or passion is a person with a dream but without the strength of character or emotional energy to make that dream real. Courage, passion and vision are powerful when they exist as a triad.

2.8 Unintended Consequences of Change

Unintended consequences (challenges) are normally forces that affect the change process, either positively or negatively. Any existing organization is an equilibrium that is the result of driving forces and resisting forces working against each other, meaning that any situation of change contains driving forces or other factors, that tend to alter existing circumstances (pressure to change) and forces of resistance or factors that tend to oppose or undermine the change (Van der Westhuizen, 2008).

However, management is more concerned in the forces which act against, rather than for, the change. Change normally triggers emotional reaction because of the uncertainty involved. Therefore, in planning for change, management should always take resistance to change into account (Smith et al., 2011).

Table 2.3 below, summarises major forces for resistance to change identified by research done by different authors.

Table 2.3 Major sources for resistance.

Smith, Cronje, Brevis, and Vrba (2011)	Robbins and Judge, (2011)	McConalogue (as cited in Purdassee, 2008)	Van der Westhuizen (2008)
	Individua	al Sources	
Threatened self- interest: Power over organizational	Habit Used to relying on old habits or programmed	Insufficient buy-in and ownership Lack of commitment from	Loss of the familiar and reliable Leads to feeling insecure
resources Prestige and respect Uncertainty Fear of losing jobs	responses Security Threatens feelings of security and safety	top Lack of middle management ownership Insufficient support	The loss of personal choice and values Protecting own interest
Relocation New training Lack of trust and	Economic factors Changes in job tasks or established work	at all levels Unrealistic timescale for change	Possible loss of authority Affecting individual's position

			<u></u>
misunderstanding	routines	Loss of energy	of authority
Lack of trust between parties involved	Incompetency in performing new tasks or routines	Lack of resources Lack of trust	Not understanding the reasons for change
Distrust and suspicion Different perceptions Personal interpretations of	Fear of the unknown Change substitutes ambiguity and uncertainty for the unknown	Failed attempts at change Lack of vision or a process Inadequate interpersonal	Misunderstanding or insufficient information Meaningless change Change must make meaning
change Miscommunication	Selective information processing	communications Lack of readiness for change	Fear of Change Fear of the unknown
Misinterpretations Low tolerance for	Selectively processing of information in	Problems with letting go	A low tolerance for change
change The fear of being incompetent Emotional resistance	order to keep perceptions intact Ignoring challenging information	Over and covert resistance	Not emotionally equipped to assimilate or implement change
	mormación		Various (mistaken) perceptions in respect of change Fear of losing jobs
			Non-involvement
			Non-involvement in the planning phase
			Pressure
General reasons	Organisational Sources		
Inertia: prefer to maintain the status	Structural inertia		Pressure associated with change for
quo; clinging to their	Change act as a		compiling new

comfort zone	counterbalance to sustain stability	documents and regulations
Poor timing Surprise: if change is sudden, unexpected or extreme, resistance become a reflex reaction Peer pressure: work groups sometimes resist new ideas due to anti-management attitudes.	counterbalance to sustain stability Group inertia Group norms act as constraints against individual desires Threat to established power relationships Threats to longestablished power relationships	

Source: adapted from Smith, Cronje, Brevis, and Vrba (2011), Robbins and Judge (2011), Purdassee (2008), and Van der Westhuizen (2008).

From table two above, it can be seen that there are common reasons for resistance even though change may occur in different enterprises. The common areas are summarized as follow:

- Threatened self-interest, protecting own interests: people care less about the
 organisation's best interests than their own. They will change if it will cause
 them to lose something of value, such as power over organization resources,
 money in the form of current and future income and prestige and self-respect.
- Lack of trust and misunderstanding: people need to fully understand what the change is all about; all misperceptions should be cleared in order to build trust between the parties involved. Distrust and suspicion often results in rumours

and distorted information and may become an effective obstacle to change. Misunderstandings or insufficient information are often the cause of not being able (or not wanting) to see or hear explanations about the significance of change.

- Different perceptions: perceptions of the costs and benefits of a proposed change depend on what individuals think change will mean for them and their organization. Differing perceptions, on the benefits of proposed change, occur when information on the change is not properly disseminated. Employees are often exposed to different and often less, information than management and may not understand the full consequences of change.
- Poor communication: resistance will be an automatic response to change, if the
 necessary communication channels are blocked, insufficient or only one way.
 Inadequate feedback, due to no or poor monitoring and evaluation systems in
 place, also lead to a break-down in communication channels.
- Low tolerance to change: people resist change because they will not able to
 develop the new competencies necessary to perform well. Although individuals
 often understand the necessity for change, they may be emotionally unequipped
 to assimilate or implement the change. Individuals also resist change as they lack
 the necessary skills to handle both resistance and change.
- Uncertainty, fear for the unknown and insecurity: people's inherent aversion to change is caused by fear of the unknown and uncertainty with regards to job security, relocation or training. Another contributing factor is the lack of a proper change management plan with its own vision.
- Peer pressure and group inertia: work groups sometimes resist new ideas because of anti-management attitudes. Even if individuals want to change their attitudes and perceptions about change, group norms may act as a constraint.

From the preceding discussion of the reasons for the resistance to change, it seems that, change, is more often a personal experienced rather than organizational one.

2.9 Managing Change: Support Mechanisms

The process of managing a change initiative can be described as consisting in a number of stages, namely; determining the need for the change and initiating it, planning the change, implementing the change, being prepared for resistance to change and managing it, stabilizing the results of change, and learning from the process (Amos, Ristow, Ristow, & Pearsel., 2012).

Change Management occurs when there is a gap between enterprises, divisions, functions or individual performance objectives and actual performance in the organisation. Change management is about modifying or transforming organizations in order to maintain or improve their effectiveness. Managers are responsible for ensuring that the organization (or part of the organization they manage) performs effectively. To do this, they need to know what constitutes effective performance and have some means of assessing whether or not the organization, as a whole or their particular sub-system, is performing effectively. They also need to know, if performance is unsatisfactory, what elements of the organization can be changed in order to improve performance and what steps they can take to secure these changes (Hayes, 2002).

Lientz and Rea (2004), define change management as, the approach to plan, design, implement, manage, measure, and sustain changes in business processes and work. Some of the activities, according to them, that are involved in change management include:

- Reviewing the triggers and expectations of change
- Identifying potential areas for change
- Marketing the change and change management throughout
- Defining objectives and scope for change
- Selecting the activities for change
- Defining how the work will be performed after the change
- Determining the implementation strategy for the change
- Managing and directing the change

- Measuring the work before, during and after the change
- Ensuring that change is lasting and persistent
- Maintaining the momentum of change

Lientz and Rea (2004), illustrated the importance of these elements by means of a table. Table one below, gives both the need and the impact of each management change element.

Table 2.4: Elements of Change; Needs and Impacts

Element	Need	Impact, if not addressed
Review of triggers and expectations	Understand where managers are coming from	Misjudge what is behind change
Identification of areas of potential change	Need to be able to understand areas for trade- offs	Missed opportunities
Define objectives	Realistic and attainable objectives	Lack of focus
Define the scope	Trade-off between activities, resources and schedule	Scope creep and expansion
Market change and change management	Marketing is required to compensate for inertia, resistance and political/cultural factors	Support for change will wane
Select activities for change	Get management behind the selection	Without trade-offs, the whole effort is in danger
Determine how work will be done after change	Need for the vision of the change	No common vision of change effect leads to confusion and misunderstanding
Create the implementation strategy	Organized approach for phasing in change	Lack of direction of the change

Manage the change	Need for multiple levels of management	Problems remain unresolved for too long
Measure the work	Essential for benefits, morale and momentum	Lack in confidence in change without measurement
Ensure lasting change	Essential in order to get benefits	Lower morale which results in inefficient work

Source: Lientz and Rea (2004).

In reviewing the table, one can see that the need for each of the elements of change is compelling, thus, all elements of change should be implemented and carried out effectively.

2.9.1 The Role of Change Agents

Change is real, often radical and affects everyone. The nature of change which needs to be managed effectively by managers according to Erasmus et al. (2010), usually affects one or more of the following functions with regards the extent of change by an enterprise during the adjustment process:

- Structure- organic, mechanistic, departmental, centralisation;
- Formal practices- written policies, rules, procedures, including human resources and financial control;
- Tasks (what work is to be done) job design, process quality, business process re-engineering, downsizing;
- Leadership transactional versus transformational styles;
- Technology processes and systems, software and hardware;
- People competencies, capabilities, and demographics;
- Products new products, research and development, quality, and features;
- Resources non-physical, physical, financial and functional;

 Culture – (formal/informal organisation) – tacit ways people think and do things, cultural change.

The success of implementing such changes is generally associated with those who facilitate the change process. Managers constantly need to monitor both the internal and external business world to identify new opportunities or for situations demanding change. The individual/s or entity initiating the change is most often referred to as the Change Agent (NTA in this case). The NTA as the agent of change is defined as, the figure that seeks to reconfigure an organization's roles, responsibilities, structures, outputs, processes, systems, technology or other resources, in the light of improving the organisational effectiveness (Saka, 2003). Once the need has been identified (implementing the new curriculum), the change agent needs to realize that the support of others in the change program will be needed. This implies that, the NTA needs to surround itself with people who support the change itself and who will promote it by influencing others.

Managing change is one of the most difficult challenges facing management. Changes and improvements are often hindered by the attitude of management. A positive attitude towards change is necessary to ensure stability. All strategies, concepts, attitudes, structures, systems, processes and reactions must be positive towards change to obtain stability as quickly as possible in a new system.

The change planned must be carefully diagnosed by management or by a designated committee. In analysing, the administrator (manager) must understand the driving and restraining forces. Driving forces are the calculated positive result of the change, while restraining forces are the negative impact of the change. To diagnose, is to understand the causes of some negative conditions in the operation of the institution.

Staff members often offer resistance to change before they are willing to accept it, especially, when they are satisfied with the status quo. The manager should, therefore, try to anticipate the initial resistance to the proposed change and deal with doubts and questions concerning the change (Van der Westhuizen, 2008).

Change managers are people who manage planning, co-ordination and implementation of activities in the change process. Managers interpret a leadership role to manage change. As transformation leaders, they must convert the vision and mission into reality and 'sell' it to the personnel. They should convey the change strategy, in detail, to employees, so they can become part of the change process. All employees must participate in the change process if they want to identify with the values and objectives of the institution (Van der Westhuizen, 2008).

Change should therefore be managed according to phases, of which, planning, is one of the key factors in the success of the implementation and acceptance of change. This means that the manager has to give special attention to how he/she intends to:

- Manage change as a process.
- Evaluate the effect of the changes and change strategy.
- Persuade all the stakeholders to accept changes.
- Communicate the aims of the changes to the all stakeholders involved.

In addition, the manager also has to:

- Record, in writing, the proposed changes for circulation amongst all stakeholders
- Share information with the staff during meetings and in informal discussions about the transformation the changes will bring;
- Identify priorities for dealing with tasks
- Devise time scheduling for reporting results and identify sources of aid in reaching the desired outcomes.

The basic idea is to provide guidance on how to overcoming resistance and how to cope with people who are unable or unwilling to change. At the same time, it is about educating and changing them, to make them able and willing to behave as expected, to 'enthusiastically' and pro-actively support the new idea and 'pro-actively' support the new idea. It is about changing people's schemata and mindsets, beliefs and attitudes. It is

about how people think and act. It requests additional effort from people, to do more and to do better (Diefenbach, 2007).

2.9.2 Pre-requisites for the Effective Management of Change

The success of implementing change is dependent on the organisational readiness for the change. The issue of importance here is, how will current systems (traditional way of teaching) of the organization be disrupted by the new system (the implementation of CBET) due to the change? How would this new system change the structure and culture of the VTC's after implementation of the new curriculum? Depending on the existing structures in place and the degree to which a change (CBET) differs from such structures, an organization may be more or less ready for such a change. Creating the need for change should, in fact, open up existing organisational cultures (VTC's) to be receptive to change (Almaraz, 1994).

According to Coetsee, as cited in Van der Westhuizen (2008), there are a number of factors that affect an organisation undergoing change. These factors are as follows:

- The degree to which the organisation will be affected by the change and the degree to which it is aware and supportive of the vision driving the change and its intended consequences;
- The degree to which the changes are in line with current practices and objectives;
- The existence of a climate of change in the organization and
- The previous experience the company had of change and the degree of readiness for change.

According to Herman and Herman (as cited in Van der Westhuizen, 2008), the following prerequisites for successful management and implementation of transformational change:

• There should be a commitment to the change by the managers and critical mass among the stakeholders.

- There should be a clear and desirable vision of what the company will be like once the change is complete.
- There should be clear cut strategic goals to be reached, as the organisation undergoes the change process and milestones should be established, to guide the path of change.
- Detailed tactical plans should be dedicated upon and made available in understandable language to all who participate in the change process.
- Training should be provided for those individuals who are to initiate and/or manage the change, if they do not possess the requisite knowledge or skills.
- Adequate time, finances, material and human resources must be provided to enhance the probability of successful change.
- High-quality, comprehension and frequent two-way communication should take place throughout the entire change process.
- Adjustments to the tactical or strategic plans should be made during transformation period of the change process, if changes are required during the initiation and implementation stages of change.
- The manager should give recognition to all who do good work and he or she should attend group celebrations every time an important milestone is reached.

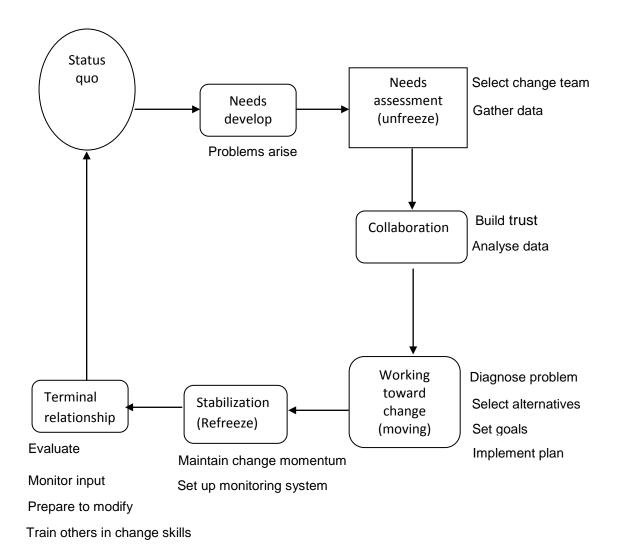
2.10 Change Management Models

The following models of managing change are suggested by the literature. These include Lewin's three phases model (as cited in Burnes, 2009) and Walker and Vogt, also based on the three step model of unfreeze, movement and refreeze (as cited in Van der Westhuizen, 2008), Bullock and Batten's, four-phase model of planned change (as cited in Burnes, 2009) and Purdassee (2008), as well as Kotter's, eight step model of change (as cited in Purdassee, 2008).

The first model (Figure 2.1) will look at a combination of Lewin's Three-Step Model (as cited in Burnes, 2009) and a change process suggested by Walker and Vogt (as

cited in van der Westhuizen, 2008). Both of the models include the three steps of unfreezing, moving and refreezing.

Figure 2.1: Lewin's Three-Step-Model of Change



Source: adapted from Lewin's (as cited in Burnes, 2009) and Walker and Vogt (as cited in Van der Westhuizen, 2008).

According to this model, change can be seen as having six phases, which means that there are six phases to be managed:

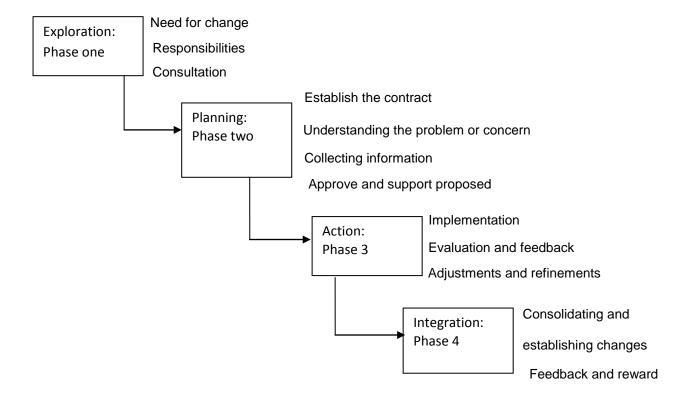
• *Diagnosis*: a problem may arise which should be diagnosed in order to establish whether it should be taken seriously.

- **Needs assessment**: a change management team should be established to gather data in searching for root causes of the problem. This step normally involves the restraining forces that hinder movement away from the status quo. Restraining forces need to be unfreezing; changing to overcome the pressures of both individual resistance and group conformity. Management might also unfreeze acceptance of the status quo by removing restraining forces.
- *Collaboration*: data should be analysed to determine whether unfreezing should occur when the diagnoses show that there is a genuine need for change.
- Working toward change: this phase involves finding creative alternatives to the problem that has been diagnosed, analysing alternatives and finally making a choice between possible solutions. Each of the planned alternatives further forces and operates against forces of resistance to change. In seeking alternative solutions, various procedures should be instituted so that the change process transforms the organization from the status quo to the desired end state. The situation should be frozen or stabilized as soon as changes have been implemented and are up and running.
- *Stabilisation*: New norms come into existence during the stabilisation phase. Loyalty to these norms is achieved by increasing people's involvement. People need to be encouraged and rewarded during the stabilization phase to ensure that support for the changes is maintained and to prevent regression to old ways. Once change has been implemented, to be successful, the new situation must be refrozen so that it can be sustained over time.
- *Evaluation*: requires an evaluation of the entire change process. This should indicate the degree of success of the change process and the change itself. It will enable the manager to ascertain the success of the change and will also serve as a point of departure for other change processes that need to be tackled.

The second model of managing change is referred to as the, 'Bullock and Batten's four-phase model of planned change'. Bullock and Batten (as cited in Burnes, 2009) and Purdassee (2008), developed an integrated, four phase model of planned change based on a review and synthesis of over 30 models of planned change.

Figure 2 below gives an overview of the four-phase model of planned change.

Figure 2.2: Bullock and Batten's four-phase model of planned change



Source: adapted from Bullock and Batten (as cited in Burnes, 2009) and Purdassee (2008).

This model describes planned change, in terms of two dimensions. Change phases, which are distinct states which an organisation moves through as it undertakes planned change and change processes; which are methods used to move an organisation from one state to another through change.

These phases are described as follows:

• *Exploration phase*: in this state, an organisation has to explore and decide whether it wants to make specific changes in its operations and, if so, commit resources to planning the changes. The change processes, involved in this phase, is becoming aware of the need for change. They begin searching for outside assistance (a consultant/facilitator) to assist with planning and implementing

the changes and establishing a contract with the consultant, which defines each party's responsibilities.

- Planning phase: once the consultant and the organisation has established a
 contract, the next state, which involves understanding the organisation's
 problem or concern, begins. The change processes in this phase is collecting
 information, in order to establish a correct diagnosis of the problem;
 establishing change goals and designing the appropriate actions to achieve these
 goals and persuading key decision-makers to approve and support the proposed
 changes.
- Action phase: in this state, an organisation implements the changes derived from the planning. The change processes involved are designed to move an organisation from its current state to its desired future state. This includes, establishing appropriate arrangements to manage the change process and gaining support for the actions to be taken, as well as, evaluating the implementation, the implementation activities and feeding back the results, so that any necessary adjustments or refinements can be made.
- Integration phase: The state commences once the changes have been successfully implemented. It is concerned with consolidating and stabilising the changes, so that they become part of an organisation's normal, everyday operation and do not require special arrangements or encouragement to maintain them. The change processes involved are reinforcing new behaviours through feedback and reward systems and gradually decreasing reliance on consultants; diffusing the successful aspects of the change process throughout the organization; training managers and employees to monitor the changes constantly and to seek to improve upon them.

According to, Cummings and Huse (as cited in Burnes, 2009), this model has a broad applicability to most change situations. It clearly incorporates key aspects of many other change models and it, especially, overcomes any confusion between the processes (methods) of change and the phases of change – the sequential states that organisations must go through to achieve successful change.

The focus of Bullock and Batten's model, just as with Lewin's, is change at individual level and group level. However, Organisational Development Practitioners have recognized, as many others have, that as 'organisations are being reinvented; work tasks are being reengineered; the rules of the marketplace are being rewritten; the fundamental nature of the organisations is changing and therefore, organizational development has had to adapt to these conditions and broaden its focus beyond individual and/or group behavior.

Purdassee (2008), suggests another type of change management model (the third model) to facilitate change in an organization, one that he refers to as the, Kotter's eight step model for change. This model strives to eliminate common errors and their consequences, for successful organisational transformation. Kotter (as cited in Purdassee, 2008), stresses that these eight stages should be seen as a process, rather than a checklist and that successful change of any magnitude, goes through all eight stages, skipping even a single stage, or getting too far ahead without a solid base, almost always creates problems (Burnes, 2009). The model by Kotter, is outlined below in figure 2.3.

Step 3: Step 1: Step 2: Step 4: Establish a Form a Create a Communisense of powerful vision cate the vision urgency coalition Kotter's, 8 steps Change Management Model Step 8: Step 7: Step 6: Step 5: Institutionali Improve-Short-term **Empower** se changes ments wins others

Figure 2.3: Kotter's eight step model for change

Source: Kotter (as cited in Purdasee, 2008)

The model suggests the following:

- *Create urgency*: by articulating a powerful rationale and business case for change. For change to happen the whole company should really want it. This could be done by developing urgency around the need for change. The manager should engage an open, honest and convincing dialogue about what is happening in the market place and with the competition. If many people start talking about the change which is proposed, the urgency can build and feed on itself.
- Form a powerful coalition: by convincing people that change is necessary. This often takes a strong leadership and visible support form key people within the organisation. Managing change isn't enough you have to lead it. Find effective change leaders throughout the company- they don't necessarily follow the traditional company hierarchy. Establish a coalition, or team of influential people whose power comes from a variety of sources, including, job title, status, expertise and political importance. Once formed, the 'change coalition' needs to work as a team, continuing to build urgency and momentum around the need for change.
- *Create a vision for the change*: a clear vision can help everyone understand why they are asked to do something. When people see for themselves what is to be achieved, the directives they are given makes more sense.
- *Communicate the vision*: The success of the vision will depend on the communication strategy being followed. The vision needs to be communicated frequently and powerfully and embedded with everything that needs to be done.
- Remove obstacles: Remove obstacles, by putting in place the structure for change and continually check for barriers to it. Removing obstacles can empower the people that will be needed to execute the vision, in order to help the change move forward.
- *Create short-term wins*: nothing motivates more than success. Within a short time frame those involved would like to see tangible results. Create short-term targets not just one long-term goal. The change team will have to work very

hard to come up with these targets, however, each milestone produced, can further motivate the entire staff.

- Build on the change: Kotter, argues that many change projects fail because
 victory is declared too early. Real change runs deep. Quick wins are only the
 beginning of what needs to be done to achieve long-term change. Each win
 should be a motivation to build.
- Anchor the changes in corporate culture: Finally, to make any change stick, it should become part of the core of an organisation. The corporate culture often determines what gets done, so the values behind the vision must be reflected in day-to-day work. Make continuous efforts to ensure that the change is seen in every aspect of the organisation. It is also important that the company leaders continue to support the change. This includes, existing staff and new leaders who are brought in. If the support of these people is lost the organisation might end up back where it started.

2.11 Conceptual Framework

Having worked through the three change management models discussed above, the researcher deemed it necessary to come up with a conceptual framework, that could cover all three sub-questions and consequently the main research question. By looking at the model suggested for this study, intended as well as unintended consequences are covered.

Figure 2.4 below, gives an illustration of the suggested change management model that would be used to cover the main research question; "How effective was the implementation of a Competency Based Education and Training (CBET) in Vocational Education Training Centres in Namibia?"

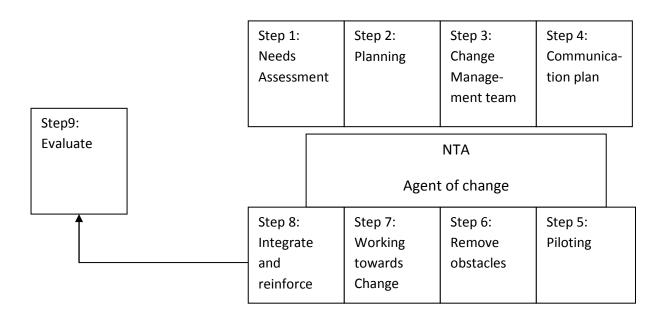


Figure 2.4: Adapted from Lewin's (as cited in Burnes, 2009) and Walker and Vogt (as cited in Van der Westhuizen, 2008), Bullock and Batten (as cited in Burnes, 2009) and Purdassee (2008), as well as Kotter (as cited in Purdassee, 2008).

The suggested change management model comprise of the following descriptors:

- Needs assessment: A needs assessment team should be established to gather
 data in searching for root causes of the problem, searching for outside assistance
 (a consultant/facilitator) to assist with planning and implementing the changes;
 as well as establishing a contract with the consultant which defines each party's
 responsibilities.
- Establish a change management team: by convincing people that change is necessary. This often takes a strong leadership and visible support form key people within the organisation. Managing change isn't enough you have to lead it; appoint a transition manager. Find effective change leaders throughout the company, establish a coalition, or team of influential people whose power comes from a variety of sources including job title, status, expertise and political importance. Once formed, the 'change coalition' needs to work as a team, under the lead of the transition manager to start to build urgency and momentum around the need for change.

- Establish a change management plan: once the consultant and the organisation have established a contract, the next state, which involves understanding the organisation's problems or concerns, begins. The change processes, in this phase, is collecting information in order to establish a correct diagnosis of the problem/s; establishing change goals and designing the appropriate actions to achieve these goals; as well as persuading key decision-makers to approve and support the proposed changes; in short, to establish an implementation plan.
- **Design a communication plan**: by articulating a powerful rationale and business case for change. For change to happen the whole company should really want it. This could be done by developing urgency around the need for change. It should start with creating and communicating a clear vision to all employees in the company. The vision needs to be communicated frequently and powerfully and embedded with everything that needs to be done.
- **Piloting**: in this state, an organisation pilots the changes derived from the planning. The change processes involved are designed to move an organisation from its current state to its desired future state (designing a roll out planphasing in phasing out). These include, establishing appropriate arrangements to manage the change process and gaining support for the actions to be taken, as well as, evaluating the implementation activities and feeding back the results, so that any necessary adjustments or refinements can be made.
- Remove obstacles/challenges: Remove obstacles/challenges, by putting in place the structure for change and continually checking (monitoring and evaluating) for barriers to it. Removing obstacles/challenges can empower the people that will be needed to execute the vision, in order to help the change move forward. This step normally involves identifying the restraining forces that hinder movement away from the status quo. Restraining forces need to be unfrozen; changed, to overcome the pressures of both, individual resistance and group conformity. Management might also unfreeze acceptance of the status quo by removing restraining forces.

- Working toward change: this phase involves finding creative alternatives to the obstacles/challenges that has been diagnosed, analyzing alternatives and finally making a choice between possible solutions. Each of the planned alternatives, further forces and operate against forces of resistance to change. In seeking alternative solutions, various procedures should be instituted, so that the change process transforms the organization from the status quo to the desired end state. The situation should be frozen or stabilized as soon as changes have been implemented and are up and running.
- Integration phase: The state commences once the changes have been successfully implemented. It is concerned with consolidating and stabilizing the changes so that they become part of an organisation's normal, everyday operation and do not require special arrangements or encouragement to maintain them. The change processes involved are reinforcing new behaviours, through feedback and reward systems and gradually decreasing reliance on the consultant; diffusing the successful aspects of the change process throughout the organisation; as well as training managers and employees to monitor the changes constantly and to seek to improve upon them.
- *Evaluation*: requires an evaluation of the entire change process. This should indicate the degree of success of the change process and the change itself. It will enable the manager to ascertain the success of the change, and will also serve as a point of departure for other change processes that need to be tackled.

2.12 Conclusion

Organisations come in all shapes and sizes, provide a vast variety of products and services, and face an enormous array of challenges. Perhaps, the only factor common to organisations is change. Organisations never stand still, though the speed and magnitude of change does vary from organisation to organisation and over time. It is now generally accepted that the ability to manage change effectively, is a crucial component of an organisation's ability to compete successfully.

Change is a difficult concept to define. Various authors have different views of change and the management thereof. Lientz and Rea (2004), define change management as the approach to plan, design, implement, manage, measure and sustain changes in

business processes and work. The success of implementing change is generally associated with those who facilitate the change process. Change agents are people who normally drive the whole implementation process.

This literature review attempted to look at defining transformational change, its intended and unintended consequences, as well as strategies of how to ensure the smooth implementation of transformational change.

The first sub-question: "What were the driving forces/triggers for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia? Is rather straight forward but not directly answered by the existing literature. Further research in terms of a semi-structured interview was required to identify the driving forces for the proposed change.

The second sub-question: "What factors acted as enablers to enhance the process of implementing CBET in VTC's in Namibia?" was also partially covered by the literature but the real factors could only be serviced by means of collecting primary data, via a semi-structured interview with those participants identified for the study.

With regards to the third sub-question, "What unintended consequences (inhibiting factors) emerged as a result of the implementation of the Competency-Based Education and Training in VTC's in Namibia and how were dealt with?" The researcher looked at the forces that affected the change processes, either positively or negatively, with the emphasis of forces that could act against rather than for the change. The first part of the sub-question, 'unintended consequences' was covered by looking at the major forces for resistance to change, identified by various authors, who did previous research on this topic.

The second part of the sub-question, 'and how were they dealt with?' was covered by looking at the following literature:

- how to manage change;
- the role of the change agent (NTA) and
- pre-requisites for the effective management of change.

However, further exploration is needed to find out precisely which one of those given in the literature would be commonly found, as those forces against change, as well as possible new emerging forces and those that were especially new barriers that were dealt with.

The fourth sub-question, "What change management strategies/models were employed in the implementation of CBET in VTC's?" Was covered by designing a new model integrating three change management models which include the following:

The first model looked at a combination of, Lewin's Three-Step model and a change process suggested by Walker and Vogt. This model has broad applicability to most change situations. It clearly incorporates key aspects of many other change models and it especially overcomes any confusion between the processes (methods) of change and the phases of change – the sequential states that organisations must go through to achieve successful change

The second model of managing change is referred to as the, Bullock and Batten's four-phase model of planned change. This model is similar to the previous one on change at individual level and group level. However, OD practitioners have recognized, as many others have, that as 'organisations are being reinvented; work tasks are being reengineered; the rules of the marketplace are being rewritten; the fundamental nature of the organisations is changing', therefore, organizational development has had to adapt to these conditions and broaden its focus out beyond individual and group behavior.

The last model to facilitate change in an organisation is referred to as, Kotter's eight step model for change. This model strives to eliminate common errors and their consequences. The integration of the three models was designed for successful organisational transformation in future that could cover sub question four: "What change management support strategies/models were employed by the change agent in the implementation of CBET in VTC's?

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

Clough and Nutbrown (2010), postulate that the aim of methodology is to describe and analyse methods, throwing light on their limitations and resources and clarifying their suppositions and consequences. It is the task of the methodology to uncover and justify research assumptions as far as practicably possible and in so doing, locate the claims which the research makes within the traditions of enquiry which uses it. Equally, it is the task of the researcher to identify the research tools and the rationale for their selection.

This chapter, therefore, focuses on the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation. It, furthermore, involves several decisions that needed to be taken in a logical order so that they can make sense to the researcher as well as the reader.

The overall decision includes, which approach should be used to study a topic. In this case the approach taken was a qualitative approach, followed by the philosophical overview (interpretive) and its assumptions, procedures of inquiry or research designs (case study), as well as the specific research methods of data collection (semi-structured interviews), analysis (qualitative) and interpretation. The selection of a research approach is also based on the nature of the research problem or issue being addressed, the researchers' personal experiences, and the audience for the study (Creswell, 2014).

In this case the issue under study was to uncover the effectiveness planning and implementing the CBET as method of training in vocational training centres by the NTA.

3.2 Research Question

A Research question is a clear, concise and focused question that helps to guide the research and project. The research questions needs to be on a topic that is familiar and interesting to the researcher. Some preliminary research needs to have been done before settling on the research question. Therefore a sample question needs to have been used, to ensure that the audience will understand what the topic of the research is

really about. Once a sample questions has been established, evaluate the questions some more before settling on your final choice (Farrugia, Petrisor, & Bhandari, 2010).

The research was based on the following research question:

How effective, according to subject's views was the transformation process of planning and implementing a Competency Based Education and Training (CBET)

Programme in Vocational Education Training Centres in Namibia?

The main research question is being supported by the following sub questions:

- What were the driving forces for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia?
- What were the factors that acted as enablers to the process of implementing CBET in VTC's in Namibia?
- What factors acted as challenges to the process of planning and implementing CBET in VTC's in Namibia, and how were these dealt with?
- What change management support strategies/models were employed by the change agent in the implementation of CBET in VTC's?

3.2.1 Research Objectives

Research Objectives should be clearly stated along with the research hypothesis if there is one. The research objectives are important as they are used to measure the outcome of the study; it also informs other matters of the study, like the sample size to be studied. Like the research questions, the objectives also help to aim and focus the study (Farrugia et al., 2010).

The main objective that frames this study was to:

Uncover the effectiveness; according to subject's views of the transformation process of planning and implementing a Competency Based Education and Training (CBET) Programme in Vocational Education Training Centres in Namibia?

According to the perspective chosen by the actors 'perceived effectiveness', the following four sub-objectives had been investigated:

- to determine the driving forces for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia?
- to determine the factors that acted as enablers to the process of implementing CBET in VTC's in Namibia?
- to identify the factors that acted as challenges to inhibit the process of planning and implementing CBET in VTC's in Namibia, and how were these dealt with?
- to establish the effectiveness of the change management support strategies/models employed by the change agent in the implementation of CBET in VTC's.

3.3 Research Philosophy

In planning a study, researchers need to think through the philosophical world view assumptions that they bring to the study, the research design that is related to this world view, and the specific methods or procedures of research that translate the specific approach into practice. The term 'world view' is defined by Creswell (2014), as:

"a basic set of beliefs that guide action", meaning a basic set of beliefs that guide the research. This type of belief held by the researcher often leads to embracing a qualitative, quantitative or mixed method approach." (p. 6)

Table 3.1 below highlights four views that are widely discussed by literature worldwide (Creswell, 2014).

Table 3.1: Four World Views

Postpositivism	Constructivism
Determination	Understanding
Reductionism	Multiple participant meanings
Empirical observation and measurement	Social and historical construction Theory generation
Theory verification	Theory generation
Transformative	Pragmatism

Political	Consequences of action
Power and justice oriented	Problem-centered
Collaborative	Pluralistic
	Real-world practice oriented

Source: Creswell (2014).

3.3.1 Postpositivism

The postpositivist assumptions have represented the traditional form of research, and these assumptions hold true more for quantitative than qualitative research. This worldview is sometimes called scientific method, or doing science research. It is also called positivist/postpositivist research empirical science, and postpositivism. Postpositivism represents the thinking after positivism, challenging the traditional notion of the absolute truth of knowledge.

In the postpositivist approach, there are laws or theories that govern the world and these need to be tested or verified and refined, so that we can understand the world. Thus, in the scientific method- the accepted approach to research by postpositivists- a researcher begins with theory, collects data that either supports or refutes the theory, and then makes necessary revisions and conducts additional tests.

3.3.2 The constructivist worldview

Constructivists or social constructivism (often combined with interpretivism), is typically seen as an approach to qualitative research. Social constructivists believe that individuals seek understanding of the world in which they live and work to understand the historical and cultural settings of the participants. The goal of the researcher is to rely, as much as possible, on the participant's views of the situation being studied, by trying to make sense (or interpret) the meanings others have about the world. Rather than starting with a theory (as in postpositivism), inquirers generate or inductively develop a theory or pattern of meaning.

3.3.3 The transformative view

This philosophical worldview focuses on the need of groups and individuals in society that may be marginalized or disenfranchised. The transformative view holds that, research inquiry needs to be intertwined with politics and a political change agenda, to confront social oppression at whatever levels it occurs, Mertens (as cited in Creswell, 2014). Thus, the research contains an action agenda for reform that may change lives of the participants, the institutions in which individuals work or live and the researcher's life. Moreover, specific issues need to be addressed that speak to important social issues of the day, issues such as empowerment, inequality, oppression, domination, suppression, and alienation. This research also assumes that the inquirer will proceed collaboratively, so as to not further marginalize the participants as a result of the inquiry. In this sense, the participants may help designs questions, collect data, analyse information, or reap the rewards of the research.

3.3.4 The pragmatic worldview

The fourth position abut worldviews comes from the pragmatists. Pragmatism as a worldview arises out of actions, situations and consequences, rather than antecedent conditions (as in post positivism). The focus is on applications that work to find solutions to problems. Instead of focusing on methods, researchers emphasise the research problem and use all approaches available to understand the problem. This is an approach more suitable for mixed methods studies which focuses on the research problem in social science research and then using a pluralistic approach to derive knowledge about the problem.

Having studied these four worldviews the researcher decided to adopt a social constructivist worldview based on the following assumptions:

- Human beings construct meaning as they engage with the world they are interpreting. Qualitative researchers tend to use open-ended questions so that the participants can share their views.
- Humans engage with their world and make sense of it based on their historical
 and social perspectives, thus, qualitative researchers seek to understand the
 context or setting of the participants, through visiting this context and gathering

information personally. They also interpret what they find, an interpretation shaped by the researcher's own experiences and background.

 The basic generation of meaning is always social, arising in and out of interaction with human community. The process of qualitative research is largely inductive; the inquirer generates meaning from data collected in the field.

King and Horrocs (2010), concur with Creswell (2010), by describing interpretative research as idiographic, which literally means, describing aspects of the social world by offering a detailed account of specific social settings, processes and relationships. The focus of the research might be to uncover how people feel about the world and make sense of their lives from their particular vantage points, as interpretivism perceives experience and understanding as seldom straightforward. People participate in indeterminate worlds, often attaching different interpretations and meaning to seemingly similar facts and events.

Hence, the purpose of this case study was to determine the perceived effectiveness of the transformation process of planning and implementing a Competency Based Education and Training (CBET) in Vocational Education Training Centres (VTC's) in Namibia, through semi-structured interviews with members of management. The focus was to uncover how members of management feel about, experienced and made sense of the implementation process of CBET in Namibia.

3.4 Research Approach

Creswell (2014), identifies three types of approaches; qualitative, quantitative and mixed methods.

3.4.1 Qualitative research

Leedy and Ormrod (2010), define **qualitative research**, as research that involves looking at characteristics, or qualities, that cannot easily be reduced to numerical values. A qualitative researcher typically aims to examine the many nuances and complexities of a particular phenomenon. In the qualitative approach data is based in a familiarisation with a real-life context or situation, it is concerned to understand the

interrelationships between different factors, the preconceptions of the researcher are suspended and the language of information is valued and utilised.

Furthermore, it seeks to find out how people understand a situation and how their understanding influences their actions (Anderson, 2009). Those who engage in this form of inquiry support a way of looking at research that honours an inductive style, a focus of individual meaning and the importance of rendering the complexity of a situation. The final report has a flexible structure, Creswell (2014).

3.4.2 Quantitative Research

Quantitative research, on the other hand, is defined by Creswell (2014), as an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measures, typically on instruments, so that numbered data can be analysed using statistical procedures. The final report has a set structure consisting of an introduction, literature and theory, methods, results and discussions. Like qualitative research, those who engage in this form of inquiry have assumptions about testing theories deductively, building in protections against bias, controlling for alternative explanations and being able to generalize and replicate the findings.

3.4.3 Mixed Methods Research

Mixed method research is an approach to inquiry that involves, collecting both, quantitative and qualitative data, integrating the two forms of data and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that, the combination of qualitative and quantitative approaches provides a more complete understanding of the research problem that either approach can provide alone (Creswell, 2014).

The preferred approach for this study was directly influenced by the worldview selected above. Since the constructivist worldview was selected as the research philosophy, the researcher followed a qualitative approach for data collection and analysis, as it examines the meanings and experiences of different people in different situations or cultural contexts in order to understand and explain the different realities of human situations, Anderson (2009). Furthermore, a qualitative approach was given preference as it could enable the researcher to reveal the nature of these multiple perspectives.

Another reason for preferring the qualitative approach was that when, little information exists on a topic, when variables are unknown, when a relevant theory base is inadequate or missing, a qualitative study can help define what is important – that is, what needs to be studied. What is important here, is to emphasise the value of a qualitative approach when feelings, opinions and most importantly, the emotions of respondents, are investigated - especially with an emotive subject matter such as change, Leedy and Ormrod (2010).

3.5 Research Design

A research design is a blueprint for the research. According to Denscombe (2010), a good research design does three things:

- It provides a description of the various components of the investigation; it specifies the general approach to the research that will be adopted the strategy and gives details about the methods of data collection and analysis that will be used.
- It provides a rationale for the choice of research strategy in relation to the
 research questions; it explains how the various methods of data collection and
 analysis link with the specific research questions being investigated and shows
 how they will produce data that is suitable for the kind of research questions
 being investigated.
- It explains how the key components of a research project link together; it explains the logic of the research process as it moves from one phase to the next and it shows how the methods of data collection and analysis are consistent in terms of their general philosophy (see diagram 1 below).

Saunders, Lewis, and Thornhill (2003), identify different types of research designs that can be employed, such as survey method, case study and exploratory, descriptive and explanatory studies. The design selected for this research project is the qualitative case study design. Newby (2010), defines case study, as an investigation of a single

instance, usually with the goal of identifying and perhaps understanding how an issue arose, how a problem was resolved, often with the purpose of isolating critical incidents that act as decision points for change.

A case study seeks the understanding of individual elements about their roles and perceptions in the change process (the role of NTA management). In addition, a case study may be suitable for learning more about a little known or poorly understood situation (the implementation of CBET in VTC's). It seeks to investigate the interaction of different factors and events that contribute to the focus of the enquiry (Anderson, 2009). It may, furthermore, be useful for investigating how an individual or program changes over time, perhaps as the result of certain circumstances or interventions (Leedy & Ormrod, 2010).

A major weakness about a case study though, is that findings cannot really be generalised to any other organisation which may be going through or will undergo similar experiences of change. Other weaknesses could be that huge volumes of qualitative data may be difficult to analyse, to cross-check and the fact that the researcher may influence and be influenced by the case (Anderson, 2009).

3.6. Target population

A population may be defined as the set of individuals, items or data from which a sample is taken. Defining a research population focuses on being a member of a particular group, such as:

- staff in an organization
- users of a product
- members of a group,
- those with a condition for example, stress (Horn, 2009).

The target population, in this study, was identified as those members of the population who meet the requirements of the research issue. Since the issue of this study is about determining the perceived effectiveness of the transformation process of

the planning and implementation of a Competency Based Education and Training (CBET) in Vocational Education Training Centres in Namibia, the target population was those members of management, directly involved in the planning and implementation of the transformational change at the NTA.

3.6.1 Sampling

Kumar, (1999) views sampling as the process of selecting a few members (a sample) from a larger group (the sampling population) to become the basis for estimating or predicting a fact, situation or outcome regarding a bigger group. A sample, therefore, would be drawn from the population the researcher is interested in.

According to Welman et al. (2012), it is impractical and uneconomical to involve all members of the population in a research project; hence, the option to select a few participants' that would be representative enough for the results to be generalized but within a given scope. Obtaining information from a sample is often more practical and accurate than obtaining the same information from an entire universe or population (Struwig & Stead, 2001). Different sampling designs may be more or less appropriate in different situations.

There are two types of sampling with research: probability sampling and non-probability sampling. The distinguishing factors, that would determine which type of sampling would be most appropriate for ones' study, is whether the approach is qualitative or quantitative. Since this study is qualitative in nature, the sampling technique that employed was non-probability.

According to Leedy and Ormrod (2010), in non-probability sampling, the researcher has no way of forecasting that each element of the population will be represented in the sample. In this study, the researcher will make use of purposive sampling, for the selection of those members of management and convenience sampling for staff directly involved in the transformation, since it is a small number and conveniently available. The reason for selecting two different types of sampling is that, at this stage, the size of the population is unknown and/or inaccessible.

Purposive sampling is a non-probability method, in which the selected cases are related to the purpose of the study. The primary consideration in purposive sampling, is

the judgment of the researcher as to who can provide the best information to achieve the objectives of the study. The researcher only goes to those subjects who in his/her opinion are likely to have the required information and who will be willing to share it (Horn, 2009). In this case, members of management were 'hand-picked' for this research on the basis of:

relevance: to the theory/issue being investigated

• knowledge: privileged knowledge or experience about the topic.

Purposive sampling was selected, as the researcher already knows something about the specific people or events and deliberately selected particular ones because they are seen as respondents likely to produce the most valuable data (Denscombe, 2010). However, although purposive sampling may be very appropriate for certain research problems, it can result in sample bias as the selection of the participants is determined by the researcher. It is, therefore, impossible to evaluate the extent to which such samples represent the relevant population, thus, not possible to generalize the results (Welmanet al., 2012).

3.6.2 Units of Analysis

According to Welman et al. (2012), in research, the members or elements of the population are referred to as the units of analysis. In the human behavioural sciences, units of analysis typically refer to:

- humans
- groups
- organizations or institutions
- human products or outputs and
- events.

The units of analysis for this study were employees from a specific organisation. The unit of analysis comprises of those members of management involved in the transformation and implementation of CBET within all VTC's in Namibia.

3.7 Research Instruments

Since the researcher made use of a case study, extensive data was gathered about the management's contribution to facilitate the process of change at VTC's. Semi-structured interviews with members of management were conducted over a period of a month, at their availability and convenience.

The interviews in a qualitative study are either open-ended or semi-structured it, therefore, allows for probing or rephrasing if and when needed.

A semi-structured interview was selected based on the following reasons:

- there is an interview guide with topics to be covered (as opposed to an interview schedule which has a fixed set of questions),
- it has starter questions and guidance and what themes to introduce if the interviewee does not introduce them,
- there is guidance on interviewer behavior, including guidance on the clarification that can be offered and the extent to which the interviewer can stray beyond the brief with follow-up questions (Newby, 2010).

Another reason would be, that the interviewer is prepared to be flexible in terms of the order in which the topics are considered and perhaps more significantly, to let the interviewee develop ideas and speak more widely on the issues raised by the researcher (Denscombe, 2010). Reasons for using semi-structured interviews are based on the following advantages:

- it is used to obtain a richer picture of some of the aspects under investigation;
- it allows for the use of direct quotes from the respondents, to reveal insights about the feelings, opinions and arguments and to give personality to a written report and
- it provides an authentic voice, adds emotion and passion and enables the researcher to convey, in a powerful way, issues and perspectives that are important to the interpretation and explanation (Newby, 2010).

It furthermore, leaves the respondents to decide the wording of the answer, the length of the answer and the kind of matters to be raised in the answer. The disadvantages, however, are that firstly, they demand some effort on the part of the respondents (which might well reduce their willingness to take part in the research) and secondly, they leave the researcher with data which is very 'raw' and requires a lot of time-consuming analysis before they can be used (Denscombe, 2010).

The primary disadvantage is that the researcher gets information from different people and may not be able to make comparisons among interviewees. It is also time consuming and needs an expert to transcribe the interview.

3.8 Data Collection Procedure

For the design of this tool, the researcher prepared an interview guide, where topics on which questions were based, were predetermined and listed (Appendix B). With permission of the subjects, a Dictaphone was used to record the conversation to be transcribed afterwards.

Semi-structured interviews were conducted with six members of management.

3.9 Data Analysis

Data analysis involves collecting open-ended data, based on asking general questions and developing an analysis from the information supplied by the participants (Creswell, 2009). As part of the reduction process; upon careful scrutinising of the data, the researcher chose to undertake a write-up in summary form, by making use of a qualitative data summary/memo.

For this study, data was qualitatively analysed. The process followed in analysing and presenting the data was based on a data analysis diagram (diagram 2 below) suggested by Creswell, (2009).

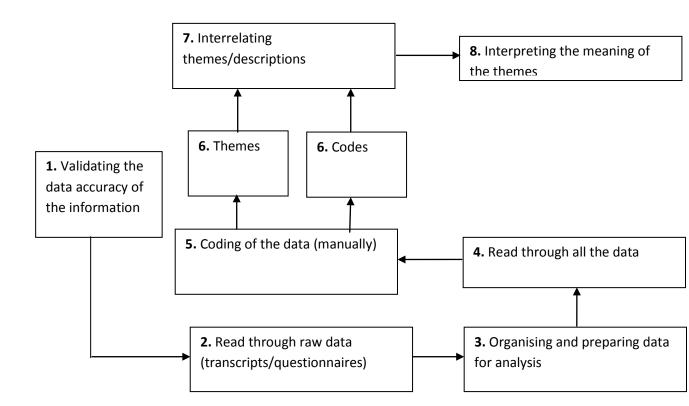


Diagram 2: Data Analysis process (Creswell, 2009)

3.10 Verification of the Data

The credibility of research is something that should not be taken for granted. For the research to achieve credibility, it needs to demonstrate that the findings are based on practices that are knowledgeable to the bases of good research.

3.10.1 Validity

Validity concerns the accuracy of the questions asked, the data collected and the explanations offered. Generally it relates to the data and the analysis used in the research. It refers to the quality of data and explanations and the confidence we might have that it is accurate and reflects what is true or what is real (Denscombe, 2010).

Validity is a situation specific concept (in this case NTA), which is specific to the particular purpose for which the instrument is being used. Validity is concerned with the answers to this question; does the instrument measure what it is supposed to measure?

The answer to this question can be provided through a pre-test (Leedy and Ormrod, 2010).

The types of validity considered for this case study were content validity, interpretive validity as well as member checking. Content validity comes into play when a test is to be constructed. The researcher usually formulates a sample of questions or items that represents the content to be covered by the test. Content validity, thus, refers to the degree or extent to which the sample of the test items are representative of some defined domain of content.

To establish content validity, experts' judge, critically, the test items to determine whether:

- The items measure predetermined criteria, objectives or content.
- The items are representative of the total number of possible items which could have been compiled in terms of the total content domain (Leedy & Ormrod, 2010).

Interpretive validity, entails the degree to which participants' viewpoints, thoughts, intentions and experiences are accurately understood and reported by the qualitative researcher (Burke, 1997). This would be done by means of respondent validation; the researcher can return to the participants with the data and findings as a means of checking the validity of the findings. This allows a check on factual accuracy and allows the researcher's understanding to be confirmed, or amended, by those whose opinions, views or experiences are being studied (Denscombe, 2010).

3.10.2 Reliability

According to Yin (2003), the quality of any given design is judged according to certain logical tests of which, reliability, demonstrates that the operations of the study, such as the data collection procedures, can be repeated with the same results. Reliability relates to the methods of data collection and the concern that that they should be consistent and not distort the findings. Generally it entails an evaluation of the methods and techniques used to collect the data. It refers to the ability of a research process to provide results that do not do vary from occasion to occasion and that do not vary according to the particular persons understanding the research (Denscombe, 2010).

Bless and Higson-Smith (2000), on the other hand, view the reliability of measurement as the degree to which that instrument produces equivalent results for repeated trials. They further state that, the greater the consistency in the results, the greater the reliability of the measuring procedures. One of the methods that were used to assess reliability was to check that it does not contain obvious mistakes made during transcription.

3.10.3 Pilot Testing

When developing a new instrument, it is useful to 'test it out', before administering it to the actual sample. This process of testing out is done by means of a pilot study, which entails administering the study, to a limited number of subjects, from the same population as that from which the eventual project is intended. The pilot study is, therefore, a 'dress rehearsal' for the actual research investigation (Welman et al., 2012).

To ascertain the efficacy of the research instruments, a pilot study was undertaken, with four subordinates of those members selected for the actual study, to test the validity of the questions designed for the study. Weaknesses of the design (questions, comments and inputs from the subjects used for the pilot) were identified and improved afterwards. Some questions were re-phrased, some discarded and some new questions were added before the final appointments were confirmed. The pilot study aided the researcher to have greater insight and to establish the reliability and validity of the research instruments (Bell, 1999).

3.10.4 Member Checking

The fourth type of validity that was employed by the researcher was member checking. Member checking is normally used to determine the accuracy of the qualitative findings, by taking the final report or specific descriptions or themes, back to the participants and determining whether the subjects feel that they are accurate (Creswell, 2009). The researcher did not take back the raw transcripts to check for accuracy; instead, the researcher only took back parts of the polished product, to confirm the accuracy of their profiles, the themes and sub-themes that emerged from their responses as well as to confirm their experiences and recommendations.

3.11 Research Ethics

Goolsby (2005), refers to ethics as "the appropriateness of one's behaviour in relation to the rights of those who become the subjects of one's work or are affected by it" (p. 144). Saunders, Lewis, and Thornhill (2003), posit that "ethical concerns will emerge as one plan his/her research, seeks access to organizations and to individuals, collects, analyses and reports the data" (p. 129). King and Horrocs (2010), suggest a set of ethical considerations that guided this study (Appendix C). These were the steps followed:

- *Informed consent*: the researcher ensured that participants were fully informed about the research procedure, so that they may give their consent to participate in the research, before data collection took place.
- No deception: deception of participants should be avoided altogether. The
 researcher tried to avoid deceiving the participants' in any and all matters.
- *Right to withdraw*: the researcher ensured that participants felt free to withdraw from participation without fear of being penalized or threatened.
- Debriefing: the researcher ensured that participants were informed about the full aims of the research before data were collected. Availability of the data was ensured and member checking was done.
- *Confidentiality*: The researcher ensured confidentiality regarding any information acquired during the research process.

3.12 Limitations of the Study

The first limitation of the study is the scope within which it was executed. Since the study comprises a case study, it means that its focus was narrowed down to the experience of one single case (NTA) for a defined period of time, resulting in learning more about a little known or poorly understood situation. Therefore, the researcher cannot generalize the findings to other institutions dealing with changes (Leedy & Ormrod, 2010). Since the NTA was established to take over management and direction of VET systems in Namibia, by developing and implementing the CBET system as the

preferred method of training in all VTC's in Namibia, the scope of the study would thus include the NTA as the only agent of change.

It should furthermore, be stressed that since the term 'case study' pertains to the fact that a limited number of units of analysis (often only one) is studied intensively, Welman et al. (2012); the units of analysis in this study included only a few individuals from only one institution regarded as the agent of change (NTA). The units of analysis comprises of six members of management, out of the eight members of management; excluding one manager who did not want to take part in the study, as well as the acting CEO, as this participant was only part of the organisation for a few months, at the time of the study.

Another limitation to the study was the fact that triangulation could not be done, as the researcher did not make use of three different data collection instruments to corroborate the findings but rather only two, a semi-structured interview with those members of management identified for the study, as well as document analysis and appropriate secondary data, in the form of literature identified, in relation with the main research question and sub questions.

The last limitation lies within the type of sampling techniques used for selecting the participants. However, although purposive sampling may be very appropriate for certain research problems, it can result in sample bias as the selection of the participants is determined by the researcher. It is, therefore, impossible to evaluate the extent to which such samples are represented of the relevant population, thus, not possible to generalize the results, Welman et al. (2012).

3.13 Conclusion

Chapter three strived to give an overview of the research methodology employed for this study. An interpretative philosophy together with a qualitative approach was used, based on a case study design. Furthermore, the Research philosophy was informed by the social constructivist world view. Participants were purposively selected in a non-probability manner, as the researcher identified them as the ones who may provide the best information to achieve the objectives of the study. A semi-

structured interview was designed to elicit information in relation with the main research question and sub-questions. The data analyses procedure adopted was based on the 8 step method as suggested by, (Creswell, 2009). The units of analysis were the managers of the change agent and extensive profiles were drawn up, while maintaining the participants' anonymity. Strict code of ethics was adhered to and all participants provided informed consent.

The research instruments used were semi-structured interview questions. Data collection took the form of a Dictaphone, which was then later transcribed. Verification of data was done in quadruple; validity, reliability, piloting as well as member checking.

The next chapter gives a breakdown of how the data collected for this study, is broken down from its sub questions to emerging themes and sub-themes for proper analysis.

CHAPTER 4: DATA ANALYSIS AND PRESENTATION

4.1 Introduction

Data analysis is fundamental to the quality of the outcomes of any investigative inquiry. It is a process that involves more than just describing what people said or what the researcher has seen. Data is therefore gathered and interpreted with the aim of answering the sub-questions by asking questions such as, 'what?' 'why?' and 'how?' to determine the relationships between different variables in this situation, and the likely outcomes of particular actions or interventions (Anderson, 2009).

The data gathered for this study was based on the following main objective:

 To investigate the effectiveness (according subjects' views) of the transformation process for planning and implementing a Competency Based Education and Training (CBET) in Vocational Education Training Centres in Namibia.

According to the perspective chosen by the actors 'perceived effectiveness', the following four sub-objectives had been investigated:

- to determine the driving forces for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia?
- to determine the factors that acted as enablers to the process of implementing CBET in VTC's in Namibia?
- to identify the factors that acted as challenges to inhibit the process of planning and implementing CBET in VTC's in Namibia, and how were these dealt with?
- to establish the effectiveness of the change management support strategies/models employed by the change agent in the implementation of CBET in VTC's.

4.2 Description of the Sample

The sample selected from a group of eight managers including the current Acting CEO, were the following managers, from six different departments:

Table 4.1 presents, the profiles of managers in terms of: current position/ranks, number of years in current position, current qualifications, number of years at current institution, years of experience in teaching/training, years of experience in CBET when joining the institution and part of the initial planning process of CBET. This information was deemed necessary, to include in the study, as it has a direct bearing on the main research question, as the target group was only those members directly involved in the transformation process.

Participants' profiles	M1	M2	M3	M4	M5	M6
Number of years in current position	2	7	3	2	6	6
Current qualifications	M Ed	MSc M Ed	Bachelors Degree	MSc	M Ed	National Diploma
Number of years at current institution	2	7	8	4	6	6.5
Years of experience in teaching/training	21	20	0	14	19	3
Prior CBET experience	4	18	0	0	0	3
Part of the initial planning process of CBET	Yes (2006- 2007)	Yes (started Competency- based Assessment Division)	Yes (not indicated)	No	Yes (since 2008)	No

Table 4.1: Participant's Profiles

4.3 Analysis and Presentation of the Data

Data analysis involves collecting open-ended data, based on asking general questions and developing an analysis from the information supplied by the participants (Creswell, 2009). As part of the reduction process; upon careful scrutinising of the data, the researcher chose to undertake a write-up in summary form by making use of a qualitative data summary/memo.

The researcher thought this method to be the best way to organise, categorise and interpret the data, so that it would reflect the issues covered as well as show a comparison, between data obtained from the six subjects for summarising and drawing conclusions from, for the purpose of making relevant recommendations if needed.

The process followed in analysing and presenting the data was based on a data analysis diagram (figure 4.1 below) adopted by Creswell, (2009).

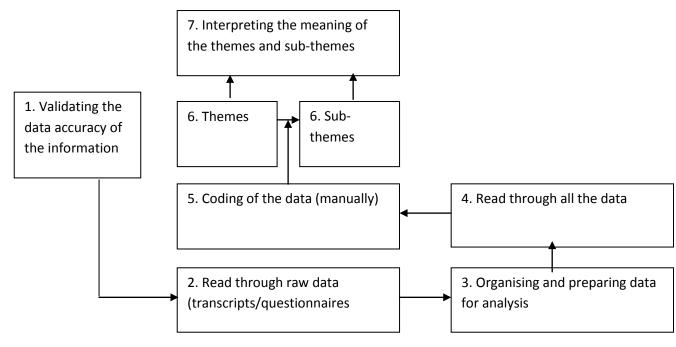


Figure 4.1: Data Analysis process. Adopted from Creswell (2009).

Diagram two, suggests a step-by step but interactive approach to be used at the convenience and discretion of the researcher (it is not always needed for it to be presented in the order provided). This diagram is being used in the following ways:

- **Step 1**: **Validate Data for accuracy of Information**: first the researcher validated the accuracy of the data after it has been transcribed by professionals, by reading through each transcription several times and comparing them against their respective recordings.
- **Step 2**: **Read through all Raw Data**: during this stage, the researcher carefully read through all transcripts several times to get a general sense of the information and to reflect its overall meaning.
- **Step 3**: **Organise and prepare the Data for Anlaysis**: At this stage, the researcher started sorting and organising the data into different categories/themes as per sub question formulated from the main research question.
- **Step 4: Read through all Data carefully.** The reasons were, to find out what participants are really saying, what ideas emerge from the data and what is the impression of the overall depth, credibility, and use of the information. At this stage, the researcher started to look for general patterns, similarities and differences in the responses from the subjects.
- **Step 5: Begin detailed Analysis with a Coding Process**. In this case, the researcher only coded the interviewees as M1, M2, M3, M4, M5, and M6 as the target population were only managers working at the site of the research.
- **Step 6: Themes and Sub-themes**: this case, the researcher rather opted for themes and sub-themes, predetermined from the sub-questions of the main research question, by organising the material into chunks or segments of text, before bringing meaning to the information. Data was then fit to these themes and sub-themes, by segmenting sentences (or paragraphs) under the different sub-themes of the main themes and by implementing the following steps:

Data was organised according to a data analysis memo/summary, by tabulating it under the four sub questions of the main questions. Themes were formulated based on the questions under each sub question.

Furthermore, the researcher broke down these themes into sub themes based on the key words found in the probing questions.

Step 7: Interpreting the meaning of the Themes and Sub-themes

The final step in the data analysis process, involves making an interpretation or meaning of the data. Data was interpreted by means of, reading said data, with an understanding that, what emerged from the themes and the sub-themes, was according to the information provided by the subjects, which was influenced by their own personal opinions, experience and understanding of the topic under investigation. These opinions and understanding, they brought to the study based on their own culture, educational background and employment history.

A summary of the overall analysis of the raw data was then given under each sub question based on the information gathered under each theme and sub-theme. Discussion of the findings was based on an integration of the researcher's personal interpretation, with meaning derived from a comparison of the findings, with information assembled from the literature or theories. This could result in either a confirmation of past findings or a divergence from it. It could also suggest new questions that could be asked – questions raised by the data and analysis that the researcher had not foreseen earlier in the study. These are discussed in chapter five of the thesis; Discussion of Findings, Conclusion and Recommendations.

The next section will give a breakdown of the data analysis memo used.

Data for summary: Sub question 1		
1. What were the driving forces/triggers for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia?		
Themes and Subthemes Participants' responses		
Interpretations/Reflections/		
Observations		
Theme 1: Background to the study.		
Sub-theme 1:		
Nature of the change	M1 : "Where we had the N courses in fact we had a	
Curriculum change: Dual	dual system combined with the N courses South	

system: N1 and CBET African Unit system that we dove tailing with of course the German system..." "... N courses with the... the dual German system... that is what we had duff tailing we combined the two with one system which is in play... Now it is a modular system of Unit standard based course CBET is also a modular system but it is unit qualifications standards based..." "Is a unit standard based system... although it is a module... but they are mostly considering on units... individually units are assessed...they are training on it... all unit standards are been given credits and it counts towards a qualification..." **M2**: "Huh... CBET is making provision for the industry to Industry based training be involved in order for the training to be linked to the needs of the industry" Curriculum change M3: "whole change management from the old modular system to the new CBET system.." "for the change from that old system to this new system Change in assessment: from which was a more also practical in nature... the idea was percentage to competent or not to focus more on... you know the practical aspects... I yet competent know some of the key areas were around we don't work with percentages anymore... you know if you want... huh... a plumber to come and do plumbing work for you... if he only got a sixty percent... which forty percent does he not know... so the idea of the CBET system was more you have to be... you are either competent or you are not competent..."

Change in assessment: based on unit standards

M4: "The change was about issues pertaining to assessment, the change was about curriculum models...when I'm talking about curriculum models, I'm talking about unit standard development, qualification development and so on. I think that was one of the biggest changes because the current teaching practice or competency-based are based upon unit standards.

Transforming the VTC's to become autonomous and self-reliant.

Unit standards...if one goes back to teaching, they are learning outcomes...what is it that a trainee is expected to do at the end of the day"

Introduction of a Competencybased education and training system. M5: "transformation came about because of the VET Act, the Vocational Education and Training Act, No. 01 of 2008, which states that NTA should be created as a regulatory and funding body and at the same time, NTA should administer and control the state-owned vocational training centre's until they become self-reliant...

The change from an institution type of training to an industry-driven type of training.

M6: "the introduction of competency-based education and training in Namibia. So, with the competency-based education and training, in short CBET, in comparison with the previous system is that the previous system was more training driven...it was more the training providers that determined what goes into the curriculum, what the duration of the training programme should be and so forth, meaning there was little involvement from the industry, but now with the competency-based system, competency comes to the fore..."

"So, the key change here is from the institution-driven type of training to a more industry-driven type of training."

Summary: Sub-theme 1: Nature of the Change

Four different reasons were given by the six participants. They are as follow:

- Change in curriculum (M1, M3, M6)
- Introducing an industry-based, demand driven curriculum (M2, M6)

Change in assessment (M3, M4)

Sub-theme 2:

Transforming VTC's to become autonomous and self-reliant.

Needs assessment Done by the GRN, the Ministry **M1:** "we had studies prior to the establishment of this of Education organization... there are reports... SCOVEC reports are there... there are summary reports and there other reports that are available you know... there are a lot of reports available at the ministry..." "By the government... the Ministry of Education" **M2:** "Yes, quite a number of consultants have been Consultants were used involved in the early years" M3: "I... to be honest I cannot recall that there was a needs assessment done... hum... as I said when I joined Not sure, the change was a the NTA... at that stage the understanding was this was directive from the Cabinetnow a directive from cabinet... or from their powers be political that... maybe say that we are moving in the direction of CBET..." Consultants from Australia and "we had a number of consultants... we obviously New Zealand were used engaged people from huh... Australia... I think Australia or New Zealand they are drivers in this whole process as well" With the help of consultants, **M4**: "that was done to identify the best model for yes vocational education and training and CBET was identified." "Well, there were various consultants brought in before NTA was established...there was a project management

	team."
Consultants, from South Africa	M5:" a consultant from South Africa. They've done a study and recommended that for the centers to meet the demand of the community and the marketthe industries, they should be an entity; an independent entity that is regulating the whole of the vocational education and training system hence the creation of NTA."
Not sure, don't know if it was done.	M6: "Maybe I didn't research enough to find out whether there was such a needs analysis done. But, I'm sure there will be very good reasons why it was chosen." "As I said, I don't knowI cannot in particular point out that there was a particular needs assessment doneno."

Summary: Subtheme two- Was a needs assessment done?

- Four of the participants indicated that a needs assessment was done by the government using various consultants from outside the country (M1, M2, M4, and M5).
- **M2** and **M6** indicated that they were not sure if it was done, it was a directive from the government **(M2)**.

Sub-theme 3:	
Context of the change	
Political: the Cabinet decided	M1: "It was somehow political just to get the buy in of the whole stakeholders."
	"The Cabinet actually decided upon the establishment of the"

Political, to meet Vision 2030	M2:" it was from the political point of view because it is
	also to meet our ultimate vision 2030."
Economical, from the industry	M3: "I was trying to think from industries point of view"
A combination of Political, Economic and Social	M 4: "economic, political and socially are all embedded."
A combination of Political, Economic and Social, with the emphasis on economic: because industry was not happy with the graduates	M5: "a combination of all of thesepolitical, social, economicyah, it's very much economic, because if the industries say that the graduates were not really trained according to the standards, that was economic, but now we want people who are qualified and when they go into the industry, they are able to be absorbed in the market."
No comment	M6 : "That I don't really want to answer"

Summary: Sub-theme three - Context of the change

For the context of the change four different responses emerged:

- Political (M1, and M2)
- Economic (M3)
- Political, Social and Economic (M4 and M5)
- No comment (M6)

Sub-theme 4:		

Planned or emergent M1: " ... It was a planned thing because if you look at the Planned consultation... because we consulted to see the... whatever... and it started off with the PM... The Project Unit" M3: "probably emergent" Not sure..., probably emergent M4: "it was both. It might have started...it might have Both planned and emergent: emerged somewhere, but then the process was put in might have emerged from place in the form of planning that we found we need to somewhere....upon which the implement" planning followed M5: "Well, it can be...how can I say...emergent, a public Emergent: from a public outcry outcry...made it possible for the change to come and in the process, the planning is coming in ... yes ... and in between there were also so many research studies done

Summary: Sub-theme 4- Planned or emergent?

The question on whether the change was planned or emergent the following response came about:

- Planned (M1)
- Emergent (M3, M5 with M3 not really sure about it)
- Both planned and emergent (M4)
- **M2** and **M6** did not give a response on this question.

Theme 2: Triggers/Reasons for change?	
	M1: "the fact that we said the challenges that we faced

Government dominated VTC's in Namibia in isolation from industry.

Government too rigid with policies, taxes and regulations too difficult for industry to comply with.

To establish a demand driven system

Became too expensive for GRN to maintain

To introduce the Levy system to get industry more involved

Mismatch between demand and supply

Poor end products

System was too rigid without any room for flexibility

Globalisation

Following trends around the world to become competitiveness

by then... the companies at times... you everything was controlled by the government... because everything was regulated by the government and then you know the companies by then were still owned by private individuals you know... family businesses and all those things. So they thought that you know... there was too much burden on them as an individual owners to have... you now... the trainees and all those things with government policies and the taxes and all those things and all the regulations and all those things and they were not so much playing along with the system by then. Also and then government felt let us outsource the thing and develop a new demand driven system..."

"Also and then government felt let us outsource the thing and develop a new demand driven system..."

"it was very expensive you know... to run the VTC's... so the government decided to outsource it and to have these stakeholders involve in everything and to introduce also the levy to contribute because through introduction of the levy's system of course the partners or the stakeholders will be more involve in the VET system..."

M3: "from what I can gather the old modular system was just not fit... for what Namibia actually wanted... it was not producing you know huh... either the quantities and also the quality that was required and also the systems around it... if you talk about assessment... seems to be so rigid and you know not flexible..."

M4: "Well...I think...I would say the actual reason is the international trade influence..."

"So, it was because of the world trend that influences the change...and it's *common*. When something happens in the other countries, you also want to adapt so that at least you pick...you remain at the same level...so..."

Public outcry M5: "... because CBET came about as a result of a Cabinet decision...to say okay if the public is saying this, let's come up with this new programme which is friendlier and accommodating each and every one. Then, the Ministry of Education became the custodian; the driving force, but now this responsibility is handed over to NTA..." M6: "... as I have alluded to earlier is that systems were more training institution-driven than industry-driven...that's why ... is to bring about importability of skills."

Summary: Theme 2 - Reasons for the change

Reasons for the change were given as follow:

- The government was dominating VET in Namibia in isolation from industry (M1)
- Government too rigid with its policies, taxes and regulations too heavy for industry to comply with (M1)
- VET became too expensive for the government to sustain on its own (M1)
- To get industry involved by introducing the training levy system (M1)
- To establish a demand driven system (M1, M2)
- Due to the mismatches between demand and supply (M3)
- Poor end products pushed out in the market. (M3)
- Globalisation and global competitiveness (M4)
- Public outcry **(M5)**
- Changing the curriculum from a theoretical-oriented system to a practical skilloriented system (M6)

Theme 3:

Intended outcomes

To get buy in from stakeholders

Enhance/establish private public partnership

Enhance the quality of the end products

To establish a demand driven system

To secure employment

To ensure high graduate rates

For poverty eradication

Alignment between demand and supply

To establish a more flexibly system

To produce competent graduates

To produce competent skilled workers

M1: "First we wanted to... the outcomes that we were in researching or the government was in researching or the ministry's organisation was to get the buy in from the stakeholders..."

"And then of course the private public partnership to enhance that partnership... then of course to enhance the quality of the training of course and then of course the quality of the end products that would be used for the development of the country and to empower Vision 2030."

M2: "Mainly to link the training with demands with the industry and then to secure employment rates... high employment rates and also high graduate rates and then of course with that poverty eradication at the end of the time..."

M3: ".. the alignment between the needs of the industry and with the training market those two need to be properly aligned and the flexibility of the system... that we can actually get trainees who are fit for the job that when they get out there they are able to perform and they are actually getting out at the level that is"

M4: "The outcome was to produce competent skilled workers for the country. That's the intended outcome...that's why it's called competency-based...it's either you are able to make the table or not. So, the outcomes were basically to produce a competently skilled workforce"

M5: "We would like the end product to come out really as a qualified workforce who can contribute to the

To produce a qualified work	economy of Namibia"
force	M6 :" we should also be able to compete with other
Global competiveness	countriesto be able to focus more on competences
To respond to industry needs	and answer directly to industry's needs. So, it is more industry focusedit could be economic drivers we are
To uplift the level of performance	talking about if we respond directly to what industry needs it means one is able to uplift even the level of industry performance or economic performance of the country and so forthyah."

Summary: Theme 3 - Intended outcomes

According to the participants, the intended outcomes of implementing CBET were as follow:

- To get buy in from stakeholders (M1)
- Enhance/establish private public partnership (M2)
- Enhance the quality of the end products, competent graduates, competent skilled workers, qualified workforce (M1, M3, M4, M5)
- To establish a demand driven system, to respond to industry needs (M2,M6)
- To secure employment (M2)
- To ensure high graduate rates (M2)
- For poverty eradication (M2)
- Alignment between demand and supply (M3)
- To establish a more flexible system (M3)
- Global competiveness (M6)

Theme 4: Temporal aspects	
Sub-theme 1: Role out and	
phasing in- phasing out plan	
2006-2015	M1: " since 2006 we by let's say 2015"
2006-?	M2: "It started in 2006 September"
?-2013-17 (not sure)	M3: "I think the dates that were thrown around were 2017 I think that you can still verify with hum operations I think that was the timeline and that 2017 timeline was also linked to transformation"
	"You may find that it was probably 2013/2014 maybe 2015 for the phasing in phasing out of the curriculum itselfI think even having said 2017 I think there was probably even earlier dates that were set especially for the phasing in phasing out"
Somewhere in the 2000's not sure	M4: "I think it was startedI'm not sure exactly as I was not with NTA, but I think it started somewhere in the 2000sthat's when it started"
Don't have roll out plan	"We don't have a phase-in-phase-out plan whereby we're saying this is the time we should have developed a phase-out plan for this programme."
2008-2017-18 (not sure)	M5 : "I think, 2008yes that is why I'm saying that by 2017/2018"
2003-2018	M6 : "I think such programs started already around 2003 till 2018 around there"

Summary: Theme 4 - Temporal Aspects

The question about a roll out plan in terms of phasing-in, phasing-out showed some interesting results, see below:

• M1 and M2 indicated that the phasing in started in 2006, while M3 did not give a date for the phasing in, M4 on the other hand indicated that it already started somewhere in the 2000's not really sure also, M5 indicated the phasing-in in 2008 with M6 indicating 2003. For the phasing out or complete implementation of CBET in all VTC's the time span has been given as from 2013-2018. From this, one can deduce that no one of them is really sure about the temporal aspect of the start and end of this new programme. This is an indication that either, there was no roll out plan or it has never been properly communicated to these respondents.

Data for Summary: Sub question 2			
1. What factors acted as enablers to enhance the process of implementing CBET in			
VTC's in Namibia?			
Themes and Subthemes	Participants' responses		
Interpretations/Reflections/			
Observations			
Theme 1 : Enablers			
Sub-theme 1: Resources			
NTA board, human resources- appointed staff from top to lower positions	M1: "The mere fact that we had NTA boardthey also brought in infrastructure in terms of human capital appointed some staff members from the top positions to the lower positions actually to get NTA on board."		
Funds from the Ministry	"the ministry actually availed funds to have thing started"		
Task force consisting of various stakeholders	"There was a task force made up of various stakeholdersto look into various factors pros and cons and you know that task force kind of was influencing the project management unit and advising		

giving advisory services support and all those things" "... there was a project management unit... that was Project management unit advised by the task force..." "We have structures... NTA has got structures... like Industrial skills committee industrial skills committee... those are the people that... from various industries to stakeholder made up institutions shared by various identify occupations, courses people from the private sector mostly... those are the and programs needed people that are identifying the occupations that are needed to make it a demand driven system... those are people that are identifying courses or programmes or occupations that are needed within the industry... to also have the buy in and the development of stakeholders." Regular workshops **M2**: "there used to be regular workshops... there used to be regular visits to Katima" "institutions which have been benchmarked for piloting Pilot institutions identified and was that they were equipped in many ways and then equipped even there trainers have been trained... and they even had the quality systems that have been developed and Instructors have been trained then huh... unit standards have been developed, on unit standard development qualifications have been registered with the NQA, funds Unit standards have been were at least available in many ways from the developed government and also from the donor agencies and so on..." Programs were registered with the NQA Funds were available from GRN, donor agencies "right from the beginning there were external External consultants for advice consultants... they were assigned to different divisions in order to assess divisional needs and providing professional advice..." Trained assessors and "we have got trained assessors... qualified assessors,

moderators	moderators and so on so whatever assessment process that is taking place
Government as the driving force, resources, consultants and funds	M3: "the driving push from government and the resources that were provided I think that that was one of the big push to actually drive this whole process bring in consultants you obviously throw money at the consultants"
Committed drivers, NTA	"I think the people that we had on board also in the NTA very committed drive you know I think they share in the vision you know trying to implement this whole CBET methodology"
Development partners who provided advice to spearhead the process	M4: "Well, we had development partners who provided particular advisors, like Lux Developmentparticular advisors at various centers and their role was to help these institutions embrace competency-based education and transformation and so on."
EU consultants	M5: There were EU consultantsyahthey started the process and developed the curriculum"
The already existing Directorate for VET Experienced people Policy and legislation already in place	M6: "Number one, I would say, there was a Directorate responsible for VET under the Ministry and that already is a positive thing. VET existed before the introduction of CBET in Namibia so, there were already experienced people. Number two; it was backed with a national policy, the VET Policy of 2004. Of course, you havefrom a legislative point of view, you have a policy."
Consultants broad on board, funds available from donors	"some consultants brought on board to assist the team establishing the institution and to introduce the system, and of course, I think there was some money available

	to do so, because I can remember there were some donor agencies on board"
Availability of resources in terms of financial and human capital	"resources were made available in terms of capital and human resources, but whether that is enough to drive the whole cause"

Summary: Sub-theme 1- Resources

Enabling factors under resources were given as follow:

- Commitment and support from the government and the NTA (M1, M3)
- Funds available from the government (M1, M2, M3, M6)
- Workshops and training (M2,)
- External consultants on board (M2, M3, M5, M6)
- Stakeholders serving on various committees (M1, M4)
- Human capital and experience people (M1, M2, M6)
- Piloting the project (M2)

Material development (M2)

Programs registered with the NQA (M2)

Sub-theme 2: Training received on CBET?	
No training received on CBET	M1: "No" No, no"
A lot of training right from the start	M2: "A lot of training right from the beginning a lot of training even on because I when I came over I came to establish the national assessment and certification division from the scratch started off

Continuous involvement in training relating to CBET

with the application... design of the application forms... design of all paper work... and then also the processes and then I got training from the... consultants... from Australia who have also a very good established CBET system..."

"I have been also continuously involved in other training related to training programmes to CBET."

Training on DACCUM; develop a curriculum

M3: "one of the methodologies was the DACCUM on how to develop a curriculum that was being run extensively by the consultants and our people... when they started developing the unit standards and I was part of the team... facilitator... I worked with the facilitator... even though I am from a finance point of view... we were all involved in all the activities..."

A few training courses; no specifications though

M4: "Well...yah...through the Development Agency that we had, there was a couple of trainings provided without knowing whether...I don't know what were the evaluation and outcomes of the training we received."

Management development programme

M5: "Yes, as managers, the entire management of NTA...last year we attended a management and leadership training offered by the University of Stellenbosch and also some centre managers"

Induction, training on DACCUM,

M6: "One normally receives training specific to the areas of responsibility so, we did receive training...induction and in terms of what you are going to do...all the technical training that we required. I think we got."

Unit standard writing, curriculum development

"We have attended DACCUM (Develop a Curriculum) unit standard writing and qualification, curriculum development and all the training programs that are related to the work we do, particularly in our Division so, we underwent such training."

Summary: Sub-theme 2- Training received on CBET?

implementers and participants,

M1 indicated that no training was received with regards to CBET whereas M3 and M6 indicated that training was received on, for example DACCUM(Developing A Curriculum).
M2 and M4 did not specify the type of training they received, M5 on the other hand referred to receiving training on management development. M6 indicated that training was received on unit standard development and induction.

Sub-theme three: Transfer of	
Training	
Not yet	M1: "No that is what I am going to do"
Training on principles of assessment	M2: "Yes, I use to train others as well in the beginning the principles of assessment and"
assessment	"Like the instructors at the Vocational Training Centre's VTC's we use to go out and then also hum orientates them on the assessment processes on the
Training on CBET principles,	entire CBET principles and National assessment arrangements and all those things"
Orientation, facilitator training, assessor training, moderator training	M3: "I'm sure majority of our instructors have actually been provided with the orientation or training in terms of that and I think all most if not all have received training in terms facilitator training, assessor training, moderator training and all those"
Not sure- transfer some training to end users,	M4: "I think they tried to transfer some of this training to the end users, participants and implementers, but I'm not sure at what pace this training was transferred."

without specifying	
During holidays, NOSSA on health and safety	M5: "whenever they're on holiday or when whatever conditions are favorable to them. Even recently, we had trainers, representing each of the VTC's; attending the NOSSA coursethis is health and safety."
Workshops on unit standards, training related materials.	M6: "We also do reach out to the instructors whereby we have organized workshops for them and induct them on what unit standards are, on what qualifications are and all the training related materials that NTA develops. We have conducted a number of workshops with instructors from different VTCs more to introduce them to the products that we develop specifically in our Division."

Summary Sub-theme 3: Transfer of Training

The question on whether any transfer of training took place, meaning, whether they themselves have trained others (VTC instructors) on CBET, the responses were as follows:

The only participant that did not transfer any training was M1. The rest of the participants did some training, including, training on assessment (M2, M3), training on principles of CBET (M2), facilitator training (M3), and moderator training (M3). M4 did not specify the type of training transferred, health and safety (M5), unit standard development and training related materials, (M6).

Data for Summary: Sub question 3		
What factors acted as challenges that inhibit the process of planning and implementing CBET in VTC's in Namibia?		
Themes and Subthemes	Participants' Responses	

Interpretations/Reflections/	
Observations	
Theme 1: Restraining Forces Lack of exposure and experience with those joining the NTA from the government Poor human resources	M1: "we some of our cadres were left there and some of our cadres did not opt to come here were left and some of us who came did not take did not have the background of VET and the new change" "Yet we don't have capacity in terms of human capital or human resources"
Lack of funds Outdated machinery Enforcing CBET on the infrastructure established for the old system	"we don't have now that the budget has also been cut we don't have finances which is of course the greatest and the biggest hum factor and we came over here with old machinery some things from the government setup"
Rushing into the new system without giving staff time to get used to the idea	"Yet we are bringing in CBET and kind of forcing CBET on the old structure that is existing you understand that is one of the one of the inhabiting factors"
No feedback on the failures and challenges encountered with the pilot Lack of human resources	"the teachers that were there the instructors were more for the old system so it is a new concept that is coming and with time maybe we need also to mobilise our guys to to and we have also hurried a bit you know we are supposed to learn from the flaws or the some of the failures from ZVTC"
Lack of equipment	"Pilot didn't give us any report yet we didn't see the report as to how what the failures encountered or the challenges they had yet"
Mindset of staff to adjust to change, staff attitudes	"guys are understaffed and I have mentioned to you the area on that covers at a year manpower is usually a problem here" "And with the minimum resources they have equipment was actually the biggest challenges in mind set change"
Mindset of people to change	"it takes time to understand each other also and the way we operated the way they operated it is a lot of things you have to it is a mindset change to adjust to new alignments and to adjust to the changes"

Mindset of people to change

M2: "the mindset of the people to change from the old practice to the new practice it is also... to really to start thinking that this is a national system which has come... and it is for us and we must stand together... we must support each other so that we can go forward"

Change agents confusion two systems running parallel.

"even the implementers also happens at a time that they get hesitant because sometimes they are sitting with two systems... old system and the new system..."

Conflict because of the requirements of implementing a CBET not met

"it can also lead to conflict because they might have everything in place for the old system but not for the CBET and then there could be this type of hinders to the progress of the trainees based on the requirements of the CBET..."

Training/teaching and assessment due to insufficient tools and equipment.

"Both the training and assessment because some of the... many of the providers mainly the former public ones the VTC's they are not... they do not have sufficient tools and equipment... so those tools and equipments are required for both training and assessment purposes"

Running a dual system in parallel at the same time

"The... main challenge for the new system is that because the old system is still running also and then old system is also... it's also... of course it is also still orientated... it is only the methodology which has changed and then the old system is already established and then the new system is only starting now..."

Absence of a VETMIS

"...that are also hindering our progress is that we do not have a computerised assessment data base... (VETMIS).

M3: "you will find people the ministry will sort of be reluctant... they are sitting back thinking well... it's your NTA you guys are now the one's that... we are still here and we know what has been going on but you guys go ahead and do your thing..."

Reluctance of GRN to be actively

"we had serious challenges when we came to that... and you actually found that even at the centers themselves we had to run a process whereby we recruited new people at the centers that were under the NTA and we still had people from the old regime

Staff was not consulted in this whole process	"we keep on making some of the mistakes that you know the
Negative attitude of staff for being left out in the planning of this whole process	"We were not consulted we were not part of this whole process this VET was our baby you know I would feel like that you know today this is my thing and then tomorrow someone just comes in and so you know you will find that a lot people were reluctant"
VTC'S not CBET compliant yet	"as I said at the beginning they were negative but I don't think it was more of the change from the system of the modular system to CBET it was more look we have been left out of this whole process"
Lack of equipment and poor infrastructure	
Lack of funds Lots of training needed in delivery of the new system	"then the resources to be able to provide for equipment and infrastructure at the various institutions and this is why I say most of them if you go to them I don't think they are actually CBET compliant"
Poor planning on how to go about the process	"there were a lot of training that need to be carried out in terms of delivery of the training programs"
	"the finances that are available even with the human resources
Conflict due to dual system	"again the whole planning in terms of how to move you know and even looking at it holistically we probably should have just spent a little bit of time to look at it holistically in terms of what is to be done and then systematically you know."
Running a dual system concurrently	"Well exactly so you know you'll find at some places at VTC one guy who is still on the ministry of education contract if you want to tell me something you are on NTA contract I don't report to you"
part of the new system	who were there so not only were you having two systems running but you also had people from two different regimes in one set also so"

Reluctance of staff to cooperate	old regime had made"	
Repetition of the same mistakes,	M4: "communication is also an issueone thing one has to look	
not learning from the past	at, for example, in the past when students got their results they	
	saw their percentage, but now all they see is competent or not competentand one would ask what is competentand	
	employers as well. So, those are some of the inhibitingthe	
Lack of communication	communication"	
Transcripts of results not user		
friendly to show percentages in		
terms of pass or fail but rather		
statements of competent or not yet competent which is difficult	"And obviously, the capacity of our implementers is also an	
to determine the standard	issue."	
	"CBET is quite demanding in terms of resources. You must have the right equipment, tools and whatever So, it was one of the	
Capacity of the instructors to	inhibiting factors for the implementation"	
implement CBET		
Lack of resources; equipment		
and tools to implement CBET	"They (implementers) didn't take it lightly". "They (end-users)	
	also didn't take it lightly. If you may recall, there were a couple	
	of demonstrations because (1) they felt some of the important subjects were not included, like mathematics, you know, science	
	and so on."	
Negative attitude towards the		
change, demonstrations due to	"We started implementing while the equipment that was needed by the centers and some unit standards were not available. So,	
the absence of certain courses	the implementation became premature."	
	"Well, it's still a challenge I would say because you need to	
Implementation was premature	change the mindset of the people; you need to change the	
as some of the unit standards	mindset of the industry"	
were not developed yet		
	M5 : "I know how it startedit was hectic and there were a lot of	
Mindset of people needs to be	demonstrations and so on"	
changed as well as that of		
industry		

"Up to now, the people at the centers are still...although they are

	implementing CBET, but they are pulling to what they know"	
Demonstrations		
Lapsing back into the old ways of teaching	"you have these people from the old system who don't even know how to assess the modular system and it's a whole confusion"	
Lack of knowledge how to assess in the new system	"funds to train people,funds should be made available"	
Lack of funds	"But apart from that, the support from the head officebecause the transformation process should not exclude anybodythe collective participation of peoplefor everyone to understand and to be willing to participate."	
Support form head office (GRN) Staff attitude towards the change- resistance	M6: "you have those that are so resistant. They say no, we do not know what the system is going to bring about and they remain resistant. The same happened with the training providers because you found those that embrace the new training system and they are cooperative, but you found those that are reluctant maybe they got used toor perhapsif you take it furtherissuesuhsuch as resources could also scare some of the stakeholders, even those that had a key interest right from the beginning"	
The resources needed to implement such a system scared off some of the stakeholders	"I think certain stakeholders are not patient enough or do not understand how long it will take a system, such as CBET, to make an impact and how it will make an impact"	
Uncertainty about the outcome of the change effort	"Implementing a system like CBET is quite expensive if a country is not ready to spend that much to make sure it is implemented successfully"	
Expensive system	"resources as I have said, even though there is a budgetary allocation made available, it is not as sufficient as to what is required to implement CBET."	
Insufficient funds	"the aspect of human resources is also undermined, one could say with the current team, one cannot successfully implement CBET because it requires a lot of people."	

Lack of human resources	"to a limited extentthere is equipmentthere is machinery, but of course, to meet the minimum requirements of the system, I think more equipment is still needed. All VTCs need to be better resourced if they are to bring about the required changes. So, I could say there is of course a shortage in terms of equipment and also in terms of experienced instructors."
Insufficient equipment Lack of experienced instructors	"I realised that things were not done the right way or how they should have been done. For example, the organisation rushed too quickly into intensive implementation, while a complete needs analysis of what should be in place, was not done, or whatever was needed to be in place, was not in place." "I think it was before that pilot was evaluated to see all the results comprehensively in terms of resources that maybe people got so excited that the rollover to other VTCs was done so quickly; then later implementation flaws started surfacing and that's the reason I was saying no-no-no."

Summary: Restraining Forces

Restraining forces were identified as follow:

- Lack of exposure, experience and training (M1, M2, M3, M5)
- Poor human resources planning and allocation (M1, M4, M6)
- Lack of funds (M1, M3, M5, M6)
- Outdated machinery and/or lack of equipment (M1, M2, M3, M5,M6)
- Rushing into the new system, poor planning (M1, M3, M4)
- Negative attitude and mindset of staff (M1, M3, M4, M5, M6)
- Confusion and conflict due to running a dual system in parallel (M2, M3,)
- Lack of communication and consultation with all stakeholders(M3, M4)

- Poor support from drivers such as the Government and NTA (M3, M5)
- No feedback on challenges and failures encountered from the pilots (M1, M3)
- Absence of a Vocational Education and Training Management Information Systems (VETMIS)
 (M3)
- VTC's not CBET compliant yet (M3)
- Lapsing back into the old ways of doing things (M5)
- Uncertainty about the outcome of the change effort (M6)

Theme 2: Alternatives to Operate against Restraining Forces

A tender is currently out to evaluate the programme, its failures and flaws for feedback and further action based on the findings

Structures are in place such as the industrial skills committee, responsible for identifying occupations needed by a demand driven system.

The Public Relations Officer who is responsible to liaise with industry and stakeholders to understand the reasons for implementing CBET

Equip VTC's with the necessary equipment in order to gain

M1: "Currently we... huh... about to start with the CBET study... huh... proposals have been submitted... and once that tender is awarded to whoever has won to check the gaps... the failures and flaws... whatever is happening... why... what is going on... just to... and after that study just get the feedback report and try and work on that thing... because CBET is not currently hundred percent working... you know..."

"NTA has got structures... like industrial skills committee...

those are the people that are identifying the occupations that are needed to make it a demand driven system... those are people that are identifying courses or programs or occupations that are needed within the industry"

M2: "So currently at least there is a public relations officer who is supposed to really synthesise with the industry and all the stakeholders on the CBET so that everybody can understand..."

"VTC's to become independent it means also to equip them

independence	with all requirements, short comings and so on."	
Training on the transfer of training in VTC's	M3: "training is being provided in terms of huh actually how to deliver I think in terms of the system is the level of experience or exposure required by the instructors or the facilitators I think we facilitated a lot of that"	
Providing upgrading courses in terms of latest developments and technology offered by a number of companies in the different trades	" I think two years back we actually started the training here, we called all the facilitators of all the training institutions that were delivering training on the new system and we actually engaged a number of companies to actually provide upgrade their courses in terms of the latest technologyand you know just to expose them to the latest way of doing things"	
Defining and communicating CBET in a Namibian context.	M4: "we are trying to communicate, but at the same time we don't want to communicate loudly because we still have to define competence-based education in Namibia's context. So, we need to define it then we can start communicating loudly" "we look at the shortcomings and we look at what we are talking about when we talk about competency-basedwhat is the role of the employerwhat is the role of the provider, I mean, what does the instructor do, what does the learner doso, all those things"	
Identifying the short comings in CBET based on the blue print.	"we wait for what is coming out of the blueprint on competency-based education."	
Quarterly forums with management teams from VTC's to discuss training related issues (only in the	M5: "in this division (transformation), in our programs, we have quarterly forums with the centre management teams and within that, as we don't want the quarterly meetings to be the only ones, we are encouraging the rest of training to have their forums to discuss training related issues, for	

transformation division), such matters pertaining assessment, high failure rates. example, the assessment results...why is it that we have a high failure rate, why is it that those workshops are not equipped and then they give feedback?"

Uplifting skills of instructors by undertaking the Polytechnic of Namibia instructors course

Short courses offered by the NTA and other training providers to upgrade instructors skills

Equipping workshops' at the various VTC's

Introducing the training levy system to collect money from industry and employers to use that money to

equip VTC's to ensure that those

gaps are enclosed

M6: "Yah, there are many, there are many...uh...for example, the issue of uplifting the skills of the instructors...as you are aware, of course, the training of...Polytech is one of the providers that put programs in place to make sure instructors have the right skills to implement the system."

"There are short programs also run here and there at NTA and also at other institutions where instructors are sent for short courses."

"In terms of equipping the workshops and things like that...I think if you've heard of...it was also on the news where the late Minister purchased some equipment for the centers."

"That was just the beginning, but now we are also introducing the training levy which will be collected from industry or from employers, so to say. So, some of that money will definitely be used to equip the centers' and initiatives are being taken to make sure such gaps are closed."

Summary: Theme 1- Alternatives to Operate against Restraining Forces

Alternatives to operate against these restraining forces were given as follow:

- To evaluate and identify the shortcomings on the implementation, thus far, for further action (M1, M4)
- Structures such as the PRO, in conjunction with the industrial skills committee, should liaise with industry and stakeholders, to define CBET in a Namibian context and to identify

demand driven occupations (M2, M3,)

- Equipping VTC's with the necessary equipment and tools through a training levy system (M2, M6)
- Workshops and skills upgrading training on the transfer of training to stay abreast of latest developments and technologies (M3, M5, M6)
- Defining CBET in a Namibian context and to have regular meetings with management teams to discuss training related issues (M4)

Theme 3: Who can influence the success/failure of this change?

Manager's at VTC's by monitoring and evaluating the implementation of the CBET system

M1: "part of implementation is the management of the centers' (VTC's) on the ground... who are implementing... should bring there part of ensuring monitoring and evaluating how things are done on the ground you know"

VTP at NTA who are supposed to spearhead the process of monitoring and evaluating the whole process

"we have the VTP (NTA) division hum... and they are supposed to actually... hum... spearhead the process of checking you know... the training aspect... because there are normally the follow up training and all those things"

The NTA as the driving force and regulatory body

M2: "the NTA is now the driving force as much as it is regulatory body..."

All other training providers such as private institutions like WOLWEDANS and NICE

"Yeah at this moment NTA is playing a very big role but now huh... the providers need also to work together... in their own success because they cannot only be spoon fed they must also make their own efforts... some of them are really doing that... so we need to stand together... we have got also private institutions like NICE and WOLWEDANS and also others... and then they are doing very well they are not dependent also

	from the NTA and they have got huh success rates"
The industry, as they are the recipients of the end products	M3: " the industry I think they are the recipients ultimately they are the recipients of the product that comes up with the institutions"
The training providers but some of the private providers are still reluctant to come on board.	"I think the recipients the industry is probably key I mean if they don't buy into this whole thing than it is out the window secondly the training providers I think they are also important in this regard hum there are a few training providers that still refuse to take this on board private training providers ."
The NTA who is the driving force behind the whole concept of CBET	"and the NTA I think is then the other one hum as an organisation need to be able to drive this whole concept of CBET"
Everybody involved, meaning all stakeholders as well as the NTA.	M4 : "It's everybody…everyone involved has a stake to play"
The NTA needs to convince stakeholders to buy in, by communicating the advantages to them.	"Yes, as NTA. We have a stake too. We have to come up with a system to convince industry, to convince stakeholders that yes this is the system we want to embrace. We have a stake to communicate the advantages of the system and the other stakeholders have a stake to embrace the system"
Industry as they are the recipients of the products, the trainees themselves, the training providers, the parents, everybody that forms part of the chain.	"We are talking about industry; we are talking about the recipients of the programs, the students themselves; we are talking about the providers; we are talking about the trainers; and we are talking about the parents as well. So, it's a very huge and long chain involving various stakeholders."

The NTA as the agent of change should communicate the relevant information to the implementers if they want the system to succeed.

The industry, as those who are trained, will end up in industry.

Industry needs to approve of the quality of the end products they will have to employ.

They are the subject matter experts so they need to be involved from the beginning.

The GRN as it provides the budget as well as developing policies regarding issues around articulation and collaboration with institutions like the NQA

M5: "NTA as an entity, as the change agent because if NTA is not communicating the right information to the implementers, we expect the system maybe to fail or to take time to be successful. So, the driving agent to enable the system to be successful really is NTA."

M6: "Okay, why I value the influence of all of them...? I can point out that the industry can influence the success or failure of the system compared to other stakeholders."

"The people we are trying to have trained will eventually work in the industry. If the industry does not accept the level of training or the initiative being taken definitely you cannot see the end result"

"They have to be involved right from the development of the program. You cannot just decide a carpenter should do this while you yourself are not a carpenter...you are not involved in carpentry in the industry at that moment. So, you have to allow the industry participant to come and see what is required *in this curriculum*."

"Of course, government is also one of the key stakeholders; not only it provides the budget, but also it is the custodian through, for example, critical institutions, like NQA which is the custodian of the National Qualifications Framework."

"So, the government is one of the key role players in terms of how they can steer the whole programme because it is the policies which can enable issues of articulation and collaboration within the institutions because most or all of the institutions that are looking after education or training in Namibia are government funded and it is through national policies that one can drive this"

Summary: Theme 3- Influences on Successes and Failures of Planning and Implementing the Proposed Change.

The following stakeholders were identified to make this transformation a success:

- The NTA, reasons being: they are spearheading the process, they are the driving force and regulatory body, they need to convince stakeholders to buy in and they are the agent of change (M1, M2, M3, M4, M5)
- VTC managers, by monitoring and evaluating the implementation of CBET (M1)
- All training providers, public as well as private (M2, M3, M4)
- The industry, reasons being: they are the recipients of the end products, they need to approve the quality of the end products and they are the subject matter experts (M3, M4, M6)
- All stakeholders (M4)
- The Government, as it provides the budget as well as developing policies regarding issues around articulation and collaboration with institutions, such as the NQA (M6)

Data for Summary: Sub Question 4 4. How effective was the change management process facilitated by the change agent in the implementation of CBET in VTC's. Themes and Subthemes Participants' Responses Interpretations/Reflections/ Observations

Theme1: Management Support

Sub-theme 1: Change Management team

Was not part of the team as M1 was not part of the NTA at initial stage of planning and implementation

No formal team was established but there was a project management unit for the CBET implementation

Not for CBET

Not that M3 can recall, managers would share information but a team was not established for CBET implementation

Not at this stage but there was going to be a documented process, for what needs to happen at a specific centre

No, VET expansion program will come up with one now

M1: I was not part of that change management team... I was not here yet....."

"I am a bit new here now... I was just coming from... I came and I am for two years now here"

M2: "Yeah, first of all there was a project management unit for the implementation of the CBET for transformation from the old system to the new system..."

"Normally the teams were... it was not a formal team... which was... but it is a... I mean it is a... it was... huh..."

"That is still coming... that is still coming"

M3: "Not for CBET implementation per se..."

"Not that I recall... I mean again... it maybe something within the operations department... hum... but not that I can remember that was the team that was focused on this whole issue..."

"when we have our management meetings we would share that information but there wasn't a team... that normally comes together and say let's discuss this whole transformation process..."

M4: "not at this stage. You know, that in itself was going to be a documented process (change management plan) of what is it that we need to do for a specific centre...yah...what is it that we need to do for a specific centre."

M5: "No, I think the VET Expansion Programme will now come up with roadmaps and so on."

Not sure, think there is one now, not sure if it was established this year or last year... but it is a positive development to create one. **M6:** "I'm aware of one now...there is a management team; I think...I'm not 'previ 'to say what they do exactly because it's very new."

"I don't know if it was in existence before our time and died all. The one that I'm aware of is the one that was lately established and it's the only one..."

"Was it this year or late last year...(team was established) Yah, but I think it's a positive development to create one.

"Now, I said I'm not really too "previ" to how say it came about and what they do at the moment because it's still too new."

Summary: Sub-theme 1- Management Team

Responses regarding the existence of a change management team are as follow:

- Was not part of a team (M1)
- No formal team was established, it is yet to be established (M2)
- Not for CBET, a team was not established (M3)
- Not at this stage, but there was going to be a documented process for what needs to happen at a specific centre (M4)
- No, a VET expansion programme will come up with one now (M5)
- Not sure, think there is one now that was established this year or perhaps last year, but it would be a positive development to create one **(M6)**

Sub-theme 2: Communication Plan

Workshop and presentations

M1: "It was the workshops and then people... you know we had consultants that were presenting main presentations"

"VTC's also underwent workshop... orientation workshops... in order to change management..."

Orientation workshops on change management

"that was than once... of one... I think one week... it was a one week orientation something..."

A week once-off orientation workshop

Team activities for the organization.

"And of course here and there we have got some team activities for organisation development we would be briefed here and all those things..."

Telephonic, e-mails and written communications

No formal documentation available, rather informal discussions informing employed **M2**: "Huh... so the communication was mainly done... directly maybe through the telephones or emails or it was also done through written communication... I mean huh..."

"... I think this reform which coming up is going to do that... but otherwise with us... there is really no documentation so to say but there is informal documentation perhaps that at least people know exactly in a way because we have been involved in the system how these things have been running and so on..."

Not sure whether, a communication plan, was in place

M3: "Hum... I don't know... I don't know..."

"I think platforms were... there had been a number of platforms... whether it was planned and whether it was a communication plan..."

I don't think there were enough..."

Not on CBET

M4: "No...uh...not on CBET."

"Well, the platforms that we used in the past are workshops."

No communication plan in place, there is nothing on paper

M5: "To me...uh-uh-uh..."

"even though...no, there is nothing on paper...to say this is the communication plan, there isn't really a...I...I'm not sure, maybe it's there at some divisions..."

Yes, there is. There are various platforms and channels of communication.

M6: "Yes, there is a communication plan."

"Yah, there are various platforms and channels of communication that I use, for example, in terms of my division...uh...materials that we develop have to be industry-driven. There are intervals when you have to communicate to the industry and other stakeholders"

Summary: Sub-theme 2- Communication Plan

Responses on whether a communications plan is available were given as follow:

- M1 and M2 gave various platforms of how communication is done but could not really say
 whether a communication plan is in existence. Workshops and presentations, team activities,
 telephonic conversations, e-mails and written communications, informal discussions,
 seemed to be the way of communicating.
- M3 is not sure
- M4 and M5 are positive that there is no communication plan in place
- M6 was the only one confirming that there are various platforms and channels of communication.

Sub-Theme 3: Change Management Plan/Procedures in place?	
No not really, probably there was something.	M1: "No not really" "I think there probably was somethingwas a new structure the implementation of the VET curriculum will be spearheaded by me as the new manager that side once

everything is..."

Not really, there is not really a plan but there is a strategy to phase out the old curriculum and phase in the new curriculum **M2**: "Not really because we started off with the traditional areas which have been already available with the VTC's and then the focus was on those areas to be phased out and most of the materials for those areas have been developed..."

"There is no really plan but there is a strategy in a way that those huh... they have to phase out the old programs and implement the new ones... and based on that many programs have already been developed by the NTA...

Can't recall if there is a proper plan in place. M3 is not aware if such a plan exists and whether is it being followed/implemented M3: "I honestly... to be honest I cannot remember there being a proper plan... we have actually asked this question so many times... I cannot remember there being a proper plan... for each one of the centers' cause this is what we have been asking for... has a clear plan to say for each one of the centers' this is how we going to look at this whole issue of phasing in the new curriculum because there are various aspects that we need to considered... okay we are going to start with this... and this is what we going to do... this is what we aspect to finish within a certain period of time and then by then it would be done..."

"No we aren't...(following a specific change management plan)"

No, there was no plan at all, it was implemented prematurely

M4: "Uh...no. There was no plan at all. That is why I said in my statement it was implemented premature. People started implementing and some of the curriculums were not developed..."

There was no formalized process not at this stage

"I don't think we had a formalized process."

There was no proper roll out plan

"Uh...not at this stage. Like I said, we did not have a proper phase-in-phase-out plan.

Not for CBET.

M5: "Ye...not...when you say for CBET only"

	"Because nowyah, yah, but we are not in that, as a division, because like that Divisionthey are now coming up with a study on CBET"
There was not a clear implementation plan About to get a consultant on board, to develop an implementation plan	M6 : "I said, there was not a clear implementation plan, as a result, we are going to have a consultant on board who is going to make a short review of the impact of CBET so far with the idea of developing a blueprint for CBET in Namibia and also to develop an implementation plan and a complete change plan of how it should be implemented"

Summary: Sub-Theme 3- Change Management Plan

Responses on whether a change management plan is in existence were as follows:

- M1: No not really, probably there was something
- M2: Not really, there is not really a plan
- M3: Can't recall
- M4: No, there was not a plan at all
- **M5**: Not for CBET
- **M6**: There was not a clear implementation plan

Sub-Theme 4: Monitoring and	
Evaluation plan We don't have that division here	M1: "Currently we don't have that division here that is why I am saying we have quality assurance what they are doing they will tell you more"
	"During our assessment we are normally getting reports from our assessors and moderators"
We normally get reports on assessments Centre managers should monitor	"part of implementation is the management of the centers' on the ground who are implementing should bring there part of ensuring monitoring and evaluating how things are done on the

and evaluate but that has lapsed. With the transition many things lapsed and with the transformation, also, many things that were in place lapsed

ground you know... that is somehow... you know lapsed... with the transition a lot of things actually lapsed... the divisions that are functional you know discard and with transformation and with the new setup things are just like... hum... a bit like lapsed back so we hope that with the new structures the new divisions that things will change for the better..."

It is very difficult to monitor and evaluate, as we do not have a division to do the monitoring and evaluation, each division should do it

M2: "That is in a way that is very... very difficult because you cannot really remote control..."

It is not functional yet, it should be operational very soon by the VET implementation division "No we do not have a division (monitoring and evaluation) as such but each division is doing that"

"It is not yet even functional but it will be... it has to be operational very soon... so that is VET curriculum implementation or division which is to monitor... closely monitor the progress the implementation processes and also provide guidance and then see that... all is done in line with the requirements"

M3 is not sure

M3: "Eish... that one I don't know... maybe... operations can tell you... the ways that they have... hum..."

No monitoring and evaluation was put in place with the implementation, thus far

"we have not even being done thorough implementation... and there was no monitoring and evaluation mechanism put in place "

The process is being regulated through constant support, coaching, monitoring and evaluation until the process is stable

"we are looking to our regulatory issues we are not leaving the centers by themselves... to say just go ahead and do it... it is going to have to be constant... you know support, coaching, monitoring and evaluation of the implementation until we are satisfied that it is stable..."

It is not embraced yet

M4: "Uh...not fully, but anyway, people are moving because training has to go on, but it is not yet embraced."

Students calling head of operation complaining about the services of

"The call that I just received is students complaining that the

the instructors

A consultant will be appointed soon to evaluate what has been done, thus far, with regards to CBET

Establishing a management team; reporting on focus areas as indicated on the strategic and business plan of the NTA

These include, reporting on funding, as well as on training and related services

M6 is not sure whether such plan is in place. Reference is made to the division responsible for transformation (M5) implementers are not doing enough. So, one can have a bit of a piece, but not really..."

"That's why we will call in somebody, through a consultant, to help us look at what we have done in terms of CBET."

M5: "the implementers are the VTCs...we appointed a management team that is reporting to us and then we have these monthly reports that are coming in. We have a template to show the focus areas we must report on. We have to report on organizational effectiveness...those issues that make the organization to work effectively, on funding we must report, on training and related services, on regulations...it's not just a report, it has to be on these focus areas as indicated in the strategic plan and business plan of NTA."

M6: "We have a division specific for that purpose; I think they would be able to answer that; how they go about that"

"...that is what I'm saying in terms of how they implement and how that is checked, we have a responsible division for transformation and that is where you have to find out...they will answer those specific questions."

Summary: Sub-theme 4- Monitoring and Evaluation Plan

For monitoring and evaluation responses were as follows:

- M1: We don't have that division here, centre managers should monitor and evaluate but that
 has lapsed, with the transition many things lapsed, with the transformation many things that
 were in place lapsed.
- **M2:** It is not functional yet, it should be operational very soon by the VET implementation division.

- M3: Not sure, that one I don't know.
- **M4:** No, monitoring and evaluation was in place with the implementation thus far, it is not embraced yet.
- **M5**: A consultant will be appointed soon to evaluate what has been done thus far, with regards to CBET.
- M6: Not sure, reference is given to the division responsible for transformation

Sub-Theme 5: Change Management Models

A lot of theories and various models were presented during the orientation but the committee should know more about using a certain model.

No specific model is being used but with the study on CBET, they will find out what type of model will be suitable for Namibia.

Not for CBET.

No model is in place on CBET.

Not on CBET.

M1: "I am not aware of that one although we went into the orientation whatever... there were a lot of theories and various models that we got"

"And I think the committee that has been established would know more whether the approach that they are using... is something of a model..."

M2: "We do not have a specific model that we can say... that this is 'Taylor's' model that we are implementing"

"I think now... it is not really formalised but now that the study going to be on CBET because they also want to find out what type of model can be recommended for Namibia..."

M3: "Not CBET per se... so there is definitely something but I don't think it is specific to CBET..."

M4: "We don't have a model in place. No, we don't have those models. If we have, I haven't seen them...and I will request to see them."

M5: "Not in CBET...but you know, if you ask me about a transformation plan or model we're using to move from here to where we want to, I can't tell you. For example, we're using the business model and also the learning organization model. These are the mixtures we are using ... but for CBET now we don't

have a model in place."

M6: "Yah, as I said earlier, we are following the strategic plan but there's no change management model. Maybe if there is one with the team that we have now established...a change management plan, I do not know with what they are operating"

Summary: Sub-theme 5- Change Management Models

The question on whether a change management model was used was answered as follows:

- **M1:** A lot of theories and various models were presented during orientation but the committee should know more about if a certain model is being used or not
- **M2:** No specific model is being used
- **M3**: Not for CBET
- **M4:** No model is in place for CBET
- **M5**: Not on CBET
- **M6**: There is no change management model

Sub-Theme 6: Management Staff Turnover and Handing Over of Office.

As with all organisations, people are coming and leaving, we have appointed new critical positions, the GMS- operations, and training fund.

M1: "Of course... we have... normally people... people who leaving for... during the past... we have 12 people that have left NTA... of course... we are also worried... what is it... why are people leaving but we are also receiving people... right now we have appointed... right now we have critical positions filled the GMS will be filled... GM operations have been filled... GMS training fund has been filled..."

In 2010 two GM's services were terminated, but not aware of any specific training offered to their successors.

M2: "Yeah, quite a number of changes... because we started off with the project management unit whereby we had a project manager... so from... and then from... huh... in 2010 huh... there were two General Managers who's service was terminated because of whatever, I do not know... and them from there...of course"

"So not... I don't know... I am not aware of a specific training that if a general manager left another one came and then his undergoing that process because he comes also with knowledge but it is based on the gap that he has got that perhaps that if there is a need than that gap could be..."

"so what normally happens is that huh... the ones who are there have now to work with the new person and then the person has also to... do a lot of reading on the huh... NTA legislatives, policies, acts... and order to appoint him/herself and then also get a visit the divisions to acquaint him/herself about what is happening..."

"Yeah... it of course normally if such type of things happen in any organisation... it can slow down some of the things... it can slow down... but... it was... it was not such a major slow down because of the commitment that even those who joined had... so..."

M3: "At management level there was a lot of change... again if you look at the structures... mostly at the centers... even here at the NTA if start with head office... we had hum... well you know of the CEO... hum... but we also had our GM's... who left GM operations... it was a key position in GM finance... so there has

"I think there is a good... there has been a number of changes in terms of management..."

been changes in that regard..."

"...in terms of the CEO and the two GM's that were let go... I think that had a terrible blow on the organisation... because it was at that stage when there was momentum behind this whole push... it was at a stage when we were really pushing... hum and there was momentum and we had good relations with the ministry... with all our stakeholders... you know we were on the

This can lead to a slowdown of operations but it was not a major slow down as these people are very committed.

A lot of changes have occurred on management level at the centers as well as at the NTA.

Few changes in terms of management, the GMs' of Operations and Finance as well as the CEO.

It had a terrible blow on the organisation, because it was at

that stage when we had momentum and good relations with the Ministry, with all stakeholders, you know we were on the right track and then it happened.

We are trying to make it as smooth as possible so that operations are not hampered.

Some of them in management positions left, and some of us came.

No, that was not done; you have to do your own research.

Only a few left but the managers are the same, additional people came on board, where the one left the other one is starting.

There should be proper handing over when a person is leaving but it could not happen in the case of right track and then that happened with the GM's..."

"But also trying to find a way of you know when we do get the people on board... try and make it as smooth as possible so that operations are not hampered... and I think we did a fairly good job..."

M4: "some of them in management positions...(left the organisation)."

"Well, some of us came in in that process."

"No, I wasn't. I joined (the NTA) four years back."

"No. You know, that was not done because for some of the documents you have to go on and do your own research and you will later say, no this was done... So, if there was a very good genuine hand over with a file...but obviously... that was not done"

M5: "Only a few, few left...like the managers they are the same. NTA is growing and additional people are coming on board...some new people who started."

"I think it's just a way of complementing one another...this one is starting where the other one left."

"Well, not in the case of the CEO as you know, the way in which she left did not leave any room for that, but really the procedure is that whenever anyone goes because they are moving to new the CEO, due to the way she left.

occupations, there should be proper handing over."

As in any organisation people are leaving and people are coming, but in my case, a smooth handing over does not happen.

M6: "Uhm...as in any other organisations of course; people leave, people come for various reasons...yah."

I got some files from the person from whom I took over and she did her best. "I assumed that has happened because it's difficult to talk about that while it has not happened in my Division."

"of course, that person also left with certain information in

terms of the progress and things like that."

"I got some files. I would say she had done the best she could do maybe with the little she had or with what she was given that time. I think the changeover in this division was smooth."

I think it was a smooth handover.

Summary: Sub-theme 6 - Management Staff Turnover and Handing Over of Office.

- As with all organisations people are coming and going; we have appointed new critical positions, the GM's of Operations' and Training Fund. In 2010 two GM's services were terminated; a lot of changes have occurred on management level at the centers as well as at the NTA. Quite a few changes in terms of management, the GM's of Operations' and Finance, as well as the CEO, some left and the new team came (M1, M2, M3, M4).
- This can lead to a slowdown of operations but it was not a major slow down, as we have committed people, it had a terrible blow on the organization because it was at that stage that there was good momentum and good relations with the Ministry (M2, M3).
- Not aware of any specific training offered for successor, there are attempts to make handing over as smooth as possible, so that operations are not hampered. No, that was not done; you have to do your own research, there should be a proper handing over, but it could not happen in the case of the CEO, in my case a smooth handing over does not happen, I got files from the person I took over

from; I think it was a smooth handover. All participants agreed on the above statement, except for participant **M1**.

Recommendations	Participants' Responses
Get experts to fasten the process and to see what money has been spent on the old system, what can be changed overnight, what is needed and what should be discarded.	M1: "get experts and see how we can fasten the process in the sense of when we go to development if you want to face a decision normally what we need to do is to get the experts what materialswhat money has been spent on the old system as well see if we can change the things over night what is it that take what is necessary and throw out."
Don't make hasty decisions and rush into things, learn from the experiences and do things right.	"whatever we should do we must do it with all care and caution and don't rush not really rush even the old system had its anomalies it was they inherited it and we trying to change it here and there and we spent a lot of money we must learn from the pass and do things right"
First you need to pilot the project in order to prepare people for what is to come. Get feedback and based on what works practically or not you can go on.	M2: "I mean to huh you start only when people are ready and not huh I mean you first have to pilot something you get the feedback and based on whether it is practical or not you can you can be in time with everything"
Get systems in place before implementing.	"But if you are just starting out of nowhere then you will be overloaded with things that are going to create more failures and so"
Acquire the needed resources before implementing the project.	"So the first is that get your systems in place before you can start implementing"
Get all stakeholders to work together on this project. Get buy-in and support from	"Get your systems in place and then quality assure your systems" "And then get the get the resourcesbefore you start"
especially the private sector.	"I think the most important thing is for the nation to start working together" "And then support each other because ultimately it is for our

Implement a Vocational
Education and Training
Management Information System

Consultation with all stakeholders and proper planning is needed.

Get a VETMIS system

Get the buy-in from all stakeholders to drive the process together as a team.

Do a situation analysis to see what the current situation on the ground is.

Do a reflection about what has gone wrong and why and take it from there.

Have a communication plan/strategy in place.

Have the necessary equipment in place.

Define CBET in a Namibian context.

Have a change management model in place.

own economic development... so we huh... even for the private sector to be involved in what is happening and then provide required support..."

"And then also huh... huh... for the industry to enable your placements... huh... for the graduates... even... or even those one's who are still in training... so in order to enhance what is required at the industry level..."

"Get a VETMIS system"

M3: "It has been quite an experience... hum... you know I think the one thing... you know consultation is actually key thing... and I think maybe it wasn't as much hum... planning... was lacking..."

"You need to engage the entire various stakeholders and consult them in terms of what this actually means..."

"And get their buy in and then drive it together... I think that is important... and again as I have indicated the issue of planning... you need to be able to do it up front... otherwise we find ourselves in the situation where we are still trying to find a way to phase out the old... with the new system..."

M4: "Yah...the first thing to do is a situation analysis to look at what is currently on the ground then based on that you build on...you look at the pros and cons then you start working on the cons and pros"

"you sit down and reflect and look in your glasses and say...what is it that we have done wrong; what is it that we have not done good and how do we move from here?"

"One is the issue of communication; the issue of capacity building; the issue of making sure that equipment is available, particularly communication is the most important."

"Yah, we must have a change management model; secondly, we must define competency-based education in Namibian context; contextualize it. Then, we should communicate."

Listen to people to see what concerns they have and whether they understand the whole change effort.

Admit your mistakes, don't try to defend it.

Do progress checks see where we should improve?

Appoint an independent agent/consultant monitoring and evaluation for recommendations for improvements.

Re-evaluate the whole implementation process and progress made thus far, in terms of what needs to be in place, what resources we need, what are the training requirements.

Set the required standards for the qualification.

The curriculum should be in place, the resources must be in place, workshops should be equipped, competent instructors on CBET should be appointed.

The GRN should avail more resources, the utilisation of the levy system should be promoted, and the system should be well funded.

All stakeholders, including the

M5: "Yes. First of all, to listen to people when they talk and to understand...if you don't listen and assume that people know and understand...uh...no, no."

"And also, to face reality and not to be defensive if a mistake has been committed...for one to admit that it was a mistake...and we are sorry, things are like that...and not to defend it...you need to listen to the people"

"I think when you introduce the system, there should be an evaluation session just to see the progress of the system and where should we improve and so on."

"And proper monitoring and evaluation by an independent agent then you can come up with comprehensive recommendations...then we can see the way forward."

M6: "I think we should go slow and re-evaluate the whole implementation that was done so far, so that we can come up with something new in terms of how do we phase-in, what needs to be in place, what resources do we need, what are the training requirements for the people administering the system or those that are involved...instructors and so forth, so that we could do things differently"

"when you implement a programme, you need to set standards already and their respective qualifications, curriculum should be in place, learning resources must be in place, the workshop should be equipped, the instructors should be in place and they should have the right skills, they should know what CBET is and all those things."

"Number one is more on resources; of course, more resources are required to run such a system. The government should avail more resources and...uh...sourcing of more resources, like utilization of the training levy and so forth, should be promoted so that the system is well funded."

GRN and industry should realize the need for better equipped institutions.

Establish better cooperation with industry.

Expose trainees to the latest technology, to close the gap between mismatches in demand and supply.

Emphasis should be placed on tightening the relationship between VTC's and industry.

"Number two, equipment in the centers...the government and all stakeholders, even industry, should realise the need for better equipped institutions, modern equipment"

"we should be somehow there and we should establish more cooperation with the industry that, of course, while we cannot have everything modern in the VTCs, at least let's make opportunities available for people to be sent to the industry where they are exposed to the latest technology, then the gap is not that big in terms of what they are trained on and in terms of what they need in the industry.

"Institution-industry relationships should be enhanced because that is the only way you can impact the practical training relevant to the industry."

Summary: Recommendations

Recommendations were given as follows:

- 1. Do a situation analysis to see what the current situation on the ground is.
- 2. Define CBET in a Namibian context, set the required standards for the qualifications.
- 3. Get buy-in from all stakeholders to drive the process together as a team. Consulting with all stakeholders and proper planning is needed. The GRN should provide more resources, the utilisation of the levy system should be promoted and the system should be well funded.
- 4. Appoint an independent agent/consultant for monitoring and evaluation for recommendations or improvements. Contract experts, to cement the process and to see what money has been spent on the old system, what can be changed overnight, what is needed and what should be discarded.
- 5. Get systems in place before implementing, have a change management model in place as well as a communication plan/strategy.
- 6. The curriculum and resources should be in place. Workshops should be equipped and competent instructors, on CBET, should be appointed.

- 7. Expose trainees to the latest technology to close the gap between mismatches in demand and supply.
- 8. Don't make hasty decisions and rush into things, learn from the experiences and do things right. Pilot the project first, in order to prepare people for what is to come. Get feedback and based on what works, practically or not, you can then proceed.
- 9. Do progress checks to see where we should improve? Do a reflection about what have gone wrong and why and take it from there.
- 10. Listen to people to see what concerns they have and whether they understand the whole change effort. Admit your mistakes, don't try to defend it.
- 11. Implement a Vocational Education and Training Management Information System

4.4 Conclusion

This chapter presented the findings as they relate to the research objectives as well as the nature of the data gathered. The data collected was open ended and analysed according to Cresswell's (2009), 8 step method. The data was then presented in summary form and themes and sub themes and recommendations were developed from these.

Chapter five will deal with the conclusions and recommendations relating to the previous results and discussion of the results.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1 Introduction

This chapter represents a discussion of the data analysed in chapter 4. It gives a summary of the findings on the themes and sub-themes broken down in chapter four, under the three sub-questions formulated from the main research question. Prior to that, a discussion on the participants profile will be given, as it may have a direct bearing to determine the perceived effectiveness of the planning and implementation of a CBET programme at VTC's in Namibia.

The purpose of this case study was, to uncover the perceived (according to the subjects' views) effectiveness of the transformation process of planning and implementing a Competency Based Education and Training (CBET) in Vocational Education Training Centres in Namibia, through semi-structured interviews with members of management. The focus was to uncover how members of management feel about, experienced and made sense of the implementation process of CBET in Namibia. Therefore, the focus of the study was one dimensional; to look at the perceptions, of only the managers, employed by the change agents, regarding the implementation of CBET, as a method of training in Vocational Training Centres in Namibia.

5.2 Participants Profiles

Based on the profiles of the six managers, one can see that there is a huge discrepancy in terms of the information provided under the different categories, ranging from their highest professional qualifications, number of years in current position, years of experience in teaching/training, years of experience in CBET, number of years in the organisation and lastly, to whether they were part of the planning and inception of CBET.

5.2.1 Academic Qualifications

Four out of the six managers hold a Masters' degree; three in education, the other two Masters' degree is one in Mechanical Engineering, while the other one is in Human Resources Development. The other two have one a Bachelor's degree in Accounting and Finance and the other one a National Diploma in Vocational Education and Training. One would expect that at management level all six should have a Masters'

degree in Training and Development or Education as this is the field in which all of them are employed, although in different departments.

Namibia has embraced the CBET approach to VET. Under this approach, unit standards which describe the outcomes, demanded by industry and the community, form the basis for curriculum, assessment and qualifications in the national VET system. It would, therefore, be required from managers to understand the basics of teaching and/ or training, such as developing curricula, developing training materials and unit standard qualifications as well as the assessment thereof against performance criteria. However, different training programs on curriculum development, unit standard development and assessment were offered to some of these managers only.

"M1 indicated that no training was received with regards to, CBET whereas M3 and M6, indicated that training was received on for example DACCUM- Developing a Curriculum. M2 and M4 did not really specify the type of training received. M5, on the other hand, referred to receiving training on management development. M6 indicated that training was received on unit standard development and induction.

From the analysis above, the only managers who **clearly** indicated that training on CBET was received were, M3 and M6. For such a position, one would expect that all should have gone through the same type of trainings with regards to CBET.

5.2.2 Number of Years in Current Position

The numbers of years these managers are in their current positions ranges from 2-7 years, although, some of them have been working for the institutions for more years, in the case of M3 and M4. However, what emerged from the analysis was that this transformation started in the early 2000's (M4) and should be fully implemented in 2018 (M6). This shows evidence that the planning and implementation of CBET was on its way long before these managers joined the NTA.

5.2.3 Years of Experience in Teaching and Training

The number of years of experience, of those managers in teaching and training, ranges from 0-21. Four of the managers have a vast amount of years in teaching and training, more than ten, while one of the other two only has three years and the other one 0.

5.2.4 Years of Experience in CBET, upon arrival

Three of the managers did not have any experience of CBET on arrival (M3, M4 and M5), while the manager with the most years of experience was M2 (18), followed by M1 (4) and M6 (3).

5.2.5 Part of the Initial Planning and Inception of CBET?

Four of the managers indicated that they were part of the initial planning of CBET (M1, 2, 3, and 5), whereas two had none (M1 and 6). However, the experience in CBET begin only in 2006, whereas CBET was supposedly first introduced in the early 2000's.

The next section, of the discussion of findings, will be done based on the thematic map illustrated by table 5.1. This map was designed based on the themes and sub-themes that emerged from the responses given by the subject under the three subquestions that derived from the main question.

The main objective that frames this study was to:

Investigate the effectiveness (according to the subjects being interviewed views) of the transformation process of planning and implementing a Competency Based Education and Training (CBET) in Vocational Education Training Centres in Namibia.

According to the perspective chosen by the actors 'perceived effectiveness', the following four sub-objectives was investigated:

- to determine the driving forces for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia?
- to determine the factors that acted as enablers to the process of implementing CBET in VTC's in Namibia?
- to identify the factors that acted as challenges to inhibit the process of planning and implementing CBET in VTC's in Namibia, and how were these dealt with?
- to establish the effectiveness of the change management support strategies/models employed by the change agent in the implementation of CBET in VTC's.

Objectives	1.Themes	Sub-themes
1.Triggers/Driving Forces	1. Background to the Study	Nature of the Change
rorces		Needs Assessment
		Context of the Change
		Planned or Emergent
	2. Reasons/ Triggers for Change	
	3. Intended Outcomes	
	4. Temporal Aspects	Roll out Plan
2. Enablers	1. Enablers	Resources
		Training
		Transfer of Training
3.Challenges/Inhibitors/	Restraining Forces	Resources
Stumbling blocks		
	Alternatives to Restraining Forces	
	Determinants of Success or Failure of Program	Key Players
4.Facilitation of Change	1. Management Support	Change Management Team
Management Process	Strategies	Change Management Plan
		Communication Plan
		Monitoring and Evaluation
		Change Management Models
		Management Staff Turnover and Handing over Office

Table 5.1 Themes and sub-themes

5.3 Discussion of objective 1: to determine the driving forces for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia?

5.3.1 Background to the Study

5.3.1.1 Nature of the Change

Three of the participants indicated that there was a change in curriculum,

"from a modular system to a unit standard, competency based education and training system" (M3)

According to the NTA (2010), the previous curriculum was based on standard blocks of time spent, rather than competencies acquired. This forms part of the restructuring of VET by reforming its technical and vocational education system, to make it more effective and accessible to disadvantaged sectors of society (NAMCOL, 2011).

Two indicated that the change was in assessment;

"the change was about issues pertaining to assessment" (M4)

The CBET approach, based on unit standards, described the outcomes demanded by industry and the community which formed the basis for curriculum, assessment and qualifications in the National VET system (Mushuarari and Durango, 2008).

Another two indicated that this change was about introducing an industry-based, demand driven curriculum;

"so the key change here is from the institution-driven type of training to a more industry-driven type of training". (M6)

According to the literature, there was a concern about the mismatches in the demand and supply of skills to address the ever-growing skills shortages. This led to industry having less and less confidence in the public VET system. Vocational training in Namibia was isolated from the market needs of the private sector (Kukler, 2007).

5.3.1.2 Needs Assessment

Four of the participants indicated that a needs assessment was done by the Namibian government, with the help of consultants from outside. Countries such as South Africa, New Zealand and Australia were mentioned. The literature showed that, CBET is an important strategy in most technical and vocational education programs, in countries such as Australia, New Zealand, USA and the UK (Sharam & Naisele, 2008).

These countries introduced CBET in the late 1960's (USA and Australia), the 1970's (UK and Germany), and in the 1980"s in New Zealand (Bowden, 2000). This trend seems to be a global initiative, investigating and discussing CBET from all regions in the world (Kerka, 1998). The NTA, in particular Namibia, could only gain from the lessons learnt by those that have walked so many miles on the road to implementing CBET.

However, different countries should respond to the different training needs of learners, from different socio-economic and academic backgrounds and prepare them for gainful employment and sustainable livelihoods (African Union, 2007). One of the participants' stated, as part of their recommendations, that CBET should first be defined in a Namibian context and required standards should be set, before, it can be communicated to the rest of the role players.

According to the Three-Step-Model by Lewin (2009) when doing a need assessment, a change management team should be established to gather data in searching for root causes of the problem. This normally involves the restraining forces that hinder movement away from the status quo (Burnes, 2009).

5.3.1.3 Context of the Change

The three contexts given as the reasons/driving forces behind the change were political, social as well as economic. Two of the participants indicated that it was a political decision;

"it was somehow political, the cabinet actually decided", while one thought it was economical, "from the industries point of view". (M1)

Whereas, two of them thought it was from three dimensions, political, social and economic;

"...a combination of all of these, political, social, and economic, but more from an economic perspective, because if the industries say that the graduates were not really trained according to their standards, they won't be able to be absorbed in the market".

(M5)

The Namibian Skills Deficit Report, of 2010, illustrates that the issue of skills was an urgent concern across various sectors. One of the outcomes of this report, included, the inability of the country's training authorities to produce graduates with skills of the right type and quality.

According to Eramus et al. (2010), change usually takes place as a result of an adjustment to the environment, workplace, customers, and worker relationships. It may include changed legislation and regulations of central authorities, joint utilisation or resources by several departments, the implementation of more effective systems, methods and procedures and the rationalisation of services.

What surfaces here is the strong political influence from politics. As stated by, Kerka (1998), competency standards are propelled by a strong political impetus, as a way to prepare the workforce for the competitive global economy. Hence, the establishment of the NTA to execute its mandate, under the VET Act no 1 of 2008, to take over the management and the direction of VET systems in Namibia. One of the strategic objectives to restructure the VET was to establish CBET (NAMCOL, 2010).

5.3.1.4 Planned or Emergent

The results of the question, whether this change was planned or emergent, led to two of the respondents to saying that the change was emergent.

Two of the participants indicated that the change was definitely emergent, "a public outcry made it possible for the change to come", with a third stating they were not sure' "probably emergent", whilst two thought that it was planned, "it was a planned thing because if you look at the consultations."

Based on the analysis of the data collected as well as observations from the literature the change was planned due to the following reasons:

The needs assessment was done by the Namibian Government, by consulting countries that had already been through this process, to learn from their flaws, expertise, and skills. The Namibian Government came up with an Education and Training Sector Improvement Plan (ETSIP), to facilitate the transition to a knowledge-based economy. This transition will demand a skilled, competitive workforce (ETSIP, 2006).

The establishment of the NTA, under the VET Act no 1 of 2008, which provides the legislative background for the reform of the VET system in Namibia, to assist the Namibian people in both the formal and informal economy, to realise their potential by developing the skills required by the Namibian industry and the Namibian community, to assist Namibian businesses to develop and successfully compete in local, regional, and international markets and lastly, to assist the government to provide high quality services in Namibia (NAMCOL, 2011).

Namibia has embraced the CBET approach to VET. The decision to adopt this approach was made on the basis that the overriding purpose of VET is to produce competent workers. These are workers who are able to apply their knowledge, skills and attitudes to perform work activities to the standard expected on a world stage (Mushuari & Durango, 2008).

According to the literature, planned change is defined by Robbins and Judge (2011), as activities that are intentional and goal oriented. It seeks to improve the ability of the organisations, to adapt to changes in the environment as well as to change the behaviour of its employees. One of the strategic objectives of ETSIP, is to restructure VET in Namibia in order to improve the quality of VET. CBET was introduced to ensure a more effective and efficient way to acquire the competencies required to have a competent workforce.

5.3.2 Triggers or Reasons for the Change

Reasons for the change were given as follows:

• The government was dominating VET in Namibia in isolation from industry

- Government was too rigid with its policies and regulations and too heavy with its taxes for industry to comply with.
- VET became too expensive for the government to sustain.
- To get industry involved by introducing the training levy system
- To establish a demand driven system
- Due to the mismatches between demand and supply
- Poor end products pushed out in the market
- Globalisation and global competitiveness
- Public outcry and
- Changing the curriculum from a theoretical-oriented system to a practical skilloriented system

According to the African Union (2007), the general-economic environment and the contextual framework in which VET delivery currently operate on the continent is characterised by amongst others:

- Huge numbers of poorly educated, unskilled or unemployed youth,
- Low quality
- Poor public perception
- Uncoordinated, unregulated and fragmented delivery systems
- Weak national economies

These back up the reasons given by the participants as to why a change in the delivery of VET was needed. According to Vision 2030 (2010), Namibia needs a workforce that has the flexibility to acquire new skills for the new jobs created. The structures of economies and technicians are a key determinant of the labour forces' flexibility and productivity (NAMCOL, 2011). A change was needed, in order to improve the effectiveness and efficiency of VET in Namibia, as the inability of the country's

training authorities to produce graduates with skills of the right type and quality, has become something of a contested topic in Namibia over the last decade.

5.3.3 Intended Outcomes

Four of the participants indicated that the most crucial outcomes were to enhance the quality of the end products, produce competent graduates, produce competent skilled workers, and to provide a qualified workforce. Two of the participants indicated that Namibia's VET should establish a demand driven system to respond to industry's needs, while other outcomes given by individuals include the following:

- To get buy in from stakeholders
- Enhance/establish private public partnership
- To secure employment
- To ensure high graduate rates
- Eradicating poverty
- · Alignment between demand and supply
- To establish a more flexible system
- Global competiveness

These outcomes could help to reduce the shrinking or stagnant wage employment opportunities, especially in the industrial sector as well as the huge numbers of poorly educated, unskilled and unemployed youth in Namibia (African Union, 2007). VET systems in Africa and Namibia should, therefore, be placed in such a way as to train the skilled and entrepreneurial workforce that both Africa and Namibia need to create wealth and emerge out of poverty.

This skills problem can be fixed by, enhancing the competitiveness of the economy, by giving as many possible young Namibians the 'relevant' training to produce the necessary specialised skills, such as physicists, chemists, ICT professions, architects, cartographers that Namibia urgently needs for its transition into a Knowledge-based economy.

According to Fourie (as cited by Links, 2010), he is of the opinion that the skills shortages should be addressed, by simplifying procedures for work permits for scarce and skilled staff and to promote technical and business skills training in academic institutions and industry.

5.3.4 Temporal Aspects: Roll Out Plan

This is an area in which participants were not really sure about, when the phasing-in started and when the old curriculum is supposed to phased out. Two of them indicated that the phasing in started in 2006, one did not give a date for the phasing in, another one indicated that it already started somewhere in the 2000's, not really sure also, the fifth one indicated that the phasing-in started in 2008, with the last participant indicating 2003. For the phasing out or complete implementation of CBET in all VTC's the time span has been given as from 2013-2018. From this, one can deduce that not one of them is really sure about the temporal aspects of the implementation of the CBET system.

According to, Van der Westhuizen (2008), change should be managed according to phases, of which planning is one key factor in the success of the implementation and acceptance of change. These phases include devising a time schedule for reporting results and identifying sources in aid of reaching the desired outcome. The change strategy should be conveyed in detail to employees in the change process, so that they can become part of the change process. He further suggests that a detailed tactical plan should be dedicated upon and made available in understandable language to all who participate in the change process.

5.4 Discussion of Objective 2: To Determine the Factors that Acted as Enablers to the Process of Implementing CBET in VTC's in Namibia?

5.4.1 Enablers

5.4.1.1 Resources

Enabling forces were identified as follow:

Four of the participants indicated that financial resources were the most readily available;

"the driving push from government and the resources that were provided... bring in consultants, you obviously throw money at the consultants" . (M3)

Another resource, which falls under human capital, was the consultants contracted to assist with the planning and development of material development as indicated by another four of the participants;

"...there were EU consultants". (M5)

The availability of human resources and experienced people was indicated by three of the participants;

"VET existed before the introduction of CBET in Namibia, so there were already experienced people". (M6)

Two of the six indicated the commitment and support from the government and the NTA;

"I think the people that we had on board in the NTA, very committed drive, I think they share in the vision, you know trying to implement the whole CBET methodology".

(M3)

Another two referred to the various stakeholders serving on various committees as an enabler;

"...industrial skills committees from various industries to identify occupations, courses and programmes needed". (M1)

Other enabling forces given were, workshop and training on CBET, the fact that the program was first piloted, unit standard and material development that has taken place and the fact that the programs were registered by the NQA.

Literature shows that the success of implementing changes is generally associated with those who facilitate the change process. The NTA in this instance as the

change agent needs to understand the driving and restraining forces. The driving forces such as the ones identified by the participants are the positive forces supporting and pushing towards change.

According to, Herman and Herman, as cited in, Van der Westhuizen (2008), one of the prerequisites for change is that adequate time, finances, material and human resources should be provided to enhance the probability of successful change. According to Tushman, Newman, and Nadler (as cited in Duffy, 2004), for successful implementation of new programs, as part of change, enables forces such as the provision of resources needed to complete the change, rewarding performance that support the change, building a change management team to lead the process, and developing management systems to support the change, should be created.

5.4.1.2 Training Received on CBET

Three of the participants indicated that training related to CBET, such as how to develop a curriculum and unit standard writing was received;

"...we have attended DACCUM, unit standard writing and all other training programmes that are related to the work we do". (M6)

Although another two also confirmed that training was received, they could not specify the type of training received;

One of the participants only referred to management development training that was received while the last one indicated that no training was received at all;

Herman and Herman, as cited in, Van der Westhuizen (2008), posit that training should be provided for those individuals who are to initiate and/or manage the change, if they do not possess the requisite knowledge or skills.

5.4.1.3 Transfer of Training

The question on whether transfer of training took place was answered as follow: only one participant indicated that he did not transfer any training, since he himself did not receive any training related to CBET;

"...no that is what I am going to do now". (M1)

The other five participants indicated that transfer of training took place, this included training on assessment, moderation, and facilitation skills.

"I think almost if not all have received training in terms of facilitator training, assessor training and moderator training". (M3)

Principles of CBET;

"...on the entire CBET principles". (M2)

Health and safety;

"Even recently we had trainers representing each of the VTC's attending the NOSSA course... this is health and safety". (M5)

Unit standard development and training related materials;

"We also do reach out to the instructors whereby we have organised workshops for them and induct them on what unit standards are, on what qualifications are and all the training related material that the NTA develops". (M6)

Once again, the researcher would like to stress the importance that training is provided for those individuals who are to initiate and/or manage the change, if they do not possess the requisite knowledge or skills. This could enhance the integration of the change, by consolidating and stabilising the changes so that they can become part of the organisation's normal everyday operation, by training managers and employees who monitor the changes constantly and seek to improve upon them.

5.5 Discussion of Objective 3: To Identify the Factors that Acted as Challenges to inhibit the process of Planning and Implementing CBET in VTC's in Namibia, and how were these dealt with?

5.5.1 Restraining Forces

5.5.1.1 Resources

Five of the six participants being interviewed indicated that negative attitudes of staff and their mind set is one of the biggest obstacles in the change management process;

"You have those that are so resistant. They say no, we do not know what the system is going to bring about and they remain resistant". (M6)

Another five mentioned outdated machinery and lack of equipment;

"Lack of resources; equipment and tools to implement CBET". (M4)

Lack of funds, was seen by four as another obstacle;

"The budget has also been cut, we don't have finances, which is of course the greatest and the biggest". (M1)

Lack of exposure, experience and training, were some of the other obstacles mentioned by yet another four, as an obstacle.

"There were a lot of training that need to be carried out in terms of delivery of the training programmes". (M3)

Poor human resources, was mentioned by three of the respondents;

"The aspect of Human Resources is also undermined, one could say with the current team one cannot successfully implement CBET because it requires a lot of people". (M6)

Confusion and conflict, due to running a dual system in parallel, lack of communication and consultation and poor support from drivers, such as the government and NTA, were indicated by independent pairs, with regards to the change;

"...it can also lead to conflict because they might have everything in place for the old system but not for the CBET". (M2)

"We were not consulted, we were not part of this whole process". (M3)

"...but apart from that, the support from the head office (GRN) because the Transformation process should not exclude anybody". (M5)

Other obstacles identified by individuals are:

- No feedback on challenges and failures encountered from the pilot,
- VTC's not CBET compliant yet,
- Lapsing into old ways of doing things,
- Uncertainty about the outcome of the change effort and
- Absence of VETMIS

These are the forces that normally affect the change process negatively, better known as restraining forces or challenges. According to Lewin's model of Change Management, these are the restraining forces that need to be unfrozen; changing to overcome the pressure of both individual resistance and group conformity. Management might also unfreeze acceptance of the status quo, by removing restraining forces. Kotter's eight step model suggests that, obstacles should be removed by putting structures in place to continually check for barriers to the change effort. Removing obstacles can empower the people that will be needed to execute the vision in order to help the change move forward (Purdassee, 2008).

The basic idea should be to provide guidance about overcoming resistance, to cope with unable or unwilling people, while at the same time, educating and changing them; to make them able and willing to behave as expected, to enthusiastically and proactively support the new idea. It is about changing people's schemata and mind-sets, beliefs and attitudes. It should be about how people think and act to inspire them to go that extra mile to do more and to do better (Diefenbach, 2007).

5.5.1.2 Alternatives to Operate against Restraining Forces

Suggestions of alternatives to these restraining forces against the proposed change were given as follow:

Three of the participants suggested workshops, skills upgrading courses and training were appropriate to stay abreast with the latest developments and technologies;

"Polytech is one of the providers that put programs in place to make sure instructors have the right skills to implement the system". (M6)

While two of the respondents suggested that the PRO, together with the industrial skills committee, should liaise with industry and other stakeholders to define CBET in a Namibian context and to identify demand driven occupations.

"...so currently at least there is a Public Relations Officer who is supposed to synthesise with industry and all the stakeholders on CBET so that everybody can understand".

(M3)

Two of respondents suggested that an evaluation should be done on the implementation of CBET thus far, to identify the shortcomings for further action;

"Currently, we about to start with the CBET study, proposals have been submitted and once the tender is awarded to whoever has won, to check for the gaps, the failures and flaws on what is happening, why, what is going on. After the study get the feedback report and try and work on that thing because CBET is not currently hundred percent working, you know".

(M1)

while another two referred to equipping VTC's with the necessary equipment and tools through a training levy system,

"...in terms of equipping the workshops and things like that, the late Education Minister, purchased some equipment for the centres, that was just the beginning, we are also introducing the training levy which will be collected from industry or employers. Some of that money will definitely be used to equip the centres". (M6)

Another very important issue is to establish proper communication by having regular management meetings to discuss training related issues.

Lewin, in his three-step model, suggested in phase four, in order to work towards change, involves finding creative alternatives to these obstacles that has been diagnosed, analysing alternatives and finally making a choice between possible solutions. In seeking for alternative solutions, various procedures should be instituted (such as the alternatives given above) so that the change process transforms the organisation from the status quo to the desired state. Once change has been implemented (CBET), to be successful, the new situation should be refrozen so that it can be sustained over time.

5.5.1.3 Who can Influence the Success/Failure of the Proposed Change?

The NTA as the change agent was given by five of the participants, as the first stakeholder that can have an impact on the success or failure if this intervention;

"The NTA is the agent of change because if the NTA is not communicating the right information to the implementers, we can expect the system maybe to fail or to be successful".

(M5)

Other stakeholders that have been identified are all the training providers, the industry as well as the government of Namibia.

Literature shows that the role of the change agent is of paramount importance in the success of a change intervention program. According to, Waldersee ad Pettigrew, as cited in Duffy, (2004), senior executives (CEO of NTA) and other line managers (Heads of Centres) must drive the transformation. Without the unequivocal and visible leadership of these heads, the implementation of CBET will fail. The NTA, as the agents of change, needs to surround itself with people and stakeholders who support the change itself and who will promote it through influencing others (Saka, 2003).

The NTA as an agent of change should give special attention to how it intends to persuade the stakeholders to accept the change by taking in consideration the degree to which organisation's (training providers and recipients of their end products

(industry)), will be affected by the change and the degree to which they are ware and are supportive of the vision driving the change as well as the intended and unintended consequences of change as well as the degree to which these changes are in line with current practices and objectives (Coetsee, as cited in Van der Westhuizen, 2008).

Herman and Herman (as cited in Van der Westhuizen, 2008), further suggest that there should be a commitment to the change by the managers and critical mass among the stakeholders, by creating a high-quality, comprehensive and frequent two-way communication with stakeholders throughout the entire initiation and implementation stages when rolling out the new program.

5.6 Discussion of Objective 4: To Establish the Effectiveness of the Change Management Support Strategies/Models employed by the Change Agent in the Implementation of CBET in VTC's

5.6.1 Management Support

5.6.1.1 Change Management Team

Responses regarding the existence of a change management team were as follows:

All of the six participants indicated that they were not aware whether such a team was established or if there was one, they were not aware of its existence;

"...no formal team was established, it is still coming, not established yet". (M2)

Kotters, eight step model, suggests that coalition, or a team of influential people whose power come from a variety of sources including job title, statues, expertise and political influence, should be established. In the case of implementing CBET, all stakeholders should be involved, by establishing such a team. Once formed, the change coalition needs to work as a team, continuing to build urgency and momentum around the need for change (Purdase, 2008).

Furthermore, the change must be carefully diagnosed by the management or by a designated committee (Van der Westhuizen, 2008).

5.6.1.2 Change Management Plan

Five of the participants indicated that no implementation plan/strategy for CBET was designed, while one could not recall such an instrument;

"...no there was no plan at all". (M4)

Creating an implementation strategy reflects an organised way for phasing in the change, without it; there is a lack of direction for the change (Lientz & Rea, 2004). The success of implementing such change is generally associated with those who facilitate the process. They are responsible for planning, co-ordinating and implementing the change effort by devising a plan or strategy based on the priorities for dealing with tasks. This plan should be made available, in understandable language, to all who participate in the change process and adjustments should be made to the tactical or strategic plan if changes are required during the initiation and implementation stages of the change (Van der Westhuizen, 2008).

Tushman, Newman, and Nadler, as cited in, Duffy (2004), states that a clear and credible description of a strategic orientation should be articulated, challenging performance standards to move forward should be set and the needed resources to complete the change should be provided.

5.6.1.3 Communication Plan

Responses on whether a communications plan is available were given as follows:

 M1, M2 and M6 detailed various platforms on how communication is conducted but could not really say whether a communication plan is in existence.
 Workshops and presentations, team activities, telephonic conversations, e-mails and written communications as well as informal discussions, are all used to communicate.

- **M3** is not sure.
- M4 and M5 are positive that there is no communication plan in place.

Based on the responses given above, it is clear that no communication plan was devised. According to literature, the success of the vision (proposed change) depends on the communication strategy being followed. The vision needs to be communicated frequently and powerfully and embedded with everything that needs to be done, how, when and by whom (Purdassee, 2008). Information should be shared with all stakeholders during meetings and informal discussions about the transformation the changes will bring (Van der Westhuizen, 2008).

5.6.1.4 Monitoring and Evaluation Plan

No monitoring and evaluation plan was in place at the time of the research as indicated by them all;

"No monitoring and evaluation was in place with the implementation thus far. It is not embraced yet". (M4)

The literature shows that evaluation indicates the degree of success of the change process and the change itself. It will enable the change agent to ascertain the success of the change and will also serve as a point of departure for other change processes that need to be tackled, Lewin's three-step model of change (as cited in Burnes, 2009). Monitoring should be included in the process, by devising a time schedule for reporting results and identify sources of aid in reaching the desired outcomes (Van der Westhuizen, 2008).

5.6.1.5 Change Management Models

The question on whether any change management model was used was given as a negative by five of the participants, while one was not sure about any change management model being used for the implementation of CBET at VTC's in Namibia;

"...a lot of theories and various models were presented during orientation but the committee should know more about a certain model being used or not". (M1)

According to literature, the management of a change initiative consists of a number of stages, namely determining the need for the change and initiating it, planning the change, implementing the change, being prepared for résistance to change and managing it, stabilising the results of the change, and learning from the process (Amos et al., 2012). Lientz and Rea (2004), concur with them by stating that, change management is a process to plan, design, implement, manage, measure, and sustain changes in the business processes and work.

Literature further suggested three models on which this change effort could have been based;

- The first model looked at a combination of, Lewin's Three-Step model (as cited in Burnes, 2009) and a change process suggested by, Walker and Vogt. This model has broad applicability to most change situations. It clearly incorporates key aspects of many other change models and it especially overcomes any confusion between the processes (methods) of change and the phases of change the sequential states that organisations must go through to achieve successful change.
- The second model of managing change is referred to as the, Bullock and Batten's four-phase model of planned change. This model is just as the previous one, about change at individual level and group level. However, OD practitioners have recognized, as many others have, that as 'organisations are being reinvented; work tasks are being reengineered; the rules of the marketplace are being rewritten; the fundamental nature of the organisations is changing' and therefore, organizational development has had to adapt to these conditions and broaden its focus out beyond individual and group behavior.
- The last model to facilitate change in an organisation is referred to as, Kotter's
 eight step model for change. This model strives to eliminate common errors and
 their consequences for successful organizational transformation. Kotter (as cited
 in Burnes, 2009), stresses that these eight stages should be seen as a process

rather than a checklist and that successful change of any magnitude goes through all eight stages, skipping even a single stage or getting too far ahead without a solid base, almost always creates problems.

Unfortunately no change management model was used to develop a strategy as a guiding tool and as a sense of direction for a smooth phasing-in, phasing-out plan or roll out plan including, progress checks in the form of a proper monitoring and evaluation plan. It is however, the responsibility of the CEO to manage the planning, co-ordination and implementation of the activities in the change process.

5.6.1.6 Handing Over of Office

During the period that the implementation started, a few members of management left the organisation, new ones were appointed and the position of the CEO was filled by three different people. Five of the participants could not really say whether training was offered to the successors especially in the case of the CEO.

It is the task of the CEO to see that a positive attitude towards change is created to ensure stability. All strategies, concepts, attitudes, structures, systems, processes and reactions must be positive towards change to obtain stability as quickly as possible in a new system.

5.7 Conclusion

This chapter gave an interpretation of the data presented and analysed in chapter four. The interpretation was based on the different themes and sub-themes identified under each sub-question formulated from the main question. These revealed that there was a significant difference in the experience and education standards of the participants, despite them all being in management level. The interpretation of the data was then linked to the theory/literature review discussed in chapter two, to find out if and how the data that emerged from the study, identifies with the existing literature and to what extent the literature was similar or different from these findings. A list of recommendations was drawn up as given by the participants for future references as a point of departure. The next chapter will give a summary of the main findings under each of the sub question as well as the conceptual framework designed in chapter three.

CHAPTER SIX: SUMMARY OF MAIN FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents a summary of the main findings of the study, as established in chapter 4 and discussed in chapter 5, in relation to the main research question and its sub-questions of the study. The purpose of this case study was thus, to uncover the effectiveness, of the transformation process of developing and implementing the CBET as a method of training in vocational training centres in Namibia, by the NTA. The actual strategic goal, against which such perceived effectiveness was measured, was the establishment of a CBET programme in VTC's in Namibia.

The data gathered for this study were based on the following main objective:

• To investigate the effectiveness (according to the subjects views) of the transformation process for a Competency Based Education and Training (CBET) in Vocational Education Training Centres in Namibia.

However, this section will first give an overall summary about the participants' profiles to determine their compatibility for the proposed change.

This chapter will further discuss the main findings on each sub-question against the theoretical basis and conceptual framework as designed in chapter two of the study. The conceptual framework was designed as an integration of the three change management models discussed in chapter two.

Participants' profiles

All six participants' are in the possession of a tertiary qualification suitable for their positions, although they range from undergraduate qualifications to post graduate qualifications (Diploma to Masters Degrees). However, only three have a master's degree in education while one has a masters' degree in human resources development. One has a bachelor's degree in Accounting and Finance which is still suitable for his position as Manager: Training Fund. The last one has a diploma in vocational education and training, giving him the advantage, as he has a theoretical base for CBET.

Different types of training programs were offered to these participants' with regards to CBET such as, how to develop a curriculum and unit standard development, however, not all could confirm that they indeed got similar training.

As stated before, Namibia has embraced the CBET system, based on unit standard qualifications. It would therefore, be advisable for all managers both existing and new, to receive the same type of training with regards to CBET.

Although four of the participants indicated that they were part of the initial inception of the CBET, their number of years in their current positions at the NTA, as well as the indication they have given when CBET was first phased-in, is somewhat contradictory. The longest time span given by one of the participants was seven but an indication was given that the program was started in the early 2000's, with a phasing-in that started in 2006. This gives an indication that managers were not sure precisely when the actual pilot started and that CEBT was on the map long before anyone of them started at the NTA.

Another interesting factor is that, three of the respondents indicated that they did not have any experience in CBET before starting at the NTA but four of them indicated that they were part of the initial inception.

The NTA should strive to employ individuals with proper qualifications, as well as the necessary experience and background on the new curriculum, should they recruit new managers in future.

6.2 Discussion of Objective 1:

Objective 1: To Determine the Driving Forces for the Proposed Transformational Change (CBET implementation) to be enacted in VTC's in Namibia?

From the data collected under this objective the following emerged:

- There was a change in curriculum from a modular system to a unit standard competency based education and training system.
- A needs assessment was done to identify the need for a transition from the old modular system to the new CBET system, by means of consultants from different

countries across the world, who embraced the system long before it was introduced in Namibia. The idea was that, Namibia could benefit from their flaws and lessons when implementing the CBET system in the country. However, it should be taken into account that different countries have different needs based on their socio-economic conditions. Thus, Namibia needs to define CBET in its own context and what would be required for such a system to be implemented successfully, to achieve gainful employment and sustainable livelihoods (African Union, 2007).

• The context of the change was political, based on a decision from Cabinet, economical, industries were not happy with products from VTC's as well as social, due to an outcry for a better system from society. However, what surfaces is a strong political influence according to ESIP (2006). Kerka (1998), states that competency standard qualifications are propelled by strong political impetus to prepare the workforce for the competitive global economy. Thus, the NTA was established to take over management and the direction of VET systems in Namibia (NAMCOL, 2010).

The implementation of a CBET system was planned rather than emergent, based on the following reasons:

- The needs assessment done by the Namibian government with the aid of consultants,
- The implementation of the Education and Training Sector Plan (ETSIP, 2006) and
- The establishment of the NTA
- One of the strategic objectives of ETSIP was to restructure VET in Namibia by embracing CBET to improve the quality of VET.

Although various reasons were given for the change, the main reason was to improve the effectiveness and efficiency of VET in Namibia, as VET trainers could not produce graduates with skills of the right type and quality, due to the mismatches in demand and supply. This happened due to the isolation of industry from the VET

system, which was dominated by governments' rigid policies and taxes that were too heavy for industry to afford.

The outcomes of the new system were to enhance the quality of the end products, produce competent graduates, produce competent skilled workers, to provide a skilled workforce, to establish a demand driven system to respond to industry's needs in order to secure employment, eradicate poverty and to compete globally.

The CBET system is supposed to have a roll out plan but participants were not sure as to when precisely the phasing-in started and by when all VTC's are supposed to be CBET compliant.

6.3 Discussion of Objectives 2 and 3

A summary of the enabling and restraining forces, identified in chapter 4 and discussed in chapter 5, is laid out in table 6.1, in order to compare the positives and negative indicators that enhanced the process or acted as inhibitors for the said change.

Objective 2: To Determine the Factors that Acted as Enablers to the Process of Implementing CBET in VTC's in Namibia.

Objective 3: To Identify the Factors that Acted as Challenges to Inhibit the Process of Planning and Implementing CBET in VTC's in Namibia, and how were these dealt with?

Positive Indicators	Negative Indicators
Resources	Resources
Commitment and support from the government and the NTA	Lack of exposure, experience and training
Funds available from the government	Poor human resources
Workshops and training	Outdated machinery, lack of equipment
External consultants on board	Rushing into the new system, poor
Stakeholders serving on various	planning

committees

Human capital and experience people

Piloting the project

Material development programs registered with the NQA

Negative attitude and mindset of staff

Confusion and conflict due to running a dual system in parallel

Lack of communication and consultation

Poor support from drivers such as the government and NTA

No feedback on challenges and failures encountered from the pilot

Absence of a Vocational Education and Training Management Information Systems (VETMIS)

VTC's not CBET compliant yet

Lapsing back into the old ways of doing things

Uncertainty about the outcome of the change effort

Training received on CBET?

Developing a curriculum

Material development

Unit standard development

Assessment and moderation

Alternatives to Restraining Forces

To evaluate and identify the shortcomings on the implementation thus far, for further action

Structures such as the PRO in conjunction with the industrial skills committee to liaise with industry and stakeholders should define CBET in a Namibian context and to identify demand driven occupations

Equipping VTC's with the necessary equipment and tools through a training levy system

Workshops and skills upgrading training on the transfer of training, to

	stay abreast of latest developments and technologies
	Defining CBET in a Namibian context and to have regular meetings with management teams to discuss training related issues
Transfer of Training	Stakeholders to determine the success or failure of the change effort
Assessment and moderation	
Principles of CBET	The NTA, reasons being: they are spearheading the process, they are the
Facilitator training	driving force and regulatory body, they need to convince stakeholders to buy
Health and safety	in, they are the agents of change
Unit standards development	VTC managers, by monitoring and evaluating the implementation of CBET
Developing training related materials	evaluating the implementation of CDE1
	All training providers, public as well as private
	The industry, reasons being: they are the recipients of the end products, they need to approve the quality of the end products and they are the subject matter experts
	All stakeholders
	The Government, as it provides the budget as well as developing policies regarding issues around articulation and collaboration with institutions such as the NQA

 Table 6.1 Enabling and restraining forces

As can be seen from table 6.1 above, it is quite clear that the NTA and its stakeholders did a lot, in terms of enabling the change process. However, the negative indicators currently outweigh the positive indicators. This picture can change if the NTA is going to work on the alternatives given, to act against the restraining forces in order to change them into a positive. Furthermore, should emphasis be placed on strengthening the relationship between the various stakeholders; by determining

expectations from each party and trying to aspire to those expectations? Each role player should be reminded of their respective roles and priorities in the whole change effort, should they want to ensure that products acquire the competencies required to produce a competent workforce.

6.4 Discussion of Objective 4

Objective 4: To Establish the Effectiveness of the Change Management Support Strategies/Models Employed by the Change Agent in the Implementation of CBET in VTC's

Objective four is about the facilitation of the proposed change by the NTA, as agent of change, by means of its support mechanisms put in place for the implementation of a CBET by VTC's in Namibia.

The following emerged:

- There was no change management team established with a transition manager to spearhead the change process.
- The change agent did not draw up a change management plan with a vision, mission and proposed strategy on how this implantation is supposed to take place. This means no proper roll out plan for phasing-in phasing-out was designed.
- They did not design a communications plan in terms of how this whole effort was going to be marketed and implemented. However, informal communication platforms were used such as formal and informal meetings, written communications and workshops amongst others.
- There clearly was not a monitoring and evaluation plan in place, although the
 project started off as a pilot in two of the VTC's. No feedback was given in the
 form of a proper report based on the difficulties/obstacles experienced and
 identified for further action.
- No change management model was used for CBET per se to provide guidance and direction for the whole proposed change, and lastly;

• Too many changes within management, including several CEOs, over the past three years, lead to a slowdown in the implementation of the proposed change.

6.5 Discussion of findings based on the conceptual framework

The conceptual framework discussed in chapter two, upon which this study was based is a combination of Lewin's Three-Step Model (as cited in Burnes, 2009) and a change process suggested by, Walker and Vogt (as cited in van der Westhuizen, 2008), the Bullock and Batten's four-phase model of planned change and Kotter's, eight step model for change (Purdassee, 2008; Burnes, 2009). Table 6.2 below, represents a checklist based on the steps identified in the new model and what emerged from the findings.

Suggested Step in the New Model	Findings from Data
1. Needs assessment	Was done by the GRN, with the assistance of outside consultants
2. Planning phase	It was a planned change effort, but no change management plan was drawn up
3. Establishing a change management team	No change management team was established
4. Formulating a communication plan	No communication plan was designed
5. Piloting the project	Piloting started in two VTC's but no monitoring and evaluation of the pilot was done
6. Remove obstacles and challenges	Obstacles and challenges were not formally identified due to the absence of a monitoring and evaluation plan based on progress checks
7. Working towards change	Obstacles were not removed yet, although suggestions for creating alternatives to obstacles were given

8. Integrating changes	Could not commence as new changes based on steps 6 and 7 were not created and implemented
9. Evaluation	No evaluation of the implementation process was done thus far.

Table 6.2 Checklist on change management for findings

It is clear from the findings that although so many elements were in place for the proposed change in terms of what evolved under the discussions of objectives 1-3. This includes the triggers/reasons for the change, the enabling forces, and alternatives to restraining forces including, the stakeholder who could affect the successfulness or failure of the programme. However, with the absence of a proper change management model, it can be said that although progress has been made, the process was not facilitated effectively enough to show enough evidence of positive results achieved thus far.

6.6 Recommendations

Based on the findings discussed above, participants' came up with their own recommendations of how they could make the process more effectively. These recommendations were based on the lessons learnt from these experiences. This could be the starting point (with the help of other change management model) to create their own strategy or change management plan for the future. They suggested the following steps:

- 1. Do a situation analysis to see what the current situation on the ground is.
- 2. Define CBET in a Namibian context, set the required standards for the qualifications.
- 3. Get buy-in from all stakeholders to drive the process together as a team, consultation with all stakeholders and proper planning is needed, the GRN should avail more resources, the utilization of the levy system should be promoted and the system should be well funded.
- 4. Appoint an independent agent/consultant for monitoring and evaluation for the purpose of providing recommendations for improvements. Procure experts to

- fasten the process and to see what money has been spent on the old system, what can be changed overnight, what is needed and what should be discarded.
- 5. Secure the systems in place before implementing it. Draw up a comprehensive change management model as well as a communication plan/strategy.
- 6. The curriculum and the resources must be in place, workshops should be equipped and competent instructors on CBET should be appointed.
- 7. Expose trainees to the latest technology to close the gap between mismatches in demand and supply.
- 8. Don't make hasty decisions and rush into things, learn from the experiences and do things right. Pilot the project first in order to prepare people for what is to come. Get feedback and based on what works practically or not you can go on.
- 9. Do progress checks to see where it can be improved. Reflection about what has gone wrong and why and take it from there, termed "Lessons Learnt" sessions, that can be documented and used for the future.
- 10. Listen to people to see what concerns they have and whether they understand the whole change effort. Admit your mistakes, don't try to defend it.
- 11. Implement a Vocational Education and Training Management Information System

6.7 Limitations of the study

The first limitation of the study is the scope within which it was executed. Since the study comprises a case study it means that its focus was narrowed down to the experience of one single case (NTA) for a defined period of time resulting in learning more about a little known or poorly understood situation. Therefore, the researcher cannot generalize the findings to other institutions dealing with changes (Leedy & Ormrod, 2010). Since the NTA, was established to take over management and direction of VET systems in Namibia by developing and implementing the CBET system as the

preferred method of training in all VTC's in Namibia, the scope of the study thus included the NTA as the only agent of change.

It should furthermore be stressed that, since the term 'case study' pertains to the fact that a limited number of units of analysis (often only one) is studied intensively (Welman, et al., 2012), the units of analysis in this study included only a few individuals, from only one institution, regarded as the agent of change (NTA). The units of analysis comprises of 6 members of management out of the 8 members of management; excluding one manager who did not want to take part in the study as well as the acting CEO, as this participant has only been part of the organisation for a few months, at the time of the study.

Another limitation to the study was the fact that triangulation could not be done, as the researcher did not make use of three different data collection instruments to corroborate the findings but rather two only, a semi-structured interview with those members of management identified for the study as well as document analysis and appropriate secondary data in the form of literature identified in relation with the main research question and sub questions.

The last limitation lies within the type of sampling techniques used for selecting the participants. However, although purposive sampling may be very appropriate for certain research problems, it can result in sample bias as the selection of the participants is determined by the researcher. It is therefore, impossible to evaluate the extent to which such samples are representative of the relevant population thus, not possible to generalize the results (Welman et al., 2012).

6.8 Recommendations for Further Study

The study was based on one group of participants, employed in management positions at the NTA, thus, multiple interpretation based on experiences of all other role players w.r.t CBET were not taken in consideration, such as the subordinates of these managers who were also involved in the transformation from one curriculum to another. Industry and members of the industrial Skills Committees, the views and experiences of those who were part of the inception of CBET who left the company, as

well as VTC's managers and staff, were other possible respondents that were not part of the study.

This study would therefore, recommend that some, if not all of these members be part of future research, on the implementation of CBET to obtain a broader perspective of the effectiveness there off.

6.9 Conclusion

This research was based on a single case, to determine how effectively a new training system was implemented by a certain change agent. Since it was based on an interpretive case study design, the unit of analysis was very specific in obtaining the perceived views of one group of participants only, regarding the effectiveness of the implementation of the said system.

The effectiveness could only be determined in terms of the research questions formulated by the main research question. From the findings, it can be deduced that the implementation of the new system was not totally ineffective, but also not a hundred percent effective. Research question four was not achieved at all, meaning that in the absence of a proper change management model or strategic plan the implementation was not really successful. Recommendations were given by the participants themselves in how to improve the effectiveness there off.

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APPENDIX A: Participants' profile

Participants' Profile	
Participant no:	
Division:	
Highest Academic qualification when joining NTA:	
Gender:	
Previous occupation: Years working for previous company:	
Roles and duties in previous company:	
Years of experience in Education/Training: Years of experience in CBET:	
Position at NTA:	
Years at NTA:	
Part of the planning and inception of CBET?	
What was your position with regards to the implementation of CBET, if other	
than current position?	
Briefly describe your responsibilities with regard to the CBET implementation:	

Thanks

APPENDIX: B

Interview guide

Organisation: NTA

Interviewer: Lukas Jakobus Bock

Interviewee:

Date: Time:

Purpose of interview: The purpose of this study is to evaluate the perceived effectiveness of the transformation process of developing and implementing the CBET as method of training in vocational training centres by the NTA.

Research Questions:

The main objective that frames this study was to:

Uncover the perceived effectiveness (according to the subjects' views) of the transformation process for a Competency Based Education and Training (CBET) in Vocational Education Training Centres in Namibia.

According to the perspective chosen by the actors 'perceived effectiveness', the following four sub-objectives had been investigated:

- to determine the driving forces for the proposed transformational change (CBET implementation) to be enacted in VTC's in Namibia?
- to determine the factors that acted as enablers to the process of implementing CBET in VTC's in Namibia?
- to identify the factors that acted as challenges to inhibit the process of planning and implementing CBET in VTC's in Namibia, and how were these dealt with?
- to establish the effectiveness of the change management support strategies/models employed by the change agent in the implementation of CBET in VTC's.

Ethical Issues: Before we start with this interview, I would like to assure you that all information will be treated ethically, with regards to anonymity, confidentiality, honesty, professionalism, respect and upholding the integrity of all participants.

1. Background to the proposed change effort: Drivers and Triggers

- I. What specifically changed?
 - Were the proposed changes based on the outcomes of a need assessment?
 - If so, who conducted the assessment?
 - What was the context of the change? (Managerial (internal), Political or Social (external)?
 - Was the change planned or emergent?
- II. Why did this change take place?
 - What triggered the change? (Managerial (internal), Political or Social (external)?
 - What were the reasons for change?
- III. What were the intended outcomes of this change?
 - What outcomes and business results did the driving forces need to achieve through this change effort?
- IV. What were the temporal aspects of this change?
 - Are you aware of a specific role out plan for the implementation of CBET at VTC's?
 - When did it start and when was it supposed to end?

2. Success Factors

- 1. What factors enhanced the change process in terms of staff attitudes and perceptions of the change?
 - What was the enabling forces enhancing the change process?
 - Did you receive any training with regards to the preparation and implementation of the anticipated change process?
 - Did any other transfer of training take place to prepare members who formed part of the change process?

3. Inhibiting Factors

- I. What factors act as stumbling blocks to the change process in terms of staff attitudes and perceptions of the change?
 - What were the restraining forces that acted as inhibitors to the change?
 - Did you create any alternative forces to operate against restraining forces, and if so, what were these?

II. Who can influence the success/failure of this change? (Groups, individuals, stakeholders?)

4. Management Support- Change management facilitation process

- I. Did you formulate a change management team?
 - If so, what criteria was used to select the members of the team
 - If a team was selected, who formed part of the team w.r.t., stakeholders?
 - What was the role(s) of the team?
 - If, not was your role?
- II. Did you design a proper communication plan?
 - If so, how was the change communicated?
 - What was the nature of the information/message being sent?
 - What media/platforms were most appropriate for acceptance of this message?
 - How often were means of communication employed?

III. Did you follow a specific change management model/plan/strategy roadmap that was employed as guiding tool for the preparation and implementation of the proposed change?

• If so, do you have any documented change management procedures to be followed?

IV. Did you have a proper monitoring and evaluation plan in place to check the progress of the proposed change?

- If so, what strategies did you employ?
- How successful were they? Elaborate.

 Did you have milestones and progress checks for each step of the implementation phase? If so, could you give a brief description of how it was done?

V. Have any changes been made that you are aware of in terms of managers leaving or joining the company during this period of change?

• If so, how was the handing over/take-over of office handled?

5. Recommendations

- I. If you have to do it again, would you bring about any changes?
 - If so, which are these changes and why? /What would you do differently and why?
 - If not, why not?
 - What lesson(s) did you learn from this experience?

II. Do you have any other recommendations about the implementation of the proposed change?

Closure: Thank you very much for your time. Your knowledge and insights will be very helpful to me. Would you like to receive a copy of the report?

Once again, thank you.

Ending time of interview

APPENDIX C

Part 1

As part of my studies for reading towards a Masters in Leadership and Change management at the Polytechnic of Namibia, I have to complete a half a thesis for which I need your assistance.

The research consists of the following:

The role of NTA in managing transformational change in VTC's

All I am asking of you is:

A few minutes of your time to participate in my research project by providing me with the necessary information pertaining the topic of the project.

Part 2

It is important that you also read and understand the following general principles:

- 1. Participation in the assignment is completely voluntary and no pressure, however subtle, may be placed on you to take part.
- 2. It is possible that you may not derive any benefit personally from your participation in the assignment, although the knowledge that may be gained by means of this study may benefit other persons or communities.

- 3. You are free to withdraw from the study at any time, without stating reasons, and you will in no way be harmed by so doing. You may also request that your data no longer be used in this study.
- 4. You will be given access to your own data upon request.
- 5. You are encouraged to ask me any questions you may have regarding the study and the related procedures at any stage. I will gladly answer your queries.
- 6. If you are a minor, the written consent of your parent or legal guardian is required before you participate in this study, as well as (in writing if possible) your voluntary assent to take part no coercion may be placed on you.
- 7. The research objectives are always secondary to your well-being and actions taken will always place your interests above those of the study.

Title of the Study:

The role of NTA in managing transformational change in VTC's

I, the undersigned

Full names & Surname

have read the preceding premises in connection with this study, as explained in *Part 1* and *Part 2* of this informed consent form, and have also heard the oral version thereof and I declare that I understand it. I was given the opportunity to discuss relevant aspects of this study with the researcher and I hereby declare that I am taking part in this study voluntarily.

	_
Signatura	Date:
Signature.	Date