

**THE FEASIBILITY OF COMPETENCE BASED EDUCATION AND  
TRAINING POLICY IN THE UGANDAN CONTEXT**  
**A case: The Painting and Decorator Programme Lugogo Vocational Training  
Institute**

By

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2010/U/HD/228/MVP

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## **DECLARATION**

I ABEINE ABDUL hereby declare that the dissertation for the masters of vocational pedagogy at Kyambogo University, here by submitted by me , has not previously been submitted for a degree at this or any other university and that it is my own work in design and execution

## **APPROVAL**

The undersigned appointed by the dean of the graduate school, have examined the thesis entitled,

### **FEASIBILITY OF COMPETENCE BASED EDUCATION AND TRAINING POLICY IN THE UGANDAN CONTEXT.**

A case: the painting and decorator programme Lugogo vocational training institute

Presented by Abeine Abdul, Registration Number 2010/u/HD/228/MVP, a candidate for the degree of master of vocational pedagogy, and here by certify that in their opinion, it is worthy of acceptance.

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## **DEDICATION**

I dedicate this master's thesis to my Father and to my mother who supported me financially, morally or otherwise, brothers, and sisters who have loved me always and supported me during this course.

To our lecturers and my colleagues and friends from Oslo house Cohort 2 as well as the entire NOMA house for the encouragement and support throughout the course.

God bless you all

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## ACRONYMS

<b>A&amp;C</b>	Assessment & Certification
<b>ANTA</b>	Australian National Training Authority
<b>APL</b>	Accreditation of Prior Learning
<b>AQF</b>	Australian Qualifications Framework
<b>AQTF</b>	Australian Quality Training Framework
<b>ATP</b>	Assessment & Training Packages
<b>BTVET</b>	Business, Technical and Vocational Education and Training
<b>CBA</b>	Competence-based Assessment
<b>CBE</b>	Competence Based Education
<b>CBET</b>	Competency Based Education and Training
<b>DACUM</b>	Develop a Curriculum
<b>DIT</b>	Directorate of Industrial Training
<b>FE</b>	Further Education
<b>FHEQ</b>	Framework for Higher Education Qualifications
<b>GNVQ</b>	General National Vocational Qualification
<b>GoU</b>	Government of Uganda
<b>GTZ</b>	German Technical Co-operation/Deutsche Gesellschaft für Technische Zusammenarbeit
<b>IK</b>	Indigenous Knowledge
<b>ITA</b>	Industrial Training Act
<b>ITAB</b>	Industry Training Advisory Body
<b>ITC</b>	Industrial Training Council
<b>LSC</b>	Learning and Skills Council
<b>LWA</b>	Learning-working Assignment
<b>MC</b>	Modular Curriculum
<b>MoES</b>	Ministry of Education and Sports
<b>MSC</b>	Manpower Service Commission
<b>NCVER</b>	National Centre for Vocational Education Research
<b>NQF</b>	National Qualifications Framework
<b>NTO</b>	National Training Organisation

<b>NVQ</b>	National Vocational Qualification
<b>OP</b>	Occupational Profile
<b>PEVOT</b>	Promotion of Employment Oriented Vocational and Technical
<b>PEX</b>	Practical Exercise
<b>PTI</b>	Performance (Practical) Test Item
<b>QCA</b>	Qualifications and Curriculum Authority
<b>RPL</b>	Recognition of Prior Learning
<b>TAFE</b>	Technical and Further Education/
<b>TEK</b>	Traditional Environmental Knowledge
<b>TIB</b>	Test Item Bank
<b>TVEI</b>	Technical and Vocational Education Initiative
<b>UGAPRIVI</b>	Uganda Association of Private Vocational Training Institutions
<b>UPE</b>	Universal Primary Education
<b>UVQ</b>	Uganda Vocational Qualification
<b>UVQF</b>	Uganda Vocational Qualifications Framework
<b>VET</b>	Vocational Education and Training
<b>WTI</b>	Written (Theory) Test Item

## ABSTRACT

The efforts to effectively reform Business Technical Vocational Education and Training (BTVET) towards a Competence Based Education and Training (CBET) in Uganda began in 2004 with the development of the Uganda Vocational Qualifications Framework instruments in order to effectively enhance CBET mechanisms in Uganda's education systems. Four years later the introduction of Assessment Training Packages (ATPs) into selected BTVET learning institutions has caused radical changes both negative and positive in teaching, learning and assessment processes within the BTVET sector in Uganda. . In accordance with the aims of this thesis, we sought to understand the sequence of events in the evolution of CBE/T in Uganda, this study therefore brings an overview of relevant reports, recommendations and reviews, as well as voices of expatriates pertaining to CBET seeking to answer two fundamental questions;

*Is there a place for a competency-based approach to be formally integrated into Uganda's formal BTVET sector?*

*Is the integration of CBET into the current formal BTVET context practical?*

A qualitative methodology was used to carry out the study. The data examined comprised of documents pertaining to competency-based programs, information from descriptive surveys and in-depth interviews conducted with a group of participants with a long term experience in teaching, and/or designing curriculum for competency-based programs in the BTVET sectors. The Data collected was coded throughout the collection process and analyzed for identification of themes and interpretation.

Results of the study suggest that competency-based learning has a place in the formal BTVET sector and can be effective in those elements of a course which place an emphasis on technical tasks. Its suitability was acknowledged as a component part of an integrated approach rather than a single approach. Results also suggested that the nature of competency-based programs in the BTVET sector tends to produce a rigidity of thinking, based on the ability to follow specific procedures, whereas the aims of the BTVET sector especially institutions of higher learning require graduates to acquire functional knowledge based on analytic inquiry. This implies that the BTVET sector needs to look 'beyond skill' to producing graduates with the required generic skills and attributes considered to be both employable and acceptable within the broader community.

Results also suggested that given the status of BTVET in Uganda (infested with low levels of financing, inadequate quality assurance mechanisms, slow response to technological advancements, lack of binding public private partnerships, ill equipped school workshops and laboratories, negative attitudes towards TVET etc.) CBET can best be practical and sustainable at lower levels of Competences, and in selected BTVET learning institutions

# **CHAPTER ONE**

## **1.0. INTRODUCTION**

### **1.1. Overview**

This report is an examination requirement for the degree of master in Vocational Pedagogy; The aim of this study was twofold: to understand the concept of CBE/T in the Ugandan context through the perspectives of expatriates by reviewing the attitudes and perceptions of participants interviewed regarding CBE/T; and to explore the views of those participants in relation to the practicability and sustainability of incorporating a competency-based approaches into the BTVET sector. Generally the report consists of three chapters: Chapter one is the introduction and its purpose is to introduce the reader to the researcher and to the reasons as to why the researcher undertook this study, Chapter two is the literature review, examines relevant scholarly view regarding the study and as well as analysis from CBET related documents and report on the BTVET sector; Chapter three describes the methods, tools/ instruments and procedures i employed in collecting, processing and analyzing data from the various sources; in Chapter four of this report i labour to present the data and provide an in-depth analysis of the findings in consideration of scholarly views provided in chapter two of the study; and in Chapter five I made relevant conclusions as regard to the study, provided a number or recommendation on what ought to be done to achieve the desired outcomes.

### **1.2. Historical back ground to the study**

Before colonial intervention, Uganda like many other African countries relied mainly on indigenous knowledge (IK)/ Traditional knowledge (TK),traditional environmental knowledge (TEK) and local knowledge. These were generally long-standing traditions and practices of certain regional, indigenous, or local communities, it encompassed the wisdom, knowledge, and teachings of these communities.<sup>1</sup>

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1. Acharya, Deepak and ShrivastavaAnshu (2008): Indigenous Herbal Medicines: Traditional Herbal Practices, Aavishkar Publishers Distributor, Jaipur- India. ISBN 9788179102527. p 440

Indigenous knowledge (IK) reflected a community's interests and communities depended on their traditional knowledge for survival. Indigenous knowledge systems (IKS) were based on the lifestyles of people and divulged skills that were only relevant to the livelihoods of the people in that community at that given time and as times and situations changed so did the content and the methods of delivery (Lave and Wenger 1991). This meant that the world of work determined what kind of content, skills, knowledge and attitudes imparted. (Peña, 2005, p. 198).

With the introduction of colonial rule in Uganda in the 1800's along came with publically (mainly academic in nature) funded education in the 1880's and in the 1920's formal vocational education and training was introduced into the education system by the church missionaries with the help of the protectorate government.<sup>2</sup>

Formalizing vocational education in particular was quite a challenging task for both the colonial masters as well as the indigenous people because adopting and adapting to formal agriculture and technical education in Uganda's education system was quite complex. It involved development of a curriculum that all BTVET institutions were required to follow, formulation of syllabi, Content, standardizing methods of delivery, and formulation of policies to manage this reform. This marked the beginning of a transition from an informal work based education and training into a formal curriculum based education and training.<sup>3</sup>

On departure of the colonial masters the Uganda Government embarked on the journey to reform BTVET: the immediate post-independence education policy drafted by the caste education commission laid emphasis on; equal opportunity to education for all, raising standards of agriculture and technical education and provision of adult education. These efforts however were put to ashes by the onset of a nearly two decade civil unrest.<sup>4</sup>

Events changed, in the late 1990's and especially since the beginning of the 2nd millennium. BTVET reemerged on the development agenda of the Uganda government. A fresh awareness of

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<sup>2</sup>Uganda. Education sector; Policy overview paper, May 2006 by ENABLE (Energy for Water-Health-Education)

<sup>3</sup> Book Review of Chapter 5 and 6, History of Education in Uganda J.C Ssekamwa, Fountain Publishers (2<sup>nd</sup> Edition) Kampala Uganda, ISBN 9970 02 059 5

<sup>4</sup>Ministry of Education and Sports (2003) Draft Policy Document on Technical and Vocation Education and Training in Uganda

the critical role that TVET can play in economic growth and national development dawned among policy makers and within the international donor communities as reflected in the various educational acts, education sector investment plans, the various poverty reduction strategy documents and education sector strategic plans.<sup>5</sup>

Currently efforts are underway to implement the (BTVET) strategic plan 2011 – 2020. The strategic plan builds on considerable progress in the reform of BTVET towards CBET achieved during the last decade, notably the BTVET Act of 2008 (that revives and reinstates DIT) and the establishment of implementation mechanisms of the Uganda Vocational Qualifications Framework (UVQF)<sup>6</sup>. This continues to Echo the Government's willingness and enthusiasm in promoting the integration of the concept of CBET into the BTVET system. The question only lies in whether or not the recommendations of the document "skilling Uganda" will have far more reaching reforms than the previous policy documents.

#### **1.2.1. Personal background**

##### **As a student and graduate**

Borrowing from my experience as an under graduate student of vocational studies in Art and Design with Education (BVOC, Educ), the evaluation as per the course objective, showed that I had acquired the required skills during the programme and in that regard I was awarded a second class upper degree in Vocational art and design with education (BVAD. Educ) on the 8<sup>th</sup> of February 2008. However my experience as a graduate showed that the skills I had acquired from the programme (BVAD. Educ) were no longer very applicable and very relevant for the available employment in my area of specialization (print making), Thus justifying that the current government efforts to reform BTVET into a competence Based Education and Training is needed and is urgent.

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<sup>5</sup>Meeting of the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF II+) 29-31 May 2007 ADDIS ABABA Ethiopia

<sup>6</sup>Paper on Skills Development presented during the Education Sector Review 2010/11 Theme: Towards Meeting the Challenges in the Delivery of Quality Education and Sports By Patrick Semwogerere Director PDCI

## **As a teacher**

My role as a teacher was, to develop instructional decisions necessary to teach the content, manage a classroom, diagnose and treat individual learning problems and evaluate the performance of my students in accordance to the preset standards.

I enjoyed the profession yet with little remuneration; nothing was more rewarding to me as a teacher, like seeing my learner go over a particular huddle successfully under my instruction. During that time, I was passing on to my students very much the same knowledge and skills I acquired at university and it was the academic success of my learners that gave me the satisfaction I needed from the Job as well as keep me going.

Articulating further the need for a more relevant approach to improving education outcomes where the teacher's goal isn't just the academic success of their learners but acquisition of required competencies and ease of absorption into the job market. An approach well described by the concept of CBET.

### **1.2.2. back ground to the study**

The concept of Competence-Based or Competency-Based Education and Training (CBET) is interpreted in many ways in education systems all over the world, resulting at one end of the scale into a tick list of skills and at the other into a set of generic abilities that transcends disciplinary knowledge and skills.<sup>7</sup>

CBET has secured its place in technical and vocational education and training TVET in Europe and other western societies. However, this is not without controversy. Having successfully connected the education initiatives with labour markets and societal demands, the concept has not stayed unnoticed within the demesne of international education reform<sup>8</sup>.

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<sup>7</sup> Paper on Competence-based curriculum development in higher education: some African experiences by **Wim Kouwenhoven**

<sup>8</sup>Competence Based Education in Indonesia "Evaluating the Matrix of Competence-Based Education in Indonesian Higher Education" **Willem Nederstigt (MSc)** SPAN Consultants, Education Development Programmes, Den Haag [nederstigt@span.nl](mailto:nederstigt@span.nl) / [willem\\_nederstigt@hotmail.com](mailto:willem_nederstigt@hotmail.com)

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Over the past five decades (from the 1960s), the concept of Competence Based Education and training (CBET) has gradually and steadily gained in importance within education reform processes, many western education institutes are implementing while some African institutes are making the transition towards CBET. Although CBET has been found to have some challenges and encounters fierce criticism in western societies, the overall attitude is positive, due to the fact that the concept has proved to be an efficient approach for connecting education to the “world of work”.<sup>9</sup>

CBET being able to develop an international competitive economy and workforce, increasingly education initiatives in various African countries are promoting the incorporation of CBET, Viewed as a new tool to strengthen their local labour markets and economies. In light of the above multiple initiatives are being deployed to support developing countries in reforming their traditional content based VET system towards CBET(Christie 1997; Mansfield 2004). Uganda has not been any different.

In Uganda Initiatives to improve its’ education by introducing of CBET, prompted by international benchmarks and aiming for increased economic development, new education policy reforms pointing towards promotion the adoption of CBET within the country’s public business vocational education and training (BTVET) sector are on-going. Supported by the Germany Agency for Technical Co-operation (GTZ) , In 2008 the MOES with the help of the Directorate of Industrial Training (DIT) embarked on the reforming the BTVET system into a Competence Based Education and Training system (CBET) to advance the efforts to link Education and Training to the real world of work.

In 2008 CBET was introduced with in the BTVET system with the Directorate of Industrial Training DIT as the custodian of the policy and as the institution mandated to design and implement all CBET related activities. In this regard DIT Drafts all Job profiles, design Assessment training packages to suite these profiles, register all BTVET institutions willing to reform toward CBET, carry out all necessary trade tests and certification in accordance to the

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<sup>9</sup>Exploring the Literature:” Competency-based Education and Training & Competency-Based Career Frameworks” Report by the National Health Workforce Planning & Research Collaboration; Sharon Brownie, Janelle Thomas, Mark Bahnisch. Faculty of Health Sciences and University of Queens land Centre for Clinical Research University of Queensland Australia. *October 2011*

Uganda Vocational Qualifications Framework (UVQF) for all registered institutions implementing CBET in accordance to DIT standard (Kyobe, 2010)

Lugogo Vocational Training institute host the first pilot testing for CBET and today the approach is slowly CBET spilling over to other BTVET learning institutions (DIT 2012). Although the majority of the initiatives focusing on introducing CBET in developing countries are fairly new, problems have already been encountered in comparable curriculum reform projects in Indonesia and Ethiopia (Mulder and Gulikers 2010) but The MOES and DIT are still confident that CBET can be introduced successfully within the Ugandan context.

In light of the above, the Concern of this study stemmed from the absence of concrete evidence on the success of introducing the concept of CBET in the non-European, African developing societies like Uganda. This study therefore aimed to contributing to this discussion by observing without prejudice the feasibility of the CBET approach in the frame of BTVET in Ugandan while maintaining a specific focus on the practice in a typical BTVET programme in a formal BTVET learning institution.

### **1.2.3. Motivation**

This study was sponsored by Norwegian Masters Abroad (NOMA), as an examination requirement for the award of a master's degree of vocational pedagogy at Kyambogo University Uganda. As pointed out by the (Kyambogo University, 2009) program which states that;

The master's programme in vocational pedagogy is a high quality international programme in the area of vocational education and training. It will build capacity for training in public and private sectors; it will develop a positive attitude towards skills and competence of students in the partners and universities in the field of vocational pedagogy, economic development, and gender human rights. (p.5)

During the course of study I acquired skills in conducting research in the field of vocational education; I have carried out a number of expeditions in various learning institutions, work

places and communities of Practice in both formal and non-formal sectors, seeking to understand how learning takes place at both schools and in workplaces

During this time it became increasingly clear that most formal BTVET programmes were mainly content based programmes that paid little or in some cases no attention to relevance to the existing occupation/trade or industry thus resounding the urgent need to reform our traditional approaches towards approaches that do not only look at mere imparting skills but rather imparting the skills required by the now existing industry. This study was motivated by the ongoing Government effort to reform BTVET toward CBET while seeking to address the matter above. The reform towards the concept of Competence Based Education and Training (CBET) caught my attention and thus sought to understand the feasibility of this kind of reform in the Ugandan context.

### **1.3. Statement of the problem**

Uganda has introduced CBET into BTVET, a unique case where the world of work determines the content, skills, knowledge and attitudes needed during the learning process for each given programme.

Although the majority of the initiatives focusing on introducing CBET in developing countries are fairly new, problems have already been encountered in comparable curriculum reform projects in Indonesia and Ethiopia; however The MOES and DIT remain confident that CBET can be introduced successfully within the BTVET.

In light of the above, the Concern of this study stemmed from the absence of concrete evidence on the success of introducing the concept of CBET in African developing counties, like Uganda. This study aimed at assessing without prejudice the feasibility of the notion of CBET in Uganda's BTVET context while maintaining a specific focus on a formal BTVET programme in a formal BTVET learning institution.

### **1.4. Purpose:**

The study aimed at assessing the feasibility of Competence Based Education and training in relation to the education context of Uganda

## **1.5. Scope of the study**

### **1.5.1. Content scope**

The study focused on the suitability, practicability of the structure and frame of CBET in Uganda's BTVET sector however it was important to note that, the study could not fully analyze the immediate impact of this reform (CBET) but could draw lessons from the perspectives, perceptions, attitudes and experience of persons who were involved in the attempts to reform BTVET with this approach, while delimiting the study to analysing the frame work of the policy observing its influence on a selected programme (painting and decorator) in a selected formal BTVET learning institution (Lugogo Vocational Training Institute)

### **1.5.2. Geographical scope**

The study was carried out at DIT as well as one formal BTVET learning institution implementing CBET in Kampala central division ; Lugogo Vocational Training Institute, particularly in the department of Painting and Decorator.

### **1.5.3. Time scope:**

The study was carried out from February 2012 to January 2013.

## **1.6. Objectives:**

The objectives of the study were to;

- Define the concept of CBET in the general BTVET frame work in Uganda
- Examine the development and delivery of the painter and decorator program ( delivery of CBET )
- Examine perspectives on the integration of CBET ( attitudes, experiences and perception of attitudes towards CBET and Opinions on introducing CBET into BTVET Programs

## **1.7. Research Questions**

The two fundamental central research questions that this study sought to answer were:

1. *Is there a place for a competency-based approach to be formally integrated into Uganda's BTVET sector?*

## *2. Is the integration of CBET into the current BTVET context practical?*

This study also addressed the following research sub-questions:

- i. How is CBET framed?
- ii. What are those recommendations and strategies imbedded in CBET that are generally and uniquely designed for painting and decorator?
- iii. What is the practice in the department of painting and decorator?
- iv. What role does DIT play shaping and implementing CBET in this programme
- v. Can CBET be spread out to other institutions sustainably

### **1.8. Significance of the study**

The then foreseen significance of the study was fulfilling the researcher's examination requirements for a master's in vocational pedagogy and to be of interest to policy makers state legislators, legislative staff, local board members, local administrators implementing CBET as well as those who attend to the daily tasks of the school i.e. administrators, and teachers.

### **1.9. Rationale for Study**

This qualitative case study was important and needed for several reasons;

- A gap existed in the educational policy and practice literature where the perspectives of education administrators and teachers were not integrated to understand their implications on the reform of BTVET towards CBET.
- CBET approach to training is a new phenomenon in Uganda, not much has been written about its suitability, practicability and effectiveness on training in the Ugandan context. This study therefore was focusing on contributing to this discussion.
- In addition, Studies on policy conducted by the ministry of education and sports and its development partners have mainly been highlighting pertinent areas policy needs to address with an aim to inform the practice. This study focused on the practice in a selected formal BTVET programme, as well as echoed voices of practitioner involved in the development and delivery of CBET so that the lessons learned from the practice could inform policy.
- Finally, this study brought forward information for future researchers who wish to learn more about CBET and its effect on training in the Ugandan context

### **1.10. Limitations of the study**

There wasn't much published data in regard to CBET in Uganda; I therefore didn't bring a lot of literature regarding to the study from our own natural setting but cases from the international arena were revised for comparison.

Understanding the full effect of CBET required one to follow up the graduates at their work places, compare the new breed with the old and make concrete conclusions but the time given for the study was limited and such investigations could not be carried out. The study therefore concentrated on the perspectives and practices in CBET practitioners while observing activities in a selected formal BTVET programme.

### **1.11. Operating terms**

In this study the term feasibility intended to answer the question of suitability, practicability and sustainability

In this study Policy referred to a set of relatively stable goals, and choice of a strategy to reach these goals over a considerable period of time. These can be formulated at any level as long as they are an accepted recommendation to the practice, in this study recommended approached, requirements, and administrative procedures and bureaucracies become policy.

The term BTVET sector in this study refers to all for VET programmes at all level of training certificate diploma degree to masters

The term content based BTVET curriculum/ traditional approaches/ old curricular all meant curricular Used in BTVET learning institutions before the introduction of CBET

Integrated curricular meant curricular or programmes implementing a combination of CBET/ATPs and the content based approach or an approach to training that underpins both knowledge for cognitive development and skills for competence building.

As per this study the term integrated approach, refers to as training approaches the diffuse both the traditional content oriented approaches and protocolic or procedural oriented approached to training and curriculum development.

In this study a qualification was understood as a formal reward for demonstrating competence, based on formal assessment against set standards and provided to the individual in the form of a certificate specifying the nature of the competence.

Assessment is the means by which evidence is gathered and judged to decide if an individual has met the stipulated assessment standards or not.

Certification is understood as a formal procedure to issue a certificate (qualification) to an individual that has demonstrated during formal assessment that he/she is competent to perform the tasks specified in the occupational profile.

Competence /CBET (Occupational) competence is understood as the ability to perform tasks common to an occupation at an acceptable level.

Competence or competency can be understood as the specification of knowledge and skills and the application of that knowledge and skills to the standard of performance expected in the workplace.

Competence-based assessment (or CBA) is gathering and judging of evidence in order to decide whether a person has achieved a standard of competence.

Competence-based education and training means that programmes: have content directly related to work; focus is on 'doing something well'; assessment is based upon industry work; standards, and curricula are developed in modular form

Modules are part(s) of a whole curriculum. Modules can be considered as “self-contained” partial qualifications which are described by learning outcomes or competencies and which can be assessed and certified individually.

Occupational Profiles defines WHAT a person is supposed to do are the reference points for developing assessment standards (specifying HOW or HOW WELL a person is to perform)

### **1.12. Conceptual Back ground**

Over the years it has been proven that, there is a steady relationship between policy and practice. Policy sets the required standards on; who will take over the training, the methods of delivery, enabling access for those who need the knowledge, creation of regulatory frameworks to manage reform and quality of training and much more in any practice. Therefore investment in policy reforms can translate into fundamental reforms in practice<sup>10</sup>

Educational reforms operate on three loosely connected levels: policy, administration and practice. Each level has its own set of problems and its own view of how the education system works<sup>11</sup>.

Reform can originate in any of three ways: (1) changes in professionals' (Teachers) views of effective practice, (2) changes in administrators' perceptions of how to manage competing demands and how to translate these demands into structure and process, and (3) changes in elected officials' views of what citizens demand that result in authoritative decisions. (Elmore & Mclaghlin, 1988)

Notice that there is no necessary logical order among these sources of reform. Practitioners can initiate reform by changing their view of effective practice, leaving to others the task of translating those changes in practice into changes in administrative structure and policy. Alternatively, administrators can initiate reforms in structure and process, leaving to others the task of translating those changes into changes in practice and policy. This also what happens whenever a newly appointed officials enters a system with a new set of priorities Or elected

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<sup>10</sup>Smoke and mirrors: the relationship between research and practice in the UK-proposals for a research and development agenda in social care Mike Fisher (National Institute for Social Work) Peter Marsh (University of Sheffield), Research in Practice

<sup>11</sup> Steady work; policy, practice and the reform of American education. Richard F Elmore, Milbrey Wallin Mclaghlin, Feb 1988. Education research Centre (ERIC)

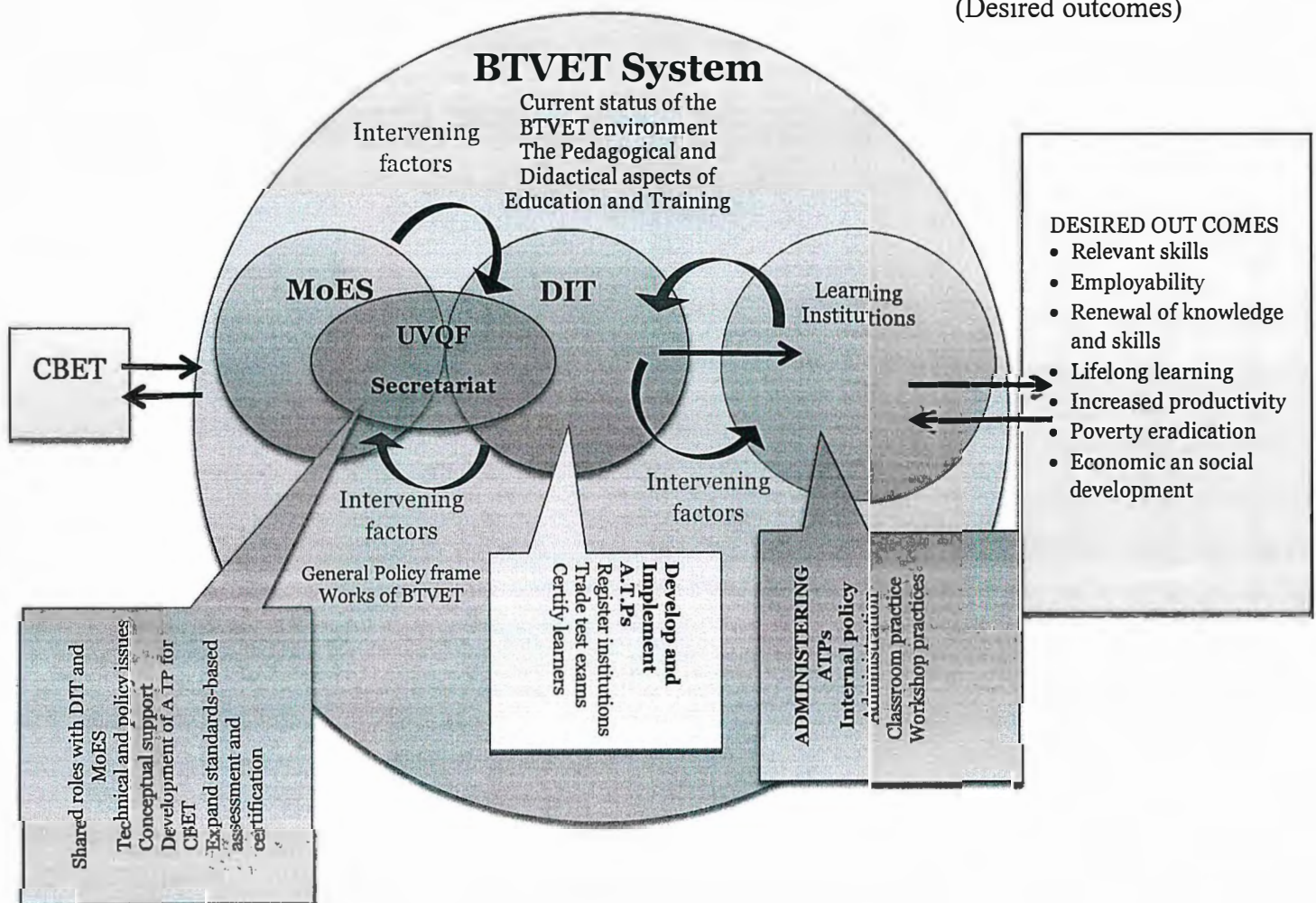


officials can initiate reform by changing policy, leaving administrators and practitioners to work out its consequences. According to (Elmore & McLaughlin, 1988)

The shift towards using policy as an implement of reform should not blind us to the fact that changes in policy are only one piece of a much larger set of relationships underlying reform. Educational reform is entirely a matter of professional judgment, administrative control, and policymaking. But that usually does not exist. Therefore if reforms will be anything other than Cosmetic, they must be composites of policy, administration, and practice. If the channels aren't open among the actors at each level, policy, administration, and practice will never connect in a useful way.

### 1.13. Conceptual frame work

Policy → administration → practice → reform  
(Desired outcomes)



## **CHAPTER TWO**

### **2.0. Literature review**

#### **2.1. Introduction**

This study, as proposed in the first chapter, aimed at evaluating the feasibility of Competence Based Education and training (CBET) in the education context of Uganda by analyzing the relationship between this educational policy and educational practice in formal BTVET learning institutions. This was done while focusing on the strategies and recommendations of CBET and their examining its influence; examining the suitability and practicality on training and highlighting its flaws by echoing voices of practitioners and maintaining focus on the practice painting and decorator programme, Lugogo vocational training institute

#### **2.2. Context**

Policy has become a fundamental lubricant of educational practice, good policy are a basis of good educational practices. It's also important to note that one cannot tell how good a policy is unless they observe how that particular policy is affecting the practice. Meaning that, educational practice is as well a fundamental feeder for educational policy.

According to Herbert M. Turner (2007) a number of policy initiatives support the apparently enhanced role for development work in education. These include the establishment of the department of research at the education governing bodies<sup>12</sup> for the creation of Evidence based Policy to inform the Practice. Educational research and policy are becoming closer and closer overtime. Today research has become a fundamental component of policy that allows policy makers to develop evidence based strategies and best practices for education. Making policy a fundamental lubricant of education policy and the other way round

Over the years it has been proven that, there is a steady relationship between policy, practice and reform. Development work in education a key component of policy formulation in developing to

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<sup>12</sup>The Campbell Collaboration: Systematic Reviews and Implications for Evidence-Based Practice  
Herbert M. Turner, III, PhD, University of Pennsylvania, Editor, C2 Education Coordinating Group  
Chad Nye, PhD, University of Central Florida, Editor, C2 Education Coordinating Group

detail all the knowledge that needs to be addressed, enable policy to set the required standards on; who will take over the training, the methods of delivery, enabling access for those who need the knowledge, creation of regulatory frameworks to manage both reform and the quality of training and so much more in any practice. Therefore investment in policy for reform can translate into fundamental reforms in practice which when sustainable automatically translates into general reform<sup>13</sup> thus articulating that, policy making is a vital and productive investment in education. According to (Ozga 2004)

There has been a very considerable increase in interest by policy-makers in educational research over the years. This follows from policy-makers' concern that research should support development of policies that will cause improvement in the performance of the education systems of any country, in the face of increased international competition in global market economies. Research should identify 'what works' in a context where policy-makers claim to be no longer bound by ideology and thus free to act on the basis of the best available evidence.<sup>14</sup>

Education policy may not always recommend actionable practices: Practitioners drew attention to problems of transferability: policy formulation may not produce clear-cut solutions to inform practice; it may address the situations in particular schools or classrooms not in others. It is not the characteristic of traditional policy to address unique varying problems but of small independent organisation; it also has to do with the point made above about contextualization, and the point made below about replication.<sup>15</sup> According to (Pawson 2001:4), "*What works in education is better understood as (what works for whom in what circumstances)*". Critics of the evidence-based approach suggest that it makes incorrect assumptions about replicating successful strategies into other practices.

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<sup>13</sup>Smoke and mirrors: the relationship between research and practice in the UK-proposals for a research and development agenda in social care Mike Fisher National Institute for Social Work Peter Marsh University of Sheffield, Research in Practice, 2009.

<sup>14</sup>From Research to Policy and Practice: Some Issues in Knowledge Transfer CES Briefing by Jenny Ozga University of Edinburgh No. 27. 31, April 2004

<sup>15</sup>Smoke and mirrors: the relationship between research and practice in the UK-proposals for a research and development agenda in social care, Mike Fisher National Institute for Social Work, Peter Marsh University of Sheffield, Research in Practice

*Systematic review* is the preferred technique of the evidence-based approach. It operates through the classification of programmes/interventions and maps their effects, looking for the maximum impact on the widest scale, so that these powerful impacts can be duplicated by replication of the appropriate programme. The causes of the impact are not explicitly examined. However an intervention strategy often works because of a particular combination of factors. These include shared assumptions among teachers and researchers and policy-makers about why and how something should be done. So repeating the programme without attention to its ‘underlying reasons and resources’ will not necessarily lead to repetition of the impact identified in the systematic review.

All of these points indicate complexity in what is sometimes taken to be a relatively simple transmission process. More work needs to be done on a number of issues, including the ways in which we view the notion policy is trying to address, the suitability of this notion as regards to the educational, economic, political and cultural context of the target group, the implementation as a whole as well as the perspectives and perceptions of the person involved the whole process.

In this study therefore we seek to track the implementation of CBET strategies and recommendation in a linear manner, from the books, to administration and finally to the classroom practices.

Policy → administration → practice

### **2.3. Defining competency**

The meaning of competency has been the subject of much debate, and the following examples of views regarding the meaning of the term ‘competency’ indicate the difficulty in obtaining a precise and universally acceptable definition. This lack of clear definition was recognized by Hoffmann (1999) who stated that:

The term competency is multi-faceted. Some have defined the term narrowly by using a single element of human performance. Others have allowed their definition to overlap several of the elements of human performance. The shifting definition has brought with it a degree of confusion over the nature of the concept and its application (p. 275).

The meaning of competency is therefore a significant issue in the development and implementation of CBE/T. Evers, Rush, and Berdrow (1998) provide definitions of skills and competency, asserting that skills are composed of 'related sets of actions' performed in a particular sequence to successfully achieve a given task, and that competence in any skill might be judged by the level at which these actions are sequenced and performed. They suggest that the acquisition of skills is achieved by a learned progression from basic to advanced skills. However, others such as Norris (1991, p. 336) have argued that: "Competence appears to circumvent the issue of what people need to know, it shifts the balance of power firmly in the direction of practice and away from theory".

Stevenson (1995) postulates the idea that the term competence has evolved over time to imply different meanings in both vocational education and academic settings. He considers that the ordinary or everyday meaning of the word 'competence' has two facets: the first denotes that a person has completed a task or fulfilled an occupation in a proficient manner, and the second denotes a desirable outcome. For instance, a person may be described as a competent musician, athlete or teacher, but we are unlikely to describe someone as a competent murderer. Strebler, Robinson, and Herron (1997) note that different meanings to describe competency have evolved through common usage, with some using the term to describe behaviours and others using the term competencies to denote standards or minimum standards of performance. Chappell (1996) suggests that the 'meaning and context' of the term 'competency' is determined by the person using the term. An important factor in defining the term 'competency' is the manner in which it is used. For instance, Watson (1993) considers that much of the debate in relation to competency-based learning programs relies on whether competency is perceived from a holistic or Cartesian viewpoint. That is to say- whether a person's competency is be judged on their overall attributes or simply on their ability to carry out a set of individual tasks relating to the workplace.

This method of categorising competency as it relates to the workplace may stem from the fact that competency-based learning programs were first implemented in short, certificate level, vocational programs in which more emphasis was placed on task-oriented aspects of the program and less emphasis placed on cognitive requirements.

In America and the United Kingdom, the notion of competency tends to emanate from the holistic concept seen in Fletcher's observation (1991) that in Australia, vocational competency reflects the expectations of employment and focuses on work-related tasks, but in the United States, vocational competence is seen to include the underlying characteristic of the person. In the United Kingdom, the Further Education Unit (1984, p. 3) defines competency as "the possession and development of sufficient skills, appropriate attitudes and experiences for successful performance in a life role".

In Australia, the notion of competency is more vocationally focused and appears to be much more industrially oriented than it is in America or the United Kingdom. It has been suggested by Harris et al. (1995) that the tendency in Australia to focus more on the occupational aspects of competency and less on 'life skills', may have contributed to some of the misgivings that have accompanied competency-based programs. These programs might also be considered 'narrow' in that they have been employment-related with little reference to the values and attitudes advocated in graduate attributes of the HE sector. An example of this was an early Australian definition of competence provided by the Australian National Training Board (1992):

The concept of competency focuses on what is expected of an employee in the workplace rather than on the learning process; and embodies the ability to transfer and apply skills and knowledge to new situations and environments (p. 29).

Hoffmann (1999, p. 276) considers that the term competency comprises three basic constituents: namely, *Observable Performance* which focuses on the ability to complete a task; *Standards* which focus on the quality of the observable performance; and *Underlying Attributes* which focus on the required underpinning knowledge, skills and generic capabilities that can be modified in response to vocational or social requirements. The first two of these constituents are suited to simple task-oriented learning programs in which the objectives are based on performance, conditions and criteria, with little need to place much emphasis on the third criteria. However, in more complex task-oriented learning programs, a much greater emphasis is required from the third constituent.

The notion of competence being linked to performance was disputed by Noddings (1984) who argues that, if we view competence as a set of observable behaviors, then the same set or list of

observable behaviors should be observed by anyone deemed competent in the same field. However, this is rarely if ever the case. She uses the example of competent teachers who may be observed using a variety of individual teaching styles to demonstrate that the nexus between competence and observable behavior is not immutable. This view is shared by Smith and Keating (2003) who state that:

Competence itself is a difficult concept. In fact we cannot really assess competence from performance: we can only infer it. A person's competence is something that lies behind what he or she can actually do. We cannot observe his or her 'competence'. Competence has usually been described as an encompassing knowledge, skills and attitude, but the problem is how to ensure that CBET teaches and assess all three (p. 135).

Chappell, Gonczi and Hager (2000) contend that behavioral demonstration dictates that competencies in a curriculum or learning program need to be described in ways that make them measurable. This may not be difficult in relatively simple straight-forward tasks, but as with many other higher institutions of Learning, VET programs involve diverse work practices involving complex interactions of various sets of knowledge skills and abilities which are not easily expressed in terms of behavioral objectives. For example, the application of work related reasoning (as with all aspects of health-care) requires both underpinning knowledge and the ability to perform practical assessment procedures - which combination must be assessed by both observation and a written or verbal justification for any procedural application.

#### **2.4. Learning Process and Competency-based Programs**

Harris et al. (1995, pp. 16-17) suggest that there are three major schools of educational philosophy whose theories can be considered as either supportive or unsupportive of CBE/T. These theories regarding learning and teaching styles and their relevance to CBE/T and in particular to the BTVET programmes/ curriculums are considered below.

The first of these is the behaviourist school which appears to be highly supportive of task-oriented approaches such as CBE/T. Harris et al. (1995) cite Skinner (1953) as the major proponent of this theory in which he suggests that there can only be speculation as to what occurs during the learning process, and therefore the only way to assess this process is to evaluate a person's behaviour or performance as they learn.

Behaviourists promote the theory that the acquisition of knowledge is aided by rewarding a correct response (positive reinforcement) rather than punishing an incorrect response (negative reinforcement). In CBE/T this can often be accomplished with immediate feedback on the completion of criteria-based tasks. This aspect of behaviourist theory is also supported in an essential element of CBE/T - public disclosure of the intended outcomes (progressive or final) prior to commencement of the task, module, or subject unit.

Secondly, there is the cognitive school of thought, which Harris et al. (1995) consider the principal proponents to be Bruner (1960), Ausubel (1963) and Gagne (1965). This theory proposes that knowledge is acquired by the continuous refinement of schemata, in which, understanding formed by past experiences and new experiences are evaluated. This theory is not at odds with CBE/T in that the tasks to be performed grow progressively more complex as more information and skills are acquired.

Thirdly, there is the humanist school of thought, whose principal proponents Harris et al. (1995) consider to have been Maslow (1970) and Rogers (1983). Humanists believe that a person should be regarded as a holistic being, and emphasises the individual differences in learning processes. This theory tends to be at odds with the predetermined and prescriptive nature of CBE/T.

Another educational theory is the concept of 'tacit knowledge' proposed by Polanyi (1967) is also useful for understanding the learning processes required in CBE/T and in particular for those competencies which are required in the practice vet course that require a lot of cognitive involvement. Polanyi explains that there are types of knowledge that cannot be easily analyzed, and these are conceptualized as tacit knowledge. Polanyi explains this phenomenon by theorizing that, if we attempt to analyse the skills and mental processes required in riding a bicycle into elements such as balancing mechanisms, co-ordination of muscle movements and eye movements - and even provide a live demonstration of this skill - this would not provide the information required to competently carry out the task. If we tried to consciously consider all the skills required as we carried out this task we would probably fall off. It requires unconscious knowledge or internalisation of all the component skills to allow us to concentrate on the overall goal. This suggests that tacit knowledge is gained and internalized through continued exposure to completing certain tasks, such as occurs in a competency-based learning program.



Although the behaviourist and cognitive schools of thought are of use in understanding CBE/T, the development of skills through ‘tacit knowledge’ proposed by Polanyi (1967) describes one of the most important features of Highly cognitive VET courses, where the development of tacit knowledge and skills is acquired in what is termed ‘palpatory literacy’. This is the development of a student’s palpatory skills to locate, identify, assess and treat musculoskeletal dysfunction. This type of skill evolves and develops in a similar fashion to the playing of a musical instrument, drawing and improves with ongoing repetition of certain movements. It also requires unconscious knowledge which is difficult to analyse, but can certainly be described as the internalisation of underpinning theoretical knowledge combined with functional or acquired skills.

The attainment of this type of knowledge and skill can be difficult to evaluate or grade, and must be assessed from a predetermined, set criteria. Furthermore, the assessment of this type of skill must be conducted using a holistic approach, and determined by an experienced practitioner. In order to neutralise the subjectivity associated with this type of assessment in the BTVET programs, two examiners assess the relevant task simultaneously

## **2.5. The global perspective of CBET**

### **2.5.1. Historical Background of CBET**

Competence-based education and training (CBET) can be traced back to the education of primary and vocational teachers in the USA in the 1970s. Poor learning in vocational education programs was the reason for applying new principles to teacher education. Teaching should be based on the role requirements and standards of the behavior of effective teachers.<sup>16</sup> The National Center for Research in Vocational Education at Ohio State University started research on "performance-based vocational teacher education" in 1969. Over a period of ten years 100 performance-based modules for vocational education were developed, which were supplemented by modules for adult and special education. In 1977, some 23 states had implemented performance- based vocational teacher education and in the late 1980s the concept shaped many

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<sup>16</sup>InWent report on Structures and Functions of Competence-based Education and Training (CBET): A Comparative Perspective (Beitrageaus der Praxis der beruflichen Bildung Internationale Weiter bildungund EntwicklungGmbH). Capacity Building International, Germany. Prof. Dr. Thomas Deißinger, Dipl. Hdl. Silke Hellwig (University of Konstanz)

programs of vocational education and training (VET)<sup>17</sup>. Despite scepticism from the very beginning, CBET gradually entered the context of VET in the UK, Australia and New Zealand. Several other countries are currently copying the concept of CBET by re-inventing or reforming their VET systems. Many hopes lie on CBET respectively because it is an "outcome-based approach" and is seen as a "major driver, incentive and motivator of learning" where the role of individuals is rated higher than that of teachers, government or other stakeholders (Reuling, 2002, p. 15). Therefore, CBET has both a didactical dimension (competences and qualifications) and a political and social dimension (pathways and opportunities for learning)

CBET is an approach to VET, in which skills, knowledge and attitudes are specified in order to define, steer and help to achieve competence standards, mostly within a kind of national qualifications framework. Competence (e.g. in the British context) or competency (e.g. in the Australian context) can be understood as *"(...) the specification of knowledge and skill and the application of that knowledge and skill to the standard of performance expected in the workplace"*. Consequently, CBET itself may be described as *"(...) training which is performance- and standards based and related to realistic workplace practices(...) It is focussed on what learners can do rather than on the courses they have done"*.

This definition (ANTA, 1998, p. 10; Misko, 1999, p. 3) places the focus of CBET on outcomes measured against industry standards rather than on courses based on institutional arrangements (classes in schools, e.g., or apprenticeships) where individual achievements are normally valued against others.

Outcome orientation places emphasis on new forms of assessment. "Recognition" or "Accreditation of Prior Learning" (RPL/APL), mainly through work experience, is another essential tool to ensure the relevance and transferability of skills and knowledge as well as to lead people back into learning.

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<sup>17</sup>InWent report on Structures and Functions of Competence-based Education and Training (CBET): A Comparative Perspective (Beitrageaus der Praxis der beruflichen Bildung Internationale Weiterbildung und Entwicklung GmbH). Capacity Building International, Germany. Prof. Dr. Thomas Deißinger, Dipl. Hdl. Silke Hellwig (University of Konstanz)

Competence-based curricula consist of workplace oriented and performance-based modules or units of competence that can be accumulated to a vocational qualification. Delivery of CBET can be designed individually by learners, teachers and trainers, which allow a self-paced mode independent from courses.

However, a modular and self-paced approach to curricula and delivery is not necessary, although it is very compatible with CBET.

A definition of CBET stated by the Australian Chamber of Commerce and Industry in 1992 summarizes its characteristics as follows:

*"A way of approaching (vocational) training that places primary emphasis on what a person can do as a result of training (the out-come), and as such represents a shift away from an emphasis on the process involved in training (the inputs). It is concerned with training to industry specific standards rather than an individual's achievement relative to others in the group"*

## **2.6. Building a Competence Based Education and Training (CBET)**

### **2.6.1. Structural Features of CBET**

There are six criteria that describe the typical structure of CBET programs. These criteria specify both the micro, (i.e. its learning and assessment dimension,) and the macro-structure (Victorian State Training Board, 1992)

The criteria specifying the micro structure primarily refer to design and realization of the learning process. Without the criteria that shape the political and regulative framework of CBET that make up the Macro structure:

### **2.6.2. Objectives of CBET**

CBET aims at preparing learners more effectively for real workplaces, which means that the acquisition of competences takes into account the requirements of companies and industry.

Furthermore, CBET should enable employees not only to increase their knowledge and skills at the workplace but also to gain nationally accredited certificates for workplace-based learning.

The self-paced and flexible structure of CBET programs should encourage learners to become responsible for their individual learning process. The modular structure allows for individual combinations of competences limited only by certain "packaging rules" which refer to accredited national vocational qualifications.

The objectives of nationally endorsed competence standards as the core of CBET are, on the one hand, to transform the requirements of industry and enterprises into the world of learning.

### **2.6.3. Realization and Implementation of CBET**

For successful implementation of CBET, a number of reflective questions referring to knowledge, skills and attitudes need to be clarified before implementing CBET. Thus, for a successful implementation of CBET it is important to understand that CBET is a new approach and different to traditional course-based teaching and training. Furthermore it is important for teachers and trainers to be well informed about the concept and prepared for its realisation.

Assessment plays a major role in the new concept and the requirements for appropriate assessment procedures must be made clear to assessors as well as teachers and trainers

### **2.6.4. Planning and Developing CBET**

The design of CBET programs requires careful planning and continuous monitoring of development steps. The first step is to define competence standards by translating work-based requirements into nationally endorsed industry standards. This requires experts in relevant occupational fields who are able to depict essential work activities, tasks and functions with respect to a specific competence profile. The methods applied can either be DACUM or functional analysis

Furthermore, the forms of delivery and assessment need to be specified in accordance with the respective training provider. Thus, the learning environment of workplaces or training providers must be defined and resources and learning materials obtained. Information on assessment requirements and procedures must be distributed to learners and trainers by registered assessors.

The organisation and management of CBET programs has to be efficient to assure the quality of outcomes and learning processes<sup>18</sup>.

#### **2.6.5. Curriculum Development in the CBET World**

Creating a curriculum is one of the essential functions within an education or training system as it constitutes the guideline for planning, conducting and assessing learning processes. Curriculum development can be approached from three different perspectives (Smith & Keating, 2003, p. 121):

- The first perspective is to regard it as "rational" or "linear", i.e. it is a logical process which proceeds from objectives to the selection of learning experiences to the organisation of learning material to evaluation.
- The second one sees curriculum development as a "cyclical" model, where the whole learning process is a cycle which continually renews itself so that evaluation leads to the re-formulation of objectives.
- The third perspective implies an "interactive" model assuming that curriculum development can commence at any stage and that feedback leads to constant change at any stage.

The two most commonly used methods for curriculum development - DACUM and functional analysis – can be rated and described as linear models.

DACUM (acronym for develop a curriculum) is a method to define systematically the tasks, jobs, competences and tools associated with a certain type of workplace.

DACUM is an inductive approach, i.e. small units are defined and gradually extended to be applied in a broad context. Three assumptions are underlying DACUM: First, persons doing certain activities regularly can describe them in a realistic and precise manner. Second, an efficient way of work and job analysis is to describe the tasks of a specialist precisely and completely and third, every successfully completed task requires special knowledge, skills, equipment and behavior, which can be identified implicitly through work and job analysis.<sup>19</sup>

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<sup>18</sup>In Went report on Structures and Functions of Competence-based Education and Training (CBET): A Comparative Perspective (Beiträge aus der Praxis der beruflichen Bildung Internationale Weiterbildung und Entwicklung GmbH). Capacity Building International, Germany. Prof. Dr. Thomas Deißinger, Dipl. Hdl. Silke Hellwig (University of Konstanz)

<sup>19</sup>In Went report on Competency-based Training.(CBET): English. Capacity Building International, Germany. (University of Konstanz)

The job analysis that is required by DACUM includes several aspects such as the analysis of occupations, jobs, duties, tasks and single work steps. Additional issues such as workers behavior, general knowledge and skills, tools, equipment, supplies and materials as well as future concerns should be considered.

Gonczi, Hager & Oliver (1990, p. 38) defined steps to be undertaken in order to set up and conduct a DACUM procedure:

- First, it is necessary to choose an expert facilitator and select participants from various levels of the relevant occupation. Participants must have a profound knowledge of the occupation and it is important that different interests (e.g. educators, practitioners, unionists) are involved.
- Second, a pre-DACUM session must be organized in order to explain the process of curriculum development.

At the beginning of the session, the facilitator has to give a general introduction to and review of the occupational area. Then the main duties within the occupation must be outlined and associated tasks, sub tasks and required competences must be identified.

Additionally, the importance of each task, sub task and competence must be rated according to its frequency of performance and its importance for a holistic work performance. The results must be structured and recorded for a final report, which is disseminated to the relevant authorities.

#### **2.6.6. Learning in a CBET Program**

As indicated above CBET favours, recommends and sets the scene for a self-paced mode of learning and the flexible delivery of competences. However, this does not mean that learning is totally unstructured:

- *First, it is important to allow for APL/RPL in order to identify the competences already gained and avoid redundant assessment.*
- *Second, an analysis of the competences the learner wants to achieve must be undertaken. This includes a context analysis, i.e. which competences are available, where can they be awarded, which learning activity will be appropriate and who will guide the activity.*

- *Third, the learner undertakes the activity and the performance is measured against specified criteria stated in the competence standard.*
- *Finally, the assessor confirms whether all required elements of competence have been successfully achieved. If this is the case the learner receives a nationally recognised certificate.*

#### **2.6.7. Contrasts between Traditional and CBET Programs**

As pointed out above CBET programs constitute a different approach to vocational training as opposed to traditional course-based programs. Contrasts are apparent with regard to national standards, credentials, assessment, credit transfer, accreditation and recognition of competences and prior learning.

Furthermore, the requirements for training providers are stated nationally in a CBET system, whereas in traditional programs there might be regional differences.

These aspects are contrasted in more detail in figure 2 and the perceived advantage for each aspect is indicated as well.

### **2.7. CBET in the African context**

#### **2.7.1. The Matrix of CBET and a Comparative Education perspectives**

Over the past years, the atmosphere of Competence Based Education has increasingly drawn international attention and has been translated in a wide variety of languages (English, German, French, Spanish, Portuguese, Chinese, Dari, and Bahasa Indonesia). A problem, which can be underestimated however, is that the models for competence-based education are developed in Western societies. This also holds for the Conditions and application of the predefined principles in non-western developing societies may lead to implementation difficulties especially in African countries. Although the education reform programme, aiming to introduce CBET in African countries education system assume that Competence Based Education can be introduced successfully within the African context, as argued by many scholars within the realm of Comparative Education, the introduction of any educational concept in a non-western context will encounter serious challenges in relation to the local, non-western cultural norms and values, which in many cases might not match the prevailing western visions on education (Masemann

1999; Crossley 2000; Grigorenko 2007; Ee and Seng 2008; Nguyen, Elliott et al. 2009). Although the need for deep contextual roots within education reform is generally agreed on, still many educational reform programmes are based on western educational concepts and fail to address the need to adapt the concepts to the context in which they are implemented. As Nguyen, Elliott et al. stated:

“In the rush to adopt and import educational theories and practices based on western thinking, cultural aspects of the pedagogy have often suffered serious neglect. Adopting policies across cultures without recognising their distinctive social and cultural dimensions runs the risk of ‘false universalism.’” P109 (Nguyen, Elliott et al. 2009).

Since the introduction of CBET in developing countries’ education systems like Uganda is fairly new, little has been written about the effect of changing the education systems towards a Competency Based Curriculum, and for that reason, little is known about the effectiveness and possibilities of transforming the curricula of non-western education institutes towards a Competence Based Curriculum. Based on the findings from previous research in the field of Comparative Education, it could be assumed that it is very likely that the introduction of the “western” concept of Competence Based Education and training will encounter challenges during its adoption in a “non-western” context (Masemann 1999; Crossley 2000; Grigorenko 2007; Ee and Seng 2008; Nguyen, Elliott et al. 2009). Searching to contribute to the international discussion on introducing western developed education in a non-western society, specifically referring to the introduction of CBET within Ugandan BTVET system, this research aims to provide an additional perspective on competence development in a non-western society and education system. Whereas current research on the international implementation of Competence Based Education often remains superficial, only managing to capture issues within the realm of implementation of the concept, failing to address deeper societal issues, the importance of local, societal embedded practices is often neglected. Aiming to avoid a repetition of the colonial history, introducing western developed education concepts without taking into account local cultures and practices, a deeper understanding of societal and cultural issues related to Competence Based Education is a precondition before introducing it in a non-western society.



### **2.7.2. CBET in the Ugandan context**

From 2004, the efforts to reform BTVET towards CBET began with the development of UVQF instruments and mechanisms in order to effectively enhance Competence-Based Education and Training (CBET) in Uganda. Four years later the introduction of ATPs into selected BTVET learning institutions has caused radical changes in teaching, learning and assessment processes within the BTVET sector. Therefore, in accordance with the aims of this thesis and in order to appreciate the sequence of events in the evolution of CBE/T in Uganda, these findings an overview of relevant reports, recommendations and reviews, as well as voices of expatriate pertaining to CBET.

Education and training in Painter and decorator commenced in the VET sector at a time when CBET was being formally introduced. The PAINTER/DECORATOR L1&L2 was developed in consultation with industry representatives and based on the relevant competency standards. Earlier painters and decorators were contained in other programmes like industrial art and design, interior design allowing for a holistic learning program with integrated content and outcomes-based units within the curriculum. But during that time the real painters were bred in work places, mainly construction companies through on job training. Today the introduction of Assessment Training Packages in the BTVET sector established a system in which all units within courses were developed, delivered and assessed in a competency-based manner, regardless of whether they had a cognitive or task-based orientation.

As with many other African and developing countries, in Uganda the VET sector is seen as being an alternative to the general HE sectors. The term VET is used in many countries, with some variations, to describe the development and furtherance of the skills and knowledge required of an individual to be productive in a given occupation. According to Smith and Keating (2003, p. 3) VET programs have a number of features which help define the term including: an association with industry; association with a job or task; learning on and off the job; and skills based. In Ugandan CBET is in the Centre of this of endeavor. These features are not confined to the VET sector; many university courses are also vocational in nature, requiring the attainment of specific levels of knowledge and skills, such as those in art and design, architecture, sports science,

Nursing and Paramedics which in my opinion should be conducting competency-based learning programs in the tertiary education sectors.”

### **2.7.3. Stake Holders and their role in the development and implementation of CBET**

#### **The Directorate of Industrial Training DIT**

Under BTVET Act, 2008 the functions of the Directorate of Industrial Training are:

- (a) To identify the needs of the labour market for occupational competencies that fall under the UVQF;
- (b) To regulate apprenticeship schemes;
- (c) To foster and promote entrepreneurial values and skills, as an integral part of the UVQF;
- (d) To secure adequate and sustainable financing for the efficient operations of the Directorate;
- (e) To accredit training institutions or companies as assessment centres;
- (f) To determine fees payable under the Act;
- (g) To develop, apply, expand and improve the purposeful application of Uganda Vocational Qualifications defined in the UVQF;
- (h) To assess and award Uganda Vocational Qualifications;
- (i) To promote on-the-job training in industry for apprenticeship, traineeship and indenture training and for other training such as further skills training and upgrading; and
- (j) To prescribe the procedure for the making of training schemes Further to the above provisions, there is established a Uganda Vocational Qualifications Framework (UVQF), under part V of the BTVET Act, 2008. It is stated

That: The purpose of the UVQF is to define:

- (1) Occupational standards in the world of work;
- (2) Assessment standards;
- (3) Vocational qualifications of learners who meet the set standards of different studies;
- (4) Provide guidelines for modular training.

The UVQF shall follow principles of Competence Based Education and Training (CBET) which include:

- (a) Flexible training or learning modules;
- (b) Positive assessment and Certification;
- (c) Assessment of Prior Learning;
- (d) Recognition of formal and non-formal training;
- (e) Self-paced or individual learning; and
- (f) Work place learning

For award and recognition of certificates, the BTVET Act, 2008 provides that:

- (1) The Directorate and other examination boards established under the Act  
Shall award certificates and diplomas for Business, Technical or Vocational  
Education and training under the UVQF;
- (2) The Certificates and Diplomas to be awarded shall be in the form Prescribed by the  
Minister on the recommendation of the Industrial Training Council;
- (3) The Certificates and Diplomas awarded under the Act shall be recognised in the Uganda  
education system and by the labour market.

At operational level in the Directorate, the Qualification Standards Department performs development tasks related to concepts, procedures and instruments for establishment of the UVQF in close collaboration with both public and private stakeholders in vocational training.

In particular, the Department organizes and coordinates the development of Assessment and Training Packages for use in competence-based vocational training as well as standards-based assessment and certification. The Directorate has therefore produced this Assessment and Training Package for use in implementing Competence-Based Education and Training mechanisms.

## **2.8. The pedagogical aspects of BTVET in Africa with specific reference to Ugandan perspectives and experiences**

### **2.8.1. Vocational didactics in an African perspective**

Vocational didactics is a system of delivery in which the task and learners is central. Vocational didactics; Integrates three important aspects that include general subjects, vocational theory, and vocational skills (practical's). These three parts have its learning roots in natural work with focus

on imitation, reproduction, actions from instructions, and communication between the new comers and old-timers. This is the general feature in all culture. (Nilsson 2008 pg. 2)

Aspects of Vocational and technical education systems in Africa relatively 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 apprenticeship training centres but the composite characteristics of its didactics are similar.

Vocational training in Africa Uganda in particular is delivered in three key ways; formal training institutions, non-formal or enterprise based institutions (work place) and informal or traditional apprentice. The primary objectives of all technical and vocational education and training programmes in Africa is; the acquisition of relevant knowledge, practical skills and attitudes for gainful employment in a particular trade or occupational area. The need to link training to employment (either self or paid employment) is at the base of all the best practices and strategies. Flexibility, adaptability, and life-long learning have become a another key in view of the rapid technological advances taking place in industry and the labour market in general. Therefore, Technical and Vocational Educational Training (TVET) is a vehicle for rapid industrialization, as well as economic empowerment and social mobility of the individual which is particularly important for African countries<sup>20</sup>. Vocational didactics particularly looks at the most effective and efficient methods of delivering vocational skills in order to achieve these objectives.

In the majority of African countries, Uganda inclusive, formal TVET programmes are school-based<sup>21</sup>. The contextual framework in which aspects of vocational didactics in Uganda's vocational training institutions may be described by the following indicators:

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<sup>20</sup>Meeting of the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF II+) 29-31 May 2007 ADDIS ABABA Ethiopia

<sup>21</sup>Meeting of the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF II+) 29-31 May 2007 ADDIS ABABA Ethiopia

First and foremost the key aspect that dominates vocational training institutions is the old and dilapidated infrastructure. That is, the toilets are broken, class rooms are tiny and are of old architecture, the hostels are in bad condition to mention but a few. This is because most of the infrastructure was built during the colonial times. For example Results from expedition 2 cohort 2 (Kyambogo University) showed that Arapai agricultural college was commissioned in 1952, most of which buildings that still stand today were torn by the war in the north, while others are too old to stand the growing numbers at the institute

Old and out dated technology and techniques most of which were the kind used during the colonial times characterise vocational schools in in Uganda and Africa at large. Majority of the vocational institutions still subject learners to work techniques that are anchored on old and out dated technology. A case in point is the print making department in Kyambogo University of which the researcher has personal experience.

“I am a graduate with a bachelor in vocational studies from the department of art and design. I majored in printmaking as a discipline. While I was a student of print making I was being taught techniques of printing (engraving, etching, and relief printing....). Techniques of which no longer apply to commercial printing in Uganda today. Even as bachelor I could not get a job in Uganda’s printing industry (Nasser) dominated by informally trained apprentices because I was way back in time as far as technology is concerned “

Disregard situated learning; it’s very important to mention that, academicians and our very own communities disregard situated learning. Borrowing Mr Okello Benson’s word in his presentation on vocational pedagogy in African context in the plenary on the 25<sup>th</sup> march 2011, he recommended, “Guard against situated learning.” This was also well put by the farm manager at Arapai agricultural college during the 3<sup>rd</sup> expedition (cohort 2 MVP Kyambogo University ) when he was asked why the students were taught how to breed cross breeds while the people they will be dealing with in the communities have local breeds.

He responded “*If the people in the villages keep local breeds and the students at the college also do the same then who is better?*”

This was a clear indicator that they disregarded farmers in communities to whom farming is a social cultural practice.

More so the curriculum in vocational training institutions is majorly theoretical than practical. That is, more time is allocated to theory than practice on the time table, the content is mainly theory while practical is only a small part of learning. For example in Arapai the time allocated to practical work was from 6:30am to 8:00am while the theories (minus 1hr of lunch and a 30 minutes break) were carried out from 9:00am to 5pm in the evening. This was also true for Nile Vocational Institute NVI (expedition two cohorts 2 KYU) and The Jinja School of Midwifery

Ramirez 1998, pg81 in Mjelde 2006, pg. 24 points out that talking about practice in theory as two different activities that exclude one another is an assumption that has invaded our culture and created a chronic illness in the realm of understanding

Supported by Lave & Wenger (1991),

Exposing the learners to practical activities and work related practical daily tasks is a source of vocational knowledge while Mjelde and Daly 2006) further assert that, Lengthening the hours spent in convention classroom schooling away from working related practice is one of the main problems in present-day school reforms.

This therefore means that if vocational and technical training institutions will benefit from TVET programmes there is need to put more effort on concurrent delivery of both theory and practical.

Inadequate content; most vocational subjects taught in vocational programmes are very shallow in terms of content. This is due to the rudimentary method of delivery, inadequate equipment and little research in the field of vocational education in Africa. This aspect was viewed at Arapai agricultural college where students and lectures were complaining of little information on their hands about particular areas of study. This also is true for the Hotel and Tourism Training Institute (HTTI) in Jinja and NVI

Walklin (1982) says the learners expect the instructors to be subject experts- a fountain of knowledge – who really knows his stuff in order to match students' expectations.

The lack of adequate sources of knowledge in the hands of the teachers has continued to disable vocational and technical education programmes in Africa.

Curriculum forms the basis for the planning, execution and evaluation of teaching (Mjelde 2006, pg. 56). This therefore means that the curriculum must constantly change to suit the dynamic

nature of the labour market. However in Africa, vocational institutions' curriculum is almost a constant; rarely revised and in case where revision is done, the implementation does not happen.

In any sort of education system change is the only constant. The point is that work with renewal of curricular is a very important work in order to improve vocational education and create a more efficient vocational learning which support a wanted vocational competence (Nilsson 2008 pg. 4) For example during our visit to Arapai agricultural college (expedition 3cohort 2KYU) the curriculum had been reviewed twice since independence, the latest being 2002. During this reform numbers of strategic recommendations were made. However most reforms had not been implemented since, yet the standards of the institution were only dilapidating.

Poor public perception that has form many years hit vocational training institutes in Africa. Vocational training has been considered as a career path for the less academically endowed. This perception has been fuelled by the low academic requirements for admission into vocational programmes and the limited prospects for further education and professional development. The impression is sometimes worsened by our governments in Africa who Instead of portraying vocational education as an effective strategy to train skilled workers for the employment market, use the term that the primary objective of the vocational education it to track and keep dropouts and "lockouts" from the basic and secondary school system off the streets<sup>22</sup>. Taking an example of Arapai agricultural college majority students are those who could not acquire the grades they needed to make it to Makerere, Kyambogo University or any other academic university for that matter. More so the requirements at Arapai are at least 1 principal pass in most of their programmes. This therefore continues to dig a ditch for the reputation of vocation education in Africa

This is no surprise in African that the Tools and Materials in vocational training institutions are inadequate. This is a song that has been sung for so many years. Not only are the tools old, worn and torn, but also few in number compared to the growing numbers of students in vocational institutions. During the 3<sup>rd</sup> expedition carried out by Masters in Vocational Pedagogy (MVP) students Cohort 2, the results showed that at Arapai agricultural college the learners are way too

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<sup>22</sup>Meeting of the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF II+) 29-31 May 2007ADDIS ABABA Ethiopia

many in relation to the number of tool and materials available. A case in point was that in crop production practical when one tractor was used to show learner how to man it. learners stood around it as the instructor was showing them the different parts, and demonstrating how to operate it, without even touching it.

Yet according to Nilsson 2008 The way to understand vocational learning mechanisms is to analyze the relations between tasks, tools, materials, precision of final quality on tasks and the demands.

In Africa gender stereotyping is a huge influence in the structural composition of vocational training institutions. Lines of Gender-biased division of labour are distinctively drawn in the development of TVET systems in vocational institutions. Some institutions are dominated by males and others by females. This is due to the deep influence of traditions and cultural values in the development of TVET systems. (Justifying therefore the current efforts for gender mainstreaming in vocational education and training in Africa) However more men seem to be braking into trades that were formally known for women as compared to the numbers are of women who are breaking into the “men’s” trades. During the 3<sup>rd</sup> expedition carried out by MVP students Cohort 2, The gender complexity at Arapai shows more men (approximately 85%) as compared to women (app: 15%). While at the Nile vocation institute (NVI) and at the hotel and tourism training institute (HTTI) we had a reasonable number of men enrolling into courses like housekeeping, food production and hair dressing, courses that were formally known as “female” courses while few or no women were visible in courses like plumbing, carpentry, electricity to mention but a few.

Inequitable and deteriorating teacher to learner ratios characterise vocational institutions in Africa. The increasing numbers of students in vocational institutions do not match the increase in the numbers of instructors in the respective institutions. For example in Arapai the numbers of student admitted were going up every year (The numbers shot even higher when the college was swallowed into Busitema university) but the same number of instructors has been kept over time making the teaching and learning more tedious for the instructors. This was also true for other institutions like the Hotel and Tourism Training Institute (HTTI) in Jinja, the Nile Vocational Institute (NVI) and the school of nursing and mid wifery in Jinja.



Yet According to Mjelde (2006 pg.110) the vocational teacher functions more as a foreman of the work or a master journey man than as a traditional teacher. He or she has all the responsibility of all the individual students and classes in work techniques and often for the academic subjects.

The increasing number in vocational institutions as cited in Arapai agricultural college, HTTI and NVI, leave less time available for instructors to see each learner over and over again as it pedagogically ought to be. This therefore has continued to challenge the possibility of proper skill acquisition for learners in vocational institutions in Africa.

The trainers have inadequate manual labour experience in their respective trades. Usually instructors in vocational training institutions, who graduate are immediately subsumed into the teaching only to go back to academic institutions to upgrade. This therefore means that they never get a chance to participate in the labour market in order to acquire more hands on skills in their respective trades.

According to Mjelde (2006), a vocational teacher is a practice-based world from a sector of working life that is outside the educational system. Most frequently they have had vocational training and practice in the manual labour market before they became teachers.

Vocational institutions are not only plagued by ill prepared trainers but also infested by Low motivation amongst the trainers. Aspects like; Low salaries, fewer benefits coupled with the tedious methods of teaching and learning, Job insecurity characterize vocational and technical training institutions in Africa. For example During the 2<sup>nd</sup> expedition carried out by (MVP) students Cohort 2, results showed that NVI, AAC and the Jinja school of Nursing and midwifery the instructors were of low motivation, caused by the delayed yet low salaries, and the neck breaking bureaucracy involved in acquisition of teaching material. This characterises Vocational institutions in Africa.

## **2.9. Lessons learned about past reform**

If the pressure for reform-political or professional-trails off, leaving traces of best practice in textbooks, teacher education, local structure, and state law; finally, an upsurge of public concern

starts the process over again<sup>23</sup>. What we're witnessing in these instances is not so much the failure of reform, nor is it necessarily, as critics often imply, some fundamental defect in the educational system as a whole. The "failure," if there is one, lies in the unwillingness of reform advocates to acknowledge the conflicts and dependencies between and among policy, administration, and practice.

Within these broad patterns of reform, quiescence, and re-reform, an enormously complex sifting and sorting process occurs. Some of the original notions of "best practice" behind a reform turn out not to make sense in organizational or pedagogical terms, Some of those that do make sense become standard practice and are no longer thought of as reforms. According to Elmore, (2009)

Policy may or may not adjust to shifts in administration and practice. Sometimes policy contains requirements that have never been implemented or have been tried and rejected as infeasible. Sometimes it contains requirements that so closely reflect standard practice they appear to be redundant, and in many cases are. Sometimes policy encourages effective changes in administration and practice. Sometimes it constrains the development of more effective administration and practice. The sifting and sorting process is also influenced by factors external to reforms. The political culture of some settings makes them immune to certain reforms and highly susceptible to others.

## **2.10. Gap**

Much of the present debates on the effects of reform grow out of research on recent national attempts to reform BTVET with policy. This study is no different. While proponents of CBET are eager to dissociate them from the mistakes of the past policy reforms since 1962, they are likely to repeat many of these mistakes in the absence of a clear understanding of the feasibility of this policy in the Uganda context. The emphasis needs to be shifted from national to regional or local policy by understanding the administrators and teachers' views, attitudes, perceptions and experiences on CBET for effective reform. This central purpose of this study therefore is to bring you these voices. Otherwise the issues that limp reform will very much be the same

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<sup>23</sup>Smoke and mirrors: the relationship between research and practice in the UK-proposals for a research and development agenda in social care Mike Fisher National Institute for Social Work Peter Marsh University of Sheffield, Research in Practice

## **CHAPTER THREE**

### **3.0. METHODOLOGY**

#### **3.1. Introduction**

The focus of this chapter was the nature of the research, a description of the methods that were used to carry out the study, the research design as well as the suitability of the topic. The chapter presented the population that was used, as well as the sampling techniques that were engaged, data collection procedures, instruments, and analysis that were used in the study.

#### **3.2. Research Methodology**

The study utilized a qualitative case study design.

A Case study is “an exploration of a ‘bounded system’ of a case or multiple cases over time, through detail in depth data collection involving a single source of information rich in context” (Creswell, 1998, p. 61). In this study a case of Painter and Decorator programme at Lugogo vocational institute a formal BTVET institution implementing CBET was studied. In agreement with Stake (1995) a case in this particular study was investigated because; it is in close proximity with DIT, UVQF secretariat and MoES (refer to chapter two for the role of BIT and UVQF secretariat), pilot studies for CBET approaches were first carried out there and it is one of the oldest and most Organized formal BTVET institution in the region; we were interested in it [case] for both its uniqueness and commonality. We therefore observed it and learnt from it.

#### **3.3. Rationale for Qualitative Methods**

As Creswell (1998) specifically defines qualitative research as, an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem, the researcher builds a complex, holistic picture, analyzes actions, words, reports detailed views of informants, and conducts the study in a natural setting (p.15).

Qualitative research can be described as a process of evaluation, and is in a sense, a process of examination and judgment of the documents viewed, the activities observed, and the answers obtained whilst interviewing participants. The process requires the researcher to become both a

participant and a learner, during which they must carefully consider their questions, test their assumptions, be reflective, and recognise their own biases as they modify or introduce new questions (Rossman and Rallis, 2003)

This study was developmental and analytical in arriving at conclusions that were based on the data obtained from answers to questions posed to participants in a descriptive survey and subsequent in-depth interviews. The study sought answers to questions regarding the views, attitudes and perceptions towards competency-based education and training from a small selected group of participants with experience in teaching, and/or designing competency-based education and training programs, as well as others who were involved in its implementation into the BTVET. In this process, the experience and reasoning of participants was analyzed.

Using a qualitative methodology therefore allowed the researcher to observe and study the influence of CBET on the actions of administrators and practitioners as well as their attitude towards CBET.

Qualitative research was an ideal tool in this research because it addressed the following issues: (Morrow, Rakhsha& Castaneda (2001, p.582-583)

- Context as an essential component of the research.
- The researcher's process of self-awareness and self-reflection.
- It was uniquely able to capture the meanings made by participants of their experiences.
- Provided the opportunity for voices that were previously silenced to be heard and lives that were marginalized to be brought to the center.

### **3.4. Case Selection**

In order to gain an in-depth perspective of CBET, this study used the maximum and variation sampling strategy (Creswell, 1998). To achieve this, respondents from the DIT, the world of work and from the selected formal BTVET learning institution were selected.

Data was collected from ten participants who were chosen for their experience in the development and delivery of CBET, their active role, expertise and professional experience in the BTVET sector. This focus was required in order to gain insight into the personal views and

perceptions expressed by the participants in relation to their experiences regarding CBE/T - they are not representing any organisation.

The respondents at DIT- UVQF secretariat, industry and institution administrators were purposively identified. While identifying the various respondents in the learning institution in the categories of, teachers, the researcher employed purposive, stratified, and random sampling techniques.

The institution was selected based on the programme of interest to the researcher. While selecting respondents, the researcher was gender sensitive where applicable.

### **3.5. Data Collection**

#### **3.5.1. Coding and Classifying of Data**

While collecting the data the researcher first and foremost broke down the objectives into classes to ease the process of data collection for example

**Objective one:** To define the concept of CBET in the general BTVET frame work in Uganda (definition of CBET in the Ugandan Context)

Data for objective one was collect in the following classifications

- 1, Defining CBE/T in the Ugandan context
- 2, Rationale for CBE/T in the Ugandan perspective
- 3, How the frame work of CBE/T was Development in Uganda

**Objective two:** Examine the development and delivery of the painter and decorator program (delivery of CBET)

Data for objective two was collect in the following classifications

- 1, Occupational Profile for painter / decorator
- 2, Developing Assessment Instruments for painter / decorator

- 3, Training Modules for painter/ decorator
- 4, The practice at the department of Painter and decorator Lugogo vocation institute

**Objective three:** To examine perspectives on the integration of CBET

Data for objective three was collected in the following classifications

- 1, attitudes,
- 2, experiences
- 3, perception of attitudes towards CBET
- 4, Opinions on introducing CBE/T into BTVET Programs

### **3.5.2. Methods of data collection to be employed;**

- Library and Archival Survey
- Observation
- Interviews
- Reflective journals

### **Library and Archival Survey**

Also referred to as documentary analysis, library and archival survey was concerned with all kinds of information hard and soft copies of various categories and artifacts. By this method, I was able to examine all written data (published or unpublished) from libraries and document centers. Here scholarly views and analysis related to the phenomenon under study that was obtained which was helpful in compiling chapter 2 of this study as well discussion of the findings in chapter four of this report. Creswell (1994: 150-151)

Documentary analysis was also key in acquiring data for objective One and two (see chapter one) of the study as well as helped the researcher answer the research questions of the study (see chapter one). The documents gathered for this kind of information included all types of reports, papers and documents from DIT, MoES and school administration, all government concept papers that pick strength from CBET and other institutional documents like time tables, ATPS,

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curriculum and brochures. For the purpose of data analysis, the document was xeroxed and all personal information was erased. The original documents were returned to the institution.

### **Non-Participant Observation**

The purpose of observation was to gain additional information about the practice in formal learning institutions by observing the daily activities as well as institutional dynamics and on-going activities from within and from without the classroom and other school related activities for a period of time. Non-participant observation was fundamental in acquiring data for objective two (see chapter one) of the study, as well as helped the researcher answer the 2<sup>nd</sup> research question of the study (see chapter one).

The researcher adopted a direct observation method which during this time the researcher watched carefully, attentively and systematically all events, objects, processes, relationships and people's behaviour while recording them in an observation protocol (see appendix F). The researcher also enhanced the observation by the use of a camera. (Mikkelsen 2005 p347)

### **Interviews**

Under this method, I conducted oral interviews following predetermined interview guides (see appendix E). I sought to use the interview method as an organized inquiry that would involve the interviewer and the interviewee sharing experiences Kvale & Brinkmann (2009: 3). These were organised and guided by the objectives and the research questions of the study.

Very little information regarding the advantages and disadvantages of integrating competency-based approaches into BT-VET in the Ugandan context was found to be available in literature; the researcher therefore asked people whose knowledge and experience in the area of competency-based programs enabled them to answer relevant questions. In this way the researcher was able to gain an understanding upon which he built a knowledge base for this research. Data acquired from this method covered objective two, three and four, as well answered all research questions of the study.

Interviews were carried out subsequently and were audio-recorded upon the consent of the respondents. In the process the researcher took notes, participants were reminded that breaks were allowed

While collecting data, descriptive survey and an in-depth interview was employed. The descriptive survey was delivered to the participants for individual completion, and returned to the researcher thereafter; individual, in-depth interviews were carried out and recorded this allowed the researcher to attain insights into participants' perspectives in relation to focus questions handed out prior to the interview. This methodology added another dimension to the data by acting as a form of triangulation.

The qualitative method of interview used in this study was in accordance with Minichiello, Aroni, Timewell and Alexander (1995) who suggested that the data obtained provides information relevant to the study, and can be used to assist in the development of research questions. This can be followed by one or more interviews, in which the questions are refined in order to elicit more precise or explicit feedback.

To ensure successful interviews, I consulted the target respondents beforehand, agreed on the time and informed them of what I expected from them so as to prepare them as pointed out by Mugenda & Mugenda (1999: 83).

### **Reflective Journal**

The last form of data was keeping a reflective journal and field notes. The journal allows the researcher to describe his feelings about conducting research in this area of study. The use of a reflective journal added rigor to qualitative inquiry as the investigator was able to record his/her reactions, assumptions, expectations, and biases about the research process as supported by Morrow and Smith (2000). In this study, the field notes provided additional data for presentation as well as analysis of data.

### **3.6. Data Analysis and interpretation**

Qualitative data analysis is a process of continual reflection on the collected data in which the researcher asks themselves analytic questions, and records all relevant observations and understandings. Minichiello et al. (1995, p. 247) state that "the aim of data analysis is to systematically arrange and present information in order to search for ideas". In this particular study, the data analysis began early in the collection process as supported by (Patton, 1990;



Chamaz, 2003) as data coding is qualitative analysis of data. Minichiello, et al. (1995, p. 257) also warns that “late coding weakens analysis therefore whenever I could, I always tried to code the previous set of field responses and notes before starting the next interview”.

Therefore, in agreement with these deliberations, this thesis adopted a qualitative analytical approach in which considerations were generated from systematically collected data, and categories of data generated as the field-work started. Paton (1990) suggests that the researcher starts with specific observations from the collected data and then detects the emergence of general patterns. As the researcher begins to understand and evaluate these emerging patterns, they will materialise as categories of themes.

During the Data collection the following categories of data were at the fore front Definition, practices, Experiences, perceptions of attitudes towards CBE/T and on integration of CBE/T into BTVET. While presenting the data, the following themes reemerged; Concepts, Delivery of CBET, Perspectives, Integration. At this stage of the data evaluation process, patterns began to emerge on which ground I began to develop my propositions and thereafter reported the findings.

During this process, the researcher was aware of the limitations that might have been caused by delimitations earlier created while proposing to undertake the study, misinterpretation of a question by the participants and misinterpretations of Responses by the researcher. For example, there were instances where answers provided in the interviews would have required clarification, and on many occasions later clarification was required to answers provided during interviews.

### **3.6.1. Coding and Classifying of Participant Data**

As previously stated, the first method was documentary analysis; in this case reports, documents, ATPs, memos and other policy relevant documents were interviewed seeking to understand the government position on CBET as well as the place of CBET in BTVET. The second and major method of data collection involving participants was the use of a non-structured interview guide containing nine questions provided at least 5 working days before the actual interview. The purpose of the method was to provide the participants with the opportunity to present reflective answers which accorded the researcher an understanding of the participant’s attitudes and perceptions on the relevant topics prior to the interview.

The responses were captured, clarified and expanded upon in the subsequent in-depth interview. Recordings of semi-structured and in-depth interviews with participants took place following the return of their descriptive surveys. Although there were no structured questions for the interviews, the completed surveys presented the researcher with the opportunity to develop relevant questions which were used in the subsequent interviews. As the descriptive surveys were completed and returned by participants, they were coded for categories prior to their follow-up interview. In this process, despite wide differences in participants' experiences of competency-based curriculums, their collective experience in both development and delivery of ATPs yielded excellent insights into the attitudes and perceptions recorded in each basic category.

During this process, data was prepared for analysis by transcribing the interview recordings of participants' perceptions, beliefs and feelings about the area of study, prior to organising these findings into various codes and repetitive themes, words, expressions and terms were sought and noted. In order to recognise the concepts, each transcript was recorded with wide margins in order to make notes and recognise repetitive words or patterns; this is in agreement with Paton (1990) who argues that, the data collected in this study should be collated into categories or units of general similarity.

In order to streamline the coding process in this study, participants were divided into three basic groups, with the modest number of participants. These groups were not rigidly defined but provided a means of identifying the participants' attitudes towards CBE/T. These groups were classified as follows:

The participants in group 1 whose attitudes towards CBE/T can be described as 'Confident' viewed the introduction of competency-based learning programs as having been generally successful. These participants conceded that there may have been some difficulty in the early stages of its introduction and implementation into the VET sector, but these participants tended to see the advantages in this form of learning process as far outweighing the disadvantages.

The participants in group 2, whose attitudes towards CBE/T can be described as 'Doubtful' expressed concern that those negative experiences, which they had encountered in the implementation, delivery and assessment procedures within the BVET sector, made the future of

CBET unsustainable. These participants were not antagonistic towards the concept of CBE/T but their conceptions of its benefits tended to be tainted by their unfavorable experiences and foreseen future challenges within the BVET sector.

The participants in group 3 whose attitudes towards CBE/T can be described as 'optimistic' also viewed the concept CBE/T favorably and were of the opinion that any associated problems they had experienced within the VET sector would probably be overcome as these programs evolved. In coding the replies to questions posed in the in depth interviews and transcripts of the semi-structured interviews, information received from the participants was divided into the following categories: 1) Participant's attitudes to CBE/T; 2) Participant's notion of CBE/T; 3) Participant's experiences and perceptions of CBE/T; 4) Participant's perception of attitudes in the BTVET towards CBE/T; and 5) Participant's opinions on introducing CBE/T into BTVET program. Remember these evolved from the objectives of the study.

Further coding of the information recorded in these categories lead the study back to the following four conceptual themes: 1) Concepts, 2) Delivery of CBET, 3) Perspectives and 4) Integration (objectives of the study). These themes formed the basis on which the data was interpreted.

The analysis of these themes and their relationships to similar themes expressed in the literature review as well as those sought from the analysis of documents, contributed to the interpretation of collected data.

The third and most critical method was observation; an observation guide was created to help the researcher focus on items, events, activities and behaviors that might have been relevant to this study, the researcher carried a reflective note pad on which all reflection on the observed practices, as well as the body language read during the in-depth interview with respondents were recorded. The data collected in this method was first and foremost for triangulation process, to help check if the answers given from the in-depth interview were coherent to the existing practice.

Secondly the data from the observation guide was important information as regard in answering the question of Delivery of CBET at institutional Level, seeking to understand who is involved at

what level of implantation (administration and class room), how training and assessment were carried out and other institutional related activities and bureaucracies unique to CBET delivery approaches. Data collected at this stage provided an empirical image of the researcher's view of CBET as well check the information collected from the ATPs on what out to be done vis-à-vis what was on ground.

### **3.7. Discussion**

The discussion was based on personal reflection and interpretation of the findings. Gibbs (2007: 10) noted that transcription of data itself was interpretive. The interpretation was backed by personal reflections, my supervisor's (Dr Jane Egau) experience in policy related activities in the area of BTVET coupled with my experience as a teacher in a vocational training institution and as a vocational pedagogue as well as the experience that I had acquired during the entire research process. Further, the discussion was enhanced by scholarly descriptions and analysis, some of which have already been reflected in chapter two of this proposal.

### **3.8. Validation Strategies**

As the area of qualitative research increases, social and behavioral scientists critique on the validity of studies that use such methodology. Thus, qualitative researchers utilize various validation strategies to make their studies credible and rigorous (Creswell & Miller, 2000).

Credibility for this study was achieved by using validation strategies of triangulation, researcher reflexivity, thick rich description, and peer debriefing.

The data was triangulated with the various forms of data that were collected in this study (i.e., interviews, observations, documents, reflective journal entries and field notes).

The researcher, being a product of BTVET, an education practitioner (teachers) himself and a master's student of vocational pedagogy, provided a section in chapter one where he described his story as a student, as teacher and as master student and his stand on the issue as well as potential bias.

Thick rich description was achieved by presenting the participants' voices under each theme and by providing detailed description of each of the respondents.

Using Stake's "critique checklist", the researcher relied on it to assess the quality of the report (1995, p.131). This twenty criteria checklist is used to assess the quality of case study reports and they are:

1. Is the report easy to read?
2. Does it fit together, each sentence contributing to the whole?
3. Does the report have a conceptual structure (for example, themes or issues?)
4. Are its issues developed in a serious and scholarly way?
5. Is the case adequately defined?
6. Is there a sense of story to the presentation?
7. Is the reader provided with some vicarious experience?
8. Have quotations been used effectively?
9. Are headings, figures, artifacts, appendixes, and indexes used effectively?
10. Was it edited well, then again with a last minute polish?
11. Has the writer made sound assertions, neither over-nor under-interpreting?
12. Has adequate attention been paid to various contexts?
13. Were sufficient raw data presented?
14. Were the data resources well-chosen and in sufficient number?
15. Do observations and interpretations appear to have been triangulated?
16. Are the role and point of view of the researcher nicely apparent?
17. Is the nature of the intended audience apparent?
18. Is empathy shown for all sides?
19. Are personal intentions examined?
20. Does it appear that individuals were put at risk?

### **3.9. Ethical Considerations**

All of the participants were treated in accordance to the ethical guidelines of the American Psychological Association (APA) and Kyambogo University master's thesis review board. Although there were no identifiable risks for participating in this study, a couple of considerations were kept in mind when dealing with respondents. First, all of the participants

who were interviewed were protected. Given that this was an academic study, there was no reason that participants may feel the pressure to answer all the questions designed for the interview.

All these considerations were incorporated at the research design stage. Every caution was taken to ensure that all parties felt safe, comfortable, and had the freedom to withdraw from the study if they felt the need to.

## **CHAPTER FOUR**

### **4.0. PRESENTATION, INTERPRETATION AND DISCUSSION**

#### **4.1. Introduction**

The initial data collected from the participants was the completion of a brief descriptive survey, which sought information on their understanding, roles, attitudes, and their opinions on the attitudes of others in relation to CBET. The participants were also asked to provide an outline of their professional experience in teaching; experience in curriculum development; involvement in developing Assessment Training Packages or involvement in any kind of CBET related activities.

The personal background information provided a professional profile on each participant. With two exceptions amongst participants who had worked across both the UVQF secretariat and DIT. The 10 participants in the study (four administrators from DIT, two administrator from Lugogo Vocational Institute, three teacher in painter and decorator and one experienced professional from the field of Painting and decorator . Their perceptions of CBE/T are therefore enhanced by their roles and their professional experiences.

The survey provided an orientation to the study for the participants and an opportunity for them to focus their thoughts on CBE/T. The responses provided a basis for conducting interviews and building on the initial responses. The specific areas of professional practice of the participants were transcended by the commonality of their responses, which in turn formed the basis for a categorization of the participants into two groupings, the optimists and the doubtful.

The participants' responses are presented below in the five categories identified in the analysis of the data. The responses are presented through the lens of the participants' attitudes and perceptions. As referred to in Chapter 1, the term 'attitude' is used to refer to a way of thinking, acting or feeling. The term 'perception' is used to refer to the process of using one's experiences to formulate views and opinions. The specific comments by the participants are italicized and parenthesized in the body of the text.

## 4.2. THE FRAME OF CBET IN THE UGANDAN CONTEXT

### Defining CBE/T in the BTVET context

As expected of this group of participants, their defining of CBET was in most cases similar and consistent with the definition qualified by the UVQF secretariat in the ATPs (2007) which defines competency-based education and training as “programs that are primarily task-oriented or vocational in nature” and view competency as “the ability of a person to perform a task in a given context, and to comprehend the principles and concepts underlying its application in order to be able to transfer such knowledge and skills to new tasks and situations in both vocational and social settings”

In group one, the ‘Confident’ Participant I9 described CBE/T as *“a combination of knowledge and formative skills performed to a required standard”*. Participant A1 suggested that *“You can teach somebody to either acquire knowledge or in addition to acquiring the knowledge to apply the knowledge and CBE/T implies the latter”*. Participant E5 considered that *“CBE/T focuses on the development of skills and knowledge to a level of performance to successfully and repeatedly undertake specific tasks and functions”*. Participant B2 differed slightly from the other participants in that he saw competency as having a dual aspect. In the first instance he describes it as *“a set of standards set by a professional community to judge members of that community against”*. Secondly, he likened the word competency to *“being competent to perform certain psychomotor skills”*, which he considered to be *“more applicable to apprenticeship training in the VET sector”*. Participant G7 considered CBE/T to be *“a program designed to develop in the worker the skills and knowledge competencies required for entry into a specific industry”*. Participant H8 described a competency-based program as *“one in which students are assessed on the basis of their competency appropriate with the ‘end-outcome’ of what they are trained to do in the workplace”*. Participant F6 stated that *“CBE/T emphasizes skills and procedural knowledge - but these should operate in a conceptual context”*.

In the second group, the ‘Doubtful’ Participant J10 described her concept of CBE/T as *“a program that spells out the ‘steps’ or skills that a graduate is expected to meet - and these skills should be repeatable when assessed”*. Participant D4 described her concept of CBE/T as *“where*



*a student emerges from a program as competent in a range of skills which are transferable to a workplace or industry".* Participant C3 was of the opinion that *"CBE/T focuses, primarily on the delivery of skills in order to reproduce that skill effectively"*.

This commonality of approach to developing a definition of competency based education and training suggests that the participants consider the term CBE/T as relating to manual or practical skills rather than cognitive skills, and that they tend to equate these skills with the requirements of industry.

### **Rationale for Competency-based Education and Training in Uganda**

One of the principal reasons for the formal introduction of CBE/T in Uganda was to provide training programs with outcomes which were deemed necessary by the relevant industry representatives and professional bodies for entry into a particular occupation (DIT 2008). These programs are primarily task-oriented or vocational in nature. According to A1 *"even though the learning of skills might be either practical or theoretical, the combination of both can provide greater mental and physical agility however these approaches become more meaningful if they have a direct linkage to industry/ workplace requirements"*. For example, Smith and Keating (2003) throw more light, without the ability to read we may gain theoretical and underpinning knowledge by verbal communication and we can acquire motor skills by practical application and refinement; however the ability to read allows us to attain greater knowledge in a self-directed manner with less reliance on others for information.

According to A1, the key role of government is to provide the educator, learner, and relevant industry or professional body with an education and training program that is clear transparent and relevant in both design and measurement of achievement. The task is as clearly put by Scollay (2000, p. 3) , to achieve this aim, each unit within a training program must be presented in a clear, precise and unambiguous manner, and the method of measuring successful attainment must be fair, flexible, reliable and valid. The purpose and nature of each unit must also be transparent, with clear, definite and stated relationships between the units, the overall program and the intended out comes. And according B2 *"the MoES is confident that the concept of CBET is the key to achieving this goal"*

In Uganda Competency-based training programs have been developed by only government represented by MoES, UVQF Secretariat and the DIT in conjunction with relevant industries and professional bodies, and designed to meet the competency standards formulated by these organisations (DIT 2008). Smith and Keating (2003, p. 52) state that: “Competency standards provide the basis for VET courses and qualifications, and they are the means for common recognition of knowledge and skills and of qualifications around the country” therefore Uganda government initiative to standardize the body required to design all CBET related activities was needed.

In regard to the above, this concept of national portability as seen to be taken into account was hinted by Smith and Keating. For example the painter and decorator programme that was developed as an independent competency-based program at Lugogo Vocational training programme, today ATP for Painter and decorator have been assumed into other BTVET institutions. The overall objective of Government is, adopted the concept of CBET across the BTVET sector in the country.

### **How the frame work of CBE/T was Development in Uganda**

The concept of Competency-based Education and Training started in the 2<sup>nd</sup> millennium, in order to develop curricula based on the competency standards of associated industries. At this time the painter and decorator programme was one of the first learning programs to be developed as a competency-based curriculum prior to the standardization, nationalization and formalization of Assessment Training Packages into the BTVET sector.

According to A1, *“In order to implement the change to a competency-based approach in BTVET the MoES had to approve a major Act (the 2008 BTVET Act) into the VET sector in 2008. This change had the following major components, “the first of which was the introduction of competency-based training” in which curricula were to meet work-related competency standards for each major industry, “reinstatement of the directorate of Industrial Training with representatives from employer groups and unions” whose role was to assist in the development of Occupation profiles, standards and accredited courses for each industry, “defining the scope and level of BTVET programmes and the roles of the different stakeholders in the provision of BTVET”, to help establishing an Institutional Framework for promotion and coordination of*

*BTJET by specifying the provider of BTJET and “the mechanism for establishment of organs responsible for the regulation of qualifications standards assessment and certification and training delivery in formal and non-formal Institutions to promote CBET”.* Despite the high sounding objectives highlighted in this otherwise good legislation, only 3.8% of the budget of the Ministry of Education is invested in the sub-sector.<sup>24</sup>

#### **4.3. DEVELOPMENT AND DELIVERY OF THE PAINTER AND DECORATOR PROGRAMME**

All strategic and working recommendations that inform the practice for a Painter and Decorator Programme (level 1 & level 2) were developed by, the UVQF Secretariat and drafted as an Assessment and Training Package (ATP).

This Assessment and Training Package is a Competence-Based Education and Training (CBET) tools and consists of three major parts:

PART I: The “Occupational Profile” (OP) of a Painter / Decorator. This Occupational Profile was developed by Painters / Decorators practicing in work life, mirrors the duties and tasks, Painters / Decorators are expected to perform in the world of work.

PART II: “Assessment Instruments” in the form of performance (practical) and written (theory) test items that can and should be used to assess whether a person complies with the requirements of employment as a Painter / Decorator. These assessment instruments were developed jointly by job practitioners (Painter / Decorator) and instructors<sup>25</sup>.

PART III: A “Training Modules” in the form of a guideline to train Painters / Decorators both on the job as well as in training centers (or combinations of both venues of learning). The Training Modules were developed basing on the Occupational Profile and Assessment Instruments thereof and hence a lot relevant for employment.

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<sup>24</sup>Paper on Skills Development presented during the Education Sector Review 2010/11 Theme: Towards Meeting the Challenges in the Delivery of Quality Education and Sports By Patrick Semwogerere Director PDCI

<sup>25</sup>In this document, only sample test items for assessing (practical) performance and occupational knowledge (theory) of Painter/ Decorators are included. A larger selection of test items can be obtained from an electronic Test Item Bank at UVQF Secretariat.

While the Occupational Profile (OP) contained in part I (see Appendix G) of the ATP provide the information of WHAT a person is expected to do competently in work life, the test items - including performance criteria-of part II(see Appendix G) qualify the HOW and/or HOW WELL a person must do the job. In combination, both parts -the OP and the test items- constitute the relevant ‘Assessment STANDARDS’ for competence-based assessment and certification for acquiring a credible Qualification for Painter/Decorator Level 1 & 2.

The modular format of the curriculum imbedded in part III (see Appendix G) of the ATP is meant to allow learners to acquire job specific skills and knowledge (i.e. competencies) module by module. A single module can be accomplished within a relatively short duration of time allowing learners to move directly into an entry level job, go for further modules or advance to higher levels of training. Modular courses allow more learners to access the training system because training centres as well as companies can accommodate more students in a given period of time.

In addition to improved access, equity and relevance of BTVET, the UVQF also enables painters and decorators who are convinced to have acquired competencies laid down in this ATP through prior training and on-the-job experience to access assessment and certification directly; be it on the basis of a single module, a group of modules or all modules pertaining to the occupation at once. This achievement will facilitate Recognition of Prior Learning (RPL)<sup>26</sup> this is an important aspect of learning however this study does not seek to bring you experiences from the none formal sector.

#### **4.3.2. Occupational Profile for painter / decorator**

In the Occupational Profile (OP) (see appendixG) for “PAINTER / DECORATOR” Duties and Tasks a competent Painter / Decorator is expected to perform in the world of work (on the job) in

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<sup>26</sup>Assessment and training package For Painter / decorator Level 1 & 2, the republic of Uganda Ministry of Education and Sports Business, Technical, Vocational Education and Training [BTVET] sub sector reform, September 2007 Developed by: (UVQF) Secretariat Directorate of Industrial Training.

Uganda today are well defined. It reflects the skill requirements of work life and acts as a reference document for the subsequent development of assessment instruments (test items) and training modules which are sought to be directly relevant to employment in Ugandan businesses and industries. According to C3, a respondent with a lot of experience in developing ATP said, *“To ensure that OP is relevant for employment in Uganda the UVQF Secretariat used the method of “occupational/job profiling. This approach involves the brainstorming of a panel of 8 to 12 competent job practitioners guided by a trained and experienced facilitator. During a two-day workshop the panelists define the duties and tasks performed in employment of a painter and decorator, as well as the prerequisite skills, knowledge, attitudes, tools and equipment, and the future trends and concerns in the occupation/job.”* However some of the critics of the concept of CBET have raised contention to this kind of approach in developing OPs, for example Hyland's (1996) survey of numerous NVQ studies found employers *"largely concerned about who was represented on the industry standards-setting boards"* and whether they were truly employer led.

Further concerns were cited by Hoffmann (1999,) who implied,

If a certain selected group of experts does not have characteristics (Knowledge Skills, attitudes and attributes) that represent the larger group of the industry in question then a certain proportion of the ATP might remain less relevant or inadequate of industrial or required work standards

While developing the OP, the DACUM-method was used. DACUM is an acronym for Develop a Curriculum and the panellists, facilitators and co-coordinators who participated in developing the OP PAINTER / DECORATOR are listed below.<sup>27</sup>

Personnel	Designation
Mr. Lubega Badru	Peacock Paint Industry

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<sup>27</sup>Occupational Profile of a “Painter /Decorator” [Level 1 & 2] May 2004 Developed by: Uganda Vocational Qualifications Framework Secretariat (UVQF-S) Dates of workshop: 10-11 May 2004

Mr. Wahabu	Peacock Paint Industry
Mr. Sebankyaye	Easter African Paint Manufactures Ltd
Mr. Sebagala Samuel	Easter African Paint Manufactures Ltd
Mr. Akwech James	HannyJannweck Associates
Mr. Twinomujuni Alfred	East African Paints Manufactures
Mr. Omara Geoffrey	Standard Signs Ltd
Ms. Candiru Esther	Lotus Arts Banda
Mr. Kaddu Mac	Self Employed
Odock Patrick	Self Employed
Mr. Enyata O. Victory	Self Employed
Lewis Durango	GTZ/INBAS (Cordinators)
Ethel Kyobe (cordinator)	Uganda Vocational Qualification Framework Secretariat (UVQF-S)
Aminah Nabalamba Musoke (Facilitator)	(UGAPRIVI) Uganda Association of Private Vocational Institutions

Curriculum Development in the process of formulating ATP for Painter and Decorator

While interacting with C3 Creating a curriculum was one of the essential functions while developing an ATP for painter and decorator L1 & 2.

While developing the curriculum the following procedures were undertake; first, it is necessary to choose an expert facilitator and select participants from relevant occupation. We selected participants in our view who had profound knowledge of the occupation as well as to take

care of interests of educators and practitioners. Second, a pre-DACUM session must be organized in order to explain the process of curriculum development.

At the beginning of the session, the facilitator has to be given a general introduction to and review of the occupational area. Then the main duties within the occupation were outlined and associated tasks, sub tasks and required competences were identified.

Additionally, the importance of each task, sub task and competence was rated according to its frequency of performance and its importance for a competency development. The results were be structured and recorded for a final report, which is disseminated to the UVQF secretariat.

*A1 B2, C3 all seem to agree the job analysis that is required by DACUM includes several aspects such as the analysis of occupations, jobs, duties, tasks and single work steps. Additional issues such as workers behavior, general knowledge and skills, tools, equipment, supplies and materials as well as future concerns should be considered.*

While developing the ATP for painter and Decorator the following DUTIES and TASKS were identified and grouped into sub sections that range from A to H with the expected generic skills, attitudes /traits/behavior and the needed tools and equipment (refer to appendix G)

#### **4.3.2.2. Developing Assessment Instruments for painter / decorator**

Assessment of occupational competence is the procedure by which evidence is gathered and judged to decide if an individual (candidate) has met the stipulated assessment standards or not. In this ATP the standards to assess occupational competences are reflected in the form of the Occupational Profile and related Test Items.

Assessment of occupational competence should comprise both practical (performance) testing and written (theory/knowledge) testing.

Based on the Occupational Profile, a combined panel of job practitioners and Instructors developed a substantial number of test items for assessing (practical) performance as well as

items for assessing occupational knowledge (theory) all stored in an electronic Test Item Bank (TIB) at the UVQF Secretariat.

Performance (Practical) Test Items (PTI) are closely related to typical work situations in Ugandan business enterprises and industries. They comprise a test assignment for candidates and assessment criteria and/or scoring guides for assessors' use.

Written Test items (WTI) for written testing of occupational theory, (knowledge) are presented in different forms which include: Short answer test items, multiple choice test items and matching test items. These WTIs herein focus on functional understanding as well as trouble-shooting typically synonymous with the world of work.

Composition of assessment / test papers will always require good choices of different types of WTI in order to ensure the assessment of relevant occupational knowledge required of candidates to exhibit competence. The test items contained in the Test Item Bank may be used for continuous / formative assessment during the process of training as well as for summative assessment of candidates who have acquired their competences non-formally/or informally. For samples of test items for painter and decorator in this document please refer to Appendix G. A larger selection of test items can be obtained as electronic or printed copies from the UVQF Secretariat or designated outlets.

#### **4.3.2.3. Training Modules for painter/ decorator**

A curriculum is a “guide / plan for teaching and learning” which provides a guide to teachers, instructors and learners. In the envisaged system of competence-based or outcome-oriented education and training (CBET), Curricula are no longer the benchmark against which assessment is conducted. It is rather the Occupational Profile and the related Test Items that provide the benchmark for assessment as well as for Curriculum development.



This modular format of the curriculum allows learners of Painting and Decoration to acquire job specific skills and knowledge (i.e. competencies) module by module. A single module can be accomplished within a relatively short duration of time allowing learners to move directly into an entry level job, do further modules and advance to higher levels of training. Modular courses allow more learners to access the training system because training centres as well as companies can accommodate more students in a given period of time.

The modules were developed jointly by both instructors from training centres and job practitioners. They were developed using the Occupational Profile as a reference point and taking into account the specifications of training and learning outcomes in the form of Test Items described in Part II of the ATP (refer to appendix G).

The modules contain “Learning-Working Assignments” (LWAs) and related “Practical Exercises” (PEXs) as key elements. LWAs are simulated or real job situations / assignments that are suitable for learning in a training environment (e.g. “small projects”). In a working environment, LWAs are real work situations. PEXs are therefore sub-sets of a LWA.

In principle, and following the philosophy of Competence-Based Education and Training (CBET), the modules can be used as a guide for learning in a training center or at the work place; or combinations of both.

### **Overview of modules**

Code Module	Title	Average duration
PD-M1	Observe health and safety requirements	1 week
PD-M2	Make and interpret designs and working drawings	5 weeks
PD-M3	Paint and spray surfaces	12 weeks
PD-M4	Decorate surfaces.	6 weeks

PD-M5	Prepare and make signs.	12 weeks
PD-M6	Carry out printing	8 weeks
PD-M7	Perform fabric design	6 weeks
PD-M8	Manage a painting and decorating business	4 weeks
		54 weeks

Information on the average duration of training should be understood as a guideline. Quick learners may need less time than indicated and slow learners more. A module should be completed if the learner is able to perform a representative selection of assignments given in the performance and written test items. For details of all PDMs from 1 to 8 attached please refer to appendix G

#### 4.4. ATTITUDES TO CBE/T

The attitudes of the first group of participants, referred to as the confidants towards CBE/T, was indeed very positive and included participants A1 B2 E5, and I9. Two of these had experience in competency-based programs in BTVET. The first of these, B2, whose involvement in the development of ATPs from the start stated that *“there was a need for a shift in concept from teaching programmes as a content-based to one in which the attainment of knowledge had to be accompanied with the accepted application of that knowledge”*. The second participant, I9, was also from the department of painter and decorator with extensive experience in competency-based delivery and he believed *“CBET is well suited to the nurturing professions where applied knowledge in the form of prescribed tasks requires the reinforcement of acquired and conditional knowledge that lead to a high degree of functional knowledge”*.

The other two participants in this group had both been involved in the development and delivery of competency-based programs at the BTVET level. Participant A1 presented very positive views on the development and implementation of CBE/T. she does, however, acknowledge that the introduction of CBE/T into the BTVET sector involved a great deal of confusion, and feels that there has been a lack of professional development emphasizing the integrated nature of

competencies. She was of the opinion that this had led to extensive delays in considering the integration of learning and assessment experiences. Her opinion of the ATPs was probably the most positive of the group and considered that *“they may have been inconsistent in accuracy and intent which once again caused confusion at their introduction but now they have evolved to provide specific and accepted conditions for assessment and have made clear the requirements for each UVQF level within each industry package”*. This endorsement of ATPs was shared by participant E5 who contends that *“CBE/T is ideally suited to any type of vocational training programme related programs but ATPs have not been understood by many in the VET”*. Participants F6, H8, and G7, whose experiences in the development and delivery of competency-based programs were mixed, their attitudes were more optimism but with certain reservations. For example, Participant F6 contends that CBE/T describes how to do things and it is *“well suited to trade areas but not to areas such as design or concept development”*.

The perception that CBE/T is not very useful in all subjects in painter and decorator was supported by participant H8 who felt that *“the introduction of CBE/T in the BTVET sector had been accompanied with confusion and lack of smooth and informed integration”*. However, she was also of the opinion that *“the initial problems such as the binary approach to assessment which accompanied the introduction of CBE/T appear to be finding resolutions with a return to non-binary grading in some institutions”*. Finally, participant G7 who had extensive experience in teaching in the BTVET sector suggested that *“competency-based training in Uganda is not completely new and stems from technical training institutions and polytechnics in the early 1960s, and late 80s where a learner’s progresses from one stage of training to the next only after completing a required set of competencies”*.

The second group the ‘Doubtful’ included participants D4, J10, and C3, who all had experience in teaching and managing competency-based programs in the BVET sectors. However, the concerns they expressed were a reflection on the methods of implementation, development and delivery rather than the concept itself. Participant D4 described the idea of competency-based education as *“logical, especially in the acquiring of task-oriented skills”* (e.g. preparing the surface, applying undercoat, or applying wall paper). This participant did, however, express concern regarding the common practice of ‘binary grading’ in which the student is graded as

simply 'competent' or 'not competent' and suggests that *"the student may be 'extremely competent' or 'barely competent', but there is no means of recording this disparity"*. This concern regarding binary assessment was also expressed by participant J10 who stated that *"little consideration has been given to students with exceptional ability and the prevalent system of binary assessment in which a student is labeled 'competent' or 'not competent' does little to encourage students towards a higher achievement"*.

The attitude of Participant C3 to CBE/T was favorable in that she felt that it *"focused on the delivery of procedural skills and the ability to reproduce those skills in an effective manner"*. However, she also felt that *"in the VET sector there is a lack of depth in the understanding or appreciation of why certain procedures may be carried out"*.

#### **4.5. EXPERIENCE OF CBE/T**

In group one, the 'confidants' Participant A1 recalled Vividly all her experiences at the early design stages and implementation of ATPs "there had been initial conflict and opposition to competency-based programs, but the teaching was gradually streamed and adapted so that students were introduced to a competency-based focus early in the program. However, this was only accomplished by co-operation with teaching staff, and administrators". Participant I9 stated her personal experience as a teacher in the painter and decorator programme "the learning outcomes in many units do not give any sense of relating to the overall outcomes of the course of study". She considered CBE/T to be "practical, relevant, specific, and challenging", and was of the opinion that "having taught under CBE/T, I found competency-based programs to be much more engaging for learners and teachers". This participant was also of the opinion that "there was less thought given to CBET more attractive as a lifelong experience in which a worker and graduates may move into BTVET to gain skills as required". She suggested that an example of this may be when an employee with an academic University degree in a particular discipline later enrolls into CBET programme.

Participant I9 stated that "at the outset, the introduction of CBE/T to the BTVET sector led to a great deal of confusion". She was of the opinion that the benefits derived from CBE/T have been reduced by difficulties including "over assessment, diminishing learning experiences to the

‘lowest common’ interpretation of the prescribed standards, and reduction in the amount of professional judgment allowed to the teaching profession through evidence-based assessment”. However, she considered with time there has been changes in teaching habits which has finally presented students with a more flexible, less rigid approach to assessment and learning. In her opinion competency-based programs including the ATPs “encouraged accountability in delivery, encouraged flexible learning practices, broke down barriers to learning for adults, and provides commonality across all programmes, understanding and acceptance of the integrity of the qualification - irrespective of how it was obtained”.

Participant E5 stated that in painting and decorator placements are “assessed against the Competency Standards developed by the UVQF secretariat together with industry and other expatriates”. However, he considered that even with this tool providing competency elements, listing and assessing all of the complex tasks, few people in the industry have a clear idea of these standards, which are often viewed as ‘theoretical’ and difficult to use in assessment. This participant also commented that “although I have had no experience in teaching at BTVET level, there was a strong feeling amongst many of my staff that products of CBET tend to be rigid thinkers and are very task-oriented”. Participant G7 considered that in CBE/T programs “the emphasis was placed on the training component and very little on the education component”. He suggested that “the VET sector has become the VT sector - vocational training sector”. He is of the opinion that the National Training Packages are based on the modular system in which the worker progressed through training modules as their skills and requirements changed. He considered that “these packages are concerned with what is required now and not what may be required in the future”. Participant F6 was of the opinion that “CBE/T is suited to the trade areas but not suited to language development or academic work”, and suggested that in Uganda it is overwhelmingly associated with industry, vocation and the workplace, but not with abstract thought. Participant H8 also considered that “the introduction of CBE/T was not well integrated and this created confusion which still exists”.

In the second group, the ‘doubtful’ Participant B2 suggested “I actually think that there is some value in the way that competencies are written - and not necessarily with traditional BTVET programmes but the clearly written competencies are quite useful”. She also found that the way in which the ‘units of competency’ are written are open to interpretation and variation in

different institutions. Participant D4 was of the view that “the introduction of CBE/T was accompanied by a reduction in graduate standards”. Participant C3 is not against the notion of CBE/T but is of the opinion that “in my experience it was a very superficial way of learning”.

The participants’ experiences of CBE/T were understandably varied, but criticisms tended to be directed towards the inadequacy of preparation for its introduction and a lack of directional focus in its implementation.

#### **4.6. PARTICIPANTS PERCEPTIONS OF ATTITUDES IN BTVET TOWARDS CBE/T**

In the first group, the ‘confidants,’ Participant A1 considered that “attitudes towards CBE/T in the BTVET sector might be influenced by individual learning experiences”. She stated that in her association with learning institutions implementing CBET Lugogo vocational inclusive, she had noticed “those teachers who had acquired practical skills in “work places” were much more inclined to using models or incorporate the use of instruments to explain or explore the subject matter”. He suggested that teacher’s whose understandings of the subject matter (usually those trained from learning institutions) was less practically acquired, were more inclined to use overheads, diagrams or power-point presentations. Participant I9 was of the opinion that CBE/T is poorly understood in the BTVET sector, with a poor knowledge-base in the learning. She believed that some learning institutions in the BTVET sector “there is an ‘arrogance’ of attitude towards competency-based programs based on a lack of understanding”. Participant E5 stated that “in the VET sector trade tests that are commonly held at the end of a program of study are used to provide a competency-based, applied learning experience - whereas occupation profiles provide a framework for skills development”. Participant B2 stated that “within the VET sector, competency standards have been with us and their relevance is accepted as a ‘given’ - when discussions does take place regarding CBE/T it is more about the practicalities of how we use these standards to assess our students”. Participant G7 is of the opinion that the some areas of BTVET sector do not equate CBE/T with their role in education and stated that “some see themselves as providing a broad education required for entry into a spread of industries and professions, and at the same time provide graduates with the skills and knowledge to adapt readily to the changing needs of industry and commerce”. Participant F6 stated that “as CBE/T is still manifesting in Uganda, it is seen as antagonist to academic discourse. It is seen as anti-

intellectual, ignoring academic skills, communication skills, and more specifically, literacy and numeracy, I hope these views are wrong”. Participant H8 was of the opinion that “there are negative attitudes to CBE/T within the BTVET sector and some of these attitudes stem from a perception in some areas of BTVET that there is a lack of grading in CBE/T assessment”, and suggested that this is not the case in all units of competency, especially those units delivered at Diploma and degree levels.

In the second group, the ‘doubtful’ Participant J10 suggested that “there is a concern in BTVET especially in Universities with faculties under BTVET that CBE/T may contribute to the loss of high standards in knowledge - in which VET also strongly focuses”, and further comments that “in general I think there will be an instinctive – no that’s a technical education thing and we don’t want to embrace a technical education thing at such levels of training”. Participant D4 added that “he had not experienced any perceptions or attitudes concerning competency-based programs from her dealings with the BTVET sector”. Participant C3 stated that many of her staff who are involved in teaching in the BTVET sector spoke of the frustrations they experienced with CBET, saying “they enjoyed working with the students but found it frustrating to be working at a superficial level and coping with all the CBET procedures”.

#### **4.7. OPINIONS ON INTRODUCING CBE/T INTO BTVET PROGRAMS**

Among the ‘confidants’, Participant A1 stated that “I have formed the view that theoretical knowledge acquired by students through formal instruction, through student initiatives and through practical demonstration by instructors serves the relevant purpose of inculcating work related and analytic skills for later industrial practice/ work placement”. He added a cautionary note by suggesting that “in my view a predominantly competency-based approach in the enabling subjects would weaken traditional content based BTVET programs, in my view a competency-based approach is best suited”.

Participant I9, also from the first group considered that “a competency-based approach may not work for all disciplines but its introduction in some units in a course such as painter/decorator, bakery, would enhance the student’s learning experience and employment opportunities”. She also considered that a competency-based approach would make the graduates “work-ready”. Participant E5 from the same group considered that “political and world trends are imposing an

increasing pressure to produce work-ready graduates who can demonstrate a highly developed set of specific work skills reinforced with a sound knowledge- base". Participant B2 suggested that the impact of competency standards on a curriculum depends on the type of competency standards. He stated that "if you refer to the psycho-motor skills competencies then it is likely to have little impact. However, if you have professionally-based competency standards and you are applying these to your program then there may well be a big impact on the curriculum and outcomes for the students".

Participant G7 contended that "education and training in the BTVET sector is in a way, competency-based in that the on-the-job component of the BTVET program usually takes place in the later stages of a learning program". Participant F6 contended that CBE/T in the form of ATPs contains positive aspects, but is of the opinion that "their narrow adherence to competencies will create problems in the transfer of credits between the BTVET sectors and industry". Participant H8 did not feel that CBE/T was suitable for all subjects, and was of the opinion that "there is a perception in the BTVET sector that the CBETATPs lack the notion of critical thought".

In the second group, the 'doubtful,' Participant J10 suggested that "in the present Painter/Decorator ATP, classes which practical still contain a significant theoretical component". She considered that this would need to continue and its level of importance maintained. Participant D4 was of the opinion that "this type of learning program is already taking in many areas such as Tailoring, Bakery, Painter/Decorator and many others - but the term competency-based is not usually or only used to describe this type of skill- based training in BTVET.

Participant C3 from the second group had a positive attitude to the incorporation of a competency-based approach in areas of BTVET with a high degree of applied knowledge. However, she was also of the opinion that "technical skills, though important, should be seen as a small part of the overall programme". She was also of the opinion that the "assessment of practical skills should be performed on at least three separate occasions in order to ascertain whether the skill has been retained", and commented that the programmes should introduce a new unit in the final semester - the content of which, should comprise of a revision of all previously attained procedural skills.



#### **4.8. ANALYSIS AND INTERPRETATION**

In order to interpret and elicit meaning from the transcribed categorized data above, the data was coded into themes and relationships. Themes were developed from the prior set objectives from which the various categories of data above were derived as explicitly elaborated in chapter three of this study as well as the recurring words, phrases and expressions of similarity found in the perceptions and perspectives provided by participants.

As indicated previously, all participants in this study were experienced in teaching at BTVET or Development of programmes or policy in the BTVT sectors, and many had experience in ATP development or delivery or both of these areas. Five of the participants had vast teaching experience within the BVET sector, with two having had teaching experience the Painter/Decorator Programme at Lugogo Vocational Institute. The other six participants had teaching experience in both educational sectors. Although the participant group represents a mix of relatively diverse academic backgrounds that add to the complexity of analysis, they have provided a rich group with broad experience in developing and teaching programs that involve competency-based learning. The interpretation of data stemming from the categories presented above has identified four major themes. These themes also related to the Objectives of the study as well as issues presented in the earlier review of literature.

In the following section an interpretation of the data is provided under conceptual themes labeled Concepts, Delivery of CBET, Perspectives and Integration.

##### **4.8.1. Concepts**

All of the participants interviewed in this study had an excellent understanding and appreciation of the concept of competency-based learning programs - with varying degrees of endorsement or approval. According to Hoffmann (1999, pp. 275-286) who argues that,

*The term 'competency' is not a well-defined concept, and that this lack of definition hinders its application.*

However, the insights exhibited by participants stemmed from their considerable experience and familiarity with competency-based programs at a developmental and/or delivery level.

For some participants such as participant A1, the introduction of CBE/T involved a conceptual change in thinking, both in the development and delivery of curriculum content. She was used to Traditional method in BTVET sector which was mostly content-based that had little regard to explicit application of practical works. However, with the advent of CBET programmes at various levels of training, a curriculum of the sorts (ATP) was required which reflected the profession's need to combine acquired and applied knowledge. She found that after adapting her thinking to accommodate these requirements she recognized the advantages in combining acquired and applied knowledge in an educational program where a large proportion of the programme underpinned applied knowledge than acquired knowledge.

This formalized integration of both acquired and applied knowledge was also seen as advantageous by Participant B2 whose background in BTVET programme development probably contributed to his conception of competency as a set of professional standards which incorporated the acquisition of psychomotor skills. Acquiring skills and knowledge for the workplace was also mentioned by Participant E5 who considered that the primary focus of CBE/T is related to those tasks and functions demanded in the workplace, and suggested that this concept is underpinned by the views of performance benchmarks being accepted as commonly understood measures of human capacity - and that these performance benchmarks can be deconstructed as a series of skills and sets of knowledge.

The acquisition of a 'skill' may require either a great deal of underpinning knowledge or very little. This term has been defined by Attwell (1990) as 'the ability to do something'. He goes on to suggest that

“While skill and competency are seen to be identical, the word 'skill' itself, connotes a dimension of increasing ability, which leads one to associate skill with expertise, mastery and excellence” (p. 433). Thus, the deconstruction of skills and knowledge suggests that a competency-based learning program need not be rigid in its application but implies that the essence of a competency-based program is the integration of knowledge and skills combined with a means of assessment that proves the learner's ability to combine both.

Participant F6 considered that the term competency describes 'skills rather than conceptualizations', and suggests that they are relevant in some areas of BTVET sector than in

others where a greater emphasis is placed on analytic inquiry and conceptual reasoning. Participant G7 had a very pragmatic view of CBE/T and suggested that competency-based educational and training processes invoke understandings of both educational training and learning.

The above comments have shown that the concept a person develops regarding CBE/T or any other system of instruction usually develops from their previous experience or association with its development or delivery. This being the case, it is natural that the participants held differing opinions on the usefulness or appropriateness of competency-based programs. However, none of the participants disliked the concept of CBE/T. In fact, they all agreed that competency-based programs had merit in those areas where the attainment of high levels of applied knowledge is required.

Given the participants' similarity of background and experience, it was not unreasonable that they expressed similar views regarding the terms 'competency' and 'competency-based education and training'. It could reasonably be stated that they consider that the term 'competency' as describing 'the ability to carry out a tasks to a prescribed standard'. My summation of the participants' conceptions of a competency-based learning program can therefore be encapsulated as follows:

**A competency-based learning program is one which relates to the professional standards of a representative body, and emphasizes an applied knowledge that is significantly proportional to that of acquired knowledge.**

#### **4.8.2. Delivery of CBET,**

The observations made here constitute constricted actions from a selected group in a particular program with in a selected institution. The practices, structure and organisation of this particular institution might not necessarily represent other BTVET institutions.

Lugogo Vocational Training Institutes is an organized institution and its proximity to the Directorate of Industrial Training, gives it advantage and it was this particular reason it was

selected for this study. The assumption was if it fails here it will never work elsewhere and if it works here given time it will work elsewhere.

Considerable effort to deliver as per the ATP was observed at the Painter/ Decorator department, the challenge however was the vast nature of the field of competency standards required by a painter/decorator which in my opinion was not practical

For example the ATP for painter/ decorator Learning Work Assignments which are the basis of teaching required competencies the learner had to master to be considered Level 2 painter/decorator were the following. (Not in their order)

- LWA 1: Make and interpret different types of designs and working drawings using free hand.
- LWA 2: Make and interpret different types of designs and working drawings using a computer.
- LWA 3: Perform paint decorations.
- LWA 4: Perform relief decorations
- LWA 5: Paint wall and wood surfaces.
- LWA 6: Paint and spray metals.
- LWA 7: Paint, spray and decorate glass.
- LWA 8: Dye different materials
- LWA 9: Make batik designs
- LWA 10: Make posters and billboards.
- LWA 11: Prepare murals.
- LWA 12: Perform screen printing
- LWA 13: Carry out machine printing
- LWA 14: Prepare a business plan for a painting and decorating business
- LWA 15: Manage resources
- LWA 16: Market and publicize products and services

In my experience as a teacher, practitioner and master's student vocational pedagogy, I see various professions in just one ATP, for example; print maker, branding and signage, graphics designer, domestic and commercial interior and exterior painter, fabricator, fabric decorators. Building an individual with all these competencies is unlike CBET. According to Harris, Guthrie,

Hobart and Lundberg (1995, p. 15) CBE/T intent is to enable a person to perform specific function or task with competency, whereas the term, 'Competency-based Education and Training' (CBE/T) is used to describe a learning program designed and developed to meet the competency standards of a relevant industry or professional body. These standards are a compilation of the requirements considered necessary for a person to be regarded as competent in a particular occupation. Learning programs using this type of approach may be oriented to the narrow rigidity of a workplace setting, or may incorporate the expectations and values of the broader community.

This is not the case as indicated in the ATP of the painter/ decorator programme; there is lack of specific focus and clarity in what kind of competencies the programme intends to impart. In this kind of approach taken by Lugogo may not be far different from the traditional methods in the BTVET programmes showing signs of lack of in depth preparation and conceptualization of the notion of competence based education and training

There are questions regarding whether or Not CBET addresses the needs of the industry or of a specific work place. Participant E5 had concerns regarding the dynamics in the world of work, in view of the non-existent mechanisms to keep updating the ATPs to meet these changes. This therefore means that the concept of ATPs addresses the concerns of the industry today to a certain level in some trades. However this does not necessarily mean that the ATPs will meet the requirement of the industry tomorrow

Classes in the department of painter and decorator start at 8:30 am in the morning and end at 4:00pm in the evening during this time teachers/ instructors handle various groups at different times, the major method of delivery observed was classroom instruction, work shop demonstrations, lectures, seminars and workshops. Little of the environment did reflect the environment at work or the industry. Doubts surrounding effectiveness of the ATPs have also been expressed by Wheelahan (2003), who questioned their effectiveness in developing skills. She suggests that Training Packages are based on fiction in that they were designed for and assumed workplace delivery when, in fact, the main method of content delivery in the vast majority of VET programs is by classroom instruction, lectures, seminars, workshops or conferences (p. 2). However, participant E5 felt positive about the ATPs, saying that they have

*“encouraged accountability in delivery, encouraged flexible learning practices, broken down barriers to learning for adults and provided commonality across all states and territories, providing a uniform understanding and acceptance of the integrity of the qualification, irrespective of how they were obtained, has allowed a variance of curriculum”.*

However there was effort to engage learners in vocational theory or work related vocabulary and practical application of the learned knowledge. But given the numbers this was not sufficient for the instructor to interact with each individual learner adequately.

In a similar regard, all participants expressed concerns that care should be required in framing and integrating CBET to ensure that standards of underpinning knowledge are maintained, and assessment of discipline specific tasks are of a standard suited to entry levels of relevant professions/ industry. Although participants were positive about the concept of CBET, nearly all felt that it could have received a much more positive response had the development and planning of its implementation received adequate preparation and consultation with teaching staff. Unfortunately, the delivery of competency-based programs has become synonymous with the Assessment Training Packages which provoked a largely negative response from participants.

The teachers who were in control of the teaching were those with a lot of experience in the teaching in the BTVET sector not those with a lot of experience in the manual labour market. It is not clear whether this would be impede the skills acquisition process but relying on these teachers to keep track of the changing Industrial dimensions of which they have little interaction. This might be a time bomb for the CBET delivery in Uganda.

Scollay (2000, p. 3) comments that, The key to a successful application of Training Packages in any learning environment is the ability of the teacher /trainer to develop and customize the learning strategies within the framework of competencies and assessment that the packages provide”.

This customizing of the learning strategies to develop a curriculum or syllabus from the Training Package strategy was seen by some, such as Waterhouse (2000), as an opportunity for innovative teachers to explore and create new methods of delivery. However, commentators such as Smith (2002) argue that: Others see this reliance upon individual teacher’s or trainer’s expertise as a

possible route to disaster, with smaller and/or less scrupulous providers perhaps leaving it to under-qualified teachers to struggle as best they could to teach units of competence

Recruiting teachers who have been accustomed to the traditional methods of teaching content from textbook and other predetermined sourced into the CBET approach might not be very practical in the Ugandan context. However my observation while I was interacting with the activities in the Painter/ Decorator programme at Lugogo vocational institute, all I saw were teachers that had a great attitude towards teaching, a great relationship with their learners and most importantly teacher who cared about their learners' progress

#### **4.8.3. Perspectives**

Participants who had involvement with the establishment of CBE/T in the BVET sector had reservations about the way in which it was introduced. They felt that there had been little or no consultation with the stakeholders prior to its implementation, resulting in confusion and lack of uniform understandings regarding subject material and assessment. This is consistent with literature in which Cairns (1999) and Newman (1999) found little evidence to suggest that the implementation of CBE/T had been preceded by much research or critical scrutiny regarding its principles and presumed benefits. From the data in this thesis, it appears that the confusion and uncertainty which accompanied the introduction of CBE/T concerning principles, content and assessment still exists. This lack of consultation and preparation with teaching staff prior to the implementation of competency-based programs was also acknowledged by those participants who were strongly supportive of competency-based approaches.

The lack of preparation and confusion which accompanied the introduction of competency-based programs has been repeated with introduction of Painter/Decorator ATPs. Participant E5 strongly supports the concept of CBE/T but considered the lack of professional development prior to introduction has led to delays in the integration of learning and assessment. However, this participant also felt that overtime years there has been and will be with time a positive and 'true' change in teaching habits which have finally presented students with more flexibility in CBE/T programs.

Participant I9, who also favours competency-based approaches, considered that the National Training Packages provided commonality of content with consistent outcomes, and flexibility for the learner to move between programmes and institutions. However, she was also of the opinion that, not enough time was provided in their implementation, resulting in the packages being poorly understood and with inconsistencies in implementation. These perspectives regarding the implementation of CBE/T in Uganda and in particular the ATPs, is supported by Wheelahan (2003) who has worked with many Technical and Further Education (TAFE) teachers over the years. She states that:

The impression I get is that teachers find that they must use competencies as curriculum and develop 'check-list' type of approaches, to ensure they cover all the performance criteria. They feel de-skilled as teachers and are being sold short (p. 8).

Participant G7 retired from the VET sector prior to the implementation of the Assessment Training Packages and regarded their implementation as a process which "signaled an educational bureaucracy gone mad - where certification could be obtained for an envelope or tying one's shoe laces". He viewed the training packages as a self-sustaining educational industry that would bring joy to the heart of any civil servant.

Concerns were raised by a number of the participants concerning the level of quality or standards attained by students undertaking competency-based programs, and their application through the Assessment Training Packages. These concerns were expressed in terms of implementation, content and assessment modes. For instance Participant J10 described the CBE/T programs she was involved as containing vague and ambiguous language, with little focus on knowledge or standards - which may be linked to the excessive paper trails required to satisfy UVQF standards. This type of concern had been foreseen by Bloch and Thomson (1994) who suggested that:

All of those concerned with the future of competency-based education, training and assessment in this country need to work towards finding a balance between over-bureaucratising the assessment process and creating a system that is so 'loose' that it renders absurd the notion of national standards and portable competencies (p. 23).

Participant J10 was also of the opinion that the Assessment Training Packages had created an environment in which the term 'competency' equates with the term 'minimum', resulting in little



incentive for the student to do any more than the minimum to be deemed competent. Participant C3 considered that in the assessment related areas in which she was involved in the Assessment Training Packages programs being delivered in the BTVET sector - focused too much on rote-learning methods that focused on the reproduction of skills, with too little emphasis on why these skills are being used. She stated that “both she and her staff who were involved in teaching CBE/T in the Painter and decorator program at all levels, found teaching with the ATP extremely frustrating because of their focus on applied knowledge at the expense of acquired knowledge. These concerns are consistent with the findings of Leahy and Gabb (1999) who state that:

A number of teachers are concerned that at the higher levels of the Uganda Qualification Framework the unremitting focus on the assessment of competencies will emphasize the performance of specific skills at the expense of the broad underpinning knowledge that is seen as essential for high quality practice (p. 4).

This perception of lack of emphasis in acquired knowledge has been mentioned by a few participants. For instance, Participant D4 used the terms ‘adequate, meeting minimum requirements’ and ‘sufficient’ when describing her concept of competency. This participant’s perception of the ATPs was that the standards of emerging students had been ‘lowered, and too much emphasis was being placed on the ability to carry out tasks with too little emphasis on producing the correct ‘attitudes’ - or what might be described as ‘graduate attributes’. This term ‘minimised’ was also used by Participants J10 and H8, whose perceptions of the ATPs were that they provided better consistency but had also brought some ‘lowered’ of content and assessment.

The term ‘minimised’ is again mentioned by E5 in connection with the public attitudes towards CBE/T when she describes the public attitude as regarding VET as lower status ‘vocational education’. In Regard to ATPs, she was complaining that the inconsistency of their implementation had created a perception that they produce minimum qualifications.

The generally negative attitudes expressed by participants towards the ATPs Packages is shared by Wheelahan and Carter (2001) who argue that these packages may result in poorer student learning outcomes and threaten the effective transfer between tertiary sectors. They maintain that there has been great pressure for the TAFE and HE sectors to collaborate, but despite this:

The policy directions in the VET sector, particularly the introduction of training packages continues to make the collaboration between the two sectors more difficult. Training Packages in their present form are less than helpful in facilitating the development of a 'seamless' tertiary education sector in Australia and do not add anything to ensuring that Australia develops a flexible workforce, equipped to face the challenges of technological change and the need for lifelong learning (p. 315).

Another area of concern raised by Participants J10, D4 and H8, was that the binary method of assessment did not provide enough incentive for students to try to excel in subjects or units of competency. The binary system of assessment probably stemmed from the attitude expressed by Participant E5, that competency has no grey areas - we are either capable or not capable of repeatedly and successfully performing tasks and functions at a prescribed level, irrespective of external or unexpected events. However, as early as the 1980's, theorists such as the educational brothers Dreyfus and Dreyfus (1986, pp. 315-335) levels of competence were being discussed by who distinguished between levels of competency and recorded five levels of them (novice, advanced beginner, competent, proficient and expert). These authors suggested that the difference between the novice and the expert lay in the varying ability of situational discrimination. They contend that the expert has learnt to distinguish situations that require one reaction from those requiring a different reaction.

#### **4.8.4. Integration**

Irrespective of their views on the implementation and delivery of CBE/T in the BTVET sector and their concerns in relation to the ATP, all of the participants felt that, if there was sufficient input into the development of programmes from the appropriate professional bodies, as well as practical support to students from those professional bodies - then the integration of a competency-based approach to programmes with a high proportion of technical requirements (such as the painter and decorator L1&2 program) would be beneficial.

All participants considered that the introduction of this type of integrated program would require considerable preparation in order to make certain that the practical tasks being taught were delivered and assessed at a standard acceptable to the requirements of the entry-level standard of the industry. The participants were also of the opinion that CBET would require considerable

thought and preparation to make sure that the subject material delivered could be assessed in a way which was clear, distinct and transparent to both the student and assessor. A competency-based approach cannot be excluded from consideration in the BTVET sector, and some see it as something which, if it was sustainable, it may have a tremendous influence on education outcomes. An example of this type of attitude is Barratt-Pugh (1995) who states that:

Whilst a national competence based system designed for VET may be an incompatible instructional design for some Higher Education institutions it does provide a framework for change in higher education by providing rational underlying philosophies which could form the basis of a restructuring towards more outcome based development. Here the outcomes would specifically focus on cognitive development as well as content replication. The outcomes would not be limited to just skills and content (p. 17).

This viewpoint was reiterated by the participants, who considered that the integration of competency-oriented units into a BTVET learning programs would bring a number of advantages to the curriculum.

Participant E5 stated that she firmly supports a competency-based approach to those course components where applied learning is a key issue, particularly in service professions such as health and social science. She considered the painter and decorator program as a perfect example that would benefit from the inclusion. She suggested that a CBE/T program does not need to be subjected to the tediousness of a quality control system such as the UVQF which currently impacts dramatically on CBE/T implementation in the VET sector.

Participant A1 was also in favour of introducing a competency-oriented approach to the procedural units within a course such as painter and decorator. Indeed, she could see no other way, and felt that it would result not only in producing professionally competent practitioners, but also would enhance the reputation of painters in the both the BTVET sector and the world of work. This participant was also of the opinion that if the other degree courses introduced a competency-based approach gradually, from year one into the discipline specific subjects, it would not detract from the broad and analytical capabilities provided by theoretical foundations.

Many of the participants felt that a number of BTVET programs already had elements of CBE/T within their programs, and Participant I9 mentioned that areas like nursing, medicine, wood

works , Art and design, home economic and many others have been using a competency-based curriculum to a certain extent for years, however far more underpinning knowledge with shallow and narrow skills acquisition. This participant pointed out that, although not formally recognized, competency-based programs already exist in many BTVET institutions, the only difference is in the terminologies used to describe them. This attitude was supported by Participant F6, who suggested that some institutions used terms such as industrial training, internship, 'clinical placement' when describing a CBE/T with notion imbedded within the programme- due to the lack of a vibrant educative press on competency-based training in Uganda. Participant E5 also expressed the view that many courses in the BTVET sector have competency-based approaches included in their curriculum, simply coming under different names including internship, staff year, probationary year, practices, or procedural skills. Similarly, Participant E5 contended that the BTVET sector often employs a hands-on component in a curriculum, and refers to these components as a workshop learning or studio works. Despite the similarities of intent and assessment of outcome, she feels that there is still a distinctive margin between CBE/T and the traditional content based programmes in the BTVET sector because CBET acknowledges that learning take place in learning institutions as well as in work places.

However, Boud & Solomon (2002) and Beckett & Hager (2002) contend that acceptance of CBE/T is a gradual in the every education sector and suggest that learning can take place just as effectively in the workplace as on the campus. Supported by (Mjelde. 2006)

Vocational pedagogy and vocational didactics are new concepts that have developed in relation to an understanding of teaching and learning processes to which learning at school and learning in working life are central. Vocational pedagogy is a learner-centered approach to teaching and learning, in which the relation between the student and task in central; the work activity itself is the focal point.

The concept of vocational pedagogy and vocational didactics are new to the field of education studies. The core of vocational pedagogy is workshop learning and learning in working life. It is not teaching but learning that is at the center of vocational didactics (Nilsson 2000). Nilsson argues that

in order to understand what it is that creates good learning situations for students, how teaching problems arise and how progress occurs, one must study more than the content

of the teaching. One must understand that learning is distributed and transformed in the practice of the everyday lives of both teachers and students. One has to investigate how students and teachers view the concrete content of teaching.

The term 'rigid' has been used by many commentators when describing CBE/T curriculum, and an example of rigidity of thinking being developed in the VET sector was voiced by the two participants involved in teaching in the painter/ decorator program. Participant C3 was not negative towards the 'notion' of competency-based programs, but considered that in the Ugandan BTVET sector graduates lacked understanding and the approach to learning was too rigid. This attitude was also voiced by Participant I9, whose positive attitude to CBE/T was slightly diminished by the concerns of both himself and fellow staff, who found that the kind of training they offered groomed 'rigid thinkers' who were too task oriented. A research paper published by Bowers (2006) an educationalist with many years of teaching experience in the TAFE area, states that:

ATPs being generally very specific with topics clearly stipulated that must be covered. It is prescriptive curriculum and often the assessments are mandated. The learning outcomes are structured and developed by industry advisory bodies with no input per se, from academics (p. 20).

Bowers goes on to suggest that the above problems give the perception of a rigid syllabus with little freedom for teachers, and whilst it is important that curricula retains links with the real world, it is important to maintain a flexibility that allows ideas to be expanded and explored in a scholarly way. Similarly, participant F6 expressed the view that the rigidity of the Assessment Training Packages and their totally competency-oriented approach has created difficulties in credit transfer between sectors. However, she also considered that it would be of benefit if competencies were built into aspects of all higher institutions programs where technical skills are required.

Concern over credit transfers was also referred to by participant C3, who suggested that the shallowness of content in the CBET approach will contribute to the difficulties in articulation which are quite obvious in the lower levels of VET programmes. She went on to clarify this by

giving the example those students wishing to upgrade to the degree in painter and decorator after completing their Diploma might be required to have credit units which is not necessarily the mode of assessment in the CBET approach. This participant was also of the opinion that the CBET approach produces students who are good at following protocols, but might lack the work related reasoning skills required in at higher education institutions. This view supports the suggestion that interface between CBET and higher institutions of learning have not lent itself to a seamless transition and Wheelahan (2001) argues that:

Absorbing CBET into higher education is constrained by the systematic impediments that derive from the existence of two sectors, impediments that have not been overcome by the existence of the Uganda Qualifications Framework. Where they exist, collaborative arrangements are expensive to maintain and time consuming. They have not been supported by government policy or regulatory arrangements and they have not been financed (p. 6).

Concerns expressed regarding levels of academic precision within the VET sector under the ATPs, has created an air of hesitancy to the introduction of a competency-oriented approach into Institutions of Higher learning. For instance, participant H8 suggested that this may have merit in task-oriented objectives, but is concerned that it might have a detrimental effect on the professional standards of graduates. She was also of the opinion that its introduction may adversely affect the development of the critical analytic thought that is an important factor in any program. Similarly, participant J10 stated that she views the introduction of a competency-based approach into some BTVET program such as Art and design, agriculture and others with hesitation, and is concerned that the present high standards might become 'lowered'. This participant is also of the opinion that professional associations/industry, expatriates and other stakeholders should have a strong influence on ATPs through their professional competency standards.

Some negative attitude towards the input from industry, professional body's expatriates may stem from the feeling that many teachers in the VET sector have the sense that their role is being de-skilled. For instance, participant D4 takes the view that while introducing of a competency-based approach especially for units which were predominantly task oriented, there was extensive dialogue between professional bodies representing the world of work than with the teachers

delivering the programs. She was also of the opinion that a competency-based approach can also contribute to graduate attributes such as professional attitudes, time management, and decision making, work related reasoning, and an ongoing sense of professional development.

Competency levels in any BTVET program were an issue for two of the participants, G7 and B2. Participant G7 was of the opinion that there are advantages to introducing a competency-based approach into some units of what is a fundamentally content-based curriculum, but suggests it would require that there are well-defined competency standards and that the competency levels are well defined. While participant B2 was of the view that introducing a competency-based approach into units of BTVET programmes at all levels would give the students a clear understanding of the graduate standard expected, he was also of the opinion that professionally based competency standards are more important than just procedural skills. He raised the question as to whether a profession without the ability to articulate a set of professional competency standards deserves to be called a profession.

In seeking to investigate the question as to whether there is a place for a competency-based approach to be formally integrated into the procedural or task oriented BTVET programmes, the predominant and consistent view to emerge has been the positive attitude of respondents to the notion of competency-based approaches in learning programs for both the BTVET lower and Higher institution of education. This attitude has persisted in spite of an almost universal perception that there had been little preparation for the introduction of CBE/T in the BVET sector, causing considerable confusion in its implementation.

At the same time, nearly all the interviewees involved in CBE/T within the BTVET sector felt that the Assessment Training Packages had resulted in a lowering of standards within the disciplines in which they were involved. There was concern expressed by the relevant participants that students trained under the CBET approach as opposed to traditional BTVET tended to acquire a rigid and protocolic thought process which is detrimental to the development of work related reasoning required in graduates. In general however, all of the participants were favourably inclined to the introduction of a competency-based approach to procedural units at all levels of BTVET. They were of the opinion that this measure would bring a number of advantages to the curriculum provided that, the development and implementation of any such step included input from the associated professional body representing all respective trades.

## CHAPTER FIVE

### 5.0. CONCLUSIONS, RECOMMENDATIONS AND WAY FORWARD

#### 5.1. Introduction

In this chapter the research findings of the study are concluded in relationship to the two fundamental research questions, which are:

*Is there a place for a competency-based approach to be formally integrated into Uganda's BTVET sector?*

*Is the integration of CBET into the current BTVET context practical?*

It can reasonably claim that, in light of the data collected and analyzed, the answers to the question one is in the affirmative across the board while the answer to question two is filled with skepticism but the general view is that, it is possible in some trade areas and to a certain level of competence. In the following discussion, consideration is given to the concept of CBE/T, its implementation in Uganda, the attitudes, perceptions of participants and observations made by the researcher in relation to formal integration of a competency-based approach within the BTVET sector.

The scope and nature of the field data was limited to a comparatively small group of individuals who have considerable experience in the development and implementation of CBET in the BTVET sector. Thus, the attitudes and perceptions of different participants may have produced a distinctly different set of conclusions. However, whilst acknowledging that the findings and observations reflect a small group of individuals and a selected programme respectively, it is suggested that their long and varied experience in teaching, administration and curriculum development, constitutes significant information that was reasonably regarded as meaningful and noteworthy.

It is also acknowledged that the intention of this study has been to focus on the attitudes and perceptions of participants as well as the observation made by the researcher regarding the phenomenon of 'Competency-based Learning'. Therefore, the possibility remains that events the participants perceived to have taken place may not always be synonymous with what actually happened. This is an inherent feature of this type of investigation in which personal feelings



toward a particular set of circumstances may unduly influence recollection. This issue has been taken into consideration during the analytic process, and where possible, supporting data in the form of quotes from published and unpublished both national and international papers have been presented.

## **5.2. The Concept of CBE/T in Uganda**

The purpose of any educational program is to inform and prepare the learner for further education and/or the acquisition of skills and attributes which will allow them to function as a valued member of the community or society in which they work and live. As an educational program, although vocational training may vary in intent, it provides the learner with the knowledge and ability to carry out certain tasks to an agreed standard of proficiency. While developing of a vocational curriculum in Uganda, it was necessary to determine whether such a curriculum put sole emphasis on satisfying workplace needs or include attributes which render a person capable of contributing with flexibility in both the workplace and the general community. Looking at the Assessment training Packages (ATPs) this has not been the case as put by According to Spencer (2005) states that:

*A primary difficulty was found to be that the tradition BTVE curriculums specified graduate outcomes in terms of learning outcomes and curriculum). Whereas that training packages in the CBET approach specify graduate outcomes in terms of industry competency standards (p. 4) which was most required However the challenge still remains that ATPs do not address matters of flexibility, and general community requirement*

For instance participant F6 suggested that in his opinion “*CBE/T has been hijacked by industry*”, and felt that “*this had not been helpful for its implementation into the BTVET sector, as it appears to have less emphasis on underpinning and conceptual knowledge*”.

This observation of CBE/T being too workplace-oriented is also supported by Harris, Guthrie, Hobart and Lundberg (1995) who suggested that a tendency of education systems to focus on occupational aspects more than ‘life skills’ may contribute to some of the misgivings that have accompanied competency-based learning programs. This question regarding the conflation of

student needs with employer needs was raised by Wheelahan (2003), who suggests that while the needs of employers and employees are interdependent, they are not the same.

In commenting on a 'discussion starter' (ANTA 2003: 6) in which it is suggested that: "Because vocational education and training is primarily about ensuring employability and employment security for individuals, industry leadership is critical." Wheelahan contends that: It is hard to argue with this statement: the problem is with the emphasis. Industry leadership is important but so too is leadership from other stakeholders if BTVET is to play a broad role in supporting communities and individuals. A distinction needs to be made between industry *led* and industry *driven*. The interests of employers and students are not identical. While employer organizations talk about the broad attributes employees need, most employers' investment in training is, as the *discussion starter* states, 'just for my business' and 'just what it needs now'. This is different from the broad capacities and skills and particularly lifelong learning skills (p. 3).

While trying to understand the frame of CBET in the general BTVET frame work in Uganda, there appears to be a fundamental question to consider. We have to ask whether its conceptual development was to satisfy the needs of industry or the needs of the community - which are not necessarily the same. In general, industry requires competent employees who can fulfill all the requirements and responsibilities of a particular occupation in a proficient manner. This is not an unreasonable requirement and industry in general cannot be expected to take responsibility for the needs of the community. However, any learning system which receives accreditation from government bodies, and large amounts of public finance in both its development and delivery must be geared to providing graduates whose education and training provides them with skills that prepare them for their role in both community and workplace.

It would appear to be the case that in Uganda, CBE/T as implemented in the BTVET sector has been dominated by a narrow, workplace-oriented approach, with a bias towards assessment rather than process. The concerns of participants regarding this workplace focus would need to be taken into account when considering any changes to the painter and decorator program or any program that wishes to incorporate a substantial number of competency-oriented units. Thus, it would be necessary to establish that any such curriculum be designed to provide the learner with knowledge and skills that constitute an education - rather than just skills training in a particular

field. It would also require that any such curriculum incorporate both community-oriented and vocationally-oriented graduate attributes.

### 5.3. Delivery of CBET in Uganda

The conclusions made here constitute constricted actions from a selected group in a particular programme within a selected institution. The practices, structure and organisation of this particular institution might not necessarily represent the other formal BTVET institution.

Lugogo Vocational institute is an organized institution and its proximity to the directorate of industrial training, as well as to the UVQF secretariat gives it advantage. The assumption was if it fails here it will never work elsewhere and if it works here given time it will work elsewhere.

In the painter and decorator department visited there was a considerable effort put to deliver as per the ATPs. The challenge however was the vast nature of the field of competency standards required by a painter/decorator which in my opinion was not practical. A number of professions in just one ATP, were highlighted which in my is almost if not impossible to achieve as well as uncharacteristic of CBET. According to Harris, Guthrie, Hobart and Lundberg (1995, p. 15)

CBE/T intent is to enable a person to perform specify function or task at a preset competency standard, These standards are a compilation of the requirements considered necessary for a person to be regarded as competent in a **particular occupation**. Learning programs using this type of approach may be oriented to the narrow rigidity of a workplace setting or particular industry if broadened, and may incorporate the expectations and values of the broader community.

This is not the case as indicated in the ATP of the painter/ decorator programme; there is lack of specific focus and clarity in what kind of competencies the programme intends to impart. In this kind of approach may not be far different from the traditional methods in the BTVET programmes showing signs of lack of in-depth preparation and conceptualization of the notion of competence based education and training while developing ATPs

There are questions regarding whether or Not the Painter/Decorator programme addresses the needs of the industry or of a specific work place Participant H8 had concerns regarding the dynamics in the Painting/Decorator industry , in view of the none existent mechanisms to keep

updating the ATPs to meet these changes. According to Mjelde 2006, pg. 56, Curriculum forms the basis for the planning, execution and evaluation of teaching this therefore means that the curriculum must constantly change to suit the dynamic nature of the labour market. However in At Lugogo vocational Training institute' ATP have been constant; no yet revised and when coupled with some challenge implementation this could become a disaster. Yet according to Nilsson 2008 pg. 4

In any sort of education system, change is the only constant. The point is that work with renewal of curricular is a very important work in order to improve vocational education and create a more efficient vocational learning which support a wanted vocational competence

This therefore means that the concept of ATPs addresses the concerns of the industry today to a certain level in some trades. However this does not necessarily mean that the ATPs will meet the requirement of the industry tomorrow”

However, participant E5 felt positive about the ATPs, saying that they have *“encouraged accountability in delivery, encouraged flexible learning practices, broken down barriers to learning for adults and provided commonality across all states and territories, providing a uniform understanding and acceptance of the integrity of the qualification, irrespective of how they were obtained, has allowed a variance of curriculum”*.

In that regard, all participants expressed concerns that care should be required in framing and integrate CBET to ensure that standards of underpinning knowledge are maintained, and assessment of discipline specific tasks are of a standard suited to entry levels of relevant professions/ industry. Although participants were positive about the concept of CBE/T, nearly all felt that it could have received a much more positive response had the development and planning of its implementation received adequate preparation and consultation with teaching staff. Unfortunately, the delivery of competency-based programmes has become synonymous with the Assessment Training Packages which provoked a largely negative response from participants.

The teacher who were in control of the teaching were those with a lot of experience in the teaching in the BTVET sector not those with a lot of experience in the manual labour market. It is not clear whether this would be impede the skills acquisition process but relying on these teacher to keep truck of the changing Indusial dimensions of which they have little interaction might be a time bomb for the CBET delivery in Uganda. Scollay (2000, p. 3) comments that:

The key to a successful application of Training Packages in any learning environment is the ability of the teacher /trainer to develop and customize the learning strategies within the framework of competencies and assessment that the packages provide”.

This customizing of the learning strategies to develop a curriculum or syllabus from the Training Package strategy was seen by some, such as Waterhouse (2000), as an opportunity for innovative teachers to explore and create new methods of delivery. However, commentators such as Smith (2002) argue that: Others see this reliance upon individual teacher’s or trainer’s expertise as a possible route to disaster, with smaller and/or less scrupulous providers perhaps leaving it to under-qualified teachers to struggle as best they could to teach to units of competence (p. 7). According to Mjelde (2006),

A vocational teacher is a practice-based world from a sector of working life that is outside the educational system. Most frequently they have had vocational training and practice in the manual labour market before they became teachers.

Therefore recruiting teachers who have been accustomed to the traditional methods of teaching content from textbook and other predetermined sourced into the CBET approach might not be very practical in the Ugandan context. However for a long time I have learnt something from someone special Stacy Bess the National Jefferson award winners 1995 for “great public Service” for her effort to promote education and public service she says, *“simple thing can be very meaningful to a child/learner thing like sitting around together, laughing and playing together, ordinary moments that we take for granted have extraordinary effects on the mind of our own children/learners she says any one can make a huge difference in the lives of these children/learners, you don’t need unusual skills or special training you just have to care.”*

my observation while I was interacting with the activities in the painter and decorator programme at Lugogo vocational institute, all I saw were teachers had a great attitude towards teaching, a great relationship with their learners and most importantly teacher who cared about what their learners

I guess that is all that matters sometimes, no matter how much skepticism there is about practicability of the integration of CBET in the BTVET sector there is still room that the approach can still be practical to certain levels of competence standards.

#### 5.4. Attitudes and Perceptions of CBE/T

Participants in this study were generally of the opinion that CBE/T had a good deal of merit, but even those who had very favorable opinions regarding its value and effectiveness were also aware of the difficulties arising in the BTVET sector resulting from lack of preparation in its implementation. The type of attitude generally reflected in the data is positive in their attitudes to the notion of CBE/T. These participants considered the use of competency-based programs to be extremely useful if confined to those areas of BTVET programs which are primarily task-oriented. However, the status of BTVET institutions to be too limiting for CBE/T used in all aspects of the BTVET sector and expressed concern that the ongoing implementation difficulties they had observed at Lugogo Vocational institute would transfer into other BTVET institutions or even worse.

For instance, participant I9 was of the opinion that in the BTVET sector especially in higher institutions of learning, CBE/T was *“poorly understood, with a belief that there is little knowledge-base to the learning”*. She felt that there was an ‘arrogance’ of attitude in that sector towards competency-based programs which was based on a lack of understanding. This perception may have validity in light of an observation by Ling (1999), who stated that:

Competency has been assessed narrowly in the VET sector and in reference to a limited concept of standards. The notion of competency can be viewed as complex and assessment of competency has the potential to explore multiple tasks, problem solving and application to new contexts – elements which may be seen as more pertinent to higher institutions of learning than simple task performance (p. 5).

Furthermore, participant E5 who was very positively inclined to the concept of CBE/T expressed the view that *“the benefits derived from CBE/T have persistently been caused by difficulties such as over assessment and the reduction in the professional judgment that reduces evidence-based assessment to merely competent or incompetent”*. However, this participant was also of the opinion that this was changing and suggested that *“Teachers on their own were presenting students with a more flexible, less rigid approach to assessment and learning in order to capture and draw lines between those who have excelled and those who are merely competent as well as those whose were not competent”*. These comments exemplify participants’ opinions that

programs within the BTVET sector requiring the attainment of procedural skills, would benefit from a competency-oriented approach to learning and assessment.

The introduction of Assessment Training Packages into the BTVET sector did little to dismiss the concerns of participants in relation to CBE/T programs. Generally speaking, the impression created by these packages was that they produced a great deal of confusion, disparity of delivery, and rigidity in assessment with no clear methodology of delivery. The strong emphasis placed on assessment within the Training Packages led Leahy and Gabb (1999, p. 4) to argue that “may be that is why they are referred to as **Assessment** Training Packages”.

In general, participants with experience of CBE/T in the BTVET sector were accepting of this type of learning program and the manner in which it has been delivered. However, most participants expressed concerns that the introduction of National Training ‘rigidity of thinking’ creates difficulties when transferring from lower levels VET programmes to higher institutions of learning courses.

The aim within the ATPs appears to be to produce a graduate who can combine declarative, technical and conditional knowledge to generate ‘protocol’ knowledge in which specific procedures are followed. However, in the Notion of CBET appears is to be to produce a graduate who can combine declarative, technical and conditional knowledge to generate a ‘functional’ knowledge based on work related reasoning that has been generated by analytic inquiry. The two seem to have been carried in the same basket.

### **5.5. Integrating CBE/T into Procedural Aspects of Higher Education**

A BTVET learning program must produce graduates who have acquired the graduate attributes and generic skills required to competently, complete tasks which are relevant to their profession/ industry/ world of work. The acquisition of the knowledge and skills required in performing particular tasks may involve differing amounts of underpinning and procedural knowledge and diverse methods of delivery and assessment.

For a graduate to achieve the required knowledge and skills it would seem logical to utilize more than one method of delivery and assessment such as CBE/T with ATPs. A similar criticism would apply to a traditional BTVET programs which had a majorly content driven curriculum. Therefore it would seem reasonable to suggest that a combining or integration of both methodologies may well prove beneficial.

None of the participants interviewed had any fundamental objections to such an integrated system, and nearly all were of the view that its implementation at all levels of BTVET would be beneficial. Without exception, participants were of the opinion that nearly all BTVET sector courses at lower levels of TVET learning (certificate level and to a certain extent diploma Level) that are practical in nature already have some form of competency oriented structure in the areas where procedural tasks are taught and assessed. However, they felt these are not usually seen within the higher institutions of learning (degree level or master's level) in a way that equates with CBE/T.

Traditional content-based approaches to curricula deem that a person who has satisfactorily completed the allocated subjects in a given course of study is considered to have achieved the required amount of knowledge and skills pertaining to that course. Although the majority of traditional learning programs have a specific vocational outcome, this is not always the case. By comparison, CBE/T programs focus on attaining specific skills that directly relate to employment rather than on the process of acquisition.

When considering differences between curriculum in the traditional BVET and integrated BTVET (CBET integrated) sector, Boud (2003) considers that there needs to be a greater input into the content and various aspects of learning programs, and argues that: There needs to be a focus on an educational approach to the in the integrated BTVET approach, not a narrow operational competency-based approach suitable for pre-defined learning outcomes. Competency-based frameworks that delineate the universe of outcomes – such as those used in the integrated approach derived from industry-based occupational standards – are unlikely to be appropriate except for relatively low-level work-based programs (p. 46).



In the present study, the differences in competency-based curricula was expressed by participant E5 who suggested that *"the very practical and industry-driven nature of CBE/T was what set the VET sector apart from the greater degree of academic rigour, innovation and professionalism derived from the traditional BTVET"*. However, there are examples in the traditional BTVET learning programs such as nursing, paramedics, and catering as was viewed (MVP Cohort 2 second expedition) at the Jinja School of Nursing and at the Hotel and Tourism Training Institute Jinja (HTTI) respectively that contain a substantial component of competency-based learning. Participant A1 pointed out that *"BTVET graduates are expected to have a comprehensive knowledge of their chosen field of study - and through reasoning and experience, continue to increase that knowledge within their field of study"*.

To overcome concerns regarding standards in academic and professional competency, an integrated approach to curriculum has been proposed by Hager, Gonczi and Athanasou (1994) in which the atomistic approach of individualizing the elements to be assessed is combined with broader generic or graduate attributes. This concept of competency respects the importance of professional practice by including the cognitive, ethical and effective aspects of performance, further, this sense of competency allows for varying viewpoints of content regarding competency in practice. According to Gonczi (1997) and Hager (1995), the integrated approach sees competency as a complex combination of knowledge, attitudes, skills and values displayed in the context of realistic task performance.

An integrated learning program requires the outcome or objective-based design which is becoming more popular in medical education (Prideaux 2003). This program is based on the desired outcomes to be obtained by graduates, requiring curriculum designers to 'work backwards' by firstly establishing desired outcomes of the entire program as well as objectives within individual units of the syllabus. Chappell et al. (2000) consider CBE/T to have evolved towards a more integrated form that links the skills, knowledge, attitudes and attributes required of the learner. They suggest that many educators have been reluctant to embrace the concept of competence, and this might, in part, be attributed to the lack of a deep understanding of the history of the competency-based training movement in vocational education.

The current BTVET efforts to integrate CBET are predominantly based on ATPs, this consist of a prescribed number of 'Units of Competency' and generate courses in which the total curriculum is competency-based. These courses are designed to produce graduates who have been assessed as 'competent'. However, an integrated system in the BTVET sector which includes both content and competency-based study, would require that the graduate's abilities were judged differently, and have a goal of producing a capable graduate. If we wish to formally integrate CBE/T into the BTVET sector, a process, which already started to take place, we also need to consider the graduate attributes required, the knowledge to be addressed, the methods of assessment utilized and the academic rigor required.

#### **5.6. Further Research**

The conclusion in relation to the perceptions of CBE/T explored in this thesis leads to a consideration of the need for further research. The thesis has explored CBE/T through practitioners' eyes and those of the researcher as to the worth of integrating aspects of CBE/T into the BTVET sector drawn upon the Painter /decorator programme.

May be now it might be time to find out whether or not this notion is acceptable, viable, effective, practical and sustainable in the none formal and informal communities of practice or the general education or academic programmes which are procedural in nature such as medicine, civil engineering, architecture, teacher training and many others in the Ugandan context.

## References.

- Attwell, P. 1990, 'What is Skill?' *Work and Occupations* Vol.17, pp. 422-448.
- Billett, S. et al. (1999). The CBT decade. Teaching for flexibility and adaptability, Leabrook (NCVER).
- Burke, J. W. (1989). Foreword. Competency Based Education and Training. J. W. Burke. London and New York, Routledge Falmer: ix-x.
- Creswell, J.W. (1998). *Qualitative Inquiry and Research Design Choosing Among Five Traditions*. Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. (2002). *Educational Research: Planning, Conducting, and Evaluating*
- Creswell, J.W., & Miller, D.L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39, 124-130.
- Crossley, M. (2000). "Bridging Cultures and Traditions in the Reconceptualisation of Comparative and International Education." Comparative Education 36(3): 319 - 332.
- Crossley, M. (2008). "Bridging Cultures and Traditions for Educational and International Development: Comparative Research, Dialogue and Difference." International Review of Education/Internationale Zeitschrift für Erziehungswissenschaft/Revue internationale l'éducation 54(3): 319-336.
- Crossley, M. and P. Jarvis (2001). "Introduction: Context Matters " Comparative Education, Comparative Education for the Twenty-First Century: An International Response 37(4): 405 - 408.
- Ertl, H. (2000). Modularisation of Vocational Education in Europe. NVQs and GNVQs as a model for the reform of initial training provisions in
- G./Reuling, J. (eds.), Vocational Training and Lifelong Learning in Australia and Germany, Adelaide (NCVER), pp. 14-20..
- Gonczi, A./Hager, P./Oliver, L. (1990). Establishing Competency-Based Standards in the Professions, Canberra.
- Greinert, W.D. (1994). The German System" of Vocational Training. History, Organization, Prospects, Baden-Baden (Nomos)
- Grigorenko, E. L. (2007). "Hitting, missing, and in between: a typology of the impact of western education on the non-western world." Comparative Education 43(1): 165 - 186.

- Hager, P. (2004). The Competence Affair or Why Vocational Education and Training Urgently Needs a New Understanding of Learning, in: *Journal of Vocational Education and Training*, vol. 56, no. 3, pp. 409-433.
- Hammersley, M (2002) *Educational Research, Policymaking and Practice*, London: Paul Chapman.
- Harris, R. (2001). Training Reform in Australia – Implications of a Shift from a Supply to a Demand-driven VET System, in: Deissinger, Th. (ed.),
- Harris, R./Deissinger, Th. (2003). Learning Cultures for Apprenticeships: a comparison of Germany and Australia, in: Searle, J./Yashin-Shaw,
- Harris. R., Guthrie. H., Hobart, B. and Lundberg, D. 1995, *Competency Based Education and Training: Between a Rock and a whirlpool*, p. 4, Melbourne: Macmillan Education Australia.
- Hoffmann, T. 1999, *The Meanings of Competency*, *Journal of European Industrial Training*, Vol. 47, No. 6, pp. 275-286.
- Hyland, T. "National Vocational Qualifications, Skills Training and Employers' Needs." *Journal of Vocational Education and Training* 48, no. 4 (1996): 349-365. (EJ 538 797)
- Hyland, T. (1994). Competence, Education and NVQs: Dissenting Perspectives. London, Cassell,
- Lave. J and Wenger. E (1991) *Situated Learning, Legitimate Peripheral Participation*. New York Cambridge University Press
- Lave. J and Wenger. E (1991) *Situated Learning, Legitimate Peripheral Participation*. New York Cambridge University Press
- Mansfield, B. (2004). "Competence in transition." *Journal of European Industrial Training* 28(2/3/4): 296 - 309.
- Marginson, S. and E. Sawir (2006). "University Leaders' Strategies in the Global Environment: A Comparative Study of Universitas Indonesia and the Australian National University." *Higher Education* 52(2): 343-373.

- Masemann, V. L. (1999). Culture and Education. Comparative Education. The dialectic of the Global and the Local. R. F. Arnove and C. A. Torres. Lanham, Boulder, New York, Oxford, Rowman and Littlefield Publishers: 116 - 133.
- Mjelde & Daly (2006). *NOMA Masters Programme in vocational Pedagogy*. Hand book vol. 2.
- Mjelde (2006): *The Magical Properties of workshop Learning*. Bern: Peter Lang ,Studies in Vocational and Continuing Education, Vol.2.( pages;32,52,53.)
- Mjelde (2009.) *Research Programmes, Basic Concepts and Processes*. Resource paper for MA Vocational Pedagogy students. Kyambogo University, kampala.
- Mulder, M. and J. Gulikers (2010). Workplace learning in East Africa: A Case Study. The SAGE Handbook of Workplace Learning. M. Malloch, L. Cairns, K. Evans and B. O'Connor. London, Sage: 307-318.
- Mulder, M., J. Gulikers, et al. (2009). "The new competence concept in higher education: error or enrichment?" Journal of European Industrial Training **33**(8/9): 755-770.
- Mulder, M., T. Weigel, et al. (2006). "The concept of competence in the development of vocational education and training in selected EU member states - a critical analysis." Journal of Vocational Education and training **59**(1): 65-85.
- Nguyen, P.-M., J. G. Elliott, et al. (2009). "Neocolonialism in education: Cooperative Learning in an Asian context." Comparative Education **45**(1): 109 - 130.
- Nilsson (2009.) *Vocational Didactics*. A selection of papers presented to students in the Masters programme in Vocational Pedagogy at Kyambogo University, kampala.
- Nilsson, Lennart, (2009). *Vocational Didactics*. A selection of papers presented to students in the Masters programme in Vocational Pedagogy at Kyambogo University, kampala.
- Nilsson (2008. ) *Learning in Work Places*. Presentation at a meeting with the stakeholders committee in the frame of NOMA master programme Vocational Pedagogy; Cooperation Kyambogo University (Uganda), Upper Nile University (Sudan), Arkershus University College (Norway), Kampala.
- Nilsson, Lennart. 2008: *Learning in Work Places*. Presentation at a meeting with the stakeholders committee in the frame of NOMA master programme Vocational Pedagogy; Cooperation Kyambogo University (Uganda), Upper Nile University (Sudan), Arkershus University College (Norway), kampala.

- Noble, C. et al. (1999). Policy Issues in the Implementation of "User Choice" in the Australian Training Market, in: *Journal of Vocational Education & Training*, vol. 51, no. 1, pp. 5-22.
- Oey-Gardiner, M. (2000). "Schooling in a decentralised Indonesia: New approaches to access and decision making." *Bulletin of Indonesian Economic Studies* 36(3): 127-134.
- Osbourne, M./Turner, E. (2002). Private Training Providers in Scotland, in: *Journal of Vocational Education and Training*, vol. 54, no. 2, pp. 267-293.
- Ozga, J (2003) Measuring and Managing Performance in Education, *CES Briefing no. 27*, CES, University of Edinburgh.
- Paper Number 1, Capable Organisations Research Project, Washington DC.
- Parker, B. and S. Walters (2009). Competence-based training and National Qualifications Frameworks in South Africa. *International perspectives on competence development, developing skills and capabilities*. K. Illeris. London and New York, Routledge: 176-188.
- Pawson, R. (2001) Evidence-based Policy: in search of a method, *Working Paper 3*, ESRC Centre for Evidence based Policy and Practice ([www.evidencenetwork.org](http://www.evidencenetwork.org)).
- Qualifications and Curriculum Authority (QCA) (2004). The national qualifications framework, URL: <http://www.qca.org.uk/493.html> (04.02.2005).
- Scollay, M. 2000, What's in a Training Package? Australian Training Review, Vol. 35, pp. 34-35.
- Skinner, B. F. 1953, *Science and Human Behavior*, Macmillan, New York.
- Smith, E./Keating, J. (2003). From Training Reform to Training Packages, Tuggerah NSW (Social Science Press).
- Stake, R.E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage Publications.
- Walklin, 1982, *Instructional Techniques and Practice*; Hand Books For Further Education. England, Stanley Thornes.
- Watkins, K. E. and M. Cseh (2009). Competence development in the USA: limiting expectations or unleashing global capacities. *International perspectives on competence development, developing skills and capabilities*. K. Illeris. London and New York, Routledge: 7-17.
- Wesselink, R., H. J. A. Biemans, et al. (2007). "Competence-based VET as seen by Dutch Researchers." *European journal of vocational training* 1(40): 38 - 51.

- Wesselink, R., M. Mulder, et al. (2006). "Developing competence-based VET in the Netherlands."
- Wolf, A. (1998). Competence-Based Assessment. Does it shift the demarcation lines?, in: Nijhof, W.J./Streumer, J.N. (eds.), Key Qualifications in Work and Education, London, pp. 207-219.
- Young, M. (2003). National Qualifications Frameworks as a Global Phenomenon: a comparative perspective, in: Journal of Education and Work, vol. 16, no. 3, pp. 223-237

## **APPENDICES**

Appendix A	Key features in competency-based learning programs
Appendix B	back ground of painted and decorator
Appendix C	ATP painter and decorator
Appendix C	Introductory information to participants
Appendix D	personal background information
Appendix E	Focus questions in the Descriptive Survey



## Appendix A

### KEY FEATURES IN COMPETENCY-BASED LEARNING PROGRAMS

<b>Key features in competency-based learning programs</b>
<b>1. Based on competency standards</b> , developed by the relevant “industry”. These competency standards have been incorporated into training packages.
<b>2. Outcome not income focused</b> in which the emphasis in curriculum development is based on the attainment of the specified competencies with the focus is on the outcome rather the process of attainment.
<b>3. Involvement with industry</b> is an important factor in competency-based learning programs that were introduced to create and maintain the skills required in a variety of occupations.
<b>4. Recognition of prior learning</b> where there is acceptance and recognition of a skill that has been acquired without formal training e.g. word-processing. This differs from credit-transfer where exceptions are given for previous study.
<b>5. Modularised</b> into units of competency that allows a curriculum or learning program to comprise of industry specific modules and general modules that are incorporated into the program. These units vary in size and complexity.
<b>6. Self-paced</b> learning and assessment allows the learner to be assessed when it is felt they have achieved an attainment of skill rather than at a specific time. Seen as suitable where individual rather than group training is being conducted.
<b>7. Assessment based on skill rather than knowledge</b> is a central feature of competency-based learning in which greater emphasis is placed on the ability to carry out manual rather than cognitive skills.
<b>8. Assessment criterion-referenced not norm-referenced</b> where assessment of performance is judged against a set criteria rather than an assessment of performance judged in comparison to others undergoing similar assessment.
<b>9. Flexible delivery</b> allows the course content to be delivered in a variety of ways to suite the requirements of the unit of competency, or the needs of the learner or the environment which may be required or available.
<b>10. Competencies are widely recognized</b> and are clearly described in a statement of attainment from the training provider allowing employers to be assured that an applicant has attained skills that meet industry requirements.

## APPENDIX B

### INTRODUCTORY INFORMATION TO PARTICIPANTS

Abeine Abdul  
MVP Programme  
Department of Art and Design  
Kyambogo University  
Date:  
To:

Dear -----

Further to our conversation I would like to thank you for agreeing to participate in the research program – Feasibility of Competence Based education and Training policy in the Ugandan context.

The following information is provided in order to help you make an informed decision whether or not you would like to participate. If you have any questions please do not hesitate to ask. You are eligible to participate in this study because you have/are still participating in the development/implementation of CBET in Uganda.

The attached information to participants outlines the project and the focus of the interview questions. I have included a list of questions with this letter and would appreciate if this could be completed as soon as possible (at your convenience). These open ended questions provide an orientation to the interview that will take place after the return of the responses to the open ended questions at a time and place which can be arranged at a later date.

It is expected that the interviews might take approximately one hour each.  
I can be contacted as follows

Adamabdul2@gmail.com  
Phone (+256) 776-388816

Yours Sincerely,

Signature

Date

Abeine Abdul  
MVP Programme, Department of Art and Design,  
Kyambogo University

## **APPENDIX C**

### **INFORMATION TO PARTICIPANTS:**

#### **Informed Consent Form**

#### **PROJECT TITLE: FEASIBILITY OF COMPETENCE BASED EDUCATION AND TRAINING POLICY IN THE UGANDAN CONTEXT.**

We would like to invite you to be a part of a study into Competency Based education and training in BTVET context of Uganda. The study aims at evaluating the feasibility of Competence Based Education and training in relation to the education context of Uganda.

The following information is provided in order to help you make an informed decision whether or not you would like to participate. If you have any questions please do not hesitate to ask. The primary focus will be on those units in BTVET, which combine both theoretical and practical aspects in their delivery.

**Procedures:** You will be asked to participate in an interview and you will be requested to allow the investigators to copy documents in your possession that you feel can be of help in this study. These documents will be xeroxed and the original document will be returned to you in a day or two days after the observation.

The interview will take approximately forty five minutes to an hour of your time. The interview will be audio recorded and will take place in any place of your convenience. During this interview you will be asked a series of questions. These questions are designed to allow you share your views, experiences and perceptions regarding competency based learning programmes and the benefits in introducing competency-based learning into elements of a content-based programmes in BTVET. Additionally, you will be asked to fill out a personal back ground sheet that will include demographic information.

**Risks and/or Discomforts:** There are no known risks or discomforts associated with this research.

**Benefits:** The information gained from this study may help us to better understand the experiences of administrators and practitioners.

**Confidentiality:** During the interview, if you would like to remain anonymous we will assign a code to insure that your identity is protected if you so wish. The audio-recording will be assigned the pseudonym that you pick during the interview. The demographic sheet will not identify you. The demographic sheet will only have the pseudonym that you picked during the interview. The Xeroxed copy of the document

you provide will be kept with the rest of the demographic sheets. Audio tapes will only be used to transcribe interview. Once the interview is transcribed, the audio tapes, interview transcripts, and the Xeroxed copies of the documents you provide will kept confidential

**Compensation:** You will not receive any type of compensation for participating in this study.

**Opportunity to Ask Questions:** You may ask any questions concerning this research and have those questions answered before agreeing to participate or during the study. Or you may call Abeine Abdul at any time, (+256) 776-388816 or email adamabdul2@gmail.com. If you have questions about your rights as a research participant that have not been answered by the investigator, report any concerns about the study, you may contact the Kyambogo University, master in vocational pedagogy programme coordinator, telephone (+256) 772-617576

**Freedom to Withdraw:** You are free to decide not to enroll in this study or to withdraw at any time without adversely affecting your relationship with the investigator or Kyambogo University. Your decision will not result in any loss of benefits to which you are otherwise entitled.

**Consent:** If you wish to participate in this study, you will be interviewed, observed, fill out a demographic sheet and provide documents if any that you will feel are relevant to this study  
You are voluntarily making a decision whether or not to participate in this study. Your signature certifies that you have decided to participate having read and understood the information presented. You will be given a copy of this consent form to keep.

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Signature of Participant

Date

I hereby give consent to audio record my interview.

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Initials of Participant

---

Date

# Kyambogo University

## Research Study for the Degree Master of Education

### BACKGROUND INFORMATION FOR PARTICIPANTS

CBET has secured its place in technical and vocational education and training TVET in Europe and other western societies. However, this is not without controversy. Having successfully connected the education initiatives with labour markets and societal demands, the concept has not stayed unnoticed within the demesne of international education reform<sup>28</sup>.

In Uganda Initiatives to improve its' education by introducing of CBET, prompted by international benchmarks and aiming for increased economic development, new education policy reforms pointing towards promotion the adoption of CBET within the country's public business vocational education and training (BTVET) sector are on-going. Supported by the Germany Agency for Technical Co-operation (GTZ) , In 2008 the MOES with the help of the Directorate of Industrial Training (DIT) embarked on the reforming the BTVET system into a Competence Based Education and Training system (CBET) to advance the efforts to link Education and Training to the real world of work.

In 2008 CBET was introduced within the BTVET system with the Directorate of Industrial Training DIT as the custodian of the policy and as the institution mandated to design and implement all CBET related activities. Although the majority of the initiatives focusing on introducing CBET in developing countries are fairly new, problems have already been encountered in comparable curriculum reform projects in Indonesia and Ethiopia (Mulder and Gulikers 2010) but The MOES and DIT are still confident that CBET can be introduced successfully within the Ugandan context.

Four years later the introduction of ATPs into selected BTVET learning institutions has caused radical changes in teaching, learning and assessment processes within the BTVET sector. Therefore, in order to appreciate the sequence of events in the evolution of CBE/T in Uganda, this study brings an overview of relevant reports, recommendations and reviews, as well as voices of expatriate pertaining to CBET seeking to answer two fundamental questions; *Is there a place for a competency-based approach to be formally integrated into Uganda's BTVET sector?*; *Is the integration of CBET into the current BTVET context practical?*

It is hoped that this research will provide some insight into competency-based approach by exploring the perceptions and views of the participants in this study, all of whom, have had experience in teaching, lecturing and curriculum development in the BTVET sector.

It is also anticipated in the subsequent interview that the participants will express their attitudes on the feasibility of integrating CBET into VET

Yours Sincerely  
**Abeine Abdul**

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<sup>28</sup>Competence Based Education in Indonesia "Evaluating the Matrix of Competence-Based Education in Indonesian Higher Education" **Willem Nederstigt (MSc)** SPAN Consultants, Education Development Programmes, Den Haag [nederstigt@span.nl](mailto:nederstigt@span.nl) / [willem\\_nederstigt@hotmail.com](mailto:willem_nederstigt@hotmail.com)  
**Martin Mulder (Prof. Dr. )**Head Chair Group of Education and Competence Studies, Wageningen University [Martin.mulder@wur.nl](mailto:Martin.mulder@wur.nl) / [www.mmulder.nl](http://www.mmulder.nl)

## **APPENDIX D**

### **PERSONAL BACKGROUND INFORMATION**

Participants are asked to provide this personal background information with the purpose of saving time at the interview and allowing the interview to focus on issues pertaining CBET and BTVET. Participants are asked to provide a brief description of each of the following: Length of involvement, role in the system and area of specialization.

#### **(1) Experience in teaching or lecturing in the VET sectors**

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#### **(2) Experience in curriculum development**

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#### **(3) Involvement with Assessment Training Packages**

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#### **(4) Involvement with occupation profile in VET sectors**

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#### **(5) Involvement in CBE/T**

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## **APPENDIX E**

### **FOCUS QUESTIONS IN THE DESCRIPTIVE SURVEY**

- (1) Describe your concept of Competency-based Education and Training?
- (2) What has been your experience or impression of competency-based education and training?
- (3) What impact, in your opinion, have the Assessment Training Packages had on the training in the BTVET sector in general?
- (4) What attitudes or reactions do you perceive in the BTVET sector towards Competency-based Education and Training?
- (5) How would you view the integration of competency-based approaches to education and training into the BTVET sector?
- (6) What implications do you feel a competency-based approach in the BTVET sector would have on the design of curricula, teaching and assessment?
- (7) What impact do you see the professional competency standards of some professional bodies having on the preparation of curriculum and teaching in the Higher Education sector?
- (8) What impact do you think the introduction of a competency based approach would have on the preparation of graduates in the workforce?
- (9) How might the adoption of a competency-based approach into BTVET programmes which have a substantial component of task-oriented objectives impact on the curriculum and outcomes for students and the profession?
- (10) Is there anything you would like to add that you feel is very important that this interview has not addressed?

#### Concluding Statement

- ☐ Thank them for their participation
- ☐ Ask if they would like to see a copy of the results
- ☐ Record any observations, feelings, thoughts and/or reactions about the interview

## **APPENDIX F**

### **INTERVIEWS GUIDE FOR DATA COLLECTION**

#### **F-1: Interview protocol- Document Analysis**

- Other researchers' Views on the phenomenon under study (the reform of BTVET into a Competence Base Education and Training (CBET)),
- Framing of CBET in the General BTVET structure in Uganda?
- The status of BTVET in Uganda and its pedagogical aspects of training
  - i. view of BTVET to day
  - ii. The didactics of teaching and learning in the BTVET context of Uganda today
  - iii. effects CBET on BTVET
- What is going on now in regard to CBET
- Recommendations on how the following functions are to be performed in Uganda?
  - i. Orient others to CBET
  - ii. Design a CBET program
  - iii. Obtain/deliver learning materials and resources
  - iv. Establish appropriate facilities
  - v. Develop procedures for managing CBET
  - vi. Foster partnerships between education and industry



## **F-2: Guide in an in-depth face to face interview**

- Views on the phenomenon under study (the reform of BTVET into a Competence Base Education and Training (CBET)),
- Framing of CBET in the General BTVET structure in Uganda?
- The status of BTVET in Uganda and its pedagogical aspects of training
  - i. view of BTVET today
  - ii. The didactics of teaching and learning in the BTVET context of Uganda today
  - iii. effects CBET on BTVET
- What is going on now in regard to CBET
- What they are doing to perform the following functions
  - i. Orient others to CBET
  - ii. Design a CBET program
  - iii. Obtain/deliver learning materials and resources
  - iv. Establish appropriate facilities
  - v. Develop procedures for managing CBET
  - vi. Foster partnerships between education and industry

To establish the following:

- How enthusiastic they are about CBET,
- How are they applying the principles in practice and overcoming the barriers and solving the problems that are bound to emerge with a new programme?
- How comfortable are they with the philosophy of CBET?
- How strongly do they believe in the potential of the CBET system?
- How open-minded are they about pushing ahead into the relative unknown that lies ahead?

**F-3: Observation Protocol**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Place: \_\_\_\_\_

Observation	Reflection

## **APPENDIX G**

ASSESSMENT AND TRAINING PACKAGE FOR PAINTER / DECORATOR LEVEL 1 & 2,  
THE REPUBLIC OF UGANDA MINISTRY OF EDUCATION AND SPORTS BUSINESS,  
TECHNICAL, VOCATIONAL EDUCATION AND TRAINING [BTVE] SUB SECTOR  
REFORM, SEPTEMBER 2007 DEVELOPED BY: (UVQF) SECRETARIAT DIRECTORATE  
OF INDUSTRIAL TRAINING.