



REPUBLIC OF KENYA

MINISTRY OF EDUCATION  
STATE DEPARTMENT FOR VOCATIONAL AND TECHNICAL  
TRAINING

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STATE DEPARTMENT FOR VOCATIONAL AND TECHNICAL  
TRAINING

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# Competency Based Education and Training Policy Framework



CBET Policy guidelines for Implementation at:  
*National Polytechnics  
Technical Trainers College  
Technical and Vocational Colleges  
Vocational Training Centers  
Industry, private sector and  
Any other institution offering TVET programmes*

Prepared by:

**DIRECTORATES OF TECHNICAL  
EDUCATION &  
VOCATIONAL EDUCATION AND  
TRAINING**

In collaboration with Key  
Stakeholders TVET sector

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## Acronyms

APL	Accreditation of prior Learning
B. Tech.	Bachelor of Technology
CA	Competence Assessment
CBET	Competency-based Training
DTE	Directorate of Technical Education
LT	Learning Time
MoE	Ministry of Education
MT	Mastery Time
NOS	National Occupational Standards
NGO	Non-Government Organization
NQF	National Qualification Framework
NVQ	National Vocational Qualification
OJT	On the Job Training
QMS	Quality Management System
RPL	Recognition of Prior Learning
SSAC	Sector Skills Advisory Committee
TPC	Training performance Criteria
PPC	Production performance Criteria
TVET	Technical and Vocational Education and Training
CDACC	Curriculum Development Assessment and Certification Council
TVETA	Technical and Vocational Education Training Authority
TUs	Technical Universities
QSD	Qualification Structure Description
KNQA	Kenya National Qualification Authority

## Foreword

The Ministry of Education and stakeholders in the TVET sector are committed to reforming the sector to produce relevantly skilled human resources required for social economic development. In this regard, the Government enacted TVET Act No. 29, 2013 based on Sessional Paper number 4 of 2016 (Previously no. 14 of 2012), on Reforming Education, Research and Training.



In order to enhance access, equity and quality of training, the Government established new TVET institutions to ensure that each County had at least one institution. The aspiration is that by the year 2020, each Constituency will have at least one technical training college.

To improve the quality of training the Ministry of Education is implementing Competence Based Education and Training (CBET) in TVET institutions aimed at producing an internationally competitive workforce. The CBET system is based on an industry and business demand-led model and established, approved and industry-validated occupational standards for all vocational jobs and trades.

In addition, a flexible and blended method of training will be developed to ensure that Kenya's technical capacity is attractive and globally competitive.

A handwritten signature in black ink, appearing to read 'Amina Mohamed'.

**Amb. (Dr) Amina Mohamed, EGH, CAV**  
**Cabinet Secretary for Education**

## Preface

Kenya is committed to reforming its Technical and Vocational Education and Training (TVET) sector, based on Competence Based Education and Training (CBET) in a desire to establish an internationally competitive workforce. It is proposed that in partnership with industry, occupational standards will be established for all technical and vocational sectors and trades. These occupational standards will be approved by industry and reviewed on a regular basis to ensure that the standards are maintained in line with changes in technology, processes and practice. These occupational standards can be used directly in the workplace and be assessed in work situations by trained assessors. They are designed particularly for those in the workplace such as apprentices and trainees.



For those individuals unable to access direct employment, full time and part time vocational training will be provided in technical training colleges and training institutes.

National quality standards for instruction and assessment will be established from occupational standards using a CBET approach. Qualifications will be developed based on learning modules drawn from the occupational standards which will be assessed individually and given credit in recognition of the competence achieved.

This framework document describes how Kenyan TVET will be reformed to compare favourably and competitively with leading first world countries across the globe. International best practice has been considered in developing this framework in a desire to develop a Kenyan model which fits both its own culture and context, and is also comparable within the international context. A National Qualification Framework has been developed on which all Kenyan qualifications from primary level to doctoral level have been placed to enable international comparison.

Terminology used within CBET internationally can vary from country to country so this framework will describe and define these terms that will be used in Kenya within the reform process. This will enable all those contributing to developing education and training in the future to comply with the nationally agreed system.

The Kenyan TVET stakeholders and the Curriculum Development Assessment and Certification Council (TVET CDACC) will work cooperatively with industry and business to establish labour market skills gaps and also to ensure that qualifying Kenyans can gain employment opportunities nationally and in other countries.

This document has been written to enable all Kenyan TVET stakeholders to understand the TVET reform in a desire to focus every effort towards developing an internationally competitive training system that prepares competent and high achieving graduates that can contribute towards a high quality and high skills economy. Qualifications will be developed in modules which can be used individually as short courses or combined into full qualifications at various levels of certificate as well as diploma and degree levels and will be attributed notional learning hours and levels which enable them to be placed on the Kenyan National Qualification Framework (KNQF). The TVET Authority has been established to monitor and ensure that national standards are met in learning delivery and assessment. I trust that you will find this document helpful and informative as we continue the reform of Kenyan TVET.

A handwritten signature in black ink, appearing to read 'Kevit Desai', with a long horizontal stroke extending to the right.

**Kevit Desai, PhD, MBS**

**Principal Secretary**

**State Department for Vocational and Technical Training**

## Acknowledgements

I would like to thank everyone who made this publication a reality. Special thanks to the staff of the Directorate of Technical Education, particularly the entire Curriculum, Research, Strategy and Planning Division for playing a great role in the publication of this CBET Policy document; the Directorate of VET, TVET CDACC, TVETA, KNQA and the private sector for the contributions made towards development of this document.



I commend the commitment of the Ministry of Education, State Department of Vocational and Technical Training and TVET CDACC in the delivery of this Publication. In deed the Ministry has affirmed its capacity to respond to the demand for Technical and Vocational Education in the country. The reforms made in TVET such as the enactment of the TVET Act 2013, and National Qualifications Framework Act of 2014 that created TVET bodies like TVETA, TVET CDACC, TVET Fund Board and KNQA and the construction, equipping and staffing of new institutions all over the country among others cannot be overemphasized. The reforms have led to a great stride in the TVET sub-sector of the country.

The collaboration of all TVET stakeholders in the implementation of this CBET system is paramount important. Therefore, I call upon all Kenya TVET fraternity and the industry to work together in implementation of this CBET policy.

A handwritten signature in black ink, appearing to read 'Dr. Meshack C. Opwora', with a large, stylized flourish at the end.

**Dr. Meshack C. Opwora, PhD**

**Director, Technical Education**

**State Department of Vocational and Technical Training**

## 1.0 Introduction

The current TVET system in Kenya is largely based on theoretical training that to some extent gives less attention to the assessment of competence as required in the workplace. Employers are critical of this historical system in that it insufficiently prepares young people for the requirements of employment. Technology is also advancing rapidly giving rise to new innovation and practices and account needs to be taken of these in any new devised qualification and training system. The global competitive market has impacted every country in the world such that goods and services are no longer limited by national borders and individuals need the ability to offer their skills and competence where ever employment opportunities arise and to respond to the changing requirements of the labour market.

Similar to other nations, Kenya has recognised that although it is difficult to predict future education and training requirements, any new developments should increase mobility of labour and ensure a well informed and qualified workforce (McGinty & Fish, 1993, p. 114<sup>1</sup>). The quality of a nation's education and training system is seen to hold the key to economic prosperity (Brown & Lauder, 1997)<sup>2</sup>. The importance of developing an educated nation with high skills to compete in the increasingly global market is also recognised by many (Lauder & Hughes, 1999<sup>3</sup>; Olssen, Codd, & O'Neill, 2004<sup>4</sup>; World Bank, 2007<sup>5</sup>). Education develops the productivity of skilled labour and arguably is increasingly the most significant factor in economic productivity and competitiveness (World Bank, 2007). The World Bank suggests that investing in education as human capital is the best way of improving economic performance.

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<sup>1</sup> McGinty, J. & Fish, J. 1993. Further Education In The market Place. London Routledge

<sup>2</sup> Brown, P., Green, A. & Lauder, H., 1997. Education, Globalisation, and Economic Development in Education Culture Economic Society. Oxford: Oxford University Press, pp. 172 -192

<sup>3</sup> Lauder, H. & Huges, D., 1999 Trading in Futures. Why Markets in Education Don't Work. Oxford: Open University

<sup>4</sup> Olssen, M., Codd, J. & O'Neill, A.M., 2004 Education Policy: Globalisation Citizenship & Democracy. London: Sage Publications Ltd

<sup>5</sup> World Bank 2007. Strategy to Revitalize Technical and Vocational Education and training (TVET in Africa, Addis Ababa Ethiopia: African Union



Kenya is experiencing increasing unemployment among young people and the present TVET system is a fragmented qualification system resulting in a poor quality outputs unable to respond to the expectations of employers. A large number of individuals in Kenya develop skills through the traditional apprentice programme, for which currently they obtain no certification and hence no formal recognition of their competences. This can be resolved by introduction of Competency Based Education and Training (CBET) approach which is outcome based, industry centred and flexible. CBET is a mode of training where the emphasis is placed on the acquisition of competence. Kenya has legislated and established policies and initiatives to address the above concerns. TVET is governed by the Constitution of Kenya 2010, The TVET Act 2013 and other related Acts of Parliament such as the University Act 2012 and The Charters for Universities (2012) and the Kenya Qualifications Framework Act 2014. TVET is also guided by a number of policy documents including: the National Training Strategy 2005, Kenya Vision 2030 (2008) and the Second and third Medium Term Plan (2013 to 2018 and 2018-2022 respectively). TVET is implemented within the requirements of policy document on reforming education and training in Kenya, the National Technical and Vocational Education and Training Master Plan and Strategy developed to guide the growth of the TVET sector. In order to re-align skills development in TVET to these national policy documents the Ministry of Education (MoE) has developed this Framework to guide the implementation of CBET programmes.

The Directorate of Technical Education (DTE) is responsible for promoting access, equity, relevance and quality training in Technical and Vocational Education and Training (TVET). This involves policy formulation, implementation, monitoring, review, dissemination and guidance. In addition, the Directorate is responsible for harmonization as well as the overall strategy and management of the TVET system. The Directorate provide oversight of all actors in the sector as well as managing TVET institutions and their programmes within the Ministry of Education and supervision of training providers to ensure adherence to the TVET policies. Further, the Directorate undertakes capacity building including: infrastructure, equipment, training facilities and trainers and managers of TVET institutions. This is geared towards enabling training institutions not

only to implement CBET but also to promote a culture of entrepreneurship, incubations and innovations. The Directorate is charged with the responsibility of rebranding technical education to ensure acceptance, fostering collaborations and linkages with industries as well as development partners on matters pertaining to TVET.

The Directorate of Vocational Education and Training (DVET) is responsible for promoting access, equity, relevance and quality training in Vocational Training Centres (VTCs). This involves development of National Policy on VTCs, implementing and reviewing VET curricular, construction, rehabilitation, equipping and expansion of VTCs in collaboration with the County Governments as well as capacity building human resource. The Directorate is also charged with the responsibility of fostering collaborations and linkages with industries and development partners on matters pertaining to VTCs.

The Technical and Vocational Education Training Authority (TVETA) is responsible for regulation, coordination and quality assurance of the TVET system while TVET Curriculum Development and Assessment and Certification Council (TVET CDACC), is responsible for the development of competency based curriculum, assessment and certification. The Kenya National Qualifications Authority (KNQA) was established to develop, implement and maintain a Kenya National Qualifications Framework (KNQF), which is a system designed to recognize the attainment of knowledge, skills and attitudes; ensure that standards and registered qualifications are internationally comparable; and recognize and evaluate qualifications for the purpose of establishing their equivalence. The framework will harmonize and equate qualifications obtained by individuals within and without Kenya as well as facilitate linkages, credit transfers and exemptions and a vertical and horizontal mobility at all levels to enable entry, re-entry and exit. Figure 1 below outlines detailed organisational structure of national TVET system detailing the roles of each government institution within the State Department of Vocational and Technical Training.

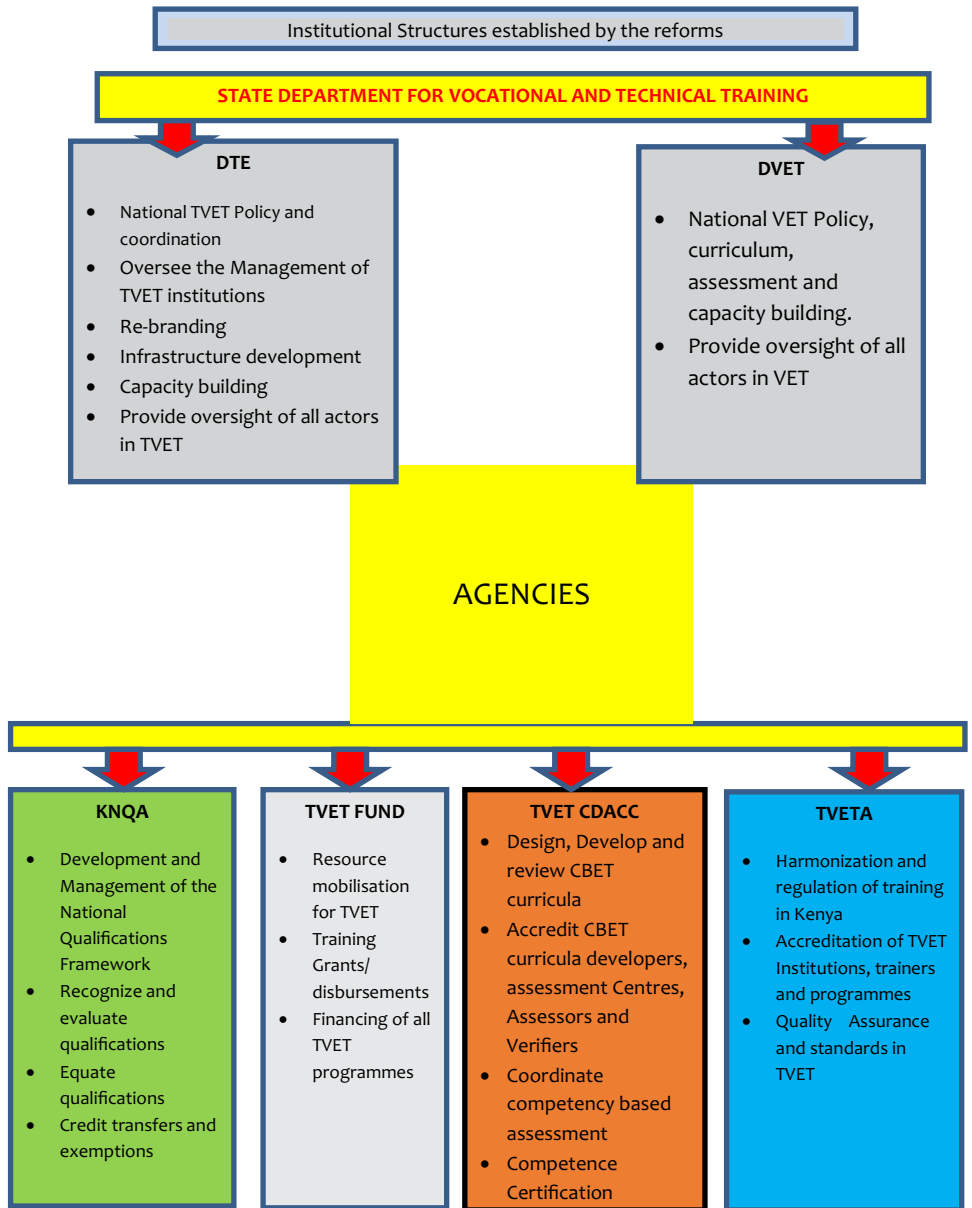


Figure 1: Institutional Structure

Figure 1: Institutional Structure

## 2.0 Competency Based Education and Training

Competency Based Education and Training (CBET) is a mode of training where the emphasis is placed on the acquisition of competence. It is designed to meet the demands of industry and business. It involves training individuals to be able to perform to the standards required in employment, in an agreed range of contexts, repeatedly over time. In CBET the emphasis is on ensuring that individuals achieve high quality of performance, important for industry and business to be successful. General Competence is sometimes defined as; ‘the ability to perform tasks or do work according to set standards. It is the ability to transfer skills, knowledge and attitudes to a range of situations within a given occupation’.

From this definition it is clear that the terms, ‘competence’ and ‘competency’ relate to the ability of an individual to do something to a required standard. Vocational competence is contextualised as the ‘doing something’ in a particular vocation, specialism, discipline or occupation.

The objectives of the CBET are to:

- Establish occupational standards which can be measured
- Train competent individuals with transferrable skills
- Link education and training to the skills needed by employers
- Establish a quality assurance system which will have the confidence of all stakeholders
- Promote lifelong learning through progression and transfer
- Encourage individuals to achieve their full potential
- Develop attitudes and abilities to respond rapidly to change

CBET is proposed to be a flexible system which will enable all sectors of the population to access training without barriers. As such it is envisaged that resultant TVET system will be able to engage with the following target groups;

- Those currently educated and trained who need to update their competences
- Individuals from the informal sector
- Individuals from the formal sector
- The unemployed population
- Out of school youth
- Those with little or no education
- Those individuals who are made redundant so that they can learn new competences
- Those who have retired but who would like to develop new skills and competences

**Table 1. Comparison of Formal Training Compared with proposed CBET System**

<b>Formal Training</b>	<b>Proposed CBET System</b>
Knowledge based curriculum with an emphasis on theory rather than practical skills	Outcome or competence based. The emphasis is put on achievement rather than process. It reflects the expectations of performance in the workplace.
Restrictive entry qualifications – only people who meet the prescribed entry qualifications can have access to training programmes	Limited entry restrictions – generally anyone can apply for a programme. Entry is not just based on qualifications or age but will take account of prior achievement. Sometimes a bridge module may be necessary. It is flexible, not time-based – learners progress through units/modules at their own pace and complete which ever modules are appropriate for employment.
Teacher centered - input focused – every trainee looks up to the teacher as the person who knows it all and relies on the skills and knowledge from the teacher	It is individualized – learning is trainee centered and the role of the trainer changes to that of a facilitator. Trainees can access learning through different methods and means.
Course duration is specified – courses have set time limits which every trainee has to adhere to, whether they have acquired the skill or not and all trainees in a particular class finish at the specified time.	It enables trainees to learn at their own pace and select which modules are appropriate. Trainees can focus on the skills they are confident of mastering
End -tested knowledge based examinations – trainees are given	Employment-led. Occupational standards are set by industrial and

<p>summative examination at the end of the specified training, without consideration of whether one is ready to take the examination or not.</p>	<p>business. Education and training is based on these occupational standards and assessed continuously as trainees are recognized as ready.</p>
<p>Graded practical tasks – Someone is deemed as having passed the examination even if the score is only 40 or 50%, with high chances of making mistakes once employed in performing those tasks</p>	<p>Training is modularized into achievable units/elements of competence. Theoretical understanding is taught and applied to individual competences. Assessment is continuous covering each and every element of the competence and outcome.</p>
<p>Training / education, centre or college – based – instruction only takes place in recognized training institutions or training centre.</p>	<p>Training and achievement can be realized in the workplace or in a training centre. It takes account of previous achievement and prior learning It is practically oriented and theory is taught mainly as underpinning knowledge</p>

# The Proposed Competency Based Education and Training Approach

Figure 2 shows the organisational system

## The organisational system

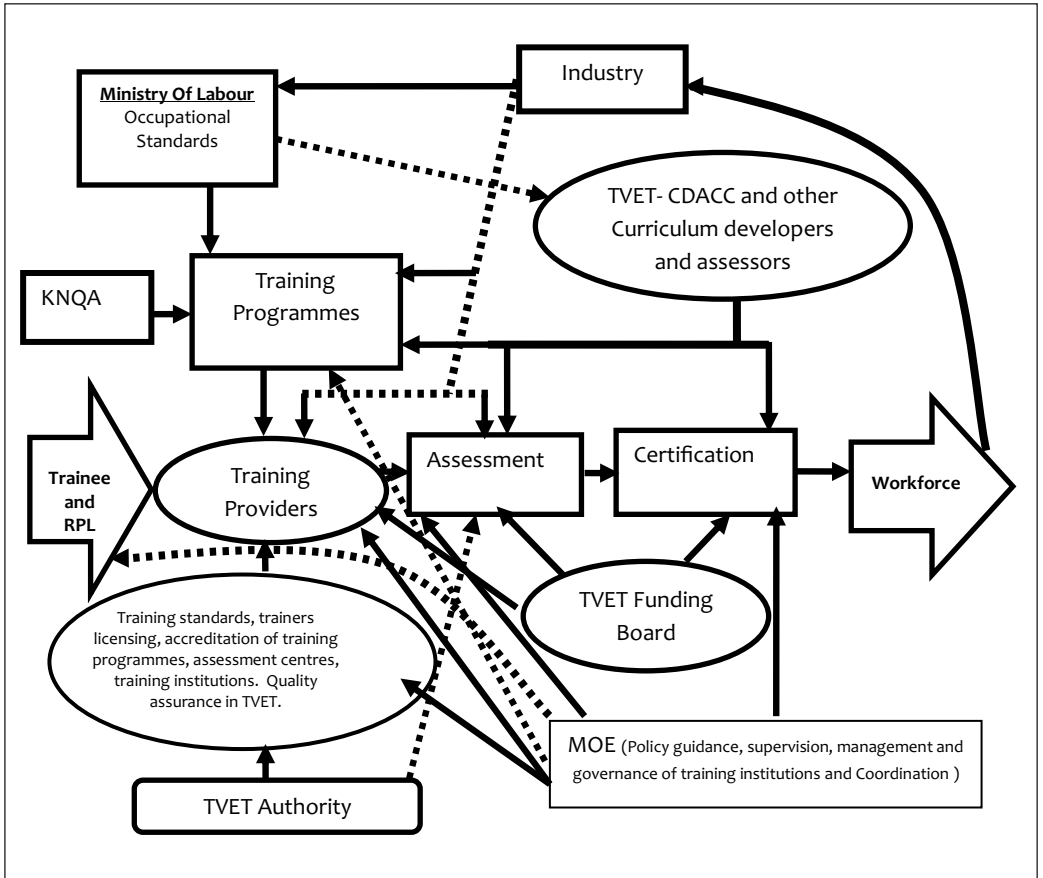


Figure 2: Organisational Process



## **2.1 The role of Directorate of TE**

The Directorate will formulate and ensure that CBET policies and guidelines are disseminated to all key stakeholders for implementation. It will spearhead a nationwide campaign to promote the CBET system and available careers in the industry. Thus, it will develop and implement national programmes to re-brand TVET system as well as create awareness and ownership of CBET policies, guidelines and programmes. In addition, it will ensure CBET is successfully implemented by respective players as per these policy guidelines. Therefore, the Directorate will monitor, evaluate, research during the implementation of the CBET system in order to update policies in the light of Kenyan experience and international developments. A monitoring and evaluation committee with external stakeholders' representation shall be established by the Directorate.

The Directorate will establish and equip assessment centres, centres of excellence and incubators in TVET institutions within the Ministry of Education. Additionally, the Directorate will promote access and equity through construction of additional TVET institutions and upgrading infrastructure, equipment, facilities, management capabilities and human resource capacities of existing TVET institutions to meet both industrial and international standards required to implement CBET. It will oversee management of trainers in national polytechnics, trainers' colleges and technical vocational Colleges under the Ministry of Education specifically capacity building, professional development, deployment, transfers, schemes of service development, recruitment and other relevant staffing matters for effective and efficient management of this function. It will liaise, collaborate and create linkages, partnerships with the industry, development partners and key stakeholders in support of TVET.

## **2.2 The role of Directorate of VET**

The Directorate will formulate, review and disseminate national policies on vocational education. Liaise with County governments to promote re-branding, capacity building, infrastructure development and careers guidance in vocational training centres. It will further ensure that the CBET policies and guidelines are disseminated to county governments,

vocational training centres and the respective stakeholders for implementation. In addition, the Directorate will provide support to county governments as well as foster strategic collaborations, linkages, partnerships and agreements with development partners, Ministries/Departments/ Agencies and other stakeholders in support of VET.

### **2.3 The role of TVETA**

The role of TVETA in light of TVET is stipulated in the TVET Act no. 29 of 2013. Majorly, the Authority will regulate, accredit and maintain standards in TVET. It will also coordinate quality assurance for implementation of CBET including:

1. Registration and licensing of training providers and trainers
2. Programmes accreditation
3. Monitoring and evaluation to assure quality and standards in all aspects of training

### **2.4 The Role of the TVET Curriculum Development Assessment and Certification Council (TVET CDACC)**

The role of TVET CDACC is provided in the TVET Act, No. 29 of 2013 and based on Education policy document on Reforming the Education, Research and Training Sector in Kenya formally draft Sessional Paper No. 14 of 2012. It is therefore expected to carry out:

- Promotion:** Arrange and conduct training on competency-based curriculum development and assessment for CBET developers, providers and assessors.
- Programme Development:** To source, adapt or develop and review suitable TVET competency-based curricula.
- To Develop, review and disseminate guidelines for preparation of CBET learning packages, and to prepare the packages in liaison with other stakeholders.

<b>Control:</b>	To control and coordinate the quality of assessment.
<b>Validation:</b>	To validate TVET competency-based curriculum.
<b>Verification:</b>	To verify, monitor and accredit assessment centres, RPL Assessors and verifiers.
<b>Assessment and Evaluation:</b>	To provide guidelines for TVET Competence based assessment and evaluation. To maintain all assessments records of CBET trainees.
<b>Certification:</b>	To award a certificate of competence and national certificates to successful trainees in conjunction with training providers/assessment centres.
<b>Database:</b>	To establish and maintain a database for training curricula, occupational standards, SSACs, Assessors, verifiers, assessment centres and TVET candidates.
<b>Exemptions and RPL</b>	To effect exemptions and accredit recognition of prior learning.
<b>Monitoring:</b>	To monitor and verify assessment in conjunction with the respective industry

## 2.5 The Role of Industry

The Industry shall set Occupational Standards for Job descriptions and Kenyan technical education and vocational training qualifications which reflect workplace operations. To attain high productivity and profitability, industry must take up its rightful position in training particularly in CBET and play the following roles:

- Setting of national occupational standards through appropriate Sector Skills Advisory Committees (SSAC)
- Monitoring standards/providing verifiers
- Assisting in the development and acquisition of training materials
- Participating in the assessment of trainees and evaluation of the TVET systems
- Providing training opportunities including apprenticeship, industrial attachment and internship for trainees and trainers.

## 2.6 The Role of Training Providers/Administrators

The training providers are responsible for providing an effective learning environment for their trainees.

Administrators/Managers will:

- Be responsible for establishing training needs by carrying out Training Needs Assessments
- Provide competent staff that is familiar with CBET system
- Provide the necessary tools, equipment and materials (where necessary encourage trainees to bring their own tools)
- Assist in the development and acquisition of training materials. Each Trainee must follow a course map as there will be prerequisite modules that will have to be achieved before being allowed to finish 'clusters' of modules to obtain a qualification and certification in any given vocational discipline
- Develop adequate workstations for the modular programme
- Ensure involvement of the industry in training
- Ensure capacity of trainers in line with the set guidelines and industry demands.
- **Recruitment and Register trainees:** Training providers shall be responsible for advertising the CBET programmes and carry out their own recruitment in line with CBET procedures as follows:
  - During recruitment a needs analysis shall be done to ascertain the potential trainee' suitability for training and also to decide at what level he/she should join the programme. Prospective trainees shall be given skills tests to gauge their entry levels.
  - There shall also be Recognition of Prior Learning (RPL) for those candidates that have acquired some basic skills.
  - During enrolment each administrator shall issue a trainee number that must be maintained throughout the training period. After module selection, trainee cards and registration forms shall be signed, and also an agreement for proof of course choice.

- **Records Management:** The training provider shall maintain a comprehensive management record system for each trainee/candidate from registration to certification.
- **Assessment:** Training providers shall ensure that assessors carry out assessment of trainees according to CBET assessment guidelines. They will establish assessment centres with approval of TVET CDACC.
- **Evaluation:** Training providers will carry out self-evaluation and make reports available to stakeholders

## 2.7 The Role of Trainers

### 2.7.1 Recruitment and Registration

There will be no set entry requirements to all CBET programmes as training will cater for all categories of people depending on what competence they wish to achieve, regardless of age, gender, ethnicity and educational background.

During recruitment the trainer shall:

- Assess trainee competence level and provide for recognition of prior learning, which is a process in which evidence of an individual's past achievements within a relevant occupational role can be judged against the standards specified within the appropriate vocational qualification
- Guide, support and counsel the trainee in identifying the appropriate programme route.
- During enrolment each trainer shall ensure that the trainee is issued with a number that must be maintained throughout the training period.

At the trainee Induction the trainer will:

- Orient trainees to the TVET system
- Introduce trainees to the institution rules, regulations, practices and emerging issues e.g. HIV /AIDS and gender issues
- Conduct tour of facilities, with special emphasis on looking at workstations

### **2.7.2 The Training Process**

During training, the trainer will:

- Ensure that trainees have the right Protective Personal Equipment (PPE)
- Provide programme maps and learning guides, which they are proposed to follow during their training
- Provide resources for specific modules (materials, equipment and tools)
- Facilitate the learning process by ensuring that each trainee follows instructions as stated in the Learning Guide, which states the tasks to be performed.
- Ensure that trainees carry out a self-check as they progress through the Learning Guides to gauge how well they have mastered the prescribed tasks before asking the instructor to conduct a performance test.
- Competently utilize tasks, skills and knowledge when demonstrating to trainees how to perform laid out tasks.
- Maintain conducive and safe working environment.

### **2.7.3 Assessment**

During assessment, the trainer/assessor shall:

- Guide trainees in achieving Training Performance Criteria (This shall be done during training), and Production Performance Criteria (This shall be achieved during training and industrial attachment), and shall be measured by time taken by trainee to accomplish a task to industrial standards) levels. The trainer shall explain to the trainees the differences between the two levels
- Conduct assessment and performance tests using the CBET approach. In CBET, assessment shall be conducted when the trainee is ready and it is performance based irrespective of how the skill is acquired.
- Provide assessment tests to candidates who are ready to be assessed.
- Ensure that trainees who do not perform to required standards are either referred back to learning time and then retake the assessment or retake the assessment straight away. A trainee shall not be allowed

to move on to the next module/unit of competence until after they have successfully cleared the module they were working on.

- Ensure that Assessment is done at two levels:
  - Training Performance Criteria (TPC) Level
  - Production Performance Criteria (PPC) Level
- Prepare and maintain trainees progress records such as attendance registers (document that records the daily activities of trainee and counter checks the clock card), clocking records, and ensure that time spent on learning the task is recorded as Learning Time (LT), while time spent on learning the task and doing it successfully during the Test Time (TT) shall be recorded.

#### **2.7.4 Mastery Time (MT)**

- Ensure that trainees are assessed internally and that the assessment is verified by external assessors/verifiers

#### **2.7.5 Record Keeping:**

Trainers shall:

- Maintain Clocking Records. The clocking system is a process that records each training time of a trainee from start to end of training of a particular task. The trainer shall ensure that trainees adhere to the clocking system that shall be set up in that particular training institution to ensure that the competences are achieved within a specified period of time
- Maintain records of equipment, tools and training materials, including course maps and learning guides
- Prepare and submit trainees' documentation for accreditation and certification
- Maintain records of trainees working areas

### **2.7.6 Facilities:**

Trainers shall:

- Maintain equipment, tools and materials.
- Ensure that workstations are well maintained

### **2.7.7 Placement:**

Trainers shall:

- Source industries for trainees industrial attachment
- Assist trainees in securing formal employment where possible
- Ensure that trainees are equipped with employability skills to enable them create employment.

## **2.8 The Role of Trainees**

### **2.8.1 Enrolment/registration:**

Trainees shall:

- Complete an enrolment form and pay the required fees.
- Be allocated a trainee number
- Be guided in choosing a programme route
- Be eligible to apply for APL where appropriate

### **2.8.2 Orientation:**

During orientation the trainee shall

- Be expected to abide to the laid down rules and regulations.
- Be exposed to the programme map and shall be guided in the interpretation
- Choose the modules to undertake in addition to the common modules.
- Ensure that they are guided in using the learning guides.
- Be shown the training facilities, especially workstations and be expected to find their way around without problems
- The trainee shall adhere to the clocking system that has been set up in that particular training institution



### **2.8.3 Training Process:**

Trainees shall:

- Follow the chosen course route and can only change upon agreement with the trainer concerned. Records for any change of course route/programme must be properly maintained.
- Ensure that Accreditation of Prior Learning if they have acquired certain skills
- Follow instructions as laid down in the learning guide
- Ensure they have all the materials, equipment and tools required to carry out specified tasks
- Request trainer to demonstrate any difficult tasks

**2.8.4 Assessment:** This is a process that judges individual performance against the performance requirements. Trainees shall:

- Be responsible for own assessment
- Do performance and knowledge self-check to gauge own competence in achieving laid out tasks and readiness to take the test.
- Request to be assessed when ready

NB:-Trainees will only be allowed three assessment attempts to any given task, failure to which they shall be deemed as being incompetent and shall be withdrawn from the programme.

### **2.8.5 Certification:**

Trainees shall only be:

- eligible to be issued with Certificates of Competence upon successful completion of clusters of units /modules for any given trade
- issued with National Certificates/qualifications upon successful completion of the whole training programme.

### **3.0 The Kenyan National Qualifications Framework**

As a signatory to the Regional Model Competency Standards (RMCS) of the International Labour Organizations, Kenya shall establish a National Qualification Framework. The Kenya National Qualifications Framework (KNQF) is a single, coherent framework for qualifications from Primary Certificates through to Doctoral Degree level. The Framework is to link together all qualifications and is to be a highly visible, quality assured national system of educational recognition, which promotes lifelong learning and a seamless and diverse education and training system. It shall cover qualifications issued by primary, and secondary schools, TVET providers and university institutions. All Kenyan qualifications shall be nationally and internationally recognised.

Within the NQF, there shall be TVET qualifications with the levels of Certificates, Diploma, and degree as well as short course/modules which can all be offered and the learning quantified in terms of notional learning hours. TVET CDACC in collaboration with TVETA will work with Kenya National Qualification Authority to develop level descriptors which will enable qualifications to be considered for placement on the KNQF. TVET Qualifications developed should:

1. Meet the requirements of industry
2. Based on Industry Occupational Standards
3. Based on Units containing elements of Competence
4. Developed into Learning Modules and written in learning outcomes which make up a Qualification
5. Qualifications are made up of Mandatory, Elective and Generic Skills Modules
6. Provide flexibility of delivery
7. Give credit of prior achievement
8. Enable credit accumulation of completed Modules
9. Be assessed against National Occupational standards
10. Have Quality Assurance measures to validate standards and achievement
11. Develop a strong partnership between Industry and Education

The KNQA is mandated to develop NQF that integrates basic, technical/vocational and higher education. The framework allows for an interface with basic education and provides a progression for technical and vocational education qualified personnel to proceed to higher education. Industry and professional bodies participating in the development of the national occupational standards will align them to the NQF for a smooth progression of qualifications from craft to technician to higher education. It is anticipated that the system will award qualifications at 9 levels. A suggestion of the qualifications per level is as given in Table 2. However, the Kenya National Qualifications Authority in consultation with stakeholders will determine the qualifications per level.

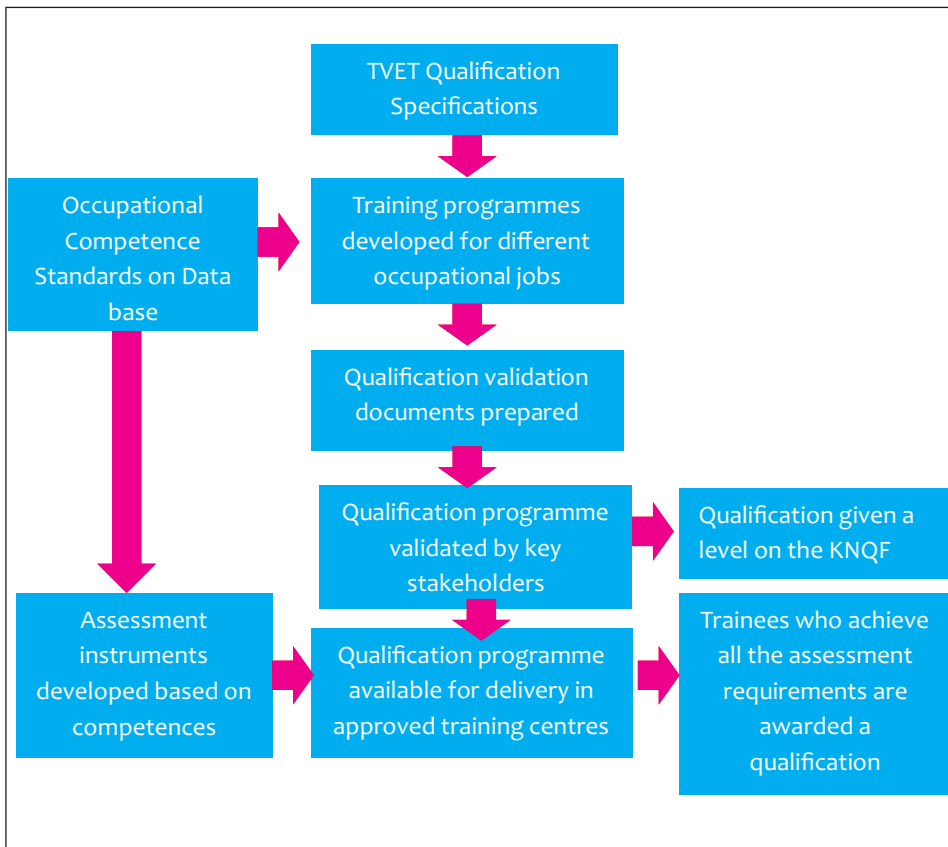
**Table 2: Levels of National Qualification**

<b>Levels of National Qualification</b>	
<b>Level</b>	<b>Suggested qualifications at each level</b>
9	Doctoral Degrees
8	Master’s Degrees
7	Bachelor’s Degrees
6	Diplomas
5	Craft Certificate
4	Artisan Certificate
3	NAV CET Certificate
2	KCSE
1	KCPE

Any qualification to be placed on the KNQF will need to be written in learning outcomes, be given credit against notional learning hours and have criterion based assessment to be considered. All foreign qualifications can be aligned to the KNQF but cannot be placed on to it. A National Qualifications Framework will be established to make provision for a nationally consistent TVET that is relevant to economic and social development and is of an international standard. It will be based on national competency standards identified by the industry and stakeholders to include relevant technical and employability

competencies. It is anticipated that the TVET system will award qualifications up to level 7 of the overall National Qualifications Framework. The TVET Qualifications Framework will provide indicative competence descriptors required per level. The stages of development of qualifications are represented in figure 3 below:

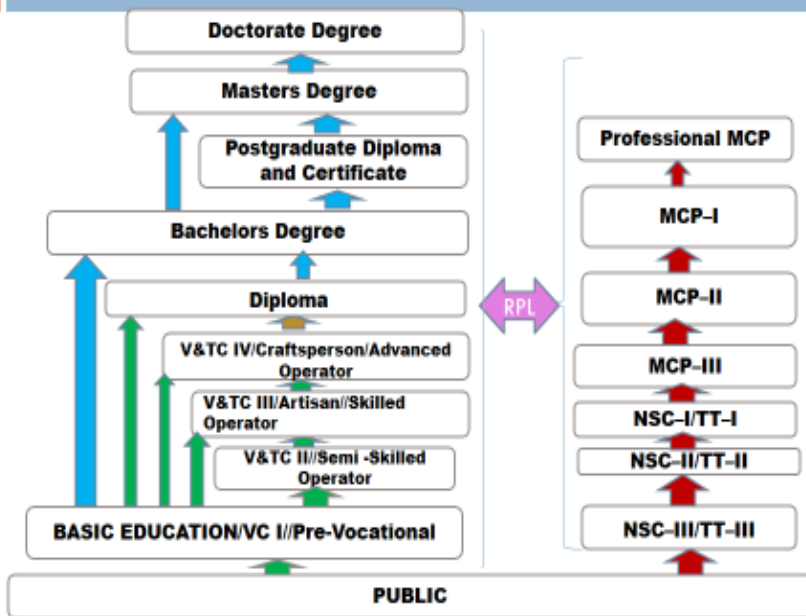
**Figure 3: The stages of development of qualifications**



### 3.1 Upgrading Pathways and Progression

The CBET Framework provides for trainees joining and leaving the TVET system at different stages with qualifications at different levels. These qualifications should suit employment requirements of the Labour market. Therefore, vertical mobility through the system is straightforward as seamless progression is facilitated while lateral entry into the system is facilitated at certain levels for those who have work experience in an appropriate field and assessed to have Recognized Prior Learning (RPL). The system shall be inclusive to consider trainees from formal, non-formal Informal education and special needs. The entry and progression pathways are shown in figure 4 below:

**Figure 4: Education and Training Progression Pathways**



1. NSC : National Skills Certificate
2. TT : Trade Test
3. V&TC : Vocational and Technical Certificate
4. RPL : Recognition of Prior Learning
5. MCP : Master Craft Person

## 4.0 Developing Learning Programmes

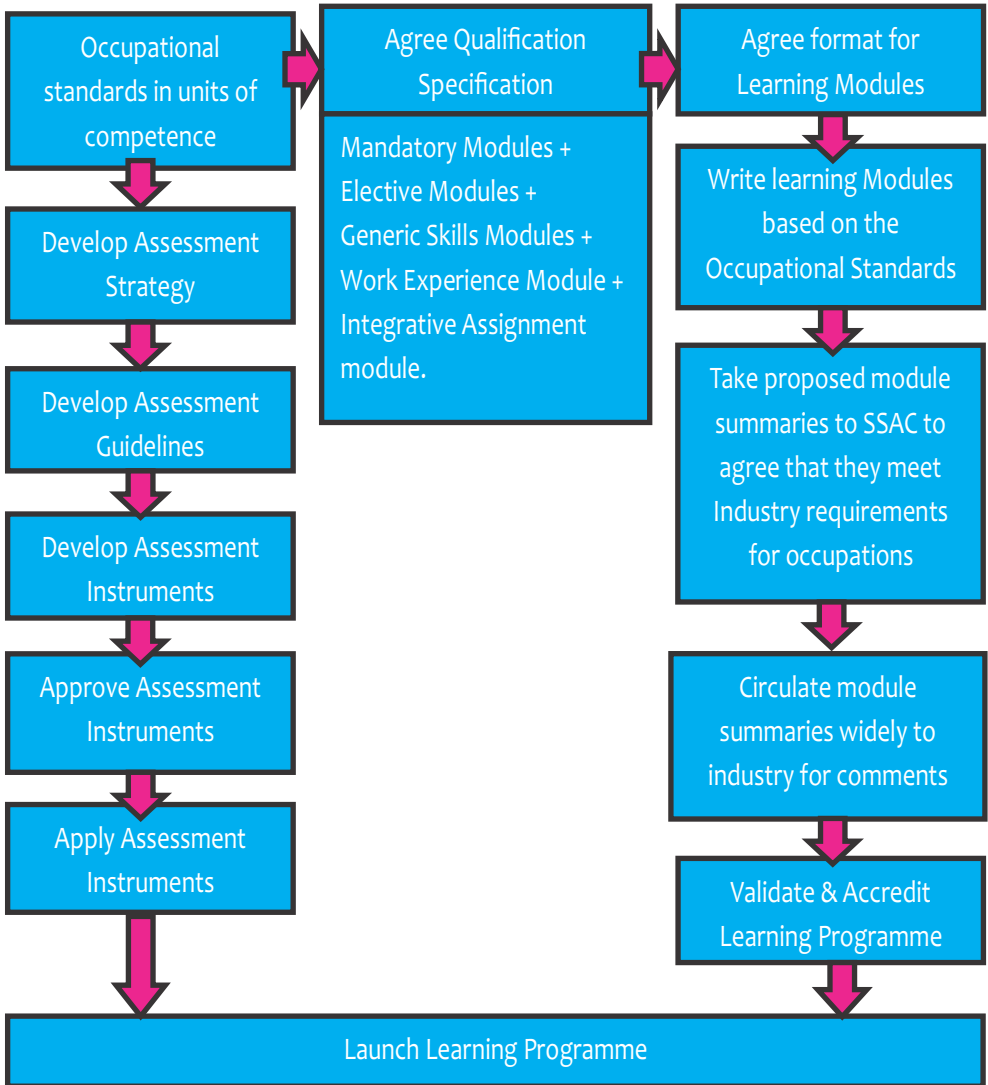


Figure 5: Details of Developing Learning Programmes

#### **4.1 Flexible Skills Acquisition**

The CBET framework is based on national competency standards which is flexible with regard to worker/trainee competency acquisition. Training providers may develop modularized courses, which are offered either full time or part time. Progressive competency acquisition shall be recognized in the National Qualifications Framework. A worker/trainee achieving some of the units and not all the competencies specified in the respective national competency standard is provided with a record of achievement/certificate of competence.

#### **4.2 National Occupational Standards**

The National Occupational Standard (NOS) specifies competencies that a person has to acquire in order to get qualified and obtain national TVET qualifications to work within a particular industry sector or occupation. The NOS describes realistic workplace outcomes and will be developed through a consultation process that includes industry practitioners and any other key stakeholders. The National Skills Councils shall identify industry sectors or occupational areas for which NOS shall be developed and play an oversight role over Sector Skills Advisory Committees (SSACs). Once established the Sector Skills Advisory Committees shall initiate the development of NOS. SSACs shall develop NOS according to processes and procedures described in this framework and submit these developed NOS to the TVET CDACC for registration.

#### **4.3 Identifying Industry Occupations for Competency Standards**

Identification of industry sectors/occupations for NOS development shall be actioned by TVET CDACC, guided by SSACs, industry bodies, GOK departments and/or according to GOK policy initiatives. Feasible requests for NOS development shall be approved by TVET CDACC and information relayed to SSACs. The labour market information system shall be used as an information source. TVET CDACC shall develop the criteria for the selection of industry sectors/occupations to develop respective NOS. Competency standard developer should refer to the Competence Standard Development guidelines set by TVET CDACC.

#### **4.4 Sector Skills Advisory Councils and Committees (SSACs)**

The Sector Skills Advisory Councils will be formed by the industry for the various sectors guided by the State Department of Post Training and Skills Development. However, the Sector Skills Advisory Committees (SSACs) shall be the technical arm of the TVET CDACC. The SSACs shall be composed of the following members:-

- a) At least three members from industry for the respective sector
- b) A member of the regulatory body for the sector
- c) A member of the registration body for the sector where applicable
- d) A member of Association body for the sector where applicable
- e) A representative of the Council Secretary of TVET CDACC shall act as the secretary to any committee established under this section.

A committee member shall, unless he/she sooner ceases to hold office by resigning or otherwise, hold office for three (3) years and may be eligible for re-appointment. Subject to any general or specific directions by the TVET CDACC Council or any regulations made under it, the committee may regulate its own proceedings.

##### **4.4.1 Responsibilities and Functions of the Sector Skills Advisory Committees**

SSACs are responsible for ensuring that Technical and Vocational Education and Training Curricula offered are according to the needs and demands of the employment market. The functions of SSACs are:

- a) Advise TVET CDACC on the establishment of new vocational trades training and educational curricula or on the abolition of existing ones.
- b) Assess training needs and determine standards for the area of trades the committee is covering.
- c) To draw up training specifications and job description for the trades to be taught.
- d) To ensure coordination with related trade training activities.
- e) To ensure that the employment market is informed about training activities under the committees to promote placements for trainees; and
- f) To form sub-committees to work with particular training issues as may be necessary.



TVET CDACC shall provide coordination and secretarial services to the SSACs. SSACs shall perform the core function of standards generation and approval. Most of the work of SSACs shall be done through meetings and use of experts. Specifically, SSACs shall play a key role in standards generation at the following phases:

- a) Identification of experts for generating/adapting standards or adopting standards
- b) Identification and verification of external assessors for validating internal assessments

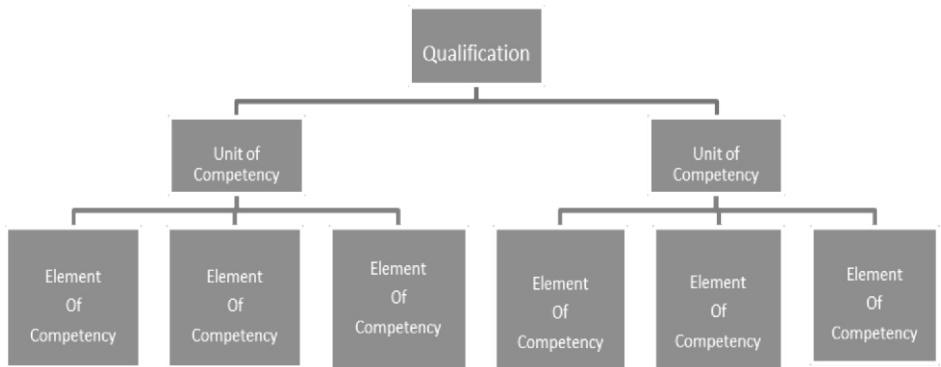
## **5.0 Occupational Standards Development**

The Occupational Standards developments are based on the concept of competence which is defined as the ability to perform the activities within an occupation. Competence is a wide concept which embodies the ability to transfer skills and knowledge to new situations within the occupational area. It encompasses organisation and planning of work, innovation and coping with non-routine activities. It includes those qualities of personal effectiveness that are required in the workplace to deal with co-workers, managers and customers.

A Unit of Competency will be made up of a number of Elements of Competency written as Performance Criteria which together with a Range indicating the coverage and evidence requirements that are required in the workplace by employers.

Vocational qualifications will normally be made up of a number of related Units which together will comprise a statement of competence relevant to an occupation. The main aim of a Unit, therefore, is to set out the essential information needed to decide whether or not an individual has demonstrated the required skills for employment in a particular area. Units will be registered components of national vocational qualifications. Each represents an outcome of a work activity that is a significant part of a qualification certificate. Units state what the outcome of a work activity is and what evidence an individual must produce if they are to receive formal recognition of their knowledge and skills. Units also detail the quantity

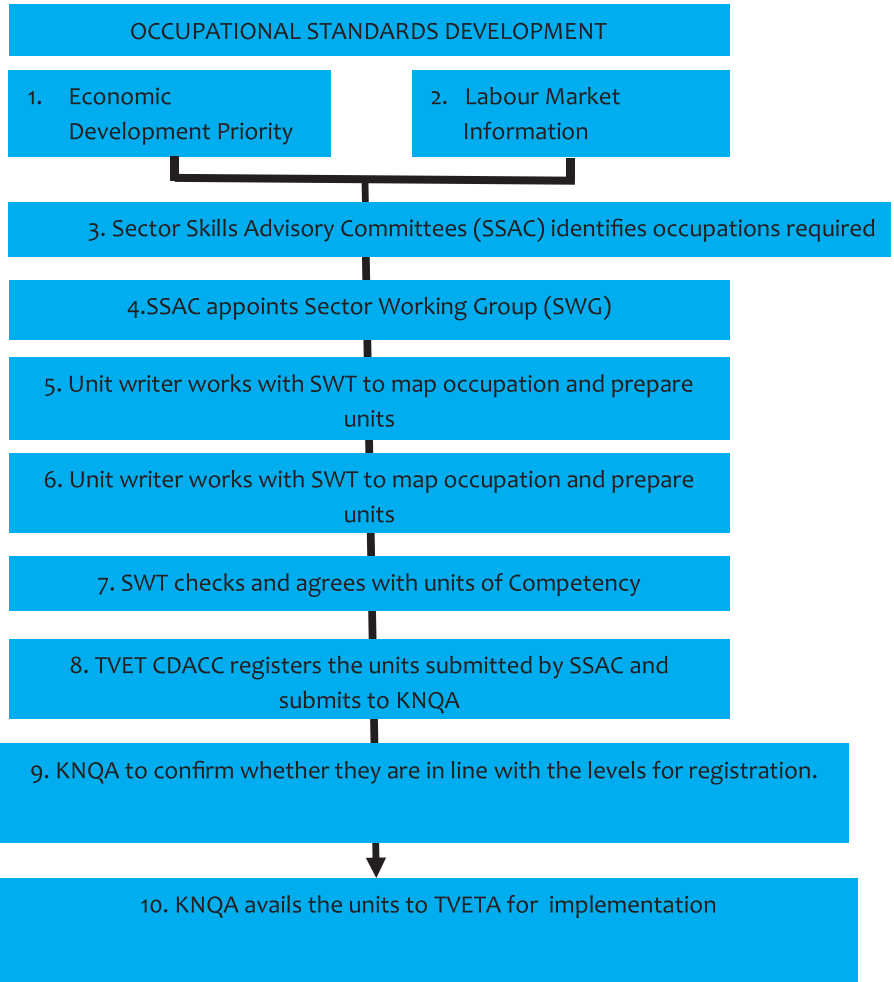
and quality of this required evidence, as agreed with national stakeholder's forum on what is acceptable performance. Occupational standards are not time bound in that they do not attribute the amount of learning time required to achieve them as it will vary considerably depending on the background of individuals and their experience. Figure 5 outlines qualification structure.



**Figure 6: Qualification Structure**

To enable qualifications to be placed on National Qualification Framework it will be necessary to give units a notional learning time to attribute the quantity as well as the level of the units of competence.

For this reason, TVET qualifications will be developed into module of learning outcomes which are based on occupational standards. This will enable competences to be grouped together to form cohesive related modules which can be both individually assessed and credited as well as combined to form qualifications at certificate, diploma and degree levels. The layout of a Module will be very similar to that defined in the Unit of occupational standards. However, the focus is for the learning outcomes described in the Module to lay down the level, quality and scope of performance that must be achieved by the individual.



**Figure 7: Stages of Occupational Standards Development**

## **5.1 Registration process for national occupational standards**

TVET CDACC is the national Council responsible for the registration of national occupational standards. The registration is a formal declaration by the Council that standards and TVETQ are procedurally correct and comply with the requirements of the ‘TVETQ’ of Kenya. If the standards or qualifications are not registered, they are to be returned to SSACs with reasons, for revision. NOS together with functional map shall be submitted by SSACs to TVET CDACC. The following steps shall be adopted in the registration of National Occupational Standards:

- SSAC confirms that the NOS have met the technical requirements and format outlined in the operational manual and requests TVET CDACC to register them.
- TVET CDACC registers the NOS and then informs SSACs on successful registration. NOS which are not registered by TVET CDACC will be sent back to SSACs with the observations and recommendations.
- TVET CDACC makes arrangements to ensure availability of the registered NOS to stakeholders and interested parties.

The National Occupational Standards shall be coded, entered on TVET CDACC data base and made available to industry assessors and accredited providers.

## **5.2 Revisions of National Occupational Standards**

National Occupational Standards should to be reviewed at least every three years or whenever necessary. TVET CDACC will take comments from stakeholders and recommend revisions of the NOSs.

## **6.0 Quality Assurance**

Quality Assurance systems and processes are a key factor in ensuring that standards and quality of the new TVET Qualifications meet industry requirements. Quality Assurance processes will be applied to every part of the system to ensure Industry Standards are set and maintained in training delivery and assessment. The Industry will take a leading role in assisting in:

- Defining the standards

- Approving standards developed
- Approving qualifications and programmes that lead to their achievement.
- Helping maintain quality and standards in training programmes by providing work experience for trainees.
- Assisting in External Assessment of Trainee Integrative Assignments
- Assisting in Validating Standards and Qualification

## **7.0 Development and Review of Learning Programmes for CBET**

Any registered TVET Provider, individuals, GOK or regulatory bodies can initiate the review of an existing CBET training programme or development of new programme to address competence requirements for industry, enterprise, education, legislative or community needs by submitting a ‘programme outline document’ proposal to TVET CDACC.

TVET CDACC shall confirm that each proposal:

- is nationally recognised;
- meets an established industry, enterprise, educational, legislative or community need;
- provides appropriate competency outcomes and a satisfactory basis for assessment;
- meets national quality assurance requirements;
- is aligned appropriately to the National Qualification Framework (NQF) where it leads to a qualification.
- Proposed assessment and certification will be undertaken by authorised bodies.

Upon approval of the ‘curriculum outline document’ proposal the following process shall be followed:

- TVET CDACC shall officially request SSAC to initiate the validation process.
- SSAC shall convene the SSACs curriculum validation meetings and coordinate the activities.
- The Curriculum experts shall assist the SSAC explaining the process, procedures and if necessary the contents of the curriculum.

- The SSACs, shall consider the following for validation.
  - The Curriculum is based on a ‘Functional Map /Competency profile’ derived from competency standards if any.
  - Profiles of the curriculum developers who participated at the workshops and curriculum writers.
  - Curriculum format.
  - Evidence of matching the TVETQ with the curriculum or units of qualifications with the curriculum.
- The validated curriculum shall be submitted to TVET CDACC for approval together with the validation recommendations of SSAC. If the curriculum does not meet the requirement for validation it shall be returned to SSAC with observations.
- The TVET CDACC will oversee the design and development of the curriculum or undertake review of the curriculum and submit it to the:
  - TVET Authority for use during approval of training programmes.
  - Directorate of TVET for circulation and implementation.

## **7.1 Stages of Developing Modular Training Programmes**

Modules should be based on Units of Competency where available and it is likely that Learning Outcomes, Performance Criteria, Range Statements and Evidence Requirements will be similar or identical in many cases. However, Modules are about learning and as such they may contain additional Learning Outcomes, Performance Criteria, Range Statements and Evidence Requirements which will support the learning processes and ultimately lead to achieving the industry competence standards. It is also possible that Units of Competency will be combined within a Module which will result in a coherent learning package leading to employment.

All Modules are freestanding blocks of learning which enable an individual to develop and achieve a holistic performance requirement for working in industry and business. Learners are granted credit when they are able to do what is required within the Module. These credits build up to become a cumulative record of achievement, with a number of Modules contributing to make up a national qualification.

## **8.0 Assessment of Competence**

Under the CBET system each trainee may be at a different stage in the accumulation of credits from their learning modules. In the CBET system assessment can be taken when the trainee is ready. However, in practice there is some benefit in keeping trainees together but it does enable trainees to catch up if they have missed time due to illness etc. and therefore assessment can be given whenever most convenient. A trainee in the workplace can ask to be assessed when ready. However, where trainees are in a training centre then it is more practical for a majority of the trainees to be assessed together at an appropriate time. Ideally, it's important to try to assess trainees when they are ready in order to prevent having too often re-seats. The trainee should be required to be successfully assessed before moving on to the next module.

### **8.1 Performance Criteria**

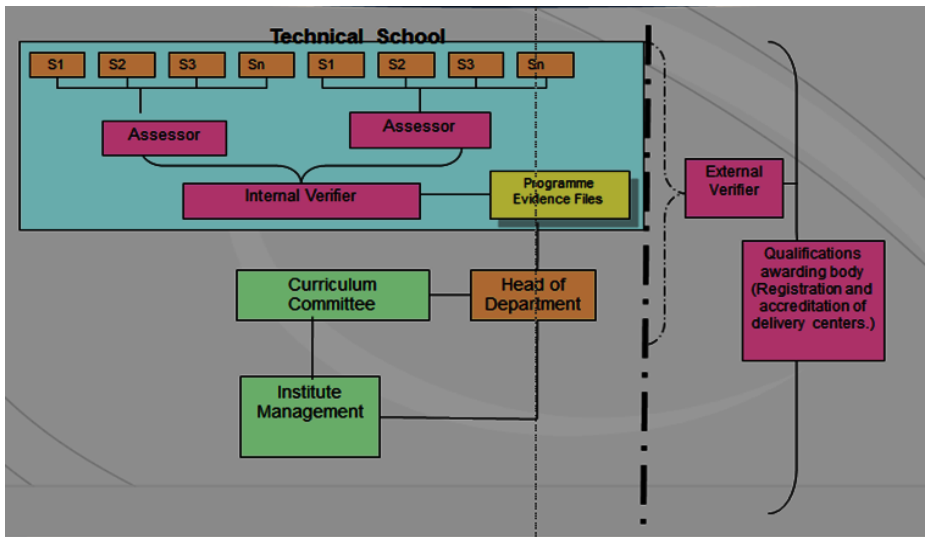
Where trainees are in the work place, less time is required for training. This is because the trainee is being orientated to production or processes and therefore can be assessed at a time when the trainee is deemed to be competent. This is referred to as Production Performance Criteria (PPC). Where a trainee is assessed in an off the job training institution, this is referred to as Training Performance Criteria (TPC).

The key factor is that those who assess trainees should be trained to national standards whether assessing in the work place or in an off the job training institute. To ensure that assessors are carrying out their function correctly, then besides training, their assessment judgments will be verified by internal and external verifiers.

### **8.2 Selection of National Assessors**

Trainees must be assessed by assessors who are trained and registered by TVET CDACC for the respective occupational sectors. The number of assessors would be determined by the number of qualifications and

trainees taking them. In a small company you may only require two assessors but in larger organisations and training institutes you will require many more. To ensure that assessors have assessed correctly they will be trained to national standards and then an internal verifier will be responsible for checking that the assessment have been conducted to the required standard. There will be national occupational competence standards for both assessors and verifiers.



**Figure 8: Assessment and Verification Process**

Assessment will be carried out within the workplace or training institute and will also be internally verified there. External verification is where the qualification awarding body (TVET CDACC) will train independent external verifiers to visit the work place and training institutes to check that all assessment is being carried out according to national requirements. Often individuals from industry or people from other training institutes can be trained in this role of external verifier. All assessment is based on evidence and this must be sufficient to meet the specified requirements in the unit or module.

Records of all assessments must be kept secure which should also show the feedback to the trainees if achieved or not achieved. Where a trainee



has not achieved then advice should be provided by the assessor on what needs to be practiced or learned before assessment can take place again. Normally trainees are not given more than two re assessment. Where they fail the three assessments then a trainee would be advised to complete a module again.

### **8.3 Recognition of Prior Learning**

The CBET approach will enable individuals to be assessed regarding on their prior learning or achievement. However, this can be time consuming and requires the system to be developed fully before this can be achieved. TVET CDACC is to develop the process of assessing prior competence.