



KENYA NATIONAL QUALIFICATIONS AUTHORITY

***THE KENYA NATIONAL QUALIFICATIONS  
FRAMEWORK***

***SHAPING THE FUTURE OF KENYA***

## ***1.0 Preamble***

The Kenya National Qualifications Framework (KNQF) is constituted of principles and guidelines by which records of learner achievement are registered to enable national recognition of acquired skills and knowledge, thereby ensuring an integrated system that encourages life-long learning. When learners know that there are clear learning pathways providing access to—and mobility and progression within—education, training and career paths, they will often be more inclined to improve their skills and knowledge since such improvements will increase their employment opportunities. The increased skills base of the workforce implies the enhancement of the functional and intellectual capability of the nation. The KNQF is based on the premise of the need to standardize and harmonize the country's qualifications by putting in place a system for setting standards defining expected knowledge, skills and understanding needed for labor market employment, self employment or further education within Kenya education and training system and beyond the country borders.

## **1.1 The KNQF Objectives**

The KNQF has been specifically designed to:

- Create an Integrated National Framework for Learning Achievements;
- Enhance and Coordinate the Quality of Education and Training in The Country by Setting Quality Standards as Well as Moderation Across Fields of Learning and Levels of Qualifications;
- Contribute to the full Personal Development of Each Learner and the Social and Economic Development of Kenya At Large;
- Ensure Linkage and Coherence Within the Existing Fragmented System of Education, Training and Certification;
- Generate Qualifications that are Comparable With those In the International Scene;
- Promote Competence-Based Assessment Practices and Qualifications;
- Encourage Learners (Workers and Others) To Continue Learning and Sharpening and Modernizing Their Skills And Knowledge To Respond To The Changing Needs Of Education And The Labor Market;
- Integrate Academic and Vocational Training, Formal and Informal, Theoretical and Practical Education And Training And Professional Qualifications Within The Framework Of The Expectations Of A Globally Competitive Work Force;
- Promote Recognition of Prior Learning So as To Bring on Board Acquired Experiential Learning and Work Experience.

## **1.2 KNQF Design Considerations**

The design of KNQF is based on the following principles:

- ❖ Ensuring standardization of terminologies to promote understanding and effective implementation of the framework;

- ❖ Defining levels of learning achievement, each with an agreed set of sharply defined competence descriptors to ensure comparability and benchmarking of qualifications;
- ❖ Using an agreed definition of *credit value* to facilitate recognition of the variety of credits and prior learning obtained from different modes of provision of education and training;
- ❖ Common standards for every level of qualifications;
- ❖ Common quality assurance criteria and procedures for use in monitoring and regulating the provision of education and training;
- ❖ A national database of information relevant to all forms of provision and standards of qualifications.

## ***2.0 Functions and Scope of the Kenya National Qualifications Framework***

### **(a) Functions**

The KNQF will serve the following key functions:

- Facilitate Vertical and Horizontal Integration and Harmonization of Qualifications Through A System of Credit Accumulation, Transfer or Exemptions. This Will Enhance the Mobility of Learners and Labor Within Institutions, Across Occupations and Sectors;
- Recognize and Assign Credits to Prior Learning So as To Enable the Recognition and Registration of Qualifications Acquired Through Non-Formal Education and Training;
- Vet Recognize and Register Qualifications Acquired Through Different Learning Modes Irrespective of The Duration of Training as Long as They Meet the Defined Minimum Standards Of The Expected Competencies;
- Vet, Recognize And Register Qualifications Acquired Outside The National Framework,
- Ensure the Development and Implementation of Clearly Defined National Standards of Qualifications Which Are Relevant to The Expectations Of The Formal And Informal Sectors Of Economy And Employment;
- Develop Systems for Evaluating, Determining Equivalences and Recognizing Skills Acquired and Qualifications Earned; And
- Facilitate Recognition of Kenyan Qualifications and To Determine Their Comparability Globally.

### **(b) Scope**

The KNQF covers all forms, levels and categories of educational and training provided by the public and private sectors in Kenya. It is guided by the principle of inclusiveness, targeting all areas of general education, vocational training, higher education, lifelong and out of school or non-formal education, other forms of learning such as open and distance, and e-learning.

The framework intends to articulate qualifications offered in general education, vocational education and training, technical education and training, higher education as well as qualifications

offered by professional bodies and associations. It incorporates all forms of education from lower, basic level of education to the highest level of tertiary and higher education.

## ***2.1 KNQF Levels and Competence Descriptors for the National Awards***

### **2.1.1 Kenya National Qualifications Framework Levels**

The term “Level” is used to refer to a degree of achievement in academic progress on a scale, with gradations representing the extent of acquisition of knowledge, conceptual understanding, competences and practical skills. The process of assigning qualifications to levels involves judgements about the relative worth or value of different qualifications. In addition, the levels system adopted is a key aspect of defining the relationships and equivalences between the qualifications of Kenya and those in the rest of the world. It is important that stakeholders understand that qualifications at the same level are deemed to be equivalent in certain respects, and not the same. Qualifications at the same level may be quite different in size and scope and have quite different purposes. For example, one may prepare learners for study of an academic subject at a higher level; another may indicate competence in an occupation.

A point worth noting is that, where it is normal to proceed from qualification A to qualification B, this does not necessarily mean that qualification B is at a higher level than qualification A. Sometimes progression is horizontal. For example, it may be common for learners who have completed a lower secondary qualification to proceed to take an artisan qualification. This does not mean that the artisan qualification is necessarily at a higher level. It may represent a different type of learning at the same level. Progression can also be down a level. For example, individuals with general degrees may be required to take practical or professional courses at a postgraduate level to gain entry to initial occupation. It should further be noted that qualifications at the same level may require quite different periods of learning. As shown in Section 3, measuring and recognizing the size or weight of learning is generally achieved through credit systems.

The number of levels in a National Qualifications Framework (NQF) varies with most countries subscribing to eight levels as shown in Table 2.1. A country adopts the number of levels that makes sense in relation to its own education and training system and policy goals. As long as the number and nature of levels bear a recognizable relationship to the eight levels in Table 2.1, there will be little difficulty in establishing comparisons with qualifications in other NQFs.

Table 2.1. Eight most common level descriptors

Level	Level Examples of qualifications and related competences
8	Doctoral degree; Senior Manager Vocational qualification <ul style="list-style-type: none"> <li>• □Jobs requiring the knowledge, creativity and leadership skills to deal with complex and unpredictable situations</li> </ul>
7	Masters degree; Specialist Professional Qualifications; Senior Manager VQ <ul style="list-style-type: none"> <li>• □Specialist knowledge-based professional work; high-level management responsibilities.</li> </ul>
6	Bachelors degree/Honors degree; Professional Qualifications; middle Manager VQ <ul style="list-style-type: none"> <li>• Knowledge-based professional work; high-level management responsibilities</li> </ul>
5	Higher education Certificate and Diploma; Technician/Specialist VQ; Paraprofessional Qualification; Advanced Vocational Qualification <ul style="list-style-type: none"> <li>• Highly skilled employment; management training</li> </ul>
4	Senior School Exit Qualification; Advanced Vocational Qualification <ul style="list-style-type: none"> <li>• Fully skilled employment; independent operative; supervisory responsibilities</li> </ul>
3	Junior School Exit Qualification; Intermediate VQ <ul style="list-style-type: none"> <li>• Skilled/semi-skilled employment</li> </ul>
2	Basic Vocational Qualification <ul style="list-style-type: none"> <li>• Skills required to function in the workplace</li> </ul>
1	Literacy and Numeracy Qualification <ul style="list-style-type: none"> <li>• Skills required to enter the workplace and undertake vocational training</li> </ul>

NQFs are based on learning outcomes which are defined as “the set of knowledge, skills and/or competences an individual has acquired and/or is able to demonstrate after completion of a learning process. Learning outcomes are statements of what a learner is expected to know, understand and/or be able to do at the end of a period of learning”. In the process of developing level descriptors clear statements are made about the characteristics and outcomes of qualifications and how qualifications at adjacent levels differ from each other. It is noteworthy that some qualifications are more concerned with development of knowledge; others with skills or personal and professional competences.

The KNQF has defined 10 unique levels of competence as shown in Table 3.2. For each level a National Award has been assigned. The framework provides clear competence descriptors for each level/National Award. It is important to remember that competence descriptors are not specific to any field of specialization (they are generic and cross-field statements). The approach used in developing the National Awards and respective competence descriptors entailed adoption and strategic modification of the levels and competence descriptors used by the prominent regulatory bodies—especially South African Qualifications Authority, Mauritius Qualifications Authority and New Zealand Qualifications Authority rather than starting afresh using the

occupational analysis approach. This was considered a valid approach since competence descriptors are broad and provide generic statements of achievement at a level of study.

The KNQF consists of the following features:

- The qualifications recognised in the KNQF are classified into the following groups:
- Schools sector, (b) Vocational and technical sector, (c) University education sector, (d) Professions;
- The levels of qualifications (e.g., certificate and diploma) are differentiated based on the breadth, depth and complexity of knowledge and skills that are included in various qualifications;
- All qualifications in the KNQF have a purpose and are interrelated to each other, providing for articulation from one qualification to the other by recognition of prior learning.

The KNQF has been designed to build flexibility into a framework that would otherwise remain too rigid and crude to accommodate the vast variety of programmes and qualifications offered across the higher education and technical bands. The last column in Table 2.2 labelled horizontal and diagonal articulation is proposed as a mechanism to facilitate meaningful articulation between qualifications in the two different tracks/strands, i.e., academic on the one hand and professional or technical, on the other. The purpose of horizontal and diagonal articulation is to facilitate learner mobility and progression along the framework as efficiently as possible. It can also be used to admit into the system those learners who do not meet the full entry requirements for their target programmes. It is likely to be the ‘space’ in the system where the recognition of prior learning (RPL) can most easily be implemented. The horizontal and diagonal articulation mechanism is thus proposed to cater for the learning needs of those whose past learning experiences have not adequately prepared them for a chosen programme, without forcing them to ‘go back to the beginning again’.

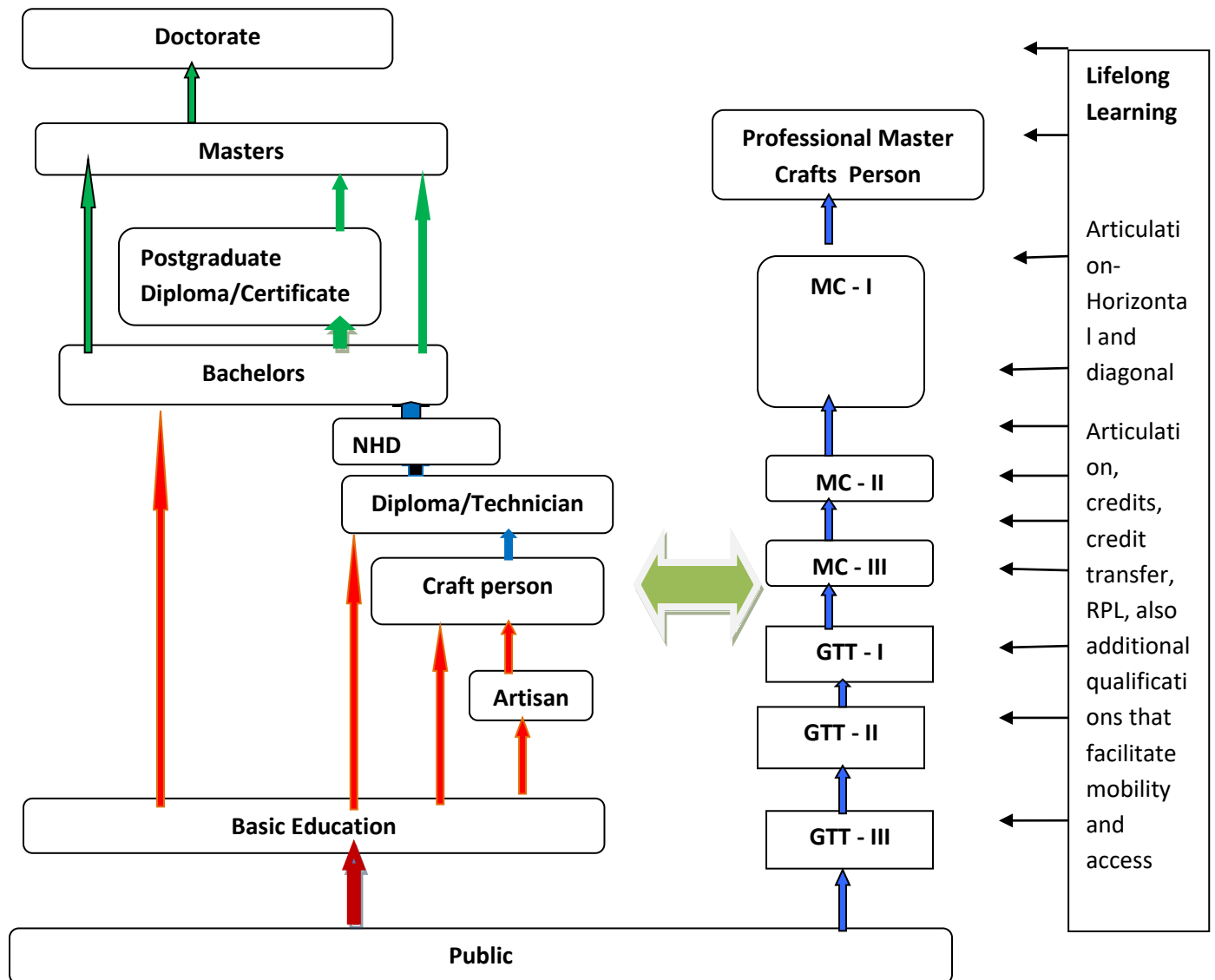
An example of the use of qualifications in the articulation column follows: A learner with Form IV and National Vocational and technical Certificate (Level 3) qualification may be permitted to move diagonally on the framework to Technician Certificate at Level 4 subject to successfully completing a bridging course (Table 2.2). Generally, horizontal articulation requirements mean that the learner is required to undertake further learning at the same level as his/her highest qualification in order to meet the entry requirements of a target programme.

Table 2.2. The KNQF and associated qualification titles.

Primary School Certificate; Secondary School Certificate; these levels do not impart skills; hence no credit hours are given.

## EDUCATION AND TRAINING PROGRESSION PATHWAYS

MC-Master Crafts Person, GTT-Government Trade Test



Arrows in the framework refer to horizontal and diagonal articulation between and within sectors.

Lifelong

Education pathways cut across all levels of qualifications through RPL.

Diagonal articulation requirements mean that the learner may proceed to the next level, but will be required to undertake additional enrichment learning in the target area prior to being admitted to a new programme. In some cases, where a learner is better prepared than others, s/he may be required to attain only a certain number of credits in the target area (i.e. register for one or two modules rather than a whole qualification in the articulation column) prior to being admitted to the target programme. In such cases, if the learning load is not too onerous, s/he may be allowed to

register simultaneously for the enrichment learning in the articulation column and for the target programme.

Whilst the framework provides general guidelines and parameters, specific articulation requirements will always be determined by the receiving institution on the basis of publicly declared entry requirements for particular programmes and qualifications. This shall be a requirement for the registration of qualifications on the KNQF. A key to ensuring the articulation of qualifications in the general and technical bands and to exploiting the flexibility of this framework, will be the clear and public statement of entry and exit requirements for programmes, both in terms of credits at particular levels and in terms of statements of learning outcomes, against which learning (both formal and experiential or non-formal) can be assessed and weighted.

As stated in the example above, the articulation column can be used as a space where learners achieve ‘articulation credits’ in transit between two programmes, or it can be used to attain whole qualifications.

### **2.1.2 Inclusion of Professional Qualifications on Kenya National Qualifications Framework**

#### *Definitions and Concepts*

A *profession* can be described as a specialist occupational group that is self-restricted and self-regulated and which tends to have a great deal of autonomy in setting the academic and practice standards, the ethical code and the disciplinary policies and practices for their members and in providing the right/license to practice. The distinctive characteristics of a profession include:

- a service orientation, making expertise available to others;
- a distinctive body of knowledge and skills, coupled with abilities and values;
- autonomy in performance of work, within agreed boundaries; and
- Public recognition of the authority of the practitioner by virtue of operation within ethical standards.

The benefits of services offered by professions are accompanied, invariably, by risks to the client and the public. There are different types of risks in different professions, for example: injustice, financial, health, safety or environmental. Consequently, professions are regulated through two main models, namely; a statutory body or a non-statutory body that has the confidence of government, clients, practitioners and the public.

A *Professional Body* (e.g. Kenya Nursing and Midwives Council, Architects and Quantity Surveyors Registration Board, Engineers Board of Kenya) is a body appointed to represent a recognized ‘community of expert practitioners’ and as such it devises, informs, monitors and continually updates the benchmark standards of competence, both academic and practical,



required in the practice of the profession for which it is responsible. It is governed either by a statute or a constitution and has the necessary full time resources to carry out its functions.

Major functions include quality assurance, assessment of professional competence, the conferring of professional designations and the right to practice, development and management of a code of professional/ethical conduct and ensuring the currency of knowledge of members through the implementation and monitoring of Continuing Professional Development programmes.

A *Professional Qualification* represents a planned combination of learning outcomes which has a defined purpose or purposes, and which is intended to provide qualifying learners with applied competence and a basis for further learning. It adds value to the qualifying learner in terms of enrichment of the person through the provision of status, recognition, credentials and licensing the enhancement of marketability and employability and the opening up of access routes to additional education and training. The applicability of qualification, however, depends on the definition of a Professional Designation.

A *Professional Designation* is a title/status that is conferred by a Professional Body, which indicates the professional status of the individual and the right to practice in the particular field of expertise governed by that Body. Retention of this status is dependent upon compliance with the stated requirements of the Body concerned. These would typically include compliance with a Code of Professional Conduct, compliance with Continuing Professional Development requirements and the payment of fees.

There are a number of important differences between academic awards and professional qualifications. A degree is a qualification awarded on academic merit based on an assessment of the candidate's knowledge and skills, and many degrees are accredited by professional bodies as meeting the *academic* requirements for entering the profession.

However, awards made by professional bodies essentially constitute a (statutory or non-statutory) "license to practice" which is awarded on the basis of not only of academic requirements, but also the candidate's competence, acquired during training and/or in the workplace and, in some instances, other factors such as personal suitability for the profession. Unlike a degree, or other academic award, which must be durable and permanent, a license to practice is temporary, its continuance is at the discretion of the professional body and will depend on evidence of the candidate's compliance with requirements for continuing professional development, ethical standards and regulations controlling fitness to practice in addition to other factors, such as physical and psychological health.

Three steps to Professional Status are recognised; firstly Professional Qualification (often in two stages, namely an academic/theoretical stage and a workplace experience stage), secondly assessment for professional registration and lastly ongoing retention of registration by professional members.

Professional Bodies have been providing employment marketplace in the country with skilled, knowledgeable and productive individuals over a long period of time thus contributing to national objectives. Moreover, regional and global trends for qualifications frameworks indicate a focus on Vocational qualifications as opposed to purely Academic and where Professional qualifications have not previously been included in NQFs around the world, there are currently moves in that direction. The KNQF as an integrated framework for all learning achievements includes Professional Qualifications on the framework as depicted in Table 3.2. The qualifications that are registered on the NQF will be quality assured by the relevant regulatory authority and will enjoy national recognition, including articulation with other nationally registered qualifications. Since Professional Designations may be revoked due to non-compliance with specific requirements of Professional Bodies it is not prudent to include them on the framework itself. Professional bodies should be encouraged to publish the standards for professional competency in a form that supports the NQF objectives of integration, coherence of education and training requirements, articulation and portability.

### **2.1.3 Recognition of Prior Learning**

Prior learning can be recognised through appropriate forms of assessment which may Include:

- Interviews; and/or
- Challenge examinations; and/or
- Assignments or projects; and/or
- Demonstrations of skills; and/or
- Validation of previous qualifications; and/or
- A combination of the above.

The RPL process will usually entail the following:

- Identifying the qualifications, unit standards or learning outcomes for which a candidate believes they will meet the requirements;
- Matching a candidate's skills, knowledge and experience with the specific requirements;
- Assessing a candidate using appropriate forms of assessment; and crediting a candidate for skills, knowledge and experience attained.

### **2.1.4 Competence Descriptors**

As already stated, level descriptors attempt to describe the nature of learning achievement, its complexity and relative demand, at each level of a qualifications framework. Level descriptors are broad, generic, qualitative statements against which specific learning outcomes can be compared and located. Thus, sets of level descriptors can be used in a general way to determine the pegging of qualifications and standards on a framework. But because they describe learning across domains, disciplines, fields and learning pathways, level descriptors must be general and at the

same time specific enough to serve their purpose. They must provide a clear understanding of the meaning of learning attainment corresponding to each level on the KNQF.

It is important to recognize that the KNQF levels and their level descriptors can only serve as reference points for more specific outcomes achieved by specific qualifications. It is important to remember that competence descriptors are broad and provide generic statements of achievement at a particular level of study. Level descriptors are necessary for qualification design and for the assessment of learning, but for these purposes must be complemented by the relevant qualification descriptors and often more specifically by the addition of specialized qualification standards. These will be re-worked into learning outcomes.

The KNQF consists of 10 national award levels with the first one - level 1 being the basic one. Each level is described by a unique level descriptor (Annex I).

### **3. CREDIT GUIDELINES FOR THE KENYA NATIONAL QUALIFICATIONS FRAMEWORK**

#### ***3.1 The Concept of Credit***

In a teaching and learning context it is common to give an indication of the volume of learning required by a training programme in terms of the time demanded by a learner with an average learning speed to realize a given set of learning outcomes. A learning outcome is a statement of what a learner can be expected to know, understand and/or do as a result of a learning experience. Such time is often referred to as 'notional' or 'average learning' time. The South African Qualification Authority (SAQA) defines 'notional hours of learning' as the learning time that it would take an average learner to meet the outcomes defined. It includes concepts such as:

- Contact time;
- Time spent in structured learning in the work place;
- Individual learning; and
- Assessment.

Other literature hold a similar view that the notional learning time should include all the activities which it is expected that the learner will undertake in order to achieve the learning outcomes including, as appropriate:

- (a) Formal learning (including classes, training sessions coaching, seminars and tutorials);
- (b) Practical work in laboratories or other locations;
- (c) Relevant Information Technology activities;
- (d) Information retrieval in libraries;
- (e) Expected private study and revision;
- (f) Work based activities which lead to assessment;
- (g) Practice, gaining, applying and refining skills to achieve threshold level of competence;
- (h) Programme planning; and
- (i) Educational counselling and mentoring.

The unit for this purpose is termed as *credit*. Below are some definitions of an academic credit with their respective sources acknowledged?

(i) UNESCO

“A credit is a generally agreed-upon value used to measure a student workload in terms of learning time required to complete course units, resulting in learning outcomes. Generally, once gained, credit cannot be lost” (Vlăsceanu, et al., 2004,p. 31).

(ii) Scottish Qualification Authority

“A credit is the amount of time that an ‘average’ learner at a specific level might expect to take to achieve the outcomes regardless of the mode of delivery or assessment (SAQA, 2002, p. 1).15

(iii) European Credit Transfer and Accumulation System (ECTS)

“A credit is the currency to measure student workload in terms of notional learning time required to achieve specific learning outcomes (EU, 2004).

(iv) New Zealand Qualification Authority (NZQA)

“A credit is a numerical value assigned to a standard on a National Qualifications Framework that represents the estimated time needed for a typical learner to demonstrate that all specified outcomes have been met (NZQA, 2003).

Credit may therefore be perceived as a currency for learning achievement that provides a measure of learning outcomes achievable in a learning time at a given level in the KNQF.

It is an award made to a learner in recognition of the verified achievement of designated learning outcomes at a specified level.

### ***3.2 The KNQF Credit Standards***

A credit is awarded only as evidence of learning achievement and is derived through estimation of notional learning time at a particular level. A credit in the KNQF equates to learning outcomes achievable in 10 hours of learning time determined on the basis of a learner with an average learning speed. That is, a credit equals 10 notional hours. The most prominent qualifications Frameworks also adopt the same definition of a credit (e.g. the NQFs adopted by Australia, New Zealand, South Africa and the United Kingdom).

The KNQF has assigned credits at its various levels as the principal means for measuring and expressing learning equivalence at the respective levels. Credits are used to reward the incremental progress of learners, facilitating student transfer, recognizing prior learning and contributing to the definition of KNQF qualification standards.

Among the advantages of a Credit system is ‘credit accumulation’ and ‘credit transfer’.  
Credit accumulation is a process of collecting credit for learning towards a qualification.

This may occur within a programme of study, across an institution, between institutions within a single country or on an international basis. Where accumulation crosses programme or institutional boundaries, this is usually referred to as credit transfer.

According to UNESCO sources, “a credit gained by a student in a given higher education institution may be recognised in another institution, depending upon the commonality in terms of level and context. Thus study credits are transferable” (Vlăsceanu et al., 2004, p.31).

In order to earn credits at a particular KNQF level, the learner must satisfy the assessment criteria for all (or the majority of) the prescribed principal learning outcomes that describe the qualification at that particular level. A credit shall not be apportioned. If a learner has met a standard (demonstrated attainment of a principal learning outcome or accumulated qualification outcomes), he/she shall receive full credits assigned to that standard.

It should be understood that competency is acquired through mastering a prescribed number of learning outcomes. This can be achieved through a combination of all the three known domains of learning namely cognitive, psychomotor, and affective which are respectively responsible for the acquisition of knowledge, skills and attitudes. Thus to earn a credit means more than assigning contact hours to a learning programme; a good estimation of average learning time should include also that spent in acquiring not only theoretical knowledge but also practical skills and the right attitude, values or ethics. It is strongly emphasized to consider the cognitive domain in its wider context in order to capture its various hierarchical levels of knowledge while defining the outcomes defining an academic credit and assessing their realization. According to Benjamin Bloom’s taxonomy knowledge has six levels which rank from the lowest to the highest degrees of complexity namely: recall knowledge; comprehension; application; analysis; synthesis; and evaluation.

### ***3.3 The KNQF Credit Framework***

A portrayal of credits assigned per qualification level is popularly known as a credit framework. Table 4.1 below indicates the proposed credit framework for the Kenya National Qualifications System. To administer the KNQF Credit Framework the following policy guidelines for post school education levels are proposed for vertical and diagonal articulation.

#### **Vocational Education and Training**

A minimum of 60 credits have to be realized at levels 2 In this framework, a holder of national Vocational Certificate is considered to meet the competence level descriptor for KNQF level 3 within the trade field. Such a person, though good at practical skills, needs broader subject area skills for progression to a higher level within technical education and training. As such would need to take a bridging course amounting to 30 credits to follow National advanced Vocational and Technical certificate at KNQF level 4.

Table 4.1: Kenya credit framework.

KNQ F Levels	Basic Education	VOCATIONAL			TECHNICAL			UNIVERSITY			Professions
		Min Over all Cred its	Min Cred its Fro m Curr ent Leve l	Max Cre dits Fro m Low est Lev el	Min Ove rall Cre dits	Min Cred its Fro m Curr ent Leve l	Max Cre dits Fro m Low est Lev el	Min Ove rall Cre dits	Min Cred its Fro m Curr ent Leve l	Max Cre dits Fro m Low est Lev el	
10					540)	510)	30 (9)	540	510	30 (9)	
9					180	150	30 (8)	180	150	30 (8)	<b>Level IV</b>
8					(120 PG D) (60 PG C)			(120 PG D) (60 PG C)			<b>Level III</b>
7		120	90	30 (6)	120	90	30 (6)	120	90	30 (6)	<b>Level II</b>
6		240	210	30 (5)	240	210	30 (5)	240	210	30 (5)	<b>Level I</b>
5		120	90	30 (4)	120	90	30 (4)	120	90	30 (4)	
4		120	90	30 (3)	120	90	30 (3)	120	120	0	
3		60	40	0	90	90	0				
2	SSC										
1	PSC										

### Technical Education and Training

(i) A minimum of 120 credits have to be realized at levels 4 for the award of Technician Certificate, among which a maximum of 30 credits may be picked from level 3. This level attracts holders of National Vocational Certificate;

(iii) A minimum of 120 credits have to be realized at levels 5 for the award of national Diploma, among which a maximum of 30 credits may be picked from level 4. This level attracts holders of National Advanced technical and Vocational certificate.

(iv) A minimum of 240 credits have to be realized at levels 6 for the award of Higher National Diploma, among which a maximum of 30 credits may be picked from level 5. This level attracts holders of National Diploma. Form Six Secondary Education leavers may also be considered for entry at his level as long as they undergo a bridging course training to cover 120 credits tailored to realize the competences / learning outcomes at level 5.

(v) A minimum of 120 credits have to be realized at levels 7 for the award of Bachelors Technical/Technology Degree (BTec) among which a maximum of 30 credits may be picked from level 6. This level attracts holders of Higher National Diploma.

(vi) A minimum of 180 credits have to be realized at levels 9 for the award of Masters Technical/Technology Degree (MTec) among which a maximum of 30 credits may be picked from level 7. This level attracts holders of Bachelors Degree. Postgraduate Certificate and Postgraduate Diploma may be granted upon realizing 60 and 120 credits respectively as part of the Masters Degree Programme. They may also be offered as independent programmes with the same credit value.

(vii) A minimum of 540 credits have to be realized at levels 10 for the award of a Technical/Technology Doctorate Degree (DTec) among which a maximum of 30 credits may be picked from level 7. This level attracts holders of Masters Degree.

### **Progression Pathways**

The adoption of the credit accumulation and transfer system within the KNQF should open doors for progression within and across education and training providers at all levels. For that matter, a student following a university path should be allowed to switch over to the technical path and vice versa. A vocational education and training student should be allowed to progress vertically to obtain a vocational degree, say BVoc, and then switch over to a Masters Degree in either the technical or university line.

### **Duration of Training**

The minimum total credit points assigned to each KNQF level gives the indication of the duration of training for the level, where 120 are considered sufficient for an academic year, which may be split into two semesters each of which may run from 15-17 weeks.

Field practical training should range between eight and 12 weeks per academic year. For vocational education and training, however, as more skills are required, the duration of training will be determined by the nature of the trade and the credits assigned to each level spread throughout the specified year or years of training.

## **4. QUALITY ASSURANCE**

The KNQF accords importance to both programme accreditation and institutional accreditation. This is necessary in order for stakeholders within the country and the international community to have confidence in the qualifications registered in the KNQF. There needs to be some appropriate procedures for ensuring that the qualifications are well designed to fit for purpose. To build the

same trust the programmes leading to these qualifications should be delivered by competent providers and that the assessments leading to the award of the qualifications are of an accepted standard.

The assurance of quality in teaching and learning and the resulting output is paramount in any educational system that is keen to produce a competent workforce for the highly competitive economy. Qualifications will therefore qualify for registration in the KNQF after meeting the minimum quality requirements. This calls for the need to subject all education and training providers to rigorous quality assurance audits.

This chapter describes an approach to quality, the machinery for the process and cites the legal implications for the same. The process of using system checks to ensure quality standards set by a competent authority can be maintained and corrected if and whenever they go wrong is referred to as quality assurance. The quality assurance of the KNQF shall therefore be centred on the following elements:

- (a) Setting and validation of qualifications standards;
- (b) Validation of relevant curricula;
- (c) Ensure appropriateness of assessment and examinations system; and

#### ***4.1 Setting of Qualifications Standards***

A qualification may be perceived, in simple terms, as a planned combination of learning outcomes which has a definite purpose and which is intended to provide qualifying learners with applied competence and a basis for further learning. A ***Qualification Standard*** is a standard that is set by a competent body to guide development of curricula targeting a particular qualification in the KNQF. It prescribes the *Purpose(s) of Qualification*, the *Principal Learning Outcomes* for realizing the Purpose(s) of Qualification, and the associated *Credit Values* with *Assessment Criteria*. These terms are explained below.

##### ***(i) Purpose of Qualification***

A Purpose of Qualification is a statement that prescribes in broader terms what someone with a particular qualification should be able to do in the world of work in terms of competencies. It also indicates the typical context that person to be awarded with the qualification could work in more efficiently.

##### ***(ii) Principal Learning Outcomes***

*Principal Learning Outcomes* are standard statements formulated to realize the *Purpose(s) of a particular Qualification* and therefore they are relatively more focused than the latter. They prescribe the typical context and level that a person who has been awarded with a particular NTA qualification could work in more efficiently, and what someone with the qualification should be able to do in the world of work in terms of *integrated skills, knowledge and understanding*, as well as the *wider cross-cutting abilities*. This is normally signaled by indicating the level of responsibility of graduates and the expected degree of independence in the workplace, in line with the respective KNQF Competence Descriptors.



### ***(iii) Credit Values***

Since credit is awarded as evidence of learning achievement it follows that the volume of learning for each *Principal Learning Outcome needs to be specified in terms of credits*. The number of credits awarded for successful realization of completion of one principal learning outcome is called a *Credit Value* of that particular principal outcome. However, it should be ensured that the sum of credits from all Principal Outcomes is equal to the minimum number of credits of the qualification at the particular level in the KNQF.

### ***(iv) Assessment Criteria***

Assessment criteria are statements that indicate what learners are expected to do in order to demonstrate that they have successfully realized a Principal Learning Outcome. The following are some key points that should be borne in mind while developing assessment criteria.

- (a) Assessment should be an integrated undertaking taking into consideration both the applied competencies and cross-cutting issues to ensure life-long learning.
- (b) Assessment should recognize achievements against approved criteria and benchmark.
- (c) Assessment should allow progression and portability and enable the transference of credits from one learning situation to another but similar situation.
- (d) Assessment should recognize prior learning and give credit to evidence of learning outcomes that have already been acquired in different ways.
- (e) Assessment should emphasize legitimacy and transparency and clarity on what the learner is expected to achieve. Credibility in assessment is assured through assessment procedures and practices being governed by fairness, validity, reliability and practicability.

Setting of Qualification standards will very much depend on the labor market information obtained through labor market surveys. The dependence arises from the need to provide qualifications that address the labor market requirements. Labor market information may be complemented by data from the relevant Standard Classification of Occupations, e.g. ISCO, etc., which describe many of the desirable workplace aptitudes and skills required for a successful venture in modern global economies.

The key regulatory bodies for qualifications registered in the KNQF, that is the CUE, TVETA and QAS (KNEC, KICD) should set qualification standards at national level for the awards under their respective jurisdiction. Validation of the qualification standards should be done by a committee representing the three bodies and other key stakeholders.

### ***4.2 Development of Relevant Curricula***

Curriculum encompasses teaching and learning experiences taking place in a learning institution. It describes all aspects of teaching and learning such as the purpose or the intended outcomes of learning, syllabi documentation, learning strategies, assessment methods and certification with adequate reflection of the needs and interests of the learner, institution, employer, profession, society and the government.

Education and training providers in Kenya will have to ensure that they develop / use curricula that are relevant to labor-market demands and the needs of direct consumers and other stakeholders. The curriculum development process usually goes through the following stages:

- (i) Curriculum planning;
- (ii) Conducting situational analysis;
- (iii) Actual curriculum development; and
- (iv) Curriculum approval and validation.

Before curriculum is developed, it is crucial to plan the exercise in order to ensure that it is done effectively and the ultimate purposes are realized in an optimum way. This should lead to the selection of effective strategies to be adopted and subsequent identification of respective financial implications, hence the essence of the planning stage. Situational analysis is important for identification of the needs of various beneficiaries of the envisaged curriculum. Situational analysis results are used to formulate the contents of a curriculum. Situational analysis is also crucial for assessing and establishing human and physical resources necessary for effective teaching and learning.

Principal learning outcomes are usually part of the standards developed by a relevant regulatory body. However, since these are normally quite broad, they need to be translated into simple learning outcomes for ease of implementation. The process of actual curriculum development involves also developing assessment criteria and their benchmarking, teaching and learning strategies, modules and resource material.

The institutional approval organs should approve their curriculum for onward transmission to the relevant regulatory body for validation after ensuring that it is in line with its vision and mission incorporates the needs of stakeholders and has followed all the requirements as stipulated by the relevant regulatory body.

The relevant regulatory body will validate the curriculum after ensuring that the following requirements have been met:

- (a) Situation Analysis supporting each curriculum has been conducted and that the results adequately reflect the needs of the employers, profession and society;
- (b) Curriculum enables competencies required of learners in their personal or professional lives after graduation. The curriculum describes what students will be able to do with what they have learned in course modules and in the academic programme as a whole;
- (c) Curriculum incorporates cross-cutting issues (generic curriculum needs, e.g. basic computer skills, communication skills, entrepreneurship, etc) to facilitate life-long learning within and across fields and that the teaching and learning strategies for realization of all the learning outcomes are adequately formulated;
- (d) Learning outcomes and course modules are reconciled in a way to allow modular delivery of curriculum under a semester learning timeframe; and
- (e) Appropriate assessment criteria have been formulated and benchmarked. This is supported with clear assessment methods and statement on respective assessment instruments.

The relevant regulatory body will then appoint a team of experts in the subject area addressed by the curriculum to determine the institutional capacity to deliver the same, in terms of adequacy of qualifications and number of the teaching staff, teaching and learning equipment and resources, infrastructure, student development and support, etc. Upon being satisfied, the regulatory body will allow the institution to use the curriculum for its award. This will qualify the award to be registered in the KNQF.

#### ***4.3 Appropriate Assessment and Examinations System***

Education and training providers wishing to have qualifications they offer registered on the KNQF should ensure having in place a sound assessment and examinations system.

The system should provide a mechanism to ensure that both formative and summative assessments are done by considering reasonable quality standards and that examination

Fulfil both the validity and reliability criteria. In this context an assessment is valid if it measures what it is supposed to measure. For example, an essay is a valid assessment method of the ability to undertake literary criticism but not of the competence to install electrical wiring in a house. Likewise, assessment is reliable if it is carried out consistently. In principle, a particular performance by a student should lead to the same assessment result regardless of who conducts the assessment and where or when it is conducted.

In practice assessments culminate in examinations conducted by approved providers or agencies. Institutions that are responsible for examinations should have in place the following:

- (i) Procedures/Guidelines for Appointing Setters, Moderators, Invigilators, Supervisors, and Markers of Examinations;
- (ii) Procedures/Guidelines for Setting and Moderating Examinations;
- (iii) Procedures/Guidelines and Criteria for Approving Examinations and Awards;
- (iv) Procedures/Guidelines for Printing Examinations, Safe Custody and Transmission of Examinations to Designated Departments/Centers;
- (v) Guidelines for the Conduct and Administration of Continuous Assessment;
- (vi) Procedures for Marking Examinations and Standardizing Results;
- (vii) Mechanisms for Detection and Control of Cheating and Other Irregularities in Examinations (including Continuous Assessment);
- (viii) Grading Systems for Various Awards;
- (ix) Procedures/Guidelines for Publishing Examination Results;
- (x) Guidelines for Academic Appeals and Student Complaints on Academic Matters;
- (xi) Procedures for Evaluating Examinations; and
- (xii) Appropriate Facilities/Working Tools for every Set of Procedures/Guidelines developed.

It is important that the assessment methods are feasible (practicable) and apply in the normal institutional setting (e.g. school or workplace) and that they are cost-effective.

#### ***4.4 Accreditation and Audit of Education and Training Institutions***

Accreditation is the approval or certification granted by the relevant authority representing the interest of both the public and students, to an institution, on account of having programmes and quality assurance system that ensures the provision of set qualification(s) and educational standard(s) for a particular period of time, normally five years.

The mechanism for accreditation for education and training institutions normally involves

- Compliance with accreditation standards;
- Preparation and submission of a self-evaluation study report on compliance with accreditation standards to a competent accreditation body;
- Establishment of an institutional quality assurance system;
- Development of curricula for training programmes using approved qualification standards; and
- Recognition of academic departments that will offer the programmes to ascertain their capacity to deliver the same at the intended level of award.

The process culminates into a physical verification visit to the institution that has applied for accreditation, by a team of experts in subject areas relevant to the programmes offered, appointed by a competent accreditation body to audit the resources of the institution. Accreditation standards cover as much as possible all areas of concern to facilitate an environment conducive to teaching and learning. These are usually clustered under the following headings:

##### **(i) Institutional Vision and Mission**

This standard requires the institution to have clear statements of Vision and Mission that define the institution, its educational purposes, its student constituency, and its place in technical education and training community.

##### **(ii) Governance and Administration**

This standard requires the institution to have a clear governance system and organizational structure with a Governing or Advisory Board or Council responsible for quality and integrity of the institution. The system must be designed in line with the provisions in enabling Act that has established the institution. The institution is also required to have administrative staff of appropriate size to enable the institution achieve its goals and must be so organized to provide the required administrative services.

##### **(iii) Institutional Integrity**

This standard requires the institution to subscribe to, advocate and demonstrate honesty, truthfulness in presentations to its constituencies and the public; in its pursuit of truth and dissemination of knowledge; in its treatment of and respect for administration, academic and supporting staff, and students; in management of its affairs and in relationship with

TVETA, CUE and other external agencies. The essence of this standard has to do with integrity and honesty in all areas of institutional operations.

**(iv) Institutional Effectiveness**

For this standard, the institution is required, appropriate to its mission and purposes, to develop and implement a broad based system of education and training, evaluation, and planning to assess institutional effectiveness and use the results for institutional improvement. The institution is also required to identify institutional outcomes that can be validated by objective evidence.

**(v) Educational Programmes**

This standard requires the institution to offer appropriate academic level programmes in recognized fields of study that culminate in identified student competencies leading to the National Awards (NA). The institution is required to demonstrate that education and training programmes it offers support the mission and vision for which it was established. The institution is further required to have clearly defined processes for establishing and evaluating all of its educational programmes. The purpose of this standard is to invite a detailed look at educational programmes of the institution.

**(vi) Student Support and Development**

This standard requires the institution to recruit and admit students appropriate to its programmes. The institution is also required to identify the diversity needs of its students and provide appropriate support services and educational programmes to address those needs. The institution is further required to have the entire student pathway characterized by a concern for student access, progress and success.

**(vii) Information and Learning Resources**

For this standard the institution is required to have information and learning resources sufficient in quality, depth, diversity, and currency to support the institution's activities and programmes. The institution is also required to have professionally qualified staff to provide appropriate support to users of information and learning resources, including training in effective application information technology to students' learning and training.

**(viii) Teaching and Supporting Staff**

This standard requires the institution to have sufficient numbers of qualified full time and part-time staff, with appropriate education, training and experience, to effectively support its educational programmes and services wherever offered and by whatever means delivered. This standard asks the institution to assess its academic and support staff in terms of their qualifications, selection and their evaluation. It also asks evaluation of professional development activities and personnel policies.

**(ix) Physical Resources**

This standard requires the institution to have sufficient and appropriate physical resources to effectively support its education and training purposes and goals. Thus this standard requires that the institution review the quality of its facilities and their maintenance.

**(x) Financial Resources**

For this standard the institution is required to have adequate financial resources to achieve, maintain and enhance its education and training programmes. The level of financial resources provides a measure for sustainability, viability and assurance for institutional improvement.

In order for the KNQF to register quality assured qualifications, all education and training providers should be audited and their programmes accredited. The regulatory bodies Responsible for qualifications under the KNQF should develop the following procedures and standards to support both regulatory operations and institutional quality initiatives:

- (a) Procedures for curriculum development, review, approval and validation;
- (b) Academic quality standards and specifications of education and training resources;
- (c) Performance indicators for institution's assessment;
- (d) Benchmarks for comparing performance across courses and across education and training institutions;
- (e) Procedures for quality assessment, evaluation and audit of course delivery;
- (f) Framework for institutional quality assurance evaluation; and
- (g) Guidelines for establishing institutional quality control and quality assurance policies and procedures.

Kenya National Qualifications Authority has developed National Qualifications Framework in order to guide the development of a national education and training system which is well integrated/aligned with the structures and processes through which an individual acquires knowledge, understanding and skills necessary for appreciating and adapting to the environment and as means by which one can realize one's full potential.

The labor markets in the country and beyond its borders are increasingly in demand of *proven* demonstration of mastery of expected learning outcomes of an education and training process. Furthermore, increasingly there are expectations that the learning outcomes characterizing different education and training systems should be comparable between nations and national groups as a means of facilitating the mobility of people for further training and jobs. These expectations can only be facilitated by a national qualifications framework.

The proposed Kenya National Qualifications Framework is expected to serve as an important component of the already conceptualized regional and international Qualifications Framework. The KNQF subscribes to the principle of inclusiveness for educational, vocational and higher education sectors, with links between countries and plans to harmonize qualifications and learning programmes with the goal of facilitating the mobility of learners and workers throughout the region.

The rationale for the proposed KNQF hinges on the need for the country to:

- integrate its education and training system at all levels and relate that system with those existing globally;
- set national standards in education and training so as to harmonize and rationalize qualifications and make them comparable with those in the international setting;
- establish mechanisms for the dissemination of equivalences and consequent recognition of qualifications and facilitate the transferability and portability of learning achievements (credits) and qualifications across institutions, levels of education and training, learning modes and borders;
- Establish a national education and training database accessible by all stakeholders.

The KNQF is based on need to standardize and harmonize the country's qualifications by putting in place a system for setting standards defining expected knowledge, skills and understanding needed for labor market employment, self employment or further education. The KNQF is thus a national qualifications system with agreed principles, practices, procedures and standardized terminology with a view to ensuring effective comparability of qualifications globally so as to facilitate mutual recognition of qualifications, as well as mobility of students and trained labor.

In line with other NQFs in globally, the KNQF embraces and recognizes the contribution made by lifelong learning and work experiences translated into credits comparable with those obtained through formal schooling. It is expected that individuals will progress academically upwards along the training and career paths and across occupations if the lifelong learning approach is adopted.