

Chapter 1

National Vocational Qualification System

The National Vocational Qualifications (NVQ) Framework is a seven level qualification system. A Qualification is generally a package of competencies to suit requirements in a particular position in the labour market. However, given that currently the General Education system does not aim at endowing students with competencies suited to the world of work, the NVQ system has developed foundation courses to facilitate training for employment.

There shall be no upper age limit for acceptance of trainees, since this is a sector in which the concept of lifelong learning, which should be generally made available in all fields, is particularly important. In general students below the age of 16 will not be accepted on training courses. However the state should ensure that such training is made available to students for whom facilities are not otherwise available for learning that will ensure them productive employment.

How qualification packages are formed will be explained in the chapter on National Competency Standards and Curricula. Each qualification developed under the NVQ Framework includes Knowledge, Skills and Abilities conducive to an occupation in the labour market. NVQ Framework has developed mechanisms to incorporate industry relevance and quality assurance in the qualifications that will be awarded.

1.1 Qualification Levels

Seven levels of NVQ Framework are mapped to qualifications with general description given below.

Table 1 Seven Levels of Qualifications

Level	Qualification	Generalized description
Level 1	NVQ 1 in Building Career Skills	Introduces students to soft skills that will facilitate employment. These include communication skills in English which is required by most employers, along with cognitive skills and social attitudes that will enable employees to work together with others whilst understanding systems and routines and applying relevant knowledge.

Level 2	NVQ 2 in Developing Career Skills And NVQ 2 in Basic competencies for particular professions	Develops Communication Skills in English and advanced cognitive skills, including time and task management, prioritization and organization. Basic work competencies develops an assistant worker able to function effectively under a qualified supervisor
Level 3	NVQ 3, Certificate introducing students to particular sectors And Competencies in a range of occupations for productive employability	Develops understanding of basic requirements for a career in particular fields with knowledge of fundamentals in such areas and positive attitudes for career development therein. Sector Skills Councils will work together with the TVEC to develop appropriate courses to encourage entry into each sector. Competent worker able to fulfil routine tasks in specific fields and work efficiently under a qualified supervisor
Level 4	NVQ 4, Certificate in particular occupations	Professional with competencies to work independently and as head of a team
Level 5	NVQ 5, National Diploma	Professional competent to work independently and take administrative decisions, and to supervise processes at middle management level
Level 6	NVQ 6, Higher National Diploma	Professional with problem solving capacity who manages processes at middle management level
Level 7	Bachelor Degree	Professional with capacity to manage processes in a particular field and with the flexibility to develop capacities in other areas of work

1.2 Level Descriptors

As NVQ framework is a 7 level Qualification system, each qualification is given a level. The criteria for giving levels to qualifications are based on three parameters.

- a) Complexity of the process that a qualification holder will carry out
- b) Learning demand (difficulty in learning of those processes)
- c) Responsibility of the job holder when relevant processes are carried out.

How those three parameters are rated at each level from Level 3 to Level 7 is defined by the level descriptors listed in Table 2. These descriptors are prepared in association with authorities responsible for other educational systems, in terms of a National Qualifications Framework.

Table 2: Level Descriptors for the National Vocational Qualifications Framework

Level	Process	Learning Demand	Responsibility
	Carry out processes that:	Employing:	Applied:
1	<ul style="list-style-type: none"> -are limited in range -are repetitive and familiar -are employed within closely defined contexts -are single processes. 	<ul style="list-style-type: none"> -recall -a narrow range of knowledge and cognitive skills -no generation of new ideas. 	<ul style="list-style-type: none"> -in directed activity -under close supervision -with no responsibility for the work or learning of others.
2	<ul style="list-style-type: none"> - are moderate in range - are established and familiar. - offer a clear choice of routine responses. - involve some prioritising of tasks from known solutions. 	<ul style="list-style-type: none"> - Basic operational knowledge and skills. - Readily available information. - known solutions to familiar problems. - little generation of new ideas. 	<ul style="list-style-type: none"> - in directed activity. - Under general supervision and quality control. - With some responsibility for quantity and quality. -

3	<ul style="list-style-type: none"> - require a range of well-developed skills. - offer a significant choice of procedures requiring prioritisation. - are employed within a range of familiar contexts. 	<ul style="list-style-type: none"> -some relevant theoretical knowledge -interpretation of available information - discretion and judgment - a range of known responses to familiar problems 	<ul style="list-style-type: none"> in self-directed activity. -under broad guidance and evaluation. - with complete responsibility for quantity and quality of output. - with possible responsibility for the quantity and quality of the output of others
4	<ul style="list-style-type: none"> -require a wide range of technical or scholastic skills. - offer a considerable choice of procedures requiring prioritisation to achieve optimum outcomes. - are employed in a variety of familiar and unfamiliar contexts. 	<ul style="list-style-type: none"> -a broad knowledge base incorporating some theoretical concepts. - analytical interpretation of information. - informed judgement. - a range of sometimes innovative responses to concrete but often unfamiliar problems. 	<ul style="list-style-type: none"> -in self-directed activity. -under broad guidance and evaluation. -with complete responsibility for quantity and quality of output. - with possible responsibility for the quantity and quality of the output of others.
5	<ul style="list-style-type: none"> -require a wide range of specialised technical or scholastic skills. - involve a wide choice of standard and non-standard procedures. -are employed in a variety of routine and non-routine contexts. 	<ul style="list-style-type: none"> -a broad knowledge base with substantial depth in some areas. - analytical interpretation of a wide range of data. - the determination of appropriate methods and procedures in response to a range of concrete problems with some theoretical elements. 	<ul style="list-style-type: none"> -in self-directed and sometimes directive activity. - within broad general guidelines or functions. - with full responsibility for the nature, quantity and quality of outcomes. - with possible responsibility for the achievement of group outcomes.

6	<p>-require a command of wide-ranging highly specialized technical or scholastic skills.</p> <p>- involve a wide choice of standard and non-standard procedures, often in non-standard combinations.</p> <p>- are employed in highly variable routine and non-routine contexts.</p>	<p>-specialised knowledge with depth in more than one area.</p> <p>-the analysis, reformatting and evaluation of a wide range of information.</p> <p>- the formulation of appropriate responses to resolve both concrete and abstract problems.</p>	<p>-in managing processes.</p> <p>-within broad parameters for defined activities.</p> <p>- with complete accountability for determining and achieving personal and/or group outcomes.</p>
7	<p>-require a command of highly specialized technical or scholastic and basic research skills across a major discipline.</p> <p>- involve the full range of procedures in a major discipline.</p> <p>-are applied in complex, variable and specialised contexts.</p>	<p>-knowledge of a major discipline with areas of specialisation in depth.</p> <p>- the analysis, transformation and evaluation of abstract data and concepts.</p> <p>-the creation of appropriate responses to resolve given or contextual abstract problems.</p>	<p>-in planning, resourcing and managing processes.</p> <p>- Within broad parameters and functions.</p> <p>- with complete accountability for determining, achieving and evaluating personal and/or group outcomes.</p>

(The permission of the New Zealand Qualifications Authority for the use of their descriptors as a basis for the development of descriptors in Sri Lanka is gratefully acknowledged.)

1.3 TVET Credit System

The Credit system used in the NVQ Framework in Sri Lanka is the European Credit Transfer and Accumulation System (ECTAS). The number of notional hours per credit ranges from 20 to 30 in the ECTAS. This includes time for self study, with the basic supervised learning period being generally 15 hours, as on the Carnegie Credit system.

However, given the failure of the school system to develop study skills in general, the TVEC system will on occasion require more hours of face to face contact, including cognitive learning as well as practical training, as appropriate for each course. In addition students will be expected to engage in self-study, including recording of practical experience and preparation of portfolios. While more self-study, and in particular group work and project work, is desirable, each credit is assumed to involve at least 25 hours of learning. A student will be expected to obtain 30 such credits during a semester where the focus is on face to face contact, and 60 such credits in a year. A 3 month course will usually lead to 15 credits.

Many courses in the sector will involve On the Job Training, during which students are expected to maintain portfolios. Additional credit will be given for such training following Level 4 NVQ courses and above, on the basis of 1 credit for 75 hours of work, for a maximum of 4 credits for any 3 month period.

While the hours of leaning encompass direct contact time with teachers and trainers, time spent on self-study and assignments, workplace learning and also time spent on assessment, it should be noted that credits can only be earned on successful completion of the work required and appropriate learning outcomes measured through formal assessment.

Chapter 2

Industry Consultations

NVQ qualifications are developed and delivered by TVET institutions to meet the skills demands of employers. TVEC, which is responsible for validation of qualifications, must therefore work in consultation with employers and through active cooperation.

Traditionally TVEC worked through NAITA which had been responsible for apprenticeship programmes and thus had the closest links to employers of state agencies in the field. However the Ministry has now established Sector Skills Councils (in the fields of Construction, Tourism and Hospitality, Manufacturing & (Light) Engineering Services and Information & Communication Technology Industry). Funding for these will initially be provided by TVEC, which has set up a directorate for liaison with the Councils. TVEC will also develop similar bodies of potential employers in other areas, including the service sector where there is a great need for more skilled employees. These will take over the role currently fulfilled by National Industrial Training Advisory Committees (NITAC) which had assisted with the development of National Competency Standards. NITACs however were not legally constituted but a formal structure is required given the greater precision required with regard to developing curricula and upgrading the skills of trainers.

The Sector Skills Councils thus far established are autonomous bodies in particular areas. Amongst the responsibilities they are expected to fulfil are

- a. Participate in the establishment of National Competency Standards and the development of Curricula to ensure acquisition in trainees of the Knowledge, Skills and Attitudes required by employers, and support their regular updating in accordance with the skills requirements of changing technology and employment requirements
- b. Support training providers to consistently interpret and deliver the requirements of the Curricula.

- c. Enhance the quality of TVET by providing industry and other employment placements for trainers attached, and partnering TVET Institutes in ensuring delivery of new knowledge and requirements to trainees.
- d. Contribute to the overall effectiveness of Technical and Vocational Education and Training programmes by supporting the apprenticeship training programs and training site staff to monitor and supervise On the Job training.
- e. Facilitate the training of NVQ Assessors and the conduct of NVQ assessments to maintain uniformity and consistency.
- f. Improve the image of the occupations in their sectors so as to attract youth for training and employment **while also educating employers on the value of employing skilled workers, and in particular those with nationally recognized qualifications.**
- g. Improve competitiveness of the Industry by enhancing capacity and competencies of existing craftsmen through skills upgrading and further training programmes and NVQ certification through the Recognition of Prior Learning scheme for career advancement.
- h. Facilitate equity of access for TVET and employment for females, vulnerable groups and the differently abled
- i. Develop occupational map and skills catalogue for the industry sector
- j. Prepare 'Sector Skills Plans' identifying industry skill needs for future developments, and provide strategic advice on training and skills development.
- k. Support the development and implementation of continuous capacity building programs for Trainers and Assessors.
- l. Initiate Agreements, Memorandum of Understanding and contracts with TVEC, NAITA and other organizations for provision of services related to skills training and development

Chapter 3

National Competency Standards and Curricula

3.1 Basics

Competencies are to be determined by the needs of industry. A package of competencies, asked for in a certain job, can for instance be brought together in a trade of a particular level (e. g. NVQ Level 4, trade: Automobile mechanic), spelled out in a paper (National Competency Standard) and taught in a course of appropriate length that enables trainers to impart relevant competencies.

The NVQ framework, National Competency Standards (NCS) is the tool to identify the competencies to be acquired to practice or engage in a certain occupation in industry. An occupation is a collection of job functions (competencies in NCS).

In order to understand key terms involved, they will be delineated first:

Competence = capability (involving **knowledge, abilities, skills and situational coping**) required to perform successfully in a particular field

Competency = ability to use, apply and demonstrate any particular capability in a particular occupational field, as identified by industry

Standards = required level (in a **collection of competencies** required for certain trades or occupations required by industry.

NCS = **standards to be achieved in the various competencies required to perform particular job functions at a particular level**

Curriculum = contains **minimum learning requirements (to achieve a collection of competencies, including content mastered in real-life situations)**, at the end of a course of study

A detailed syllabus may be developed at individual training agencies, provided the learning outcomes of the prescribed curriculum are achieved

Knowledge = theoretical aspects relevant to a certain area being cognitive in nature

Ability = power to perform a function involving cognitive awareness and direction

Skill = power to perform a practical task involving routine and /or craftsmanship

Situational Coping = power to master work situations in different permutations by transferring and applying knowledge, abilities and skills needed

Knowledge, abilities, skills and situational coping are the essential components of competence. All of them need to be addressed simultaneously in proper competence-based training.

3.2 National Competency Standards

NCS are developed for NVQ level 1 to 6, as level 7 competencies are at degree level, which is currently beyond the scope of the relevant agencies in the TVET sector

- A. NVQ levels 1 to 4 are to be awarded as **certificates**. NVQ Levels 1 and 2 were not developed to any substantial extent in the past, and will be used now principally to provide foundation level Certificate courses for students to facilitate employment, in particular in the TVET sector. For levels 3 & 4, NCS are developed with occupational focus. When an occupation is not well defined in industry, NCS are developed for a certain subject area. Generally speaking, NCS are developed for universally used job titles (such as mason, automobile mechanic or carpenter). Some sectors use different titles for the same jobs. Therefore, NCS for such occupations are named according to subject or main functional areas (e. g. NCS for Tea Factory Operation).
- B. NVQ levels 5 to 6 are to be awarded as **diplomas**. As they cover wider areas of responsibilities and cover more abilities than skills, NCS generally focus on sectors (e. g. NCS for Construction Technology or Mechatronic Technology).

The institution in charge of developing NCS is the Tertiary and Vocational Education Commission (**TVEC**). Generally TVEC will entrust this task to the National Apprentice and Industrial Training Authority (**NAITA**), which should work together with Industry Sector Skills Councils (ISSC). TVEC together with NAITA will liaise with ISSCs and set up equivalents in other sectors as required.

NCS should contain the following **terminology**, used in industry as well, instead of the words given in the brackets,

- I. job function (competency)
- II. performance output of the job function (descriptors for certain competencies)
- III. elements of a job function (elements of a certain competency)
- IV. performance standard expected (criteria for a certain performance).

Revisions to NCS can be carried out by TVEC in consultation with NAITA and ISSCs

Periodic revision should be considered at least every three years. The feedback of industry and training providers is to be collected by TVEC beforehand.

3.3 Qualifications

Qualification is the **certification of competence**. Within the NVQ framework that means awarding an NVQ level for a group of job functions (package of competencies) relevant to an occupation/employment in the labor market.

In general, level 1 to 4 certificates and level 5 to 6 diplomas are competence-based and expect a suitable teaching-learning process. However, the grouping and packaging of job functions follow a different rationale:

- 1) A level 4 qualification includes all job functions of a **skilled workman**. Such a person should be able to perform all tasks at level 3 and should be equipped with the career skills that comprise the current NVQ Levels 1 & 2I.
- 2) At levels 5 and 6, qualifications are, aside from labor-market relevant competencies, based on a **credit policy of diploma programs**: level 5 = minimum of 60 credits (one credit equals 25 notional hours) and level 6 = minimum of 120 credits.

A diploma course qualifies for a variety of jobs in the labor market. Therefore, training providers can group job functions in level 5 and 6 qualifications for available positions in the labor market, based on the following criteria:

- I. Minimum of 2/3 of credits of relevant sector competencies
- II. Minimum of 1/6 of credits of employability competencies (soft skills)
- III. Minimum of 1/6 of credits from other sectors of industry to facilitate career navigation.

3.4 Curricula

For each qualification to be awarded, there needs to be an adequate curriculum, commissioned and endorsed by TVEC and compiled by DTET, supported by ISSCs and also by UNIVOTEC in terms of academic guidance.

The competencies listed in a curriculum have to reflect **the job functions** identified in the NCS, and ensure that they are learnt through the training course.

While NCS clearly lay out the competencies for a special qualification, the **curriculum expands on this to include all elements that students should acquire to fulfill the competency requirements**. Students' handbooks should be provided as possible to expand understanding of the field of study, and introduce situation-based tasks and projects.

A **general teacher's guide** to prepare for all qualifications provided by the TVEC should be prepared.

3.4.1 Unpacking NCS into Curricula and detailed syllabi

NCS are not prescriptive. However, they form the basis of NVQ assessments, as the competencies collocated are described as observable work behavior.

Therefore, **curricula must unearth the embedded essential knowledge base as well as other key competencies** (usually discussed as "soft skills") pertinent to successfully complete the work tasks. Consequently, curricula must comprise the competencies from NCS, explain them, enrich them with knowledge and key competencies as well as a description of typical work situations needed in the workplace as well as general principles and hints for teaching delivery.

3.4.2 Modular Structure of Curricula

Closely related job functions in NCS-based competencies, corresponding knowledge and soft skills as well as typical work-life situations **are packaged into modules** that make an entire curriculum for any qualification.

It is necessary to include **modules** in,

- A. Employability skills, including English and communication skills, conceptualization, time management etc.
- B. relevant underpinning technical skills

A modern, open curriculum within the NVQ framework should look like this,

Table 4

Module Title and Code:	
Competencies (job functions and soft skills) and descriptions:	
Typical related work situations to master:	
Important pertinent content (knowledge):	
Potentially useful teaching methods (optional):	e. g.: role plays, simulations, technical projects, experiments, case studies, student presentations, panel discussions, educational games etc.

No module description should comprise more than one page

The modules will undergo a regular revision session after the NCS revision has been completed, i. e. every four years.

There should also be a synopsis of the curriculum for each course, which summarizes the competencies and / or modules required as follows

Table 5

Course Title	Course Duration
Objectives of the course and career paths available following completion of the course	
Competencies / modules to be covered	
Recommended teaching methods :	e. g.: role plays, simulations, technical projects, experiments, case studies, student presentations, panel discussions, educational games etc.

Chapter 4

Assessment

4.1 Basics

Assessment systems are intended to judge the level of competence with regard to **knowledge, skills and abilities**. In the **competence-based assessment (CBA)** system used in the TVET sector, these must be judged in relation to real-life **work situations**. CBA leads to National Vocational Qualifications (NVQs) at a certain level of competence, as codified in the NCS that display the competencies needed in industry and the work place.

4.2 Assessment types and objectives

Under the NVQ framework, competencies are assessed through various techniques with the following objectives:

- a. **Formative Assessments:** This kind of assessment (also called “continuous assessment”) provides regular feedback to learners as to the status quo of their competence development. Teachers are required to give regular feedback and counsel students on their development process during the course.
- b. **Summative Assessments:** This is a summing up process to check the cumulative acquisition of competencies required for obtaining an NVQ at the end of a course.

Summative assessment is also used in the certification of NVQs via **Recognition of Prior Learning (RPL)**. The difference is that this assessment checks on competencies acquired through informal learning at the workplace (as opposed to formal learning in center-based or apprenticeship-based courses).

4.3 Principles of Assessment

4.3.1 Competence-based Assessment (CBA)

Assessments carried out within the NVQ framework are to be competence-based, ie, they take stock of **knowledge and skills and abilities with regard to work-based**

situations. CBAs involve checking the ability to perform tasks in jobs relevant to the bundle of competencies codified in expected standards in NCSs.

4.3.2 Criterion-Based Assessment

All CBA is based on criteria that consist of **minimum standards required** in a certain job for a student to be able to perform work tasks successfully. Therefore, a minimum standard is a level of competence allowing a person to work in real life at a satisfactory level. The competence level of fellow students does not matter in this type of assessment, and student ranking as in norm-referenced assessment is not a priority.

4.3.3 Evidence-Based Assessment

CBA is always based on evidence and uses **multiple sources of evidence** to certify competence standards. Evidence could come from the following sources and should be **collected in a comprehensive student portfolio** as far as possible:

- a. Student record books or journals and log books
- b. Written Test and examination results
- c. Models worked out by the candidate or collection of work samples
- d. Pictures of work products / samples
- e. Testimonials from work supervisors / industry trainers
- f. Peer reports and Trainer reports
- g. Feedback from customers or fellow members
- h. Evidence of successful completion of training courses (certificates)
- i. Verified work experience / testimonials
- j. (Video) tapes of performed work processes
- k. Project reports or finished assignment reports
- l. Role play scripts or tapes
- m. Other information about relevant experience.

Teachers will **screen their students' portfolios on a regular basis** and provide formative feedback to help improve the evidence base and support competence developments. Teachers' **formative judgments shall be recorded in Student Progress Record Book**, as part of the **Portfolio**. Finally, teachers and NVQ assessors alike will **inspect the Learner Portfolio** in detail and come up with a summative

assessment that determines a certain category level of competence, based on the evidence provided.

An NVQ assessor can always ask for **further evidence in the NVQ certification process** if she or he is not convinced of the conclusiveness of the evidence provided or the authenticity of the evidence cannot be verified. Further evidence will generally be:

1. a **portfolio-based colloquium** (with regard to job functions / competencies)
2. a **case-study** or
3. a **practical work task (workplace observation)** or
4. a **simulation / role play**.

For reasons of assessment practicability, **TVEC shall develop and maintain a question bank** for written (and oral) competence testing, covering all occupations.

4.3.4 Categories of competence achievement within the NVQ framework

Teachers and assessors alike are asked to group **assessment rating into five categories** in order to provide **meaningful feedback to students** in the formative form during the course **and to employers** and students alike as a final report with regard to the composite level of competence reached:



With reaching the competence category of “passed”, a student will be certified with the aspired NVQ qualification, i. e. she or he will be judged as **sufficiently competent**. Only the verdict “failed” means “**not yet competent**”, i. e. the NVQ certificate or diploma will not be awarded at the time of assessment.

Even more sophisticated assessment scales, e. g. used in written tests, shall be incorporated into that five-category scale, according to the following transfer scheme:

- 0-39 points: fail
- 40-54 points: pass
- 55 - 69 points: merit

- 70 and above: distinction

Consequently, in written tests and other means of assessment that use more sophisticated scales, a **minimum pass mark of 40 %** is to be established.

As part of the ongoing formative assessment, work tasks will not have to be repeatedly shown, as long as the teacher assesses “competence” during training courses. However, in order to **support learning and getting better**, the teacher will have to provide written accounts as to the category into which the student’s performance has fallen and **counsel learners** with respect to options how to improve.

4.3.5 NVQ assessors and mandates

Qualified **NVQ assessors** are to be **appointed by TVEC** according to high technical standards, and relevant NVQ levels (e. g. at least 5 years of experience and NVQ level of one step higher, also see www.tvec.gov.lk for processes and assessor requirements). As a pre-condition of appointment, assessors will be expected to have practical experience of work place requirements with regard to the subjects they assess, and must go through **assessor training** based on NCS requirements. Appointments shall be made for three years, subject to renewal based on further training and performance. NVQ final (summative) assessments shall not be carried out by assessors for their own students, employees or relatives.

Assessment shall be made observing **assessment material** which takes into account each job function (competency). **These should be prepared in consultation with the ISSCs.** There should be an **evidence matrix with performance criteria for each competency**, usually to be derived from the learner’s portfolio as expounded above.

NVQ assessment **mandates are with training centers** that conduct accredited NVQ courses. They organize NVQ exams for their trainees/students if they have fulfilled the requirements laid down by the TVEC for NVQ qualifications. NVQ exams through the route of **Recognition of Prior Learning (RPL)** will be conducted **by NAITA and VTA** and DTET only, in terms of TVEC requirements.

4.3.6 Quality criteria of NVQ assessments

Generally speaking, all NVQ assessments should follow recognized criteria in high-quality assessment in education (see Darling-Hammond et al., Criteria for High-Quality Assessment, Palo Alto: Stanford University 2013):

- a. **Validity:** the relevant competencies needed in a certain occupation or sector (as specified in NCS) are assessed
- b. **Reliability:** assessments are repeatable with a high degree of accuracy, i. e. independent of time and location or individual assessors
- c. **Objectivity and Fairness:** with a change of assessor the same result will occur and all candidates are assessed according to the same norm (no bias), i. e. no unnecessary evidence demand or different standards applied
- d. **Transparency:** expected performance levels shall be laid bare and standards must be accessible (e. g. the evidence matrix based on NCS).

Moreover, the **high quality of assessors** must be ascertained in the system by TVEC, UNIVOTEC and the training providers alike, by means of giving feedback and providing further training for assessors, **which should involve certification of industry assignments indicating understanding of new developments in the field and industry needs**. Appointed assessors shall be **released from duty at the end of each course for an entire week** and up to **two days a week per month** during ongoing courses (this should apply if possible to private sector assessors too).

Complaints from parties to NVQ assessments are to be made to TVEC that shall handle each complaint conscientiously and provide feedback.

4.3.7 Assessment of different NVQ levels

Assessment techniques will differ at different Levels. At NVQ Levels 1 and 2, formative assessment will contribute 75% of the total credit towards the qualification. A report on a Group Project will also receive credit. At the end of the course there will be a written exam, with an oral component that will include questions as to the project report.

At NVQ Level 3, formative assessment will contribute half the total credit towards the qualification. At the end of the course there will be a written test consisting mainly of

Multiple Choice Questions with a few questions requiring short answers. This will be followed by a practical assessment with oral questioning.

At NVQ Level 4, formative assessment during the course will contribute 50 towards the qualification. This will be followed by a written test. Following On the Job Training, in the course of which the student must maintain a portfolio, there will be a practical test inclusive of an oral examination, which will include inspection of the OJT portfolio.

At NVQ Levels 5 & 6, formative assessment during the course will contribute 40 towards the qualification, followed by a written test which will contribute 40% towards the qualification. This will be followed by On the Job Training, in the course of which the student must maintain a portfolio. 10% will be given for this, and 10% for the final assessment, which will be in the form of an oral examination that will include questions as to the content of the course as well as experience during OJT.

During the oral examination, if the assessor is not satisfied about the competence of the student as certified in the formative assessment component, he may ask for a demonstration of competence. In all cases, students may proceed to the formative assessment only if they have a record of 60% attendance, and have shown satisfactory progress in the formative assessment stage.

At all levels there will be modules in soft skills, encompassing English communication skills and cognitive and social skills, which will be tested in a separate paper at which a pass mark of 50% is expected.

At Levels 3 & 4, the focus is more on **clear-cut work tasks** being performed (steps are identified in each training center according to trainer's guides that are based on NCS and curricula). In **level 5 and 6**, the work-related tasks to be performed are of a more **sector-wide or cross-occupational** nature.

Levels 5 and 6 will include **written examinations at the end of each semester, which will be part of the formative assessment as feedback should be provided and guidance to students to improve for the summative examination.**

When it comes to NVQ assessments of candidates following **an apprenticeship scheme**, the assessors need to check the **contract**, the completed **course duration** and

the portfolio with regard to **supervision entries** by NAITA inspectors and industrial trainers.

For RPL Certification there shall be clear guidelines based on supervisor reports and / or portfolios as to eligibility to apply. For a limited period the written test may be taken orally, with recording of the answers to questions.

Chapter 5

Implementation of NVQSL

5.1 Roles and Responsibilities of the Tertiary and Vocational Education Commission (TVEC)

The TVEC is the national authority for the implementation of NVQSL, with overall responsibility for continuous improvements and inter-institutional coordination. Its specific responsibilities are listed below.

- 5.1.1 National Competency Standards (NCS) and CBT Curricula
- a. Identify Occupations for development of National Competency Standards to cover all sectors of **the labour market, in consultation with industry**
 - b. Coordinate development of NCS, CBT Curricula and assessment materials.
 - c. Endorse NCS, CBT Curricula and assessment materials
 - d. Publish, distribute and sell NCS and CBT Curricula
 - e. Make available NCS and CBT curricula for sale to the public and training centres
 - f. Ensure the availability of NCS, CBT curricula and assessment materials for all occupations in the labour market
 - g. Map non – NVQ Diplomas and other qualifications as appropriate to NVQ Levels
- 5.1.2 Quality Assurance
- a. Make sure all centres are registered and all courses accredited as per TVE Act.
 - b. Ensure Quality Management Systems are installed in all centres.
 - c. Make continuous improvements to registration, accreditation and Quality Management System procedures.

5.1.3 Assessment and Certification

- a. Select candidates for assessor training
- b. Maintain an Assessor Database and ensure availability of assessors for NVQ Levels 3-6 for all occupations and occupational or technology areas with fair geographical distribution
- c. Ensure development and maintenance of a question bank, in association with DTET
- d. Ensure availability of assessment materials and assessment forms for all qualifications of NVQ Framework.
- e. Nominate assessors for NVQ Levels 3 – 6.
- f. Coordinate NVQ Level 5 & 6 examinations and assessments
- g. Develop software for assessment, data transfer and printing of certificates
- h. Conduct workshops and audit assessment programmes to ensure consistency in assessments
- i. Authorize award of records of achievement

5.2 Training Programmes

Develop and arrange for distribution of manuals and handbooks for programmes and arrange systematic delivery of training by TVEC, UNIVOTEC and other training providers

5.2.1 Social Marketing

1. Maintain timely updated website with NVQ Circulars
2. Disseminate NVQ Information and regulatory documents to stakeholders
3. Publish, distribute and sale endorsed documents
4. Train and sustain a group of NVQ Promotional officers to conduct NVQ awareness programmes
5. Link with industry and make them aware of NVQ Framework
6. Supervise social marketing programmes of allied institutions

5.2.2 Planning, Monitoring and Evaluation

1. Have an annual plan of implementation of NVQ Activities
2. Analyse NVQ Performance biannually and submit the findings at NVQ Policy and Development Committee and NVQ Implementation steering committee meetings and to Ministry at progress review meetings
3. Arrange progress monitoring meetings for specific areas of NVQ
4. Issue NVQ circulars on decisions taken at NVQ Policy Development implementation steering committee meetings as endorsed by the Commission.
5. Facilitate funding for Industry Sector Skills Councils
6. Prepare Budgets and get fund allocations for NVQ activities
7. Monitor the training outcomes of institutions and centres delivering NVQ and other courses
8. Examine curricula and assessment materials produced by training providers and ensure quality whilst encouraging good practices

TVEC shall appoint committees as required, including an NVQ Policy and Development Committee. This is expected to ensure continuous improvement to the NVQ Framework on par with international practices, and review and revise policies, procedures and methodologies to meet the national expectations of quality, relevance and accessibility to NVQs.

The NVQ Policy and Development Committee will be chaired by the Chairman of the TVEC or its Director General and include,

- a. Deputy Director General, TVEC who shall be responsible for all academic affairs
- b. Director responsible for NVQ Curricula and implementation at TVEC
- c. Director responsible for Assessment at TVEC
- d. Director responsible for liaison with Sector Councils
- e. Vice Chancellor of UNIVOTEC or Director responsible for Curricula
- f. Directors responsible for Curricula and for Apprenticeships at NAITA
- g. Academic Directors of DTET and VTA

The Committee shall also include the Chairs of the Sector Councils or their Representatives

5.3 Roles and Responsibilities of the National Apprentice and Industrial Training Authority (NAITA)

The NAITA is the lead organization for arranging apprenticeships and will therefore support TVEC in liaising with Sector Skill Councils. It will also

- a. Develop competency standards for occupations identified by TVEC.
- b. Develop Apprenticeship models of NVQ Training and liaise closely with employers for the purpose
- c. Ensure accreditation of all NVQ Training programme it offers in particular areas where there is great demand, while giving priority to its primary role of facilitating apprenticeships
- d. Implement Quality Management Systems (QMS) in NAITA training centres and in all Apprenticeship programmes
- e. Organize timely assessment and certification of all trainees in accredited training programmes
- f. Implement Recognition of Prior Learning (RPL) programmes to assess and award NVQs to employees in the industry who have acquired the skills through work experience
- g. Keep Equating and Validating Committee operational to facilitate equating of diplomas and certificates which is useful in mapping non-NVQ qualifications to NVQ by TVEC
- h. Facilitate On the Job Training for trainees in TVET institutions according to the procedures agreed at NVQ steering committee meetings
- i. Ensure all trainers are well aware of NVQ Framework and competency based training
- j. Make sure all trainers of NAITA are qualified as licensed assessors and release them as appropriate to ensure timely assessment of trainees
- k. Prepare budgets and get fund allocations for above activities
- l. Track the progress of all trainees for a 2 year period following courses and provide reports on employability of all programmes

5.4 Roles and Responsibilities of the University of Vocational Technology (UNIVOTEC)

The UNIVOTEC is the lead organization for the following activities in the implementation of NVQSL.

- a. Support TVEC and DTET in the development of Curricula
- b. Develop qualifications at higher levels to ensure high level training for those engaged in teaching and working in the sector, with particular attention to promoting analysis and conceptualization
- c. Assist with the development of appropriate learning resources in respect of each endorsed curricula.
- d. Develop programmes for training of assessors and their Continuing Professional Development (CPD) and work with DTET to conduct training
- e. Set and moderate question papers as required by the Examinations Department of DTET
- f. Facilitate trainer training and staff development required for NVQ implementation
- g. Prepare Budgets and get funds allocated for above activities
- h. Develop a path for higher qualifications for those training and working in the sector, with cumulative credit systems including for workplace experience if satisfactorily analysed and presented

5.5 Roles and Responsibilities of the Vocational Training Authority of Sri Lanka (VTA)

1. Ensure accreditation of all training programmes for which NVQ related documents are available conducted in VTA training centres
2. Implement Quality Management System (QMS) in all VTA training centres
3. Implement Recognition of Prior Learning (RPL) programmes to assess and award NVQs to employees in the industry who have acquired the skills through work experience
4. Organize timely assessments and certification of all trainees in accredited training programmes
5. Liaise with specific Sector Councils and Committees as required by TVEC

6. Ensure all trainers and officer are well aware of NVQ Framework and competency based training
7. Make sure all trainers are qualified as licensed assessors and release them as appropriate to ensure timely assessments of trainees
8. Identify shortcomings if any in NVQ Curricula and other NVQ materials and provide information to TVEC, NAITA and UNIVOTEC
9. Track the progress of all trainees for a 2 year period following courses and provide reports on employability of all programmes
10. Prepare budgets and get fund allocations for above activities

5.6 Roles and Responsibilities of the Department of Technical Education and Training (DTET)

- a. Plan and conduct semester end examinations of all NVQ courses as required, including in particular the Career Skills courses at Levels 1 and 2
- b. Provide initial training for all trainers recruited to the sector and, together with NAITA and DTET arrange regular updating on a regional basis
- c. Facilitate the operation of Board of Examination of NVQ level 5 & 6 assessments.
- d. Ensure accreditation of all training programmes for which NVQ related documents are available at Technical Colleges
- e. Implement Quality Management Systems (QMS) in all technical Colleges
- f. Conduct NVQ assessments for all students who follow accredited courses in technical colleges
- g. Organize timely assessments and certification of all trainees in accredited training programmes
- h. Ensure all trainers and Officers are well aware of NVQ Framework and competency based training
- i. Make sure all trainers are qualified as licensed assessors and release them as appropriate to ensure timely assessments of trainees
- j. Identify shortcomings if any in NVQ Curricula and other NVQ materials and provide information to TVEC, NAITA and UNIVOTEC
- k. Track the progress of all trainees for a 2 year period following courses and provide reports on employability of all programmes
- l. Prepare budgets and get fund allocations for NV activities

5.7 Roles and Responsibilities of the All other Registered Public, Private and NGO sector training Institutions

- a. Ensure accreditation of all NVQ related training programmes in TVEC registered training centres
- b. Implement Quality Management System (QMS) in all TVEC registered training centres
- c. Organize timely assessments and certification of all trainees in accredited training programmes
- d. Ensure all trainers and officers are well aware of NVQ Framework and competency based training
- e. Make sure all trainers are qualified as licensed assessors and release them as appropriate to ensure timely assessments of trainees
- f. Identify shortcomings if any in NVQ Curricula and other NVQ material and provide information to TVEC, NAITA and UNIVOTEC
- g. Track the progress of all trainees for a 2 year period following courses and provide reports on employability of all programmes
- h. Prepare budgets and get funds allocated for above activities

Chapter 6

Teacher Development and Training

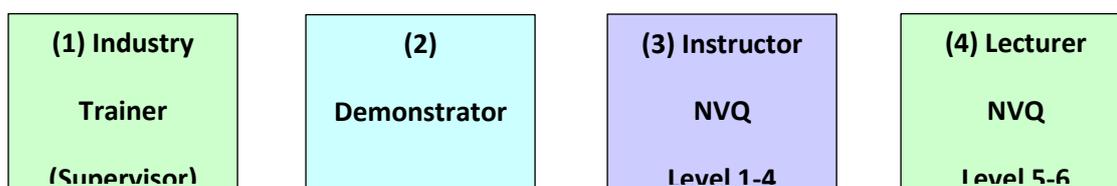
6.1 Recruitment Policy

Recruitment of able teachers is a **pre-condition for a successful training programme**. Hence, teachers in technical and vocational education must have a substantial technical background in the area they are recruited for this means a **theoretical background as well as appropriate practical experience to teach students at a certain level**. Gaps may need to be filled if totally suitable candidates are not available, but the professional background must be appropriate .

Those recruited to teach should have either a degree or an NQ qualification in the relevant subject plus experience of industry. NVQ qualifications should be at a level higher than courses to be taught, with industry experience of at least half a year. Training programmes should be set in place for those without degrees to obtain them on a modular basis, with courses in the subject and in pedagogy along with credit for work in industry assessed on the basis of portfolios. Moreover, teachers should be **emotionally stable and self-organized**, able to **communicate well** and be prepared to be **role models** when it comes to **work ethics** and imparting societal **values**. Finally, teachers must be ready to **engage in lifelong learning** to cope with rapid change in their subjects and **willing to undergo professional teacher training** and to continuously update their teacher skills, while also developing soft skills themselves, with the ability to impart these to their students. Recruitment should **aim for the best** and **reward high performance** in subsequent years.

6.2 Pre-training evaluation:

Newly recruited teachers are to be assessed according to their role in the system. Generally speaking, there are four different types of teachers:



The following training necessities in this chapter will apply only to teachers from category (2) to (4). However, industry trainers are always welcome to participate voluntarily and in a week-long course especially designed for them.

According to their needs in terms of theoretical depths and practical experience, the **technical knowledge and skills of teachers are to be assessed to determine individual gap-filling needs** when it comes to their technical competence. That gap-filling training should be compiled individually after the initial evaluation conducted by an expert in the field via an oral interview (30 minutes) and practical testing (60 minutes).

The technical training still needed can be provided and organized by the Teacher Training Institute, the recruiting institutions and industry exposure. Generally speaking, the entire system of teacher training should be **overseen by the Teacher Training Institute**.

6.3 Induction Training

After the initial evaluation, **four weeks of elementary training is mandatory** for each new teacher in the sector. Introduction to the recruiting institution and its organization shall not be part of these four weeks!

These four weeks will contain the following components:

- (A) **How to teach (Pedagogy):** How students learn and how to deal with them. This requires understanding of learning processes and basic psychology, along with the ability to communicate well and engage in positive interactions.
- (B) **What to teach (Didactics):** Close knowledge of the required Competency Standards and the Curricula, and how to transform these into viable centre-based syllabi, learner guides, individual lesson and training plans as well as student-activating teaching methodology. This also requires the ability to seek out new information on the field through self learning at appropriate levels
- (C) **How to check of teaching:** The principles of competence-based assessment, formative and summative as well as learning counseling. All those engaged in assessment, in particular monitoring of On the Job Training, should understand the importance of log entries, that will provide helpful information to students as well as other assessors

(D) **How to improve student performance and attitudes:** How to advise students on how to develop competencies further, as indicated is needed by formative assessments, observation and self-evaluation, in groups and individually.

The induction phase should **practice what is preached**, i. e. active teacher trainee involvement via participatory training methods, self-organized work, e-learning based input, role plays, assessment simulations and micro-teaching sessions.

6.4 Continuing Teacher Education

6.4.1 **Industrial Exposure:** After the first or within the **first year**, each new teacher **must work with industry for one month**, best in **December** in order not to have classes being canceled. After that, each teacher is required to spend **a month with industry every third year**, usually in December, to brush up and update subject-specific knowledge and skills.

Presentation and Colloquium after industrial exposure: Each teacher has to prepare **a presentation** (about 15 minutes) about what competencies were acquired or deepened and what job-relevant experiences made during the exposure. Subsequently, **an expert will conduct a colloquium** (about 15 minutes) with regard to the presentation and ask further questions as to how to adapt teaching to the new input gained.

6.4.2 **Teaching Methodology:** Each new teacher will spend **one week** receiving further training in modern **student-centered teaching methodology within the first year**, living up to the demands of up-to-date findings in neuroscience as well as learning and constructivist theory.

6.4.3 **Teacher training course:** Each new teacher will have to enroll into **a one-year part-time teacher training course**, leading up to a level 5 teaching qualification (Diploma in Education), **within the first three years of teaching**. The course should comprise at least 60 credits that could be potentially counted towards a degree.

6.4.4 **Teacher development portfolio:** Each new teacher will start **a professional development portfolio**, containing written accounts, pictures, drawings etc.,

answering the question to third parties: “How do I develop as a professional teacher?” The portfolio consists of best-practice examples when it comes to special lessons/workshops arrangements, student evaluations, maintaining the workplace, involvement in quality measures, further education achievements etc. Consequently, a **TVEC portfolio counselor will check the portfolio** with regard to components and have a conversation on the individual development and perspectives as a professional teacher, at least **every second year**.

The portfolio should be **an inspiration for continuing professional development** and an incentive to engage in lifelong learning.

The development portfolio can be made a component in **potential promotions** and part of a **performance-based appraisal** system and pay scheme.

6.4.5 Industry trainers: Industry trainers in particular will be offered a **one-week course** in observing, learning counseling and competence-based development as well as assessment, completion of which will lead to a **certificate as a state-licensed training supervisor**.

6.4.6 Further teacher education: In the vein of lifelong learning, teachers should continuously update their technical, pedagogical, student counseling and methodological know-how. Training institutions will be required to set up Quality Circles on a Provincial or District basis to provide opportunities for teachers to interchange experience and emulate best practices. **Univotec’s CEC** in conjunction with the **Teacher Training Institute** and the diverse head institutions should offer one or two-day workshops to bestow teachers with topical needs and updates in pedagogy, didactics and their respective technical areas. It is recommended that every teacher should spend **at least 5 days for further education each year** and should be released for that purpose, on top of the industry exposure.

Chapter 7

Quality Assurance System of TVET Programmes

7.1 Mandate

The TVEC is required to maintain standards with regard to tertiary and vocational education and training institutions and programmes.

It has therefore set in place a three tier quality assurance system. The requirements are

- A. Registration of TVET institutions ;
- B. Accreditation of TVET courses to award NVQ certificates; and
- C. Installation of a Quality Management System

7.2 Registration of Institutions

The Tertiary and Vocational Education (TVE) Act No 20 of 1990 requires all TVET institutions to be registered with TVEC.

The **Registration Process involves pre-registration** approval to establish a Training Centre. Such approval is valid only for a one year period. Within that period the centre should apply for registration. If the assessment by the TVEC proves satisfactory, the centre will be given Provisional Registration, valid for a period of two years. In that period the centre is required to obtain accreditation for all NVQ training courses and install a Quality Management System. TVEC will evaluate the progress of the centre towards accreditation and installation of QMS during these two years and provisional registration may be withdrawn in case of poor progress.

Full Registration may be given when all NVQ courses are accredited and QMS installed. This will be valid for three years, with a rank given to the Centre as explained in the *“Manual for Registration of Training Centres and Accreditation of Training Courses”*.

Renewal of Registration is required on expiry of the registration period. Registration of a training centre is a legal requirement and there will be legal action and penalties if the requirements are not fulfilled.

TVEC will ensure that all applications are responded to at once and requirements checked within a month of any application being received.

7.2.1 Criteria for Registration

For successful and effective operation of a training centre, the key requirements are with regard to the following

- a. Governance and Human Resources Management
- b. Safe Learning Environment and Infrastructure Maintained
- c. Curricula and Learning Materials Available for all Courses
- d. Training Equipment, Laboratories, Workshops and Training Materials Available for Practical Work in Curricula
- e. Management of Student Affairs
- f. Training Delivered as per Plan
- g. Timely Conduct of Continuous and Final Assessments
- h. The Levels of Satisfaction of Students, Parents and Industry
- i. Financial Stability
- j. Special and Outreach Programmes

The outputs required for registration and the standards to be maintained are **specified in the *Manual***. It should be noted that registration does not depend on processes alone, but on successful outcomes. Thus, in order to ensure customer satisfaction, each Centre must maintain a tracking system for its students and promote their employment following courses.

7.2.2 Classification of Courses for Registration

7.2.2.1 Objective Oriented Classification

Technical and Vocational Education and Training courses are conducted with different objectives and impart different types and levels of skills to persons preparing for occupations and / or further education. In addition to Foundation Courses to endow students with basic skills to enter the world of work, the TVET sector offers Certificates and Diplomas. They provide basic and advanced training, and also opportunities to upgrade skills. The courses should provide a seamless path from the start of a career to the apex, with possibilities for degrees based on knowledge and skills and work experience that is expounded through portfolios.

The TVEC should prepare Handbooks for each sector which indicate the essential learning outcomes at each level and indicate possible career paths within that sector. The handbooks will be in English, at a suitable level, and may be used as learning material in supplementary soft skills courses, which will be mandatory at all levels. They will contain glossaries for the tools and equipment used in the sector.

7.3 Accreditation of Courses

Accreditation is a certification of the availability of sufficient training facilities along with recognition of the quality of the delivery of training to achieve the aims of each course for which a NVQ qualification is given. The TVEC will also accredit courses for which NCS have not been developed as yet. The criteria for accreditation are available in the Manual. Amongst the most important features which a Centre should display is

1. Clear understanding of the required learning outcomes, and ensuring satisfactory performance outcomes
2. Adequate equipment **or certification that any shortfalls will be met during practical training**
3. Qualified and competent academic staff whose skills are regularly updated
4. Conduct of formative assessment with evidence of productive feedback
5. Arrangements for On the Job Training

7.3.1 Accreditation of National Apprenticeship Programmes

The criteria developed by TVEC in consultation with NAITA to accredit workplaces to facilitate awarding of NVQ certificates to NAITA apprentices are laid down in NVQ Circular 01/2015 published in the TVEC website www.tvec.gov.lk. Accordingly, NAITA is required to ensure the following in workplaces for apprentices.

- i. Facilities in workplaces
 - a) Machinery and Equipment as specified in National Competency Standards
 - b) Infrastructure
 - c) Competent supervisors to supervise the apprentices

- d) Availability of a training schedule to cover relevant training modules
 - e) Maintenance of training records and
 - f) Adequate safety and health requirements
- ii. Training based primarily on apprenticeship is usually of a longer duration than structured institutional training. Entry qualifications and the duration of training for apprenticeship based qualifications in different occupations shall be decided by TVEC on the advice of NAITA.

iii. Formative Assessment

This is vital to ensure attainment of required competency levels during training. It is essential that, during apprenticeship based training, all apprentices in NVQ Programmes record the results of continuous assessment in their Progress Record Book, along with a record of remedial action undertaken as needed. This may be in the form of an Apprentice's Daily Diary which amalgamates the TVEC Progress Record Book and the NAITA Daily Diary. Students should present this evidence in the form of portfolios that record particular achievements, with photographic evidence as appropriate, and should be prepared to answer questions on their portfolios, since it is essential to check their level of responsibility for, and understanding of, their achievements.

iv. Knowledge inputs

In order to acquire the competency levels under the NVQ framework, trainees should be given sufficient knowledge of relevant theory. Apprenticeship training should therefore include a sufficient period for cognitive training, through face to face instruction where possible, or else through supervised distance education. Such knowledge should be assessed through continuous assessment and recorded in the daily diary, while apprentices should be aware of the importance of the concluding assessment for obtaining the targeted NVQ qualification. The success of an apprenticeship programme depends heavily on the monitoring of apprentices by NAITA Inspectors, and evidence of periodic monitoring should be recorded in the Daily Diary.

NAITA is required to train NAITA inspectors in monitoring and assessment of apprentices in collaboration with TVEC. NAITA shall provide the Workplace Assessment Report for each workplace within two months from the date of

enrollment of the first student in the apprenticeship programme intended for accreditation. TVEC evaluates the report after visiting the workplace and acceptance of the workplace assessment report by TVEC is an indication of its suitability for accreditation status and TVEC shall issue an accreditation number. Procedures of final assessment are laid down in Chapter 6, Assessment Policies and Procedures under the NVQ Framework.

7.3.2 Accreditation of Dual Training Programmes

A Training Course could be delivered in dual training mode where part of the training is delivered in a training centre and the rest of the training is delivered during On the Job Training. CBT curricula specify the learning duration of each module in notional hours and part of the notional hours could be delivered under On the Job Training. The time duration for this should be prescribed by TVEC in accordance with the principles on which it accords credit for courses.

7.3.3 Accreditation of Courses conducted by Industrial Enterprises

Industrial Enterprises could obtain accreditation for courses conducted in a workplace with appropriate instruction facilities. For this purpose, theoretical instructions and basic practicals should be facilitated with qualified trainers within the workplace. Here also, it is necessary to organize the course to meet all the conditions required for course accreditation

7.3.4 Accreditation of Skills Upgrading Courses

CBT curricula of NVQ Level 1 – 4 specify the learning content and course duration to facilitate learning for school leavers. CBT curricula of NVQ Level 5 – 6 specify the learning content and course duration to facilitate further learning. Skills upgrading courses are those which enroll people with work experience in a field. They will be of comparatively shorter duration. Criteria for accreditation of skills upgrading courses are listed below.

- i. Course curricula should specify the relevant competencies in the relevant National Competency Standards
- ii. Competency levels of target group of students to be enrolled should be well specified.

- iii. The number of years of experience may be a criterion, but there needs to be evidence of this, usually in the form of a portfolio
- iv. Competency levels should be verified through RPL assessment at enrollment
- v. Equipment and teachers should be sufficient in numbers and of standards for the curricula offered.
- vi. Other conditions should match general accreditation conditions

In case of enrolling mixed groups of students, the course duration should be fixed considering the learning requirements of the lowest qualified group, and experienced applicants could be given exemption from learning requirements.

7.4 Quality Management System

7.4.1 Training Processes and Parameters

Registration of a training centre ensures that it meets the standards expected for successful operation. Accreditation ensures that a training course has the facilities required to conduct a NVQ course. But the NVQ Framework also emphasizes the need to maintain and upgrade the quality of all training.

TVEC has developed a Quality Management System (QMS) based on ISO 9001:2008 and as per SLS IWA 2: 2007; Guidelines for the application of ISO 9001:2008 in Education. For assessing quality, while the inputs and activities should be in line with the criteria required for registration and accreditation, there should be continuous attention to output indicators and standards which are most readily measured through employment figures for products of courses.

7.4.2 Quality Procedures

QMS needs to ensure quality in all parameters of these processes and the 6 procedures listed below shall be adopted in line with ISO 9001-2008 Quality Management System to assure quality in these parameters of training processes.

- I. Proper Maintenance of Documents of Training Processes
- II. Maintenance of Records of Training Processes
- III. Internal Audit / Management Review (Review & verify above processes and standards)

- IV. Control of Non-conformities (Deficiencies / variations identified and monitored for their effects)
- V. Corrective Actions (Deviations corrected)
- VI. Preventive Actions (Make improvement to prevent future deviations)

For the successful implementation of a Quality Management System it is essential to appoint **Quality Management Staff. Though all staff in an organization should be committed to ensuring quality, it is vital to bestow specific responsibility for**

- a) **Academic Affairs**
- b) **Career Paths and Information Dissemination**
- c) **Maintenance of infrastructure and records**

The Head of the institution may undertake one of these roles, or should appoint a Quality Management Representative who should generally be in charge of academic affairs. He should work with those responsible for the other areas given above and report regularly at a Management Review Meeting which should look at quality issues on a regular basis. Such a meeting should include the Head of the Training centre and all heads of divisions or courses. The QMR is the convener of this committee and the Head of the Training centre chairs the meetings. This committee should meet at least every quarter to sort out all quality related issues. Those with specific responsibilities shall comprise the Internal Quality Auditing staff, who will be given a training programme in Internal Quality Auditing. Detailed duties of these staff and committees are explained in the Quality Management System Handbook developed by TVEC, which also details the documentation that is required.

All TVET institutions should install a QMS and this is mandatory for institutions under the Ministry. For this purpose they should

- a) Submit the Quality Manual and get it accepted by TVEC
- b) Train the team of staff members identified for internal auditing
- c) Conduct a round of internal auditing, have a management review meeting and rectify the reported non-conformities (NCR)
- d) Conduct a 2nd round of internal auditing
- e) Submit QMS application to TVEC

- f) Coordinate with TVEC and facilitate external auditing

7.5 Role of TVEC

TVEC will be the certifying body for QMS and it shall take the following measures to facilitate the installation of QMS in training centres.

- A. Develop, print and circulate a Quality Management System Handbook
- B. Make the heads and senior staff aware of QMS and train Management representatives on preparation of their Quality Manual
- C. Evaluate Quality Manuals and give feedback to improve them to acceptable level.
- D. Train the internal quality audit teams of the training centres on internal quality auditing.
- E. Train and maintain a pool of lead auditors and get approval for an appropriate payment scheme for them.
- F. Develop an application form and other documents required for implementation of QMS.
- G. Conduct certification audits and surveillance audits of QMS installed in training centres and award QMC certifications.
- H. Ensure that all those involved in QMS understand the need for quality products and not simply adherence to processes

The inspections made by TVEC for the purposes of Registration and Accreditation and Quality Management shall be coordinated by the Deputy Director General who will be in overall charge of training programmes in the sector. He should ensure that staff work in coordination, and reports of all inspection visits are circulated to all members of the Academic / Training Division of the TVEC.

END