

Supporting Quality Teaching, Training and Assessing for Skills Development: India

A short survey of five countries and Proposal for National Standards & Qualifications for Trainers & Assessors

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1. Introduction

This paper was prepared to support moves to develop National Consultative Forum (6 March 2014) on developing National Occupational Standards (NOS) for Teachers/Trainers and Assessors who are responsible for skills development and vocational education/training in India. It consists of a cross country analysis of arrangements in 5 countries followed by analysis of the Indian context & presentation of an initial proposal for further consideration.

An initial report (2009) of the OECD Learning for Jobs – a policy review of vocational education and training of multiple countries – presents a set of policy recommendations to help countries make their vocational systems more responsive to labour market needs and boost economic growth. Among the key recommendations aimed at sustaining the workforce of teachers and trainers are

- In vocational institutions, promote partnerships with industry, encourage part-time work, and promote flexible pathways of recruitment.
- In the workplace, provide appropriate pedagogical preparation to those responsible for trainees and apprentices.
- Nationally, adopt a standardised assessment framework.

Accepting OECD broad recommendations and considering how India might further develop a quality framework for skills development, a look at other systems will provide a useful reference. This paper highlights five countries: Australia, Bangladesh, New Zealand, South Africa, and the United Kingdom.

Each of these countries have some form of occupational and competency standards for vocational teacher/trainers and assessors in place, and a national quality framework which underpins the broader skills quality system. Unsurprisingly the detail of each system varies from country to country. All the countries featured, however, have important structural elements in common – refer table below.

	National *QA Framework	National QA agency (statutory)	National Standards for TVET Teacher Trainers and Assessors	National Sector Body for Teaching and Learning
AUSTRALIA	YES	YES	YES	YES
BANGLADESH	YES	YES	YES	IN PROGRESS
NEW ZEALAND	YES	YES	YES	YES
SOUTH AFRICA	YES	YES	YES	IN PROGRESS
UNITED KINGDOM	YES	YES	YES	YES

While this paper does not set out the 'journey' each country followed, it may be observed that all of the 'mature' Quality Assurance (QA) systems have taken a continuous improvement approach to developing their systems. Embedding flexibility into quality framework is key.

Specifically on national occupation standards for teachers/trainers and assessors, the paper describes the broad regulatory, policy and operational settings for each country. It is generally accepted that teaching quality has the largest impact on student learning. Each country surveyed has established a variety of agencies, regulatory and other mechanisms to try and ensure high quality and relevant teaching and learning is at the core of the vocational system.

National level qualifications are offered in both vocational teaching/training and assessing. These are mandatory and are distinct from the practitioner/vocational qualification or workplace experience. The units (competencies, standards) comprising the teaching or assessing qualification are also listed.

2. Case Studies

2.1. Case Study 1: Australia

National Skills Standards Council (NSSC) commenced operations on 1 July 2011. The NSSC's key functions are to (nssc.natese.gov.au, 2014):

- Develop and maintain the national standards for regulation of vocational education and training, for approval by the Council of Australian Governments (COAG) Standing Council on Tertiary Education, Skills and Employment (SCOTESE).
- Provide advice to SCOTESE on the development and implementation of the standards applying to vocational education and training.
- Provide information, through SCOTESE, to the regulators of vocational education and training on the implementation and interpretation of the national standards and on issues of quality standards generally in the vocational education and training sector.
- Inform the vocational education and training sector on the national standards and any changes to the standards.
- Advise SCOTESE on the operation of the regulators of vocational education and training.
- Endorse Training Packages.
- Approve Tuition Assurance Schemes under the standards for the regulation of VET.

2.1.1. Australian VET Quality Framework

The Australian VET system is in transition. Two states (Victoria and Western Australia chose not to refer their powers to the Australian Government. At present there are two quality assurance systems operating:

- The VET Quality Framework; and
- Australian Quality Training Framework (AQTF) applies to Registered Training Organisations registered to operate within Victoria or Western Australia only.

The draft Framework is undergoing national consultation and proposes to consolidate the elements of vocational education and training into a stable and assured Australian Vocational Qualifications System (AVQS). Draft standards for the regulation of VET and a Regulation Impact Statement are being drafted.

The current standards are under review. The anticipated outcome of the review project will be one national set of standards for the regulation of VET appropriate for ensuring quality outcomes, which are clearly documented, capable of being consistently interpreted by RTOs and regulators, and effectively implemented through nationally consistent regulation.

The **VET Quality Framework** comprises (asqa.gov.au, 2014):

- the <u>Standards for NVR Registered Training Organisations 2012</u> (for initial and continuing registration.
- the <u>Australian Qualifications Framework</u> (determined by the AQF Council which is a council of the national ministers responsible for tertiary education, training and employment and is established under the authority of national ministers)

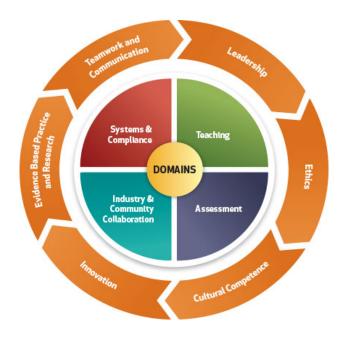
- the <u>Fit and Proper Person Requirements</u>
- the Financial Viability Risk Assessment Requirements
- the <u>Data Provision Requirements</u> (RTOs are required to collect and report their performance against the learner engagement, employer satisfaction and competency completion quality indicators to their registering body)

The quality of VET in Australia is assured through a number of standards-based mechanisms set by the NSSC:

- Standards for the registration of training providers (AQTF or VET Quality Framework);
- <u>Standards for VET regulators</u> (AQTF 2007 Standards for State and Territory Registering Bodies or Standards for VET Regulators performing functions under the National VET Regulator Act 2011)
- <u>Standards for Training Packages</u> and associated <u>NSSC Training Package Products Policy</u> and <u>NSSC Training Package Development and Endorsement Process Policy</u> (This applies to Training Package developers such as Industry Skills Councils). Training Packages comprise qualifications by AQF level and their associated competency standards). These documents specify the template for Competency Standards and mandatory and optional content. They do not prescribe how the training should be delivered, nor the time taken to deliver it, however the AQF includes indicative volume of learning by level).
- <u>Standards for accredited courses</u> (both AQTF and Standards for NVR accredited courses) it is possible to seek accreditation of courses where the content of the courses is not covered by Industry Training Packages.

2.1.2. VET Practitioner Capability Framework

VET Practitioner Capability Framework has recently (2013) been put in place. The Framework describes the broad capabilities required for a range of job roles in the VET sector. It provides a common language for the knowledge, skills, behaviours and attitudes that practitioners will display if they are performing well in their roles. The purpose of the Capability Framework is to assist Registered Training Organisations with their management processes and to guide ongoing professional development and career pathing of RTO staff (ibsa.org.au, 2014).



The framework consists of (ibsa.org.au, 2014):

- Three Levels that reflect the expertise and responsibility required of VET Practitioners
- Four Domains describing the specialist skills required of VET Practitioners
- Six Skill Areas that address more generic work skills required for VET Practitioner job roles

2.1.3. Standards for Trainer and Assessors

Training and Assessing occupational standards are made under the *National Vocational Education* and *Training Regulator Act* 2011. NSSC is responsible for determining the training and assessment competencies (under the ATQF) to be held by trainers and assessors in accordance with Standards on registration of trainers/assessors and for registration of RTOs.

The NSSC has issued a *Determination for Training and Assessment Competencies to be held by Trainers and Assessors*. This determination specifies the minimum qualifications or competencies that must be held by trainers, people delivering nationally recognised training under supervision and assessors in the VET sector (nssc.natese.gov.au, 2014).

The NSSC has determined that from 1 July 2013:

A - TRAINERS MUST:

- hold the *TAE40110 Certificate IV in Training and Assessment* from the TAE10 Training and Education Training Package as a minimum qualification or be able to demonstrate equivalence of competencies; and
- be able to demonstrate vocational competencies at least to the level being delivered and assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and trainer/ assessor competence.

B - PERSONS DELIVERING TRAINING UNDER THE SUPERVISION OF A TRAINER MUST:

- work under the supervision of a trainer with the *TAE40110 Certificate IV in Training and Assessment* or of a person who has demonstrated equivalence of competencies; and
- holds either the TAESS00007 Enterprise Trainer Presenting Skill Set or be able to
 demonstrate equivalence of competencies, or the TAESS00008 Enterprise Trainer –
 Mentoring Skill Set or be able to demonstrate equivalence of competencies within two years
 of commencing to deliver training while under supervision; and
- be able to demonstrate vocational competencies at least to the level being delivered and assessed as well as maintaining their industry currency.

C - ASSESSORS MUST¹:

- hold the TAESS00001 Assessor Skill Set or be able to demonstrate equivalence of competencies; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.

Vocational competency is defined as broad industry knowledge and experience, usually combined with a relevant industry qualification. A person who has vocational competency will be familiar with the content of the vocation and will have relevant current experience in the industry. Vocational competency must be considered on an industry-by-industry basis and with reference to any guidance provided in the relevant Training Package or Accredited Course. Training Packages or Accredited Courses include advice specific to the industry related to the vocational competencies of trainers and assessors (including qualifications and acceptable forms of evidence of competency).

2.1.4. TAE40110 Certificate IV in Training & Assessment

Currently, the minimum qualification for VET practitioners to deliver and assess nationally-recognised training is *TAE40110 Certificate IV in Training & Assessment*. This qualification has been through a number of iterations since the 1990s (nssc.natese.gov.au, 2014). The qualification is currently under review to update it to the new Standards for Training Packages. It is planned that the revised TAE Certificate IV in Training & Assessment will be endorsed by April 2014.

Core units - Certificate IV in Training and Assessment: Total number of units to complete: 7 units

Unit code ²	Unit name
TAET013A	TAEDES402A Use training packages and accredited courses to meet client needs
TAET012A	TAEDES401A Design and develop learning programs
TAET008A	TAEDEL401A Plan, organise and deliver group-based learning
TAET009A	TAEDEL402A Plan, organise and facilitate learning in the workplace
TAET003A	TAEASS401B Plan assessment activities and processes

¹ Note: If a person does not have all the assessment competencies as defined in (i) ,(ii) and (iii) then one or more persons with the combined expertise in (i), (ii) and (iii) may work together to conduct the assessment.

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² these are codes for the proposed training package

Unit code ²	Unit name
TAET004A	TAEASS402B Assess competence
TAET005A	TAEASS403B Participate in assessment validation

Elective units - Certificate IV in Training and Assessment: Total number of units to complete: 3 units

Unit code	Unit name
TAET007A	TAEDEL301A Provide Work Skill Instruction
TAET000A	BSBCMM401A Make a Presentation
TAET010A	TAEDEL403A Coordinate and Facilitate Distance-based Learning
TAET011A	TAEDEL404A Mentor in the Workplace
TAET006A	TAEASS502B Design and Develop Assessment Tools
TAET014A	TAELLN401A Address Adult Language Literary and Numeracy Skills
TAET015A	TAEASS301B Contribute to Assessment
	TAEDEL501A Facilitate e-learning
	TAETAS401A Maintain training and assessment information

2.2. Case Study 2: Bangladesh

During the last 5-6 years a major TVET and Skills Development reform programme has been underway in Bangladesh. The programme of reform has been supported externally by three key projects – the ILO TVET Reform Project 2008-2014; an Asia Development Bank and Swiss Agency for Development and Cooperation (SDC) funded Skills Development Project 2009-2013; and a World Bank Skills Training Enhancement Project 2010-2014 (Kashem, A. et al, 2011).

A national Skill Development Policy came into effect in 2011, and is an attempt to develop a cross-cutting policy agenda for skills development for period 2010-2015. It sets out the major commitments and key reforms that government will implement in partnership with industry, workers and civil society (Islam, 2012).

2.2.1. Agencies

In Bangladesh, there are around 20 Ministries operating technical institutes which offer courses at high school, polytechnic and basic trade level. There are approximately 200 government-owned technical institutes and about 3000 which are privately run, as well as many in the NGO and social sectors (Kashem, A. et al, 2011).

The Bangladesh Technical Education Board (BTEB) has a national jurisdiction to organize, supervise, regulate, control and develop technical and vocational education. BTEB is the agency for setting and monitoring training quality standards related to the issuance of the new National Technical Vocational Qualifications (NTVQ), and specifies the required minimum competencies to be held by staff involved in the design, delivery and assessment of NTVQs – 18 competency standards have been developed to support this.

The National Skills Development Council (NSDC) was established 2008, although it did not become operational until around 2011. It has a mandate to develop and implement a national policy for skills development, oversee key reforms, co-ordinate activities and monitor implementation of technical and vocational education and training (TVET) and skills training, with representatives from government, private sector and community organizations. The NSDC is responsible for all pre-employment skills training and training for the private sector. The ILO–TVET Reform project is supporting establishment and running of NSDC Secretariat, with funding support from the SDC.

Three other key agencies are the Directorate of Technical Education (DTE) under the Ministry of Education; the Bureau of Manpower, Employment and Training (BMET) under the Ministry of Expatriate Welfare and Overseas Employment; the Ministry of Youth and Sports' Department of Youth Development (DYD). The DTE has a number of technical training institutions including those for teacher/trainer education; the BMET offers a range of skill development programmes including qualifications designed to meet the international labour market; and the DYD offers more basic skills training (Kashem, A. et al, 2011).

2.2.2. National Technical and Vocational Qualification Framework

Bangladesh introduced a National Technical and Vocational Qualification Framework (NTVQF) in 2012 which describes qualifications in eight levels ranging from Pre-Vocational Level 1 to NTVQF Level 6. A National Certificate is defined against nationally-agreed Competency Standards and developed by firstly combining units of competency into groups that correspond to meaningful job roles in the workplace and then secondly, aligning this to the NTVQF. The NTVQF introduces the concept of pre-vocational levels to the skills development system in the informal sectors and loweducated youths in Bangladesh. (Govt. of Bangladesh, 'Implementation Manual...', 2013).

The implementation of a Quality Assured, Competency-Based TVET System is centred on four essential components – implementation of NTVQF, Competency Standards, Competency-Based Training Delivery System, and Competency Assessment and Certification System (Govt. of Bangladesh, 'Implementation Manual...', 2013). A manual on the implementation of NTVQF has been developed by EU-funded ILO TVET Reform Project.

2.2.3. TVET Trainers Training, Assessment and Certification Programme

Implementing the programme mentioned above requires a pool of qualified and certified TVET Trainers and Assessors. The certification for TVET Trainers and Assessors has been designed in a way which allows flexibility and career pathways. A 'Certificate IV in Competency-based Training and Assessment (CBT&A) in TVET' and an 'Advanced CBT&A in TVET (Certificate V)' are issued to those who have achieved and demonstrated competence in all the required units of competency. Also available is a 'Certificate of Completion' within the earlier mentioned qualifications – these are documents issued to those who have undergone training in the required units but have not yet had their competency assessed. Both qualifications are based on one set of competency standards and there are several pathways for instructors, eg. Direct Trainer, Training Developer, and Master Trainer. Registered Training Organisations conducting NTVQF courses should have trainers certified with the Certificate IV or the Advanced Certificate (Govt. of Bangladesh, 'Implementation Manual...', 2013).

Assessment must be administered by a person or entity who complies with the requirements for an NTVQF Assessor. These requirements are:

- "Certain number of years of work experience and possession of a technical qualification under the NTVQF
- Possession of either Certificate IV in CBT&A in TVET, Certificate V in Advanced CBT&A in TVET or the set of competencies required to be an NTVQF assessor. An industry expert can be an assessor as long as they attain the units of competencies required" (Govt. of Bangladesh, 'Implementation Manual..., 2013).

The specific Competencies required to be an Assessor are – Work Effectively within the Bangladesh TVET sector; Promote Inclusive Learning in CBT & A; Apply OSH in CBT & A environment; and Organise and conduct Competency-Based Assessment (Govt. of Bangladesh, 'Implementation Manual...', 2013).

Qualification pathway for TVET practitioners

CB Course

Developer

TVTTAS501

TVTENV401

TVTENV402

TVTENV403

TVTENV404

NTVQ Overview of potential short courses leading to Statements of Achievement Certificate IV in CBT&A in TVET & Certificate V in Advanced CBT&A CB Assessment CBLM Designer Trainer CB Assessor Developer TVTTAS501 - Conduct training need analysis TVTDES501 - Design and develop competency based learning programs Advance level Trainer of **TVET Teachers/Trainers** NTVQF Level 5 TVTASL501 - Validate competency based TVTCMQ501- Coordinate training and/or assessment arrangements for apprenticeships TVTCMQ502 - Evaluate competency based training and assessment TVTDEL501 - Facilitate training of TVET teachers/trainers and assessors TVTENV401 - Work effectively within TVTENV401 TVTENV401 TVTENV401 TVTENV401 Bangladesh TVET sector TVTENV402 - Promote inclusive learning in TVTENV402 TVTENV402 TVTENV402 TVTENV402 **CBT&A** environment TVTENV403 - Apply OSH practice in a CBT&A TVTENV403 TVTENV403 TVTENV403 TVTFNV403 environment TVTENV404 - Use information technology to Entry level TVET Teachers/Trainers TVTENV404 TVTENV404 TVTENV404 support learning TVTENV405 - Maintain and enhance professional practice NTVQF Level 4 TVTENV406 - Maintain training equipment TVTENV406 and facility TVTTEC401 - Maintain and enhance technical competency TVTDES401 - Design and modify CBT TVTDES401 learning materials TVTDEL401 - Plan and organize competency

based training sessions

assessment

TVTDEL402 - Deliver competency based

TVTASL401 - Design competency based

TVTASL402 - Organise and conduct competency based assessment

TVTDEL401

TVTDEL402

10

2.3. Case Study 3: New Zealand

2.3.1. Agencies

The New Zealand Qualifications Authority (NZQA) operates under the Crown Entities Act 2004, the Education Act 1989 and the Industry Training Act 1992. NZQA administers the New Zealand Qualifications Framework (NZQF). It is responsible for the integrity, currency and accuracy of the NZQF. Qualifications that are worth 40 credits or more and have been quality assured by a recognised quality assurance body are eligible to be added to the NZQF (nzqa.govt.nz, 2014).

Industry Training Organisations (ITOs) are private industry-based organisations, with no legal structure prescribed in legislation except that they are required to be a "body corporate". The majority of ITOs are incorporated societies, but there are also a small number of ITOs which are either charitable trusts or companies. The distinction between ITOs and other tertiary education organisations is that ITOs do not themselves deliver industry training (Tertiary Education Commission, 2012). Their functions under Section 6 of the ITO Act are to:

- "Set skill standards for their particular industry or industries that are able to be registered by NZQA
- Develop arrangements for the industry training to be delivered and for the skill standards to be met, including arrangements for monitoring and assessing trainees
- Provide leadership within the particular industry or industries on matters relating to skill and training needs" (Tertiary Education Commission, 2012).

NZQA requires ITOs to report annually on the management of their national external moderation systems. NZQA has a statutory obligation to monitor moderation of unit standards on the Directory of Assessment Standards (DAS), and most ITOs are also accredited to register assessors for the Directory of Assessment Standards (nzqa.govt.nz, 2014). The DAS is supported by a three-pronged quality system:

- Quality assurance of standards National assessment standards are quality assured before being listed on the DAS
- Consent to assess against standards Organisations demonstrate that they are able to develop or access assessment resources, undertake internal moderation, engage in the Standard Setting Body's (SSB) national external moderation system, and report results in a timely manner.
- National external moderation of assessment The developer SSB runs a moderation system that ensures national consistency of assessment decisions against DAS standards (nzqa.govt.nz, 2014).

2.3.2. Assessors

Consent to assess certifies education organisations to assess unit or achievement standards and award credit for them. Applications for Consent to Assess must comply with *Consent to Assess against Standards on the Directory of Assessment Standards Rules 2011*. Consent to assess is granted to organisations that meet:

- the requirements of provider registration
- the moderation requirements of the standard-setting body responsible for the unit standards

• all the general and industry specific requirements of the relevant Consent and Moderation Requirements (CMRs)

Unit Standard 4098 ("Use standards to assess candidate performance") is the minimum NZQA qualification required to become an Assessor in New Zealand. People who hold unit standard 4098 and also have the required experience and/or qualifications in their area of expertise can assess other people against a specific range of NZQA unit standards. People credited with this unit standard are able to: prepare for and conduct assessment; complete assessment administration; and review the assessment practice (nzqa.govt.nz, 2014).

2.3.3. National Certificate in Adult Education and Training

Several public and private providers offer the National Certificate in Adult Education and Training which is undertaken at Level 4 or Level 5 on the NQF. The qualification has been designed for people who are seeking a general entry-level qualification in the adult education and training field either within New Zealand or internationally. "People awarded the New Zealand Environment strand of this qualification are able to identify the diverse cultural and educational needs of adult learners and establish an inclusive learning environment for adult learners within New Zealand, with particular focus on the Māori and Pakeha (European) cultures of New Zealand" (nzqa.govt.nz, 2014). "People awarded the International Environment strand of this qualification are able to teach and train adult learners in learning environments outside New Zealand and are able to establish inclusive multicultural learning environments for these learners" (nzqa.govt.nz, 2014).

A range of public and private providers offer Level 4 and Level 5 National Certificate in Adult Education and Training, the following is offered by the Open Polytechnic of New Zealand.

<u>Level 4</u> National Certificate in Adult Education and Training – to complete the qualification, 40 credits must be completed at Level 4 and above.

COURSE C	ODE AND NAME	LEVEL	CREDITS
Compulsor	ту		
US7091	Establish a culturally safe and inclusive learning environment for adults in Ne Zealand's cultural setting	w4	4
Elective Gr	oup A		
Selection of	of a minimum of 8 and up to a maximum of 36 credits		
US7095	Develop and facilitate individualised adult learning plans	5	6
US7096	Deliver learning presentations for adult learners	4	8
US7097	Facilitate interactive learning sessions for adults learners	5	10
US7108	Deliver on-job training for adult trainees	4	8
US7114	Coach adult learner(s)	5	8
US7115	Create and maintain a positive learning environment for adult learners	4	6
Elective Gr	oup B		
Selection of	of courses to complete the qualification		

US11281	Prepare candidate(s) for assessment against standards	4	3
US11551	Moderate Assessment	6	8
US11552	Design and Evaluate Assessment Materials	5	8
US18203	Verify evidence for assessment	4	3
US20469	Evaluate adult learning sessions	5	5
US4098	Use standards to assess candidate performance	4	6
US7093	Design learning sessions for Adults	5	6

<u>Level 5</u> - National Certificate in Adult Education and Training must complete 60 credits with a minimum of 40 credits at Level 5 or above.

COURSE CO	ODE AND NAME	LEVEL	CRDEITS
Compulsory	y		
US20469	Evaluate adult learning sessions	5	5
US7091	Establish a culturally safe and inclusive learning environment for adults in New Zealand's cultural setting	v 4	4
US7093	Design learning sessions for Adults	5	6
Elective Gro	oup A: Select a minimum of 7 credits		
US7095	Develop and facilitate individualised adult learning plans	5	6
US7097	Facilitate interactive learning sessions for adults learners	5	10
			_
US7114 Elective Gro	Coach adult learner(s) oup B: Total credits for Elective Group A and Elective Group B to a minimum o	5 f 29 cred	8 its
Elective Gro	oup B: Total credits for Elective Group A and Elective Group B to a minimum o	f 29 cred	its
Elective Gro	oup B: Total credits for Elective Group A and Elective Group B to a minimum of Moderate Assessment	f 29 cred 6	its 8
Elective Gro	oup B: Total credits for Elective Group A and Elective Group B to a minimum o	f 29 cred	its
Elective Gro US11551 US11552	oup B: Total credits for Elective Group A and Elective Group B to a minimum of Moderate Assessment	f 29 cred 6 5	8 8
Elective Gro US11551 US11552 Elective Gro	Dup B: Total credits for Elective Group A and Elective Group B to a minimum of Moderate Assessment Design and Evaluate Assessment Materials Dup C: Total credits from the compulsory courses and Groups A and B to a minimum of Moderate Assessment Materials	f 29 cred 6 5	8 8 8 60 credits
Elective Gro US11551 US11552 Elective Gro US11281	Dup B: Total credits for Elective Group A and Elective Group B to a minimum of Moderate Assessment Design and Evaluate Assessment Materials Dup C: Total credits from the compulsory courses and Groups A and B to a minimum of Materials Prepare candidate(s) for assessment against standards	f 29 cred 6 5 nimum of	8 8 8 60 credits
Elective Gro US11551 US11552 Elective Gro US11281 US18203	Dup B: Total credits for Elective Group A and Elective Group B to a minimum of Moderate Assessment Design and Evaluate Assessment Materials Dup C: Total credits from the compulsory courses and Groups A and B to a minimum Prepare candidate(s) for assessment against standards Verify evidence for assessment	f 29 cred 6 5 nimum of	8 8 8 60 credits 3 3
Elective Gro US11551 US11552 Elective Gro US11281 US18203 US4098	Dup B: Total credits for Elective Group A and Elective Group B to a minimum of Moderate Assessment Design and Evaluate Assessment Materials Dup C: Total credits from the compulsory courses and Groups A and B to a minimum Prepare candidate(s) for assessment against standards Verify evidence for assessment Use standards to assess candidate performance	6 5 5 nimum of 4 4	8 8 8 60 credits 3 3 6

2.4. Case Study 4: South Africa

2.4.1. Regulatory Framework

The Skills Development Act (1998) provides the regulatory basis for South Africa's skills system. Following a lengthy review process a new National Qualification Framework (NQF) Act came into effect from 1 June 2009. Implementation of the new Act is underway and the full development of the linked NQF with three sub-frameworks for higher education, general and further education and training, and occupations. (SAQA, 2013). The aims of the NQF Act 2008 are "To create a single integrated national framework for learning achievements:

- Facilitate access to, and mobility and progression within, education, training and career paths;
- Enhance the quality of education and training;
- Accelerate the redress of past unfair discrimination in education, training and employment opportunities." (nqf.org.za, 2014)

2.4.2. National Strategy

South Africa's National Skills Development Strategy III (NSDSIII) was launched in early 2011, and follows the integration of higher and further education and skills development into a single Department of Higher Education and Training. One of the aims of South Africa's third skills strategy is to promote partnerships between employers, public education institutions (FET colleges, universities, universities of technology), private training providers and Skills Education Training Authorities or 'SETAs' (saqa.org.za, 2014).

2.4.2a. Statutory Bodies

- The National Skills Authority (NSA) was established through section 4 of the Skills Development Act, 1998. The functions of the NSA are to advise on policy, strategy (and implementation), allocation of National Skills Fund and regulations. The NSA liaises with Sector Education and Training Authorities (SETAs), as well as other duties/investigations conferred via the Act.
- The South African Qualifications Authority (SAQA) has responsibility for the development and implementation of the NQF and to co-ordinate its sub-frameworks. SAQA is required to accredit bodies responsible for monitoring and auditing the provision and achievement of NQF registered standards and qualifications. These bodies, called Education and Training Quality Assurance bodies (ETQAs) are established under the SAQA Act (No. 58 of 1995).
- The South African Council on Higher Education (CHE) is an independent body responsible for advising the Minister of Higher Education and Training on all matters related to higher education policy issues, and for quality assurance in higher education and training.
- Umalusi is an organisation which sets and monitors standards for general and further education and training
- The Quality Council for Trades and Occupations (QCTO) is responsible for advising the Minister of Higher Education and Training (DHET) on all matters of policy concerning occupational standards and qualifications.

• SETAs are sector education and training bodies established under the Skills Development Act, and are responsible for the organisation of education and training programmes within their sectors.

2.4.3. National Qualifications Framework

The NQF consists of 10 levels, although prior to 2008 and the introduction of the National Qualifications Framework (NQF) Act No 67, there were eight. SAQA developed the 10-level NQF with the three quality councils – Umalusi, QCTO and the CHE. The NQF Act requires SAQA to register professional bodies³ and professional designations on the NQF.

Assessors

The generic assessor unit standard – "Plan and Conduct Assessment of Learning Outcomes" (Level 5, 15 Credits) - is for people who assess or intend to assess candidates against unit standards and/or qualifications. People who have achieved this unit standard will be able to conduct assessments within their fields of expertise in line with the Criteria for the Registration of Assessors (saqa.org.za, 2014).

The unit standard can contribute towards the achievement of a variety of Education Training and Development Practices and Human Resource Development related qualifications. People credited with this unit standard are able to assess learner performance against standards and qualifications registered on the NQF, using pre-designed instruments (saqa.org.za, 2014).

People credited with the unit standard will have achieved the following specific outcomes - Plan and prepare for assessment; Prepare candidates for assessment; Conduct assessment; Evaluate and record evidence and make assessment judgments; Provide feedback to relevant parties; and Review assessment.

TVET Trainers and Teachers

In June 2013, South Africa introduced a 'Policy on Professional Qualifications for Lecturers in Technical and Vocational Education and Training'. The Policy sets out the requirements for Degrees, Diplomas and Certificates for teaching in TVET and these qualifications sit on the NQF from Levels 6-10. It outlines that 10 core competencies that TVET teachers/trainers must have (these are listed below).

NQF Level	Degrees	Diplomas	Certificates
10	Doctorate (360 credits)		
9	Master of Education (180 credits)		

³ A professional body is any body of expert practitioners in an occupational field, and includes an occupational body – that is a body constituted to represent and/or regulate a recognised community of expert practitioners.

8	Bachelor of Education Honours (120 credits)	Post Graduate Diploma in Technical and Vocational Education and Training (120 credits)	
7	Bachelor of Education in Technical and Vocational Teaching (480 credits)	Advanced Diploma in Technical and Vocational Teaching (120 credits) Advanced Diploma in Technical and Vocational Education and Training (120 credits)	
6		Diploma in Technical and Vocational Teaching (120 credits)	Advanced Certificate in Technical and Vocational Education and Training (120 credits)

2.4.4. Basic competencies for professionally qualified TVET lecturers

The following is minimum set of competences required of newly qualified lecturers⁴. Professionally qualified lecturers must:

- have a sound knowledge based in terms of their own subject specialisation...
- have a sound understanding of the TVET context in South Africa...and adjust their practice to take this into account
- know who their learners are, including understanding their diversity...to adjust teaching and learning approaches to accommodate learner diversity
- possess advanced speaking, reading, writing skills...in the language of learning and teaching
- be able to manage teaching and learning environments effectively to enhance learning
- be able to assess learners in varied and reliable ways, and to use the results of assessment both to improve learners' learning through a variety of types of feedback, and to improve their own practice
- be ICT literate...including personally competent...and to integrate in an effective manner in teaching and learning
- be knowledgeable about the demands that will be made on their learners in the workplace
- have a positive work ethic, display appropriate values and conduct themselves in a manner that befits, enhances and develops the vocational teaching profession
- be able to reflect critically, in theoretically informed ways and in conjunction with their professional community of colleagues, on their own practice, in order constantly to improve it and adapt it to evolving circumstances

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⁴ An abridged version of the competencies which set out in the Policy on Professional Qualifications for Lecturers in Technical and Vocational Education and Training' in the Government Gazette, Page 36

2.5. Case Study 5: United Kingdom

The United Kingdom (UK) has four regulators of qualifications - OfQual, Scottish Qualifications Authority, Council for the Curriculum, Examinations and Assessment and an emerging Qualifications Wales which is to take over the Welsh Government's current role in regulation. All education/training programmes and qualifications eligible for public funding in the UK are inspected and/or regulated.

England: OfQual has responsibilty for the regulation of all qualifications other than those offered by higher education institutes. While the focus of Ofqual's role is on England, in the case of Northern Ireland, it has regulatory responsibility for vocational qualifications. The Apprenticeship, Skills, Children and Learning Act (2009) and Education Act (2011) constitute OfQual's legislative framework. Ofqual reports directly to Parliament in Westminster and the Northern Ireland Assembly. OfQual sets the conditions of recognition which awarding organisations must meet and maintain in order to achieve recognition as an entity able to design, deliver and award regulated qualifications. In addition to the General Conditions of Recognition, Ofqual sets down qualification specific criteria which must be met by awarding organisations in order to be recognised to offer certain qualification types. Ofqual monitors awarding organisations and qualifications to make sure that standards are maintained. QfQual manages the Register of Regulated Qualifications (ofqual.gov.uk, 2014).

Scotland: SQA's functions are set out in the Education (Scotland) Act 1996 as amended by the Scottish Qualifications Act 2002. The organisation has two main roles - accreditation, and awarding qualifications. SQA accredits qualifications other than degrees and approves, and quality assures awarding bodies that plan to enter people for these qualifications. As an awarding body, it devises and develops qualifications; validates and reviews qualifications; assessment of candidates for SQA qualifications; quality-assures education and training establishments which offer SQA qualifications; and issues certificates to candidates. SQA also has an advisory role in the development of National Occupational Standards (NOS), and are involved in the process for approval of NOS (sqa.org.uk, 2014).

Northern Ireland: The Council for the Curriculum, Examinations and Assessment (CCEA) was established during 1994 and is a non-departmental public body reporting to the Department of Education in Northern Ireland. CCEA brings together three areas - curriculum, examinations and assessment. It advises government on schools and colleges, monitors standards with regard to qualifications and examinations, and also is an awarding body for school level qualifications and some vocational subjects (rewardinglearning.org.uk, 2014).

<u>Wales:</u> The Welsh Government (Education and Skills) regulates vocational qualifications in Wales. They recognise and monitor awarding organisations - often jointly with English regulators Ofqual and Northern Ireland's CCEA. Education and Skills work with awarding organisations to maintain standards in qualifications and assessments; develop qualifications frameworks; support the provision of Welsh medium qualifications; and ensure access for candidates with particular needs (wales.gov.uk, 2014)

2.5.1. Frameworks and Vocational Qualifications

In the late 1990s, England adopted its first National Qualifications Framework (NQF) which comprised four groups of qualifications: General (as in academic), Vocational, Occupational and

Entry Level. It has eight levels.

From 2010, the Qualifications and Credit Framework (QCF) was adopted as part of a major UK Vocational Qualification Reform Programme (UKVQRP) requiring all existing vocational and occupational qualifications to be redesigned to meet its requirements, not least the embedding of credit value to facilitate credit accumulation & transfer. While playing a full part in the UKVQRP, Scotland retained its existing credit framework - the Scottish Credit and Qualifications Framework (SCQF).

Qualifications that are out of scope of the QCF continue to be developed in line with the National Qualifications Framework (NQF) and are defined according to their level of difficulty. They are standards referenced against levels of difficulty ranging from entry level to level 8. The levels are based on descriptors identifying expected standards of knowledge, skill and competence at each level. Qualifications at the same level can be very different in terms of content and the length of time they take to complete.

National Vocational Qualifications (NVQs) are work based awards available in England, Wales and Northern Ireland that are achieved through training and assessment and based on NOS. In Scotland they are known as Scottish Vocational Qualifications (SVQ). NVQs/SVQs are based on National Occupational Standards. NVQs and SVQs are available at different levels, from Levels 1 to 7 on the QCF and Levels 1 to 11 on the Scottish SCQF.

Organisations - other

Sector Skills Councils (SSCs)

Sector Skills Councils (SSCs) are recognised⁵ by Governments throughout the UK as the independent, employer-led organisations. Amongst other roles in the UK skills system, the SSCs take the lead in the development of NOS. Until 2011, there was an SSC which took responsibility for the professional development of all those working in community learning and development, Lifelong Learning UK⁶. The ownership of these standards now rests with a new organisation, the *Institute for Learning* (ifl.ac.uk, 2014) – until recently named FE Guild. The focus of its work is around three core areas: Professional Standards and Qualifications for teachers, trainers and tutors, including the supply of initial teacher training and accredited Continuing Professional Development; Teaching, Learning and Assessment, arguably the most critical part of its work, where a key aspect will be working with the recommendations of the Commission on Adult Vocational Teaching and Learning to develop practitioner expertise; Leadership, Management and Governance, developing among other things current and aspiring leadership capabilities. It will also have research and knowledge sharing roles, building on some of the work in the Excellence Gateway through a new, knowledge sharing platform.

⁵ There is no formal recognition of SSCs as such and they no longer receive direct public funding. Funding it there but is for competitive bidding and there's no guarantee SSCs will receive.

⁶ Lifelong Learning UK (LLUK) was one of the independent, Sector Skills Councils (SSCs) for UK employers and was responsible for the professional development of all those working in community learning and development, further education, higher education, libraries, archives and information services, and work based learning across the UK. LLUK ceased to operate as a Sector Skills Council during 2011 and many of its responsibilities transferred to the Learning and Skills Improvement Service (now also defunct, mid-2013).

Chartered Institute of Educational Assessors

The Chartered Institute of Educational Assessors (CIEA) is a professional membership organisation. Members include teachers, examiners, school and college leaders, academics, awarding organisations and people responsible for professional development in diverse sectors including finance, health and land management. The CIEA supports assessors through Professional Development (including maintenance of a Framework), standard setting through a binding Code of Conduct, and the training and accrediting of individuals and organisations among other activities.

2.5.2. National Occupational Standards (NOS) for Learning and Development (L&D)

National Occupational Standards (NOS) for Learning and Development (L&D) were first introduced 2001 and updated in 2009. Individual NOS from the suite are used as part of the assessor and verifier qualifications which are a requirement for N/SVQ delivery. They apply to the following types of job roles in the lifelong learning sector for which learning and development is the main purpose: in-house trainers and training managers, external trainers, managers and consultants, assessors and verifiers. There are 13 NOS for Learning and Development⁷, which are based on a structure known as the 'training cycle' or 'learning cycle' (Lifelong Learning UK, from cityandguilds.com, 2014).

Key area A: Research learning and development needs

- 1 Identify collective learning and development needs
- 2 Identify individuals' learning and development needs

Key area B: Plan and develop learning and development opportunities

- 3 Plan and prepare learning and development programmes
- 4 Plan and prepare specific learning and development opportunities
- 5 Develop and prepare resources for learning and development

Key area C: Facilitate learner achievement

- 6 Manage learning and development in groups
- 7 Facilitate individual learning and development
- 8 Engage and support learners in the learning and development process
- 9 Assess learner achievements

Key area D: Maintain and improve quality standards

- 10 Reflect on, develop and maintain own skills and practice in learning and development
- 11 Internally monitor and maintain the quality of assessment
- 12 Externally monitor and maintain the quality of assessment
- 13 Evaluate and improve learning and development provision

⁷ It is important to note that the NOS for Learning and Development only cover what is exclusive to learning and development. Other approved NOS – for example covering management and leadership or personnel – may be necessary to provide full coverage for some job roles.

Assessors

The Assessor qualifications are nationally recognised and have been developed to meet the requirements of those who work with learners in the workplace or in work-related programmes of learning (cityandguilds.com, 2014). They are based on the Learning and Development NOS. The qualifications consist of a mix of units - some competence-based and some knowledge-based units. The knowledge-only units (which are titled 'Understanding the principles and practices of...') allow anyone who is interested in or needs to know about assessment and quality assurance - but is not a practitioner - to acquire knowledge and information about the roles (cityandguilds.com, 2014).

One example (overleaf) of a suite of Trainer/Assessor qualifications is the Training, Assessment, Quality Assurance (6317) Qualification or "TAQA" which is offered by City and Guilds. This example demonstrates Assessor and Verifying qualifications from the suite. It is available for use in England, Wales and Northern Ireland with a modified version available in Scotland.

TAQA Assessing Qualifications:

- Level 3 Award in Understanding the Principles and Practices of Assessment
- Level 3 Award in Assessing Competence in the Work Environment
- Level 3 Award in Assessing Vocationally Related Achievement
- Level 3 Certificate in Assessing Vocational Achievement

TAQA Verifying Qualifications:

- Level 4 Award in Understanding the Internal Quality Assurance of Assessment Processes and Practice
- Level 4 Award in the Internal Quality Assurance of Assessment Processes and Practice
- Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practice

Scotland

SQA qualifications for Assessors and Verifiers consist of individual SVQ Units and workplace Professional Development Awards (PDAs), available at SCQF levels 8 and 9. Centres are able to register candidates for either an SVQ Unit or the corresponding PDA. SQA - the awarding arm - is also recognised by Ofqual to offer a range of qualifications in Assessment and Quality Assurance in England, Wales and Northern Ireland. (sqa.org.uk).

3. The Indian Context

3.1. Background

The target of skilling 500 million people by 2020 poses several system level challenges for India as the reform agenda unfolds. The supply of quality teachers and assessors falls significantly short of the growing demand for skills training and assessment. For example, the *'Report of the Working Group on Skill Development and Training'* (XIIth 5 Year Plan, 2011) notes that "the present instructor training capacity of the country is only 1600, which the current requirement is around 70,000, with an additional annual requirement of around 20,000."

Moves towards greater convergence of quality assurance governance and regulatory functions at the national level is now underway, but the skills landscape remains complex. There is currently no overarching national quality assurance strategy, and specifically, no unified or nationally consistent set of standards for vocational teachers/trainers and assessors. As well, at the national and state level there are a multiplicity of agencies with quality assurance functions and responsibilities (eg. validation, accreditation), and yet significant system gaps remain.

The India-EU Skills Development Project (2011) has identified 3 key structural elements which contribute to the complexity and these are:

- The separation of arrangements in vocational education and vocational training
- State autonomy versus national requirements
- Differences in practice between the public and private provision and the formal and informal skills and employment sectors

3.2. Agencies

Several agencies have specific (and sometimes overlapping) responsibilities for India's developing and monitoring the quality of skills development and vocational education and training – these include the National Skills Development Agency (NSDA); the National Skills Development Corporation (NSDC); the Ministry of Labour and Employment's Directorate-General of Employment and Training (DGE&T), the National Council for Vocational Training (NCVT); the National Accreditation Board for Education and Training (NABET); the All India Council for Technical Education (AICTE), and their All India Board for Vocational Education; and the National Institute of Technical Teachers Training and Research (NITTTR) and its Council (under the Ministry of Human Resource Development).

The industry-led Sector Skills Councils (under NSDC guidance) play a key role national occupational standard setting, among other quality assurance responsibilities.

In addition to those agencies with a formal quality assurance mandate, a number of Ministries operate significant skills schemes and have a vested interest in assuring their quality - such as the Ministry of Rural Development, the Ministry of Tourism, and the Ministry of Overseas Indian Affairs.

National Skills Qualification Framework

The National Skills Qualification Framework (NSQF) was notified on 27 December 2013. With the notification, the Ministry of HRD's National Vocational Education Qualifications Framework (NVEQF) ceased to exist. In practice, the NSQF will subsume and unify the NVEQF with the work done to date on the DGE&T's National Vocational Qualification Framework.

The NSQF is a descriptive (not regulatory) framework which organises qualifications according to a series of levels of knowledge, skills and aptitude. There are 10 levels which are defined in terms of learning outcomes. These are ordered in ascending level of complexity, 1-10. The levels contain the competencies which the learners must possess regardless of whether they were acquired through formal, non-formal or in-formal education and training (nsdcindia.org).

The NSQF Notification contains no explicit statements about the development of national standards for trainers and/or assessors, although in the section on Curriculum Packages (Page 6, Section 7.iii.b.) notes "competency based...packages would consist of...trainer qualifications, assessment and testing guidelines...for each NSQF level (and that)...training of trainers would also be aligned to the NSQF".

On the implementation of NSQF (Page 17, Section 14), the National Skills Qualification Committee (NSQC) is responsible for "establishing and maintaining high standards for skills training" among 15 other responsibility areas. The same section notes Assessment and Certification "will be done by the respective agencies of the Government/private sector as is done now.... however (those norms developed by)...SSC/industry would be approved by the NSQC to ensure that outcomes conform to the appropriate NSQF level".

Sector Skills Councils (SSC)

Under the National Skill Development Policy 2009, SCCs are mandated to

- Set up a Labour Market Information System to assist planning and delivery of training
- Identify skill development needs and preparing a catalogue of skill types
- Develop a sector skill development plan and maintain a skill inventory
- Develop skill competency standards and qualifications
- Standardise affiliation and accreditation processes
- Participate in affiliation, accreditation, certification
- Plan and execute training of trainers
- Promote academies of excellence

Under the custodianship of the NSDC, as at November 2013, 26 SSCs had been approved by NSDC and 16 operationalised. Initially 21 priority sectors were targeted for the development of SSCs. In more recent times, additional high demand sectors like Rubber and Plumbing have been added to priorities. The SSC which could be responsible for Teacher/Trainer and Assessor standards is still to be determined, although there is an SSC for Management and Skills which was constituted in mid-2013. A list of approved SSCs and those in the pipeline, are outlined in <u>Appendix One.</u>

3.3. Qualifications Packs (QPs) and National Occupational Standards (NOS)

To date, 379 NOS and 16 QPs across 16 Sectors have been developed⁸. The QPs are essentially in two parts – domain areas and technical standards. It is intended that NOS for Teacher/Trainers and Assessors will traverse the QPs.

The NSDC has established a set of guidelines to assist SSCs to develop QPs and NOS. The recommended process involves research and analysis of sector and occupational needs; development of job roles and functional analysis; mapping to Qualifications Framework/Level Descriptors; development of Performance Criteria for NOS and Qualification Packs. The process is underpinned by a procedure for industry consultation and engagement. A Qualifications Registration Committee (QRC) finalises the NOS by ascertaining correct process, format and nomenclature have been followed. It may look at such factors as whether Level Descriptors (under NSQF) have been assigned appropriately. The QRC does not normally comment on the technical content.

3.4. Assessment, Certification, Training

The vocational education and training system in the areas of assessment, certification and training is complex and commonly uses an affiliation model (of training and assessment providers, to a national or state agency). While the affiliation model allows the system to scale up to meet demand, it can sometimes be at the expense of quality.

The separation of the delivery of training and assessment – particularly in the public sector – is also common. In the new *National Skill Certification and Monetary Reward Scheme* (or 'STAR scheme') "assessment and training bodies for all purposes of the Scheme will be separate and no overlap of roles will be allowed to maintain transparency and objectivity" (NSDC, 2013).

The Rs 1,000 crore STAR Scheme was launched mid-2013, and will attempt to encourage youth skill development by providing monetary rewards for successful completion of approved training programmes. In relation to quality assurance, one of the aims of the scheme is to encourage standardisation in the certification process. The 'approved list' of institutions is open to all institutions government or private (which, during the last two years, has been selected by any State Government or any Ministry of the Government of India to implement any Government funded or Sponsored scheme) or are NSDC partners. Organisations providing training under STAR are eligible to be approved (by the relevant SSC) as an assessment and certification agency. In due course, organisations offering assessment services can apply to work with specific SSCs, for designated NOS and QPs. Currently Levels 1-4 on the NSQF, under the SSCs, is eligible for STAR. The intention is to include Levels 5-10 during 2014. Every SSC has signed onto the STAR scheme. (NSDC, 2013).

The following description of assessment, certification and training (including of vocational teachers) system in India is not meant to be exhaustive, with an emphasis on recent system developments and/or relevance.

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⁸ In conversation with NSDC, October 2013.

Assessment

SSCs now own the process of training and certifying an assessor for the assessment under the STAR scheme. Assessors are either active industry practitioners, or retired from the sector⁹. Assessors are provided with a unique number and are allowed to affiliate with an assessment agency. The SSC conducts the "pre-screening of assessors to ensure relevant industry experience and integrity. The SSC then conducts training on technical skills based on QPs of Job roles to be assessed and assessment skills based on Assessment guidelines separately for knowledge and skills before awarding certificate to assessors". (STAR, NSDC 2013). As the SSCs grow in number and mature operationally, it may be observed practices differ significantly between the SSCs despite centralised guidelines¹⁰.

NSDC has future plans to establish "vigilance teams" to monitor assessment agencies, and the process may include spot inspection¹¹. Currently in-house (NSDC) arrangements for quality assuring assessment agencies are in place.

Under the DGE&T Modular Employable Skills, NABET has an "Accreditation Criteria for Assessing Bodies", although there are gap areas such as the moderation of assessment to ensure consistency and validation of assessment tools.

The AICTE also has a responsibility for assessment in technical education.

Certification

A range of national and state agencies are involved in the certification of vocational education and training and cover all ITIs, ITCs and polytechnics affiliated to national and state level vocational councils.

There are also three national certifying secondary school boards, one of which is the National Institute for Open Schooling which offers around 90 vocational courses/certification, which are based on NOS (only where available currently) for particular sectors.

ITIs, ITCs and polytechnics under private management at times adopt dual certification involving specialised private organisations. There exists standalone certification e.g. certificate is issued for teaching skills as an independent module through Principles of Teaching (NSDC, 'Needs Assessment Report...').

Training

Any "education body/vocational training provider can seek affiliation from an SSC in delivering the requisite elements of a NOS based vocational training"....once the competence (to) deliver training from NSQF Level 1-10, based on NOS developed by an approved SSC, is determined (nsdcindia.org).

⁹ In conversation with NSDC, October 2013

¹⁰ Roundtable with SSCs and others at the India-Australia Skills Forum, December 2013.

¹¹ In conversation with NSDC, October 2013

Training providers are eligible to be affiliated to an SSC for one year, or for delivery of a particular number of QPs¹².

NCVT affiliates government Industry Training Institutes (ITIs) and private Industry Training Centres (ITCs). Before admitting the trainees into craftsmen training, it is necessary for all ITIs/ITCs to become affiliated with NCVT in each trade/unit.

3.5. Training Vocational Teachers/Trainers

The Planning Commission notes (2011) that there is around 9400+ institutes (ITIs, ITCs etc) imparting training under the purview of DGE&T/NCVT of the Ministry of Labour and Employment. It is required that teacher/trainers in the public technical institutes complete a Crafts Instructor Training programme. Duration of the course vary from 6 months to 3 years, and entry to these courses can be made after Class 8, 10 or 12 depending on the trade in question (Planning Commission, 2011). These courses are conducted across various vocational professions such as welder, machinist, and draftsperson among many others.

NITTTR offers PhD and Masters programmes aimed at professionals working in Technical Institutions, Principals, Personnel of Directorates of Technical Education, Boards of Technical Examinations and other Educational Planners. Short term courses and workshops are offered to support the training of new recruits and in-service personnel, in areas such 'emerging rural and appropriate technologies', 'research capability', 'instructional materials development', 'computer education'. NITTTR also consults with the State authorities to identify areas for polytechnic staff development.

The AICTE offers several schemes and scholarships to encourage the professional development of aspiring or existing technical teachers, although these have strong academic and research oriented focus – eg 'Early Faculty Induction Scheme', 'QIP', 'Faculty Development Programmes'. AICTE encourages professional development through NITTTR short courses as well.

The not-for profit society-registered Indian Society for Training and Development (ISTD) offers a Diploma in Training & Development recognised by MinHRD for the purposes of recruitment to superior posts for Central Government and Public Sector Units. There is a special emphasis on Training of Trainers, Training Goals & Objectives and Training Tools & Technologies, through various short-term training courses.

Teachers within private sector institutions might normally only be required to have relevant professional experience (on-the-job), and an industry specific qualification, although may opt for qualifications such as those offered by ISTD or NITTTR.

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 $^{^{12}}$ Details about affiliated training providers and assessment agencies are available on individual SSC websites. The STAR website is a central repository for the same.

3.6. RATIONALE FOR QPs and NOS FOR TVET TEACHERS/TRAINERS AND ASSESSORS

Teachers/trainers

At the heart of delivery quality in a rapidly expanding vocational education and training system is ensuring the quality of teachers and teacher education. Concentrating on quality teaching maximises the community's investment in vocational education (Moodie, 2010).

The scope and nature of vocational education and training is expanding as work changes, society becomes more complex, and VET is called upon to deliver government goals (Wheelahan, 2010). In this increasing demanding and complex scene, VET is required to address the skill needs of emerging industries, ensure that the workforce has high skill levels in technology, to embed numeracy and literacy employability skills, among other aspects. (Wheelahan, 2010).

Good preparation of vocational teachers supports high quality teaching and that it is necessary to attract, recruit, support and retain teachers (Moodie, 2010). There are other well-recognised challenges such low status of vocational education and subsequently those involved in this teaching profession.

Having national minimum standards, consistent criteria, clear pathways for professional development (under NSQF) delivered through a trusted quality assurance regime should be aimed at attracting and retaining a professional vocational teacher/trainer workforce, which would also assist in increasing the status of vocational teacher-trainer workforce.

A teacher/trainer should be able to plan, organise, and deliver competency based training in an inclusive learning environment, as well as understand the skill development/TVET system context in which the training is delivered. The Proposed NOS for teacher/trainers attempts to capture these key requirements.

Assessors

A nationally integrated system for the training, registration and certification of assessors will help ensure that whoever assesses learner competence across all fields and economic sectors and at all NSQF levels, meets a consistent set of criteria. NOS and qualifications need to be assessed consistently, even though assessors may be registered with different SSCs and the context of assessment will vary greatly according to the level and field of the qualification. (SAQA, 2001).

"Assessors should have proficiency in the subject matter of the discipline or learning area in which the standards and qualifications they are responsible" (SAQA, 2001). Whether the assessor should hold exactly the same qualification as the one being assessed, or one in a comparable discipline/domain would need to be determined. As well, whether an Assessor would require a qualification at least one level above the one they are assessing, or the same level, would be a further determination. At a minimum, an Assessor should be able to design, organise and conduct competency based assessment and grasp the TVET system context in which the assessment takes place. The Proposed NOS for assessors attempts to capture these key requirements.

QPs and NOS FOR TVET TEACHERS/TRAINERS AND ASSESSORS

The following summarises a proposal for two Qualifications Packs (QPs), one for TVET Teacher/Trainers and one for Assessors. The initial proposal for the two QPs are aimed at 'frontline' teachers/trainers and assessors and therefore capture the essential 'building blocks' of competency based training and assessment.

In further developing the appropriate QPs and NOS for the various job roles of assessors and trainers in India, additional 'higher order' units or competencies may be considered for inclusion. Typically these competencies require a "greater understanding of teaching practices, strategic approaches to TVET, as well as, greater knowledge of systems and processes for developing effective learning materials to improve professional practice in TVET" Examples of higher order units may, amongst others, include:

- For Teachers/trainers:
 - Design and develop competency based learning programmes;
 - Conduct training needs analysis;
- For Assessors:
 - Design and Develop Assessment Tools;
 - Moderate or Validate Assessment

Qualifications Pack - Teachers/Trainers

UNIT CODE	UNIT TITLE	NSQF LEVEL (TBC) ¹⁴
TBC	Work effectively within Indian TVET sector	5
TBC	Plan and organise competency-based training sessions	5
TBC	Promote inclusive learning in a competency-based training environment	5
TBC	Deliver competency-based training	5

Qualifications Pack - Assessors

UNIT CODE	UNIT TITLE	NSQF
		LEVEL (TBC)
TBC	Work effectively within Indian TVET sector	5

Acknowledgement – Australia's Department of Industry concept/discussion paper (2013) – 'Joint Australia-India Vocational Education Trainer Training Qualification'

¹⁴ Note that further analysis may also be required to assign the appropriate NSQF level to each Unit and apply the NSDC protocol to create and assign Unit Codes.

TBC	Design , plan and organise competency -based assessment	5
TBC	Conduct competency based assessment	5

3.7. ISSUES

National Strategy

With the ambitious vision to rapidly expand the supply and quality of vocational education and training in India, comes the need for a bold, coherent, and unified national strategy. The leadership of the newly created National Skills Development Agency (NSDA) will be critical in pulling a large complex system towards the vision set out in the 2009 Skills Policy. The EU-India Skills Development Project points out that India is lacking fundamental requirements of a quality assurance framework in its skills system - that is, national objectives, principles, standards and indicators. To support this, India will need to consider developing a QA national strategic framework. Additional regulatory, institutional and policy interventions will be necessary to build rigour, trust and transparency in the skills system.

Regulation

As the skills reform agenda unfolds, and in order to assure the quality and build trust into the system a national quality assurance regulatory regime needs development. There needs to be clear lines of accountability. The statutory status and regulatory teeth of the apex body (in this case the NSDA), would be central to such a review. The EU-India Skills Development Project notes that "international experience indicates that in complex systems some form of regulation may be the best tool for providing assurances that the system is operating to a minimum national standard..." and that a "set of regulatory requirements or criteria, particularly with regard to qualifications is a common feature where qualifications frameworks exist".

National Accreditation Body

An NSDC report, 'Human Resource and Skill Requirements in the Education and Skills Development' has identified that the "demand for trainers will also lead to demand for certifying agencies and assessors. Assessors would have to be certified by organisations which have mature quality processes in place for assessment of individuals".

Another NSDC report 'Building Trainers' Skills in Vocational Employability' notes that "while government institutes believe and religiously follow the government certification process as mandated by NCVT and DGET, other institutes depend heavily on private certification agencies mostly with international collaboration or knowhow." In an effort to "overcome the absence of a universally acceptable certification process in the country", franchisees and others in the private sector are using in-house systems for certification and accreditation and "regular standalone certification for teaching skills are not found". Often specialist organisations, through an affiliation model, provide certification services.

There are already a number of actors in the TVET accreditation and certification system (such as AICTE, NCVT and NSDC/SSCs). There is a need to establish a national body "that has responsibility for quality assurance and accreditation of assessment and certifying bodies, developing

assessor and certification standards, training requirement for assessors and verifiers, advising bodies on best practice for quality assurance and monitoring and reporting on outcomes and providing advice to government" (India-EU Skills Development Project, 2011). If a national qualification body is established, NSDCs role in relation to assessment and certification may need further considerationand these processes should be the responsibility of a body with expertise in QA and Accreditation (India-EU Skills Development Project, 2011).

Affiliation model

The affiliation model in higher education is not a new concept as it was adopted from the British system (The World Bank, 2011), and in India the model also operates in TVET. Although the WB report analysed the higher education scene in South Asia, the observations may also apply to Indian TVET – particularly in the absence of robust nationally unified QA framework, and a regulatory regime with major system gaps and complex governance arrangements. In this vacuum, the system is at risk of "expand(ing) rapidly without planning, proper regulations and supervisory capacity in place......the meet(ing) the basic requirements of adequate infrastructure and minimum teacher qualifications... a combination of these factors (and others) result(s) in a downward quality spiral (The World Bank, 2011).

National Body for Vocational Teaching and Learning

Currently, India does not have national body which is responsible for developing competence in vocational education and training - although this need has been identified in various reports and fora. However, there is a proposal (2013) for a feasibility study on the setting up a Centre of Excellence in Vocational Teacher Training in India under the auspices of the Australian India Education Council (with the NSDC).

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5. Appendix

5.1. List of Sector Skills Councils approved or under consideration by NSDC

Approved by NSDC	Approved by NSDC	SSC Proposals under Diligence with NSDC
Auto	Plumbing	Handicrafts
Security	Construction and Real Estate	Construction Equipment
Retail	Logistics & Transportation	Domestic Workers
IT/ITES	Capital Goods	Hospitality
BFSI	Electronics Hardware	SSC Proposals in Pipeline
Leather	Life Sciences	Paints (Coatings)
Media	Food Processing	Sports
Healthcare	Steel	Furniture and Furnishings
Gems & Jewelry	Mining	
Rubber	Power	Management and skills
Telecom	Aerospace & Aviation	Manufacturing
Agriculture	Textile and Handlooms	Oil & Gas
Beauty and Wellness	Apparels	Chemicals and Petrochemicals

Source: NSDC Presentation (B.Banerjee) to the India- Australia Skills Forum, November 2013