

# TVET College Lecturer Education Annex Report

Country Study Cameroun
Country Study South Africa
Country Study Ghana
Country Study Tanzania
Country Study Egypt







EUROPEAN COMMISSION  Directorate-General for Education and Culture
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# TVET Teacher education in Africa Annex Report

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## 1. NATIONAL BACKGROUND OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) - CAMEROUN

#### 1.1. Key messages of this chapter

- **Key Message 1**: In Cameroon, TVET is shared and located under the responsibility of the Ministry of Education and some other sectoral ministries. Currently, a coordination structure at national level does not exist.
- **Key Message 2:** Formerly marginalized and disqualified, TVET has gained more and more attention from the authorities and the private sector. Increasingly TVET is considered as an important way to develop skills in the workforce to further national development. Currently, some improvements can be observed, such as increase of the number of training schools and increased budgets<sup>1</sup>.
- Key Message 3: for TVET in the private sector, tuition fees are set by the
  owners, except where the institution entered into a contract with the state,
  while in the public sector fees are harmonized. The examination fees are
  however uniform regardless whether the candidates are from the private or the
  public sectors.
- **Key Message 4:** the Access to TVET teacher training schools is provided based on an open nationwide competition, according to the levels and cycles, open to holders of the 1<sup>st</sup> and 2<sup>nd</sup> degree of the secondary and higher education.
- **Key Message 5:** The quality of TVET is ensured by the specialized departments and pedagogical inspections of the ministries involved. The adoption of the competency-based learning and the Licence-Doctorate-Master system requires an increasing collaboration between TVET and the professional environment in the development of curricula.

## 1.2. National TVET system: key characteristics and relationship with other Sectors

Technical and vocational education and training (TVET) in Cameroon is provided by the ministries in charge of Education, MINEDUC (Ministry of Secondary Education (MINESEC); Ministry of Employment and Vocational Training (MINEFOP) and Ministry of Higher Education (MINESUP)). Sectoral ministries are also involved, primarily from the perspective to satisfy their needs for adequate human resources, and include Ministry of Agriculture and Rural Development (MINADER); the Ministry of Public Works (MINTP); the Ministry of Posts and Telecommunications (MINPOSTEL); the Ministry of Civil Service and Administrative Reform (MINFOPRA); the Ministry of Livestock, Fisheries and Animal Industries (MINEPIA); the Ministry of Social Affairs (MINAS); the Ministry of Finance (MINFI); the Ministry of Forestry and Wildlife (MINFOF); the Ministry of Sport s and Physical Education (MINSEP) / Department of Youth and Civic Education (MINJEUN); the Ministry of Defence (MINDEF); the General Directorate of National Security (DGSN); Ministry of Territorial Administration and Decentralization (MINATD) and the Ministry of Justice (MINJUSTICE).

#### 1.2.1. Features and Relationship between TVET and other sub-sectors of education

Within the national education system in Cameroon, broadly two educational tracks can be observed on top of primary education. The first is concerns vocational education in the field of various industrial technologies, and the other at tertiary education level

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<sup>&</sup>lt;sup>1</sup> MINESUP, "Exposé Sur Les Enjeux et Défis Du Secteur de L'éducation Dans Le Document de Stratégie Pour La Croissance et L'emploi" (Conseil du Cabinet du 26 janvier 2012, Yaoundé, January 26, 2012).



encompasses science and technology (STT). Below the most common programs are summarized.

- Colleges of Technical Education Industrial and Commercial (CETIC) for four (4) years, leading to a Certificate of Professional Competence (CAP) for students from the elementary primary education;
- Post-primary [Artisan Rural Sections (SAR) / Sections Housewives (SM)], for a
  period of two years, sanctioned by a certificate of end of Vocational Training that
  gives access to the 2nd year of High Schools and Technical CETIC (LT). Postprimary education is available to students who leave primary school: usually
  older people, allowing them to continue their education, or young people that
  are less gifted in matters addressed in this type of education;
- The Rapid Vocational Training Centres (CFPR), public and private, for six (6) to fifteen (15) months. Upon completion, students receive a Professional Qualification Diploma (DQP) when training is accredited. In non-accredited training centres students obtain a Professional Qualification Certificate (CQP) instead. Generally, PRTC recruit all Graduates of Primary Education Certificate (CEP) to Doctorate of general type that does not give access to a specific expertise;
- Technical High Schools (LT) for three (3) years for CAP holders and the holders of the First Round of Patent Studies (BEPC) of the first cycle of general secondary education, sanctioned by Technical Probationary, The technical bachelor or the technician certificate;
- The University's Institutes of Technology (IUT) for two (2) or three (3) years for graduates of LT (technical certificate and technical Bac) and those of the second cycle of general secondary education (Bachelor of Science general), respectively sanctioned by a DUT or a BTS and a Professional Degree;
- High level schools (Polytechnics, Industrial Engineering Faculty, etc.) wit a
  duration of three (3) years for the training of engineers and two (2) additional
  years for the training of design engineers. The undergraduate students are
  recruited by competition among holders of Higher National Diploma (BTS) and
  holders of the Baccalaureate. The second cycle recruits its students among
  undergraduates and graduates of University Institutes of Technology.

The teacher training is split between two institutions, each of which has a different focus. They are open to graduates of each of the above post-primary qualifications.

- The Normal schools of Teachers of Technical Education (ENIET), private and public, which form the Teachers of Technical Education (EIT) for:
  - SAR / SM;
  - CETIC and LT
  - The High Schools of General Education (LEG) in terms of the teaching of Family and Social Economy (SFE);
- The Normal schools of the Higher Technical Education (ENSET), whose primary mission is the training of:
  - Teachers of Technical Education Colleges (CFEP);
  - High Schools Professors of Technical Education (PLET);
  - Guidance counsellors (CO);
  - Teachers of Normal Schools
  - Teachers of Technical Education (PENIET);
  - Higher business managers

The sectoral ministries involved in TVET have structures that ensure the supervision in terms of curriculum development, training and operations. This means that each of the relevant ministries addresses its needs in terms of training. The table below offers an overview of such educational institutions linked to the sectoral ministries.



Sectoral Ministry	Linked education institutions
MINEPIA	Centres Nationaux de Formation en Zootechnique et Vétérinaire (CNFZV)
MINADER	Écoles Techniques d'Agriculture / Collèges Régionaux d'Agriculture (ETA/CRA) / Écoles pour la Formation des Spécialistes en Développement communautaire (E.F.S.D.C) / Écoles pour la Formation des Spécialistes en Coopération (E.F.S.C) École pour la Formation des Spécialistes en Équipement et en aménagement Ruraux (E.F.S.E.A.R)
MINFOF	Écoles de Faunes et des Eaux et Forêts
MINATD	Centre de Formation en Administration Municipale (CEFAM)
DGSN	École National de Police (ENP)
MINATD	Centre de Formation en Administration Municipale (CEFAM)
MINJUSTICE	École Nationale d'Administration Pénitentiaire
MINSEP/MINJEUN	l'Institut National de Jeunesse et Sport (INJS) / Centres Nationaux d'Animation de la Jeunesse et de Sport (CNAJES).

#### 1.2.2. Legal and financial framework of TVET

Several texts govern the legal and financial framework of the TVET. At the national level education is governed by the following laws:

- Act No. 98/004 of 14 April 1998 on the orientation of education in Cameroon;
- Law No. 004/022 of 22 July 2004 laying down rules on the organization and operation of private education in Cameroon;
- Law No. 2001/005 of 16 April 2001 on the orientation of Higher Education;
- Decree No. 001/041 of 2 February 19, 2001 on the organization and functioning of public institutions of secondary education;
- Order No. 365 / B1 / 146 4 / MINEDUC / 062 / CF / MINEFI of 19 September 2001 applying certain provisions of Decree No. 2 of 19 February 001/041 on the organization and functioning of public institutions of Secondary education;
- Circular No 21 / D / 135 / MINEDUC / CAB s wearing modality of implementation of the public school budget.

Financing of TVET is distributed among public authorities, student's families and various relevant stakeholders. In the private sector, tuition fees can be set by the education institutions themselves. If an institution is under public contract, and as such subsidized, the costs are fixed by the State after consultation with the Organization of Private Education. In the public, these fees are harmonized across all public institutions both in terms of contributions and for the various examination levels.



Table 1: Tuition fees in the public sector based on levels of education

Level of education		Contribution
Post-primary (SAR / SM)		4500 CFA / US\$8
		Activités Génératrices de Revenu (AGR)
	1 <sup>er</sup> cycle	10,000 F CFA / US\$17
Secondary Technical	2 <sup>nd</sup> cycle	15,000 F CFA / US\$26
	AGR	
	Niveau1 :CAP1	75,000 F CFA / US\$128
	Niveau2 : Probatoire 1	75,000 F CFA / US\$128
	Niveau3 : Bac	75,000 F CFA / US\$128
	CAP 2	75,000 F CFA / US\$128
Normal secondary education : ENIET public	Probatoire 2	75,000 F CFA / US\$128
	CAP 3	75,000 F CFA / US\$128
	Auditeurs libres Camerounais <sup>2</sup>	225 000 F CFA / US\$383
	Auditeurs libres Etrangers	375 000 F CFA / US\$638
	AGR	
	Niveau1 1 <sup>ère</sup> année	50 000 F CFA / US\$85
Normal Higher Education :	Niveau3 3 <sup>ème</sup> année	50 000 F CFA / US\$85
ENSET	Niveau4 4 <sup>ème</sup> année	50 000 F CFA / US\$85
	AGR	

Sources: MINESEC / MINFI / MINESUP

<sup>2</sup> Entry without concours

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Table 2: Examination fees according to the structures responsible for National Education  $\ \ \,$ 

			Practice fees	
Responsible structure	Exams / Competition	Registration fees	Participation regarding work	Total
	1st year CET	2500 (US\$4)	2500 (UG+6)	2500 (US\$4)
	Commercial CAP CAP Industrial	3500 (US\$6) 3500 (US\$6)	3500 (US\$6) 6500 (US\$11)	7000 (US\$12) 10,000 (US\$
<b>MINESEC</b> - Examinations Directorate, Competitions and Certification	Entrance	3500 (US\$6)	0300 (03411)	3500 (US\$6)
	Entrance examination in 1st year BEP	3500 (US\$6)		3500 (US\$6)
	CAPIET	11,000 (US\$19)	9000 (US\$15)	20,000 (US\$34)
	Probationary E	9500 (US\$16)	7000 (US\$12)	16,500 (US\$28)
	Bac E	10,500 (US\$18)	8000 (US\$14)	18,500 (US\$31)
	Probationary G	9500 (US\$16)	3500 (US\$6)	13,000 (US\$22)
	Probationary AF-F and CI	9500 (US\$16)	7000 (US\$12)	16,500 (US\$28)
	Probationary BT	9500 (US\$16)	7000 (US\$12)	16,500 (US\$28)
MINESEC - Baccalaureate	BEP Commercial	9500 (US\$16)	3500 (US\$6)	13,000 (US\$22)
Office of Cameroon (CBOs)	Industrial BEP	9500 (US\$16)	7000 (US\$12)	16,500 (US\$28)
	Bac G	10,500 (US\$18)	4000 (US\$7)	14,500 (US\$25)
	Bac AF-F and CI	10,500 (US\$18)	8000 (US\$14)	18,500 (US\$31)
	Technician Patents	10,500 (US\$18)	8000 (US\$14)	18,500 (US\$31)
	BP Commercial	21,000 (US\$36)	4000 (US\$7)	25,000 (US\$43)
	BP Industrial	21,000 (US\$36)	15,000 (US\$26)	36,000 (US\$61)
	Tertiary sector	20,000 (US\$34)		20,000 (US\$34)
MINEFOP - Sub-directorate of	Industrial sector	25,000 (US\$43)		25,000 (US\$43)
examination	Entry examination in CPFRP	10,000 (US\$17)		10,000 (US\$17)
High on Education (ENGET)	I DIPET	50,000 (US\$86)		50,000 (US\$86)
Higher Education (ENSET)	DIPET II	50,000 (US\$86)		50,000 (US\$86)



Responsible structure	Exams / Competition	Registration fees	Practice fees / Participation regarding work	Total
	I DIPENIET	50,000 (US\$86)		50,000 (US\$86)
	DIPENIET II	50,000 (US\$86)		50,000 (US\$86)
	BTS	50,000 (US\$86)		50,000 (US\$86)
	HND	50,000 (US\$86)		50,000 (US\$86)

Source: MINESEC / MINESUP / MINEFOP

#### 1.2.3. Innovations in progress in the last 5 years

Most importantly, over the past 5 years, TVET in Cameroon adopted a competency-based learning approach in the development and revision of training programs and educational approaches.

Overall, the following innovations have been introduced by MINESEC:

- Continuation of the Project of Support to the Reform of Technical Education and Vocational Training (PARETFOP), launched in 2003 with funding from the African Development Bank to restructure the existing institutions, develop new promising sectors, revise curricula and implement alternate training, reorganize the legal texts on official examinations and finally to develop partnerships with the socio-professional environments. As an example:
  - PLAY Project (Projet Lycée Agricole de Yabassi), which has served as the basis for 12 education curricula.
  - Teacher education project in secondary education, which currently develops various curricula in the competency-based approach.
  - Developing the teaching curricula for all ENIET schools.
- Reform technical education. The 'competency-based learning approach'
  encouraged the take-up of vocational education and has been instrumental in
  the modification of certain qualifications (e.g. for commercial technique Tertiary
  Sciences and Technology (STT)). In the industrial section, there is an ongoing
  reorganization of students' curricula in undergraduate technical education. The
  first year is not a shared curriculum for everyone, only the related specialties
  are given in shared curricula.
- Restructure ENIET. Several actions have thus been undertaken: pedagogic reform (introduction of the competency-based learning); organizational reform (modernization of management) and legal framework (revision of the regulatory texts); promoting continuing education (via pedagogical seminars); partnership development of ENIET- professional environment (companies) and MINESEC-UNESCO regarding the development of inspectors and trainers of ENIET trainers.
- **Continue to equip TVET institutions with teachers** recruited or trained on the job on instructions from the government;
- **Build the skills of teachers,** inspectors, and directors by "immersion" in companies and numerous conferences, seminars and training in examination methods, teaching, management of human and financial resources, etc.
- Develop and equip numerous schools and classrooms.



#### In MINESUP, it was undertaken to:

- organize educational seminars for teachers at least twice per year per institution;
- Introduce the Licence-Doctorate-Master system, as agreed in the framework of CEMAC in the higher education sector from the academic year 2007/2008;
- operate the consolidation of the programs at all levels of education and vocational training;
- sign the Charter University / Enterprises;
- publish a Guide of Trades and Skills in ten (10) key economic development sectors in the CEMAC zone;
- implement new statutes for associate teachers and those entitled to provide technological and vocational education;
- evaluate the possibility to validate the achievements and experiences (VAE) in universities;
- establish a vice-president position in charge of cooperation and relations with the world of enterprises;
- evaluate teachers based on their published articles to facilitate their promotion;
- develop the technological and vocational component of higher education;
- modernize and professionalize the classical faculty institutions;
- develop governance and institutional support in the higher education subsector;
- involve socio-professional players in the development of academic programs;
- professionalize the training of engineers and technicians;
- offer courses in entrepreneurship, management, economics and business management, as well as immersion courses, and this from the first cycle;
- provide a minimum share (30-40%) of teaching by socio-professional players;
- set up in universities and colleges clubs of business creation, based on projects, in order to learn tools and Methodologies;
- identify the potential of students to start up their own companies, during their initial training;
- create within each university units for monitoring and support new start-ups in their projects;
- involve higher technological education institutions in applied research, by making use of incubators;
- create a platform for exchange between universities hosting an incubator and business;
- apply the lessons in professionalizing incubation projects (TP, case studies).

#### In MINEFOP, areas of intervention were:

- the organization of the General States of Employment in November 2005;
- restructuring SAR / SM and PRTC;
- the development, by 2005, of the main policy instruments for the promotion of employment and vocational training;
- the publication in 2008 of a guidance document "Vocational Training Strategy";
- signing 6,223 labour contracts for the benefit of foreign labour force;
- granting 62 vocational training grants for a period of three years each, in Algeria, in 2013;
- granting 1,200 national scholarships for vocational training including 105 municipalities for an amount of 300 million CFA francs;
- the award of 34 grants to private vocational training centres and vocational training actors in the amount of 100 million CFA francs;
- developing the African Trades and Jobs Operational Directory (ROAME);
- the provision of statistics on the jobs created by the Public Investment Budget;
- mobilizing professional actors through the organization of "business-fairs" and employment exchanges;
- the adoption of quotas in recruitment and skills transfer;



- the production of statistics on the monitoring of recruitment of labour in the major projects;
- the publication of two biannual notes of conditions and specifications of the four ONEFOP;
- creating the legal framework for the Validation of Acquired Experience (VAE);
- the signing of a memorandum of understanding for the construction of the National Institute of Training of Trainers and Programme Development between the State of Cameroon, represented by the MINEFOP and South Korea, represented by the KOICA (site identified, Monitoring Team established);
- setting up pilot institutions for the provision of orientation on School, College and Professional;
- the signing of a service agreement for the construction of technological training centres between MINEFOP and CEGEP college "Sept îles du Canada";
- the establishment of the Program of Improvement of Vocational Education for Employment (PAMOFPE), to improve access and quality of vocational training. Several actions have been undertaken in this direction:
  - rehabilitation and strengthening of training infrastructure, SAR / SM became Trades Training Centres (CFM), and the upgrade of public CFP;
  - creation of new training and orientation structures; especially Three PSC of Excellence (Douala, Limbe and Sangmélima) with the Republic of Korea (24 billion FCFA); two sectoral PSC amounting to 9.8 billion with C2D funds; guidance centres;
  - Lifelong learning offers for companies and individuals;
  - residential training in public centres;
  - organization and development of apprenticeships in companies;
  - Setting up education programmes based on their demand, as embodied by the construction and equipping of the National Centre for Trainers and Programme Development (CNFDP) KOICA Korea funds for 3.2 billion F CFA;
  - the development and implementation of training standards according to competency-based learning for at least four professions every year;
  - the completion of the skills upgrading for trainers, managers and other support personnel. The upgrade in question focuses on strengthening the capacity of trainers to the use of engineering tools for vocational training and reference systems established by the competency-based learning approach and accompanied by public and private partners in the field of engineering and training of trainers.

In the near future, the MINEFOP plans to:

- establish five Vocational Training Centres in the mining business, railway, water management, industrial maintenance and sustainability (Sept-Iles College of Canada);
- sign two memoranda of understanding to finance the construction of a vocational training centre for textile and tanning trades (OFPPT Morocco).

#### 1.3. TVET system: organization and stakeholders

TVET falls in general under the responsibility of the ministries in charge of national education (MINESEC, MINESUP and MINEFOP). On the other hand, the TVET offered by the technical ministries that is to say MINADER, MINTP, MINPOSTEL, MINFOPRA, MINEPIA, MINAS, MINFI, MINFOF, MINSEP / MINJEUN, MINDEF, DGNS, MINATD and MINJUSTICE is under their responsibility. In fact, there are currently several domains in term of national education: MINESEC supervises the CETIC (public and private) and technical high schools and ENIET, public and private. MINEFOP, the SAR / SM and public and private PRTC and the Ministry of Higher Education, that of ENSET, Faculties and Grandes Ecoles (IUT, Polytechnic, Faculty of Industrial Engineering, School of Geology and Mines ...).



Each of the sectoral ministries takes care of its interests and human resource needs. This means that the TVET offered by each Ministry is designed to benefit its future employment needs. There is therefore no single coordinating structure of TVET in Cameroon. Interdependence between TVET teacher training structures are based on the personal approach of each school head. However, the link to the teacher training in higher education and the competency approach in TVET increasingly opens partnerships between TVET and enterprises. For its part, the National Observatory of Employment and Vocational Training (ONEFOP) of MINEFOP is a promising structure which should guide the opening of training courses on the basis of a perspective based on the economic profitability of the vocational training received.

#### 1.4. Quality of TVET programs

Depending on whether it refers to national education or to the technical ministries, the quality of programs / curricula is assured by the ministries concerned. There is however a similar factor in the shared existence of the Inspection General of Teachings (IGE) or of Training (IGF) in which there are pedagogic inspections by specialty.

Depending on the type of training organized and independently, IGE / IGP's mission is to:

- define programs;
- coordinate, supervise, monitor and evaluate the activities related to the pedagogical inspections;
- monitor the activities of the structures charged of examinations and "concours";
- monitor and evaluate the system;
- permanently adapt the pedagogy to the evolution of science;
- implement the government policy on textbooks and other teaching tools; -
- organize relationships with institutions and partner organizations in research and training program;
- define the continuous education's programs and remote teaching (distance learning) of teachers.

According to the area of competence/specialty, within the IGE / IGF there are coordinator inspectors, national inspectors, regional inspectors, educational advisers, Pedagogic attachés. In MINESUP, quality assured through the general Inspection of Academic Affairs. This Inspection consists of a Directorate on University Accreditations and Quality, Standard and Quality assurance. In this light, the Ministry of Higher Education plans to create in each university a quality assurance structure.

#### 1.5. TVET system and International Developments

Two major tools are used to interpret the provision of the training of trainers in TVET and the practice of TVET in Cameroon with regards to international practices: the adoption of the Licence-Master-Doctorate system (LMD) in higher education and the introduction of a competency-based approach to learning at secondary level and in vocational training.

The Licence-Master-Doctorate system was adopted in 2005 in response to the decisions of the Heads of State of the Economic and Monetary Community of Central Africa (CEMAC) to build a sub-regional area of Higher Education, Research and Training, in the same spirit as the Bologna system in Europe. One of the main challenges was to consolidate the internationalization and globalization of educational credits; the promotion of the mobility of students, teachers, researchers and administrative personnel. By school year 2007/2008, the Licence-Doctorate-Master system was adopted and implemented in ENSET.



Since 1996, Cameroon has signed an agreement with France to lead the four year Support Programme to Cameroonian Educational System (PASECA). Initially, the New Pedagogical Approach (NAP) is recommended with the aim of getting teachers to begin their lessons by providing students with a working situation in which the student is required to make the necessary assumptions and find their own solutions. In 2003, a competency-based approach to learning was launched for VET. The associated aim is to provide learners with the necessary means to their adaptation to life in their community and the sustainability of a continuous development project. For teachers this implies to focus in their teachings on the concrete necessities in future employment.



#### 2. The profession of TVET teachers / lecturers

#### 2.1. Key messages of this chapter

- **Key Message 1:** After the economic crisis of the 1990s, the drastic decline in wages that followed has lowered the image of the teacher. Even today, many Cameroonians embrace this profession out of necessity of employment and not by vocation.
- Key Message 2: TVET teachers are mostly from the ENIET, supervised by MINESEC, and ENSET, supervised by the Ministry of Higher Education. Access to these training facilities is competitive. After the training, graduates of ENSET are automatically allowed to enter the public service.
- Key Message 3: After the initial training, TVET teachers are entitled to continuous education (seminars and workshops) which may be held both nationally and abroad.
- **Key Message 4:** Because of the quantitative deficiency of staff, the public and the private make use of professionals and graduates from TVET. These generally have the status of temporary contractors to whom the Association of Students Parents and Teachers (APEE) and regional and local authorities pay monthly pay.

#### 2.2. Types of TVET teachers

The types and categories of TVET teachers are formalized only in the public sector. Those in the private sector are governed by the Labour Code (Act No. 92-007 of 14 August 1992 on the Labour Code in Cameroon). Whether industrial TVET or STT, two major categories exist:

- At the level of secondary and post-primary, especially in LT, CETIC and SAR / SM, under the provisions of Decree 2000/059 of 5 December 2000 on the specific status of the bodies of national education, there are:
  - Teachers of Technical and Vocational Education. These can be divided into two levels: the Technical and Vocational Education Teachers, Class A and the Teachers of Technical and Vocational Education, category B. The first consists of the rank of Professors of High Schools of Technical and Vocational Education, Class A, 2nd grade (PLET) and teachers of Colleges of Technical and Vocational Education, Class A, 1st degree (CFEP). The second level consists of the grade of Principal Teacher of Technical and Vocational Education, Class B, 2nd degree (IPET) and Teacher of Technical and Vocational Education, Class B, 1st degree (IET);
  - The teachers of colleges ("écoles normales") that includes two grades: the rank of Professor of "écoles normales" of teachers, class a, 2nd degree (PENI) and the rank of Professor -Adjoint of Écoles normales of teachers, class a, 1st degree (PENIA).
- At the level of higher education, particularly in ENSET, the Polytechnic schools and IUT, pursuant to the provisions of Decree No. 93/035 of 19 January 1993 on the special status of higher education personnel, there is a unique framework including: Professors (Pr.) and Pr. Associés, Maîtres de Conference (MC) and Associated MC, Course Teachers (CC) and CC Associates, the Contractual Teachers (not integrated into the public service while fulfilling all requirements) and associated teachers (staff who contribute to the educational services of academic institutions). Basically, one is recruited as Assistant (decrees No. 045 / MINESUP / DFO of 27 November 1995 and No 01/0090 /

MINESUP / DDES of October 29, 2001 set the operating criteria of the Institution University Advisory Council (CCIU) and of CCRA).

The number of teachers is not easy to ascertain, because of their mobility. Moreover, all those who teach in TVET are not all trained or out of a vocational school. Nevertheless, at the level of secondary education, here are some statistics.

Table 3: Evolution of ENIET students in the private and the public between 2011 and 2014

Years of study	2010-2011			2011-2012			2012-2013			2013-2014		
Public	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total
Public	Data n	ot avai	lable	1162	1244	2406	1359	1425	2784	2032	2043	4075
Private	Data n	ot avai	lable	322	108	430	278	70	348	945	321	1266
Total	744	866	1610	1484	1352	2836	1637	1495	3132	2977	2364	5341

Source: MINESEC

Table 4: National Distribution of teachers in public ENIET by degrees, by gender 2012-2013

Dip	loma	PEC / PCET	PENI	PENI A	PEPS / FIFO- A	PLEG / PLET	IPEG / IPET	IEG / EIT	MEPS / MAEPS	TOTAL
SE	F	27	21	3	1	35	17	14	1	119
Χ	М	58	22	4	3	117	21	29	3	257

Source: MINESEC

Table 5: National Personnel distribution in public ENIET by status and gender 2012-2013

Officials		Contr	actual	Contr	Total		
Sex		Se	ex	Se	Sex		
F	119	F	5	F	5	F	129
М	257	М	7	М	17	М	281

Source: MINESEC

Table 6: National Distribution of qualified staff in private ENIET by type rating from 2012 to 2013

	racing nom 2012 to 2015									
Diploma	DIPES I DIPENIA, I DIPET	CAPI / CAPIEG / CAPIEMP	Capia, CAPIAEG / CAPIEMP	Capia / CAPIAEG / CAPIAET	QUALIFIED TOTAL					
SeF	14	6	3	2	25					
x M	22	14	5	3	44					

Source: MINESEC

Table 7: National Distribution of unqualified personnel in private ENIET by 2012-2013 academic degree

	academic degree										
Di	ploma		Master and higher	Licence	BTS, DUT	BAC	Lower BAC	Total unqualified			
Car	Cov	F	5	21	0	0	0	26			
Sex	Μ	7	35	2	3	3	50				

Source: MINESEC



Table 8: Evolution of national TVET students from 2009 to 2013

Years	National number of students
2009-2010	274 938
2010-2011	321 860
2011-2012	359 513
2012-2013	383 539

Source: MINESEC

Table 9: Evolution of public TVET school teachers from 2009 to 2013

Year	Sex	total
2009-2010	F	4571
2009-2010	М	3481
2010 2011	F	6939
2010-2011	М	3739
2011-2012	F	9728
2011-2012	М	5679
2012-2013	F	10876
2012-2013	М	6794

Source: MINESEC

#### 2.3. Status of TVET lecturing profession

The teacher's image has been greatly tarnished by the economic crisis and the collapse of the national economy of the mid-90s. This led to the freezing of salaries of public servants and a considerable loss of purchasing power of the employees. Indeed, in 1993, teachers as well as many other officials under the State suffered a decline in wages of about 70%. Thereafter, the devaluation of the CFA franc led to an actual pay cut of 85%. Thus in the social ladder the teachers were and still are undervalued compared to the graduates of the National Police School (ENP), the National School of Administration and Magistracy (ENAM) where one trains civil administrators, custom officers, tax inspectors and of the École Militaire Interforce (EMIA). In comparison, the starting salary of the civil servant teacher is about 65,000 CFA francs less than that of a policeman, and 25,000 CFA francs less than that of a prison officer of the same index. Higher up the salary scale, the teachers' salary is 229,650 CFA francs while at the same index, that of a military or policeman varies between 355,323 and 360,990 CFA francs CFA. The awareness of this injustice is lively and, accused of laxity, the teacher, devalued and devalued, replies that "the wages also affect the conditions of life and work<sup>3</sup>.

Moreover, there are considerable differences in status. Admission to the Police school, ENAM or EMIA grants the title of 'official' to all trainees, while its graduates enrol automatically in the civil service. In the education sector this is quite different, first of all because students need to pay for their own education. Upon graduation, graduates of ENSET and ENS are also automatically enrolled and commissioned by the State. However, for this they depend on an official declaration which can take up to a year. Graduates of ENIET and ENIEG are left by themselves and must hope to be recruited, for instance as a teacher paid by the parents, sometimes part-time teachers, or contracted teachers.

The loss of social esteem that follows, makes the teacher subject to constant stress, exacerbated by a bleak working environment (bloated workforce; precarious, obsolete or inadequate system running behind technological changes; poor funding of the

<sup>3</sup>Kom Dorothée, "Revalorisation de L'enseignant" (Yaoundé: ActionAid/CEF Cameroun, 2007), 7.



sector, etc.). In fact, there is a lack of motivation and demobilization (burnout) that reinforces the practice of parallel activities: private and paid courses; trade; vacation; etc. Marginalized and disqualified Cameroonian teachers offer a questionable value for the education system. At the same time, university professors keep a prestigious image which requires a certain respectability and respectability which fully justifies the enthusiasm of some young people for long university studies.

Efforts are underway to enhance the teacher's image: the Decree sn  $^{\circ}$  2008/099 of 7 March 2008 and No. 2014/253 of 7 July 2014 increases the basic monthly salary of the civilian and military personnel, including teachers, respectively by about 15% and 5%.

### 2.4. Access to the profession and lecturer TVET pathways for becoming a TVET lecturer

TVET teachers enter the profession through national competitions/tests, internal (for teachers already in service / students already admitted to a lower class) and directly from the industry. They come from two schools: the ENIET and ENSET. The written test generally represents 70% of the points, the school records 20% and the oral test 10%.

The concours for ENIET allows candidates to enter either the 1st year, 2nd year or 3rd (see Decree No. 80/185 on the status of teacher training colleges). Qualifications required from candidates vary by level:

- the Certificate of Professional Aptitude (CAP) or GCE O-Level Technical degree or other equivalent technical education for entry into the first year;
- evidence of technical education, the technical certificate, the Vocational Studies Certificate or other equivalent diploma of Technical education for entry into the second year;
- the Bachelor of Technical Education, the National Diploma, GCE A-Level Technical degree or other equivalent technical education for entry into the third year.

Admission to ENSET occurs at two levels: 1st cycle (a period of 3 years) and second cycle (of two years):

- The 1st year is open to holders of a technical and scientific bachelor. Holders of the BTS, the University Diploma of Technology (DUT) or a Higher National Diploma (HND) and Technician may be admitted to the 3rd year of 1st cycle.
- The 2nd cycle is open to holders of licenses and graduates of undergraduate ENSET, holders of Diploma in Teacher Education Technical grade 1 (BAC + 3), DIPET 1 which have at least 5 years in the field or an engineering degree. In the latter case, we talk about return on title.

In both cases, candidates may be admitted if they can show a relevant diploma. In addition, free and foreign candidates meeting the conditions for registration can apply. Candidates to the profession in the private education sector, presented by a private body and holding a scholarship from this body may be admitted as auditors, based on study records and according to the availability of places.

#### 2.5. Recruitment of TVET teachers

The recruitment of TVET teachers takes place at two levels: at secondary education level (by MINESEC, by organizing the competitions in ENIET, both public and private) and upper (by the Ministry of Higher Education, which organizes recruitment in



ENSET). Secondly, the recruitment of Teacher trainers for ENSET rests solely in MINESUP through the Consultative Commission for Recruiting Assistants (CCAR).<sup>4</sup>

In ENIET, MINESEC recruits at three levels (see Decree No. 80/185), as described above:

- in 1st year for holders of the Certificate of Professional Aptitude (CAP), GCE O-Level Technical or any other diploma equivalent Technical Education;
- in 2nd year for holders of technical education, the technical certificate,
   Certificate of Professional Studies, or other equivalent diploma of Technical education
- 3rd year for holders of Bachelor of Technical Education, Department of Patent,
   GCE A-Level Technical or any other equivalent diploma of Technical Education

The MINESUP recruits at two levels: the 1st and 2nd cycles. At 1st cycle, admission is at two levels: admission to 1st year for holders of technical and scientific bachelor and to 3rd year for holders of BTS, the University Diploma of Technology (DUT) or Higher National Diploma (HND) and Higher Technicians. The 2nd cycle is open to holders of licenses and graduates of 1st cycle ENSET, holders of Diploma in Teacher Education Technical grade 1 (BAC + 3), DIPET 1 having done at least 5 years on the ground, or an engineering degree. In the latter case, we talk about "return on title" ("retour sur titre").

As for the recruitment of ENSET teacher trainers, depending on the needs expressed and validated by the Local Education Authority, a call for applications is launched. Only the doctors with thesis, the holders of Advanced Studies Diploma (DEA) in the process of finalizing their thesis or equivalent degrees are eligible to apply. CCAR processes the request, analyzes the applications and interviews the candidates. The head of department concerned sends the opinions on the applications to the Dean who forwards to the Rector who forwards it to MINESUP, where the final decision is taken.

At the end of their training, ENSET graduates are automatically integrated into the Cameroonian public service. On the contrary, those from ENIET are no longer integrated since 1995 and sometimes are favoured by special programs of the government or foreign donors (World Bank, for example). Nevertheless, the private TVET organizations recruit here in large numbers (Art. 16 of Law No. 004/022 of 22 July 2004 laying down rules on the organization and operation of private education in Cameroon). Moreover, given the quantitative deficit of TVET personnel, the Associations of Students Parents and Teachers (PTA) and some regional and local authorities also recruit them.

#### 2.6. Working Conditions and payments

The working conditions of TVET teachers vary according to the level of school and whether they are in the public of private sector. In the public sector, they are governed by the Statute of the Public Service (see Decree No. 94/199 of 7 October 1994 on the general status of the Civil Service of the State amended and supplemented by Decree No 2000/287 of October 12, 2000) and the specific statutes. At secondary level, it is the decree 2000/359 of 5 December 2000 on the specific status of the officials of the bodies of Education. At higher level, in addition to Decree No. 93/035 of 19 January 1993 on the special status of higher education personnel, the Order No. 045 / MINESUP / DFO of 27 November 1995 that modifies certain provisions of Order No. 014 / MINESUP / DFO From May 22, 1995 establish also the

<sup>&</sup>lt;sup>4</sup>Marcel Fouda Ndjo and Charles Awono Onana, "Rapport de Recherche Sur Les Reformes de Gouvernance Dans L'enseignement Supérieur Camerounais," écrit, Pré-Conférence de l'IIPE À Dakar Le 14 Novembre 2012 «Réformes de Gouvernance Dans L'enseignement Supérieur: Quelles Politiques Avec Quels Effets » (Paris: UNESCO, 2012).



criteria for recruitment and promotion of teachers personnel applicable by the Advisory Committee of the University Institutions.

Teachers in public service are either awarded the status of official or of contractor. As official, they have a permanent contract in the public service hierarchy. Contractors are hired on the basis of the Labour Code, either by a permanent or fixed-term contract.

In the private sector, the working conditions are governed by Law No. 92-007 of 14 August 1992 on the Labour Code on one hand and on the other by Law No. 004/022 of 22 July 2004 laying down the rules on the organization and operation of private education in Cameroon. They can be permanent or temporary staff (up to 40% maximum per institution) and belong to one or other of the four known organizations: private Catholics; private Protestants; private Islamic and private secular.

#### 2.7. Training Opportunities for TVET teachers

Education is a major national priority (art. 2 of Law No. 98/004 of 4 April 1998 on the orientation of education in Cameroon). In fact, it is ensured both by the State and by private partners. Under these conditions, for TVET to achieve its objectives, in addition to the initial training given in ENIET and ENSET, the law requires the continuous training of civil service teachers (see Decree No. 2000/698 / PM of 13 September 2000 permanent training scheme for civil servants). This training is done every 5 years at least through internships (development, training) and seminars in Cameroon and abroad. At the beginning of each financial year, a schedule of continuing education officers is transmitted to the Prime Minister for approval by the MINFOPRA which, in addition, ensure the monitoring.

Since 2005, training courses are organized for teachers during the holiday period, which take place at the ENSET. Teachers who are not officials in public services, such as contractors in public TVET institutions and in the private sector, are also eligible for continuous education. This is governed by Art. 17 (2) of the Act No. 004/022 of 22 July 2004, laying down the rules on the organization and operation of private education in Cameroon. Seminars and national courses are held under the supervision of national and regional inspectors in charge of the different subjects of the TVET training programs.



#### 3. System of TVET Teacher Education

#### 3.1. Key messages of this chapter

- **Key Message 1**: Two major decrees organize the body of TVET teachers in the public in Cameroon: 200/359 Decree of 5 December 2000 on the specific status of the bodies of Education and Decree No. 93/035 of 19 January 1993 on the special status of personnel of higher education. The private currently do not have specific categories.
- **Key Message 2:** Cameroon currently has 4 public ENIET, 6 private ENIET and 3 ENSET.
- **Key Message 3:** The resources of public ENIET and ENSET are derived from the levies from pupils / students and state subsidies. Those of private ENIET structures come from own contribution of the owners; tuition or pension, from any aid from associations of parents, from products of the various activities of the institution or organization, gifts, bequests and loans,
- **Key Message 4**: In the various ministries involved in TVET, pedagogic inspectorates and relevant directions design programs, sometimes in collaboration with potential employers, and implement and evaluate these programs.
- **Key Message 5:** graduates of TVET in the field of research are involved in lessons and tutorials. Some patents from inventions of students are transferred to ENSET laboratories.

#### 3.2. General characteristics

#### 3.2.1. TVET teacher education policies

In Cameroon, TVET teachers are organized into two categories:

- The body of teachers in technical and vocational education, and the teacher trainers;
- The body of teachers in higher education (Decree No. 93/035 of 19 January 1993 on the special status of the staff of higher education).

The body of teachers in **Technical and Vocational Education** includes two (02) grades:

- as part of the Technical and Vocational Education Teachers, Class A, set up within two grades:
  - Professor of High Schools of Technical and Vocational Education, Class A, 2nd grade, consisting of four (4) classes, each of which has the following levels:
    - Class off-scale level 1;
    - Exceptional Class 2 levels;
    - 1st Class 3 levels;
    - o 2nd Class 7 levels;
  - The Grade of Teacher of Colleges of Technical and Vocational Education, Class A, 1st grade, consisting of three (3) classes, each of which has the following levels:
    - Exceptional Class 2 levels;
    - 1st Class 3 levels;
    - 2nd Class 7 levels. To this class it is added a unique level of interns.



- Teachers of Technical Education and Vocational Class B, consisting of two grades:
  - The grade of Principal Teacher of Technical and Vocational Education, Class B, 2nd degree, consists of three classes (3) in which there are the following ranks:
    - o Exceptional Class 2 levels;
    - 1st Class 3 levels;
    - 2nd Class 7 levels.
  - Teacher of the Technical and Vocational Education, category B, 1st grade
    - Exceptional Class 2 levels;
    - 1st Class 3 levels;
    - 2nd Class 7 levels. In this class s' adds unique level trainee.

The body of professors of Teacher education institutions (ENIET / ENSET) includes two grades:

- the rank of Professor of Normal Schools for Teachers, class A, 2nd grade in which there are four (4) classes, each of which includes the following steps:
  - Off-scale Class 1 level;
  - Exceptional Class 2 levels;
  - 1st Class 3 levels;
  - 2nd Class 7 levels.
- the rank of Assistant Professor-of Normal Teacher education institutions I,
   Class A, 1st grade in which there are three (3) classes consist of the following levels:
  - Exceptional Class 2 levels;
  - 1st Class 3 levels;
  - 2nd Class 7 levels. To this class it is added a unique level of interns.

The body of teacher in higher education can be distinguished in the following grades:

- Professors ;
- "Maîtres de conférences"
- Lecturers.

#### 3.2.2. Overview of TVET teacher education institutes

As already reported elsewhere, Cameroon has two major structures of training of TVET trainers: the ENIET, private and public, and ENSET that are currently exclusively public, spread over the national territory.

Initially, the EIT (IET) were trained at the École Normale for Teaching Household and Sewing (ENEMEC) created by Decree No. 66 / DF / 466 of 28/9/1966 and ENIET-Boys, created by order No. 113 / CAB / PM of August 31, 1978. Both institutions were based in Yaoundé. Subsequently, Decree No. 82/026 of 11 January 1982 resulted in the merger of ENIET-Boys and ENEMEC in ENIET at Soa (15 km from Yaoundé). Meanwhile, the ENIET at Mbengwi (North Western Province, 23 km from Bamenda) was established by Order No. 141 / CAB / PM of October 7, 1980.

Today, there are four functional public ENIET: Yaounde-Soa (Nkolfoulou); Douala (Ngodi-Bakoko), Garoua and Mbengwi. At the end of the school year 2012/2013, there were six (6) other more: Bafoussam-Baleng, Bertoua, Ebolowa, Maroua, Ngaoundere and Kumba. The ones of Mbengwi and Kumba are intended primarily for Anglophones while the others focus primarily on francophones. In 2012, there were four (4) Private ENIET: two in the northwest (Nacho TTTC and Tatum TTTC) and two in the centre (CETI Nyom CEPIET II).



Three ENSET are functioning: Douala (University of Douala) Bambili (University of Bamenda) and Kumba (University of Buea).

3.2.3. Funding of TVET teacher education institutes

The resources of private ENIET come from various sources, such as:

- · Personal contributions from founders of school,
- tuitions or pension; of any
- · aid associations of parents;
- products of the various activities of the institution or organization;
- gifts, bequests and loans obtained from the laws in force;
- the possible support of the State;
- contributions from regional and local authorities (see Art 20 of Law No. 004/022 of 22 July 2004 laying down rules on the organization and operation of private education in Cameroon).

Apart from loans, the public ENIET have similar resources to those private ENIET. As the state is the founder, it is the major contributor. Tuition fees and fees for participation in examinations are uniform, as shown below:

Level of education	Fees			
Post-primary (SAR / SM)	4500 CFA / US\$8			
Technical secondary	1st round	10,000 F CFA / US\$17		
(CETIC & Technical High Schools)	2nd cycle	15,000 F CFA / US\$26		
	CAP1	60,000 F CFA / US\$102		
	Probation 1	75,000 F CFA / US\$128		
Normal (ENIET)	Bac	80,000 F CFA / US\$136		
Normal (ENIET)	CAP 2	75,000 F CFA / US\$128		
	Probation 2	75,000 F CFA / US\$128		
	CAP 3	80,000 F CFA / US\$136		

Sources: MINESEC / MINFI / MINESUP

The exam fees also allow the public and private ENIET to meet some of their costs

Responsible structure	Exams / Competition	Registration Fees (in CFA francs)	Practice costs / work of material participation (in F CFA)	Total (FCFA)
	Entrance examination in 1st year CET	2500 (US\$4)		2500 (US\$4)
	Commercial CAP	3500 (US\$6)	3500 (US\$6)	7000 (US\$12)
	CAP Industrial	3500 (US\$6)	6500 (US\$11)	10,000 (US\$
Examinations Directorate, the Competition and Certification / MINESEC	Entrance examination in 2nd Technical	3500 (US\$6)		3500 (US\$6)
	Entrance examination in 1st year BEP	3500 (US\$6)		3500 (US\$6)
	CAPIET	11,000 (US\$19)	9000 (US\$15)	20,000 (US\$34)
Baccalaureate Office of	Probationary E	9500 (US\$16)	7000 (US\$12)	16,500 (US\$28)
Cameroon (CBOs)	Bachelor E	10,500 (US\$18)	8000 (US\$14)	18,500 (US\$31)
	Probationary G	9500 (US\$16)	3500 (US\$6)	13,000



Responsible structure	Exams / Competition	Registration Fees (in CFA francs)	Practice costs / work of material participation (in F CFA)	Total (FCFA)
				(US\$22)
	Probationary AF- F and CI	9500 (US\$16)	7000 (US\$12)	16,500 (US\$28)
	Probationary BT	9500 (US\$16)	7000 (US\$12)	16,500 (US\$28)
	BEP Commercial	9500 (US\$16)	3500 (US\$6)	13,000 (US\$22)
	Industrial BEP	9500 (US\$16)	7000 (US\$12)	16,500 (US\$28)
	Bachelor G	10,500 (US\$18)	4000 (US\$7)	14,500 (US\$25)
	Bachelor AF-F and CI	10,500 (US\$18)	8000 (US\$14)	18,500 (US\$31)
	Technician Patents	10,500 (US\$18)	8000 (US\$14)	18,500 (US\$31)
	BP Shopping	21,000 (US\$36)	4000 (US\$7)	25,000 (US\$43)
	BP Industrial	21,000 (US\$36)	15,000 (US\$26)	36,000 (US\$61)

Source: MINEDUB / MINESEC

In ENSET, schooling costs are is of the order of 50,000 F CFA (US\$85) per year. The state supports with substantial subsidies linked to investment and operation.

#### 3.2.4. Quality assurance of TVET teacher education institutes

The quality of training of teachers of TVET is assured in Cameroon at two levels: during training in ENIET and ENSET and once on the ground, in places of employment.

During training, students have the right to pedagogic internships to stimulate learning and consolidation. The first is to see how their peers are already active on the ground while the latter is a form of companionship and coaching led by / under the supervision of a senior, accredited professional in the field of specialization of the grantee. This course is sanctioned by an assessment which involves, as appropriate, a national or regional inspector of the specialty concerned and a teacher of the normal school where the grantee studied.

In ENIET, one internship is planned during the training. It only takes place e 3rd grade class and is sanctioned by an evaluation (# 675/14 / MINESEC / SEESEN / IGE / IP-EN of 30 December 2014 designating the host institutions of trainees Schools Teachers Normal Technical Education).

Once assigned to a school, the young teacher joins an educational team where he has as direct head an educational leader. Above it is a Head of Works (CT). Periodically, teacher training seminars are organized for their benefit at the departmental, regional and national levels.

The international models are most often used for implementation of the standard quality assurance system. Nevertheless, structurally, there are differences according to the body in charge, MINESEC, MINEFOP or MINESUP.

In MINESEC, besides the State Secretary to general education, a Directorate is dedicated to TVET: the Directorate of Secondary Technical and Vocational (DestP).



Above it, the General Inspectorate of Teaching (IGE) coordinates, supervises, monitors and evaluates the activities devolved to different pedagogy inspections, including:

- Inspection of Education in charge of Tertiary Education Science and Technology;
- Inspection of Education in charge of Industrial Techniques of Education;
- the Inspectorate of Pedagogy of Teacher training.

In the DESTP, the different pedagogic inspections work in conjunction with the Support Unit to the Pedagogical Action (CAAP) whose missions are:

- support for educational research activities;
- support for continuous training of staff;
- · management of infrastructure and teaching facilities;
- organizing the validation of educational resources;
- the development of digital resources in collaboration with inspections pedagogy and IT cell;
- the promotion and dissemination of research results;
- production and dissemination of records of the tests used.

In MINESUP, the assurance of quality falls within the competence of the Directorate of Academic Accreditation and Quality (DAUQ) and the General Inspectorate of academic affairs who are responsible for:

- monitoring and evaluation of the implementation of contracts of performance or academic management of institutions and academic institutions;
- Information to the Minister on compliance by institutions, academic institutions, public higher education institutions with special status under academic supervision, academic standards and rules established in the areas of professional conduct and ethics academics
- Information on the evolution of teaching methods and evaluation in the quality promotion within the framework of the national higher education system;
- Information to the Minister on the objectives and projects for institutional capacity building in public and private academic institutions, and public higher education institutions under the supervision and special status.

In MINEFOP, the Directorate of Vocational Training (DFOP) manages the quality of training in partnership with the Training General Inspectorate. DFOP is responsible for organizing, monitoring and evaluation of vocational training. Three sub-directorates assist it to that end: the sub-directorate for the management of training structures, the Sub-directorate of vocational guidance and Sub-directorate of examinations and competitions.

#### 3.2.5. TVET teacher education institutes and International Developments

The system for training of TVET teachers in Cameroon is linked to international development in education. This is the case for the introduction of the Licence-Master-Doctorate system in higher education (ENSET) and for the competency-based learning approach in ENIET.

The Licence-Master-Doctorate system was adopted in 2005 to build an area of Higher Education, Research and Training system in Western Africa, like the Bologna system, in order to facilitate the internationalization and globalization of credits education; promoting the mobility of students, teachers, researchers and administrative staff. Since 1996, through its Ministry of Education (MINEDUC), Cameroon signed an agreement over four years with France to lead the Support Programme for Cameroonian educational system (PASECA). Initially, the New Pedagogical Approach (NAP) is recommended with the aim of getting teachers to begin their lessons by



comparing students to an obstacle so they make assumptions and are seeking their own solutions. In 2003, the competency-based learning approach was launched.

#### 3.2.6. TVET teacher education institutes and postgraduate research

In the ENSET and ENIET there is generally a lack of qualified personnel. This requires the managers and more specifically the heads of department to use postgraduate graduates and professionals. They are most often utilized to give lectures, provide practical trainings and tutorials.

#### 3.3. TVET Teacher education programs (initial and in-service)

#### 3.3.1. Organisational aspects of TVET teacher education programs

The ENSET has the status of Public University Schools. Note that the three that exist are housed in the State Universities: ENSET Douala belongs to the University of Douala, ENSET Bambili at the University of Bamenda and ENSET Kumba to University of Buea. Each has ENSET departments that offer schooling to trainers from the industrial and commercial TVET. All ENSET are supervised by the Ministry of Higher Education.

The ENIET, public or private, are schools of secondary education under the supervision of MINESEC (cf. Decree No. 2001/041 on the organization of public schools and responsibilities of those responsible for school administration and the Act No. 004/022 of 22 July 2004 laying down rules on the organization and operation of private education in Cameroon).

#### 3.3.2. Key characteristics of the ITE curriculum

According to whether it is ENIET or ENSET, training programs depend on options, technical and industrial sciences and tertiary technologies offered in CETIC, LT and ENIET.

In ENIET, public or private, in general, training curricula include 36 hours per week and 4 large sets of disciplines:

- the disciplines of communication: languages, psychology, pedagogy, professional ethics and law, management, sociology, history, geography, law, physical education and sports;
- scientific and mathematical disciplines: general mathematics, applied mathematics, physical sciences and natural sciences;
- the specialized technology disciplines (varying according to the industry: industrial technology or science and technology tertiary);
- ancillary technologies: agro techniques, crafts (basketry, pottery, etc.).

The training includes theoretical courses, work sessions or workshops. In the third year especially, internships to learn of teaching practice in the SAR and SM of application and case studies become important. After the training, the teachers-students are expected to show:

- mastery of his/her technical area;
- possession of general knowledge to easily grasp the problems of the area of intervention in their complexity;
- assimilation of ways of promoting and conducting practical training, microprojects of development or business;
- the knowledge necessary for teaching and evaluation of the material of specialization.

In other words, the training focuses on teaching courses, teaching, psychology of the child, adult education, educational psychology, organizational and group facilitation



techniques, school legislation, micro -teaching, sociology and philosophy of education. For each discipline, the quarterly average mark obtained is calculated on the basis of 50%. The quarterly average is obtained by assigning the average scores of different materials their corresponding coefficients. The passing average of one year to the next is 10 out of 20. One retake is allowed during the formation of a student-teacher: this regulation is valid in case of failure in the final examination of CAPIET. At the end of training, the review includes 4 components:

- the scores on schooling;
- score on the technical record established by the candidate;
- scores of written tests;
- scores of practical pedagogic tests.

In ENSET, the setup of training programmes is similar to that of ENIET. The emphasis is however put on teaching courses, teaching, psychology of the child, adult education, educational psychology, organizational techniques and group facilitation, school legislation, micro-teaching, sociology and philosophy of education. Practical training is also essential. Practical courses are offered in schools and colleges under the supervision of classroom teachers who are evaluated by a national inspector<sup>5</sup>. Since the adoption of the Licence-Doctorate-Master system in HE, in the academic year 2007-2008, the teachings of each level include modules divided into teaching units, which need to be obtained separately. This training allows graduates of ENSET to receive a "pedagogic <sup>6</sup>engineer" title.

#### 3.3.3. Recruitment and selection for TVET ITE

Access in ENIET, whether public or private, takes place through a competition/test launched by MINESEC. Access in ENSET can be obtained through a competition launched by the Ministry of Higher Education. However, in public ENIET, there are also candidates, either Cameroonian and foreign, that are admitted on a special title, designated as auditors (Circular 24/12 / MINESEC).

#### 3.3.4. Early Career Support (ECS) and Continuous Professional Development (CPD)

In MINESEC the supervision of young teachers is assured at their posts of assignment by educational colleagues of their discipline, the first level of the pedagogical supervision chain, because above them are the educational advisors (at departmental level), the regional inspectors (regional) and the national inspectors (at national level).

In MINESUP, the newly recruited Assistant is overseen by the Course Manager, the Senior Lecturer by the Lecturer and the Lecturer by the Professor of the discipline. In all ministries, the quality of continuous training is ensured by inspections. When the need arises such inspections may initiate innovations and pedagogical shifts, also by providing training grants, sometimes abroad. Trainers of trainers improves through symposia and national and international seminars and through other training they undertake themselves.

Internships in companies are organized by MINESEC since 2005.

#### 3.3.5. Aligning the TVET TE to the professional needs

The laws 98/004 and 2001/005, respectively on the orientation of early childhood education, primary education, secondary education and the second one on higher education policy, provide for a consultation between the professional world and the

<sup>5</sup> UNESCO, "Données Mondiales de L'éducation. Cameroun," Ecrit (Genève, 2010).

<sup>&</sup>lt;sup>6</sup> Yves Bertrand Feudjio Djouda, "L'adoption Du «Système LMD» Par Les Universités Du Cameroun: Enjeux, Contraintes et Perspectives," JHEA/RESA 7, no. 1&2 (2009): 141–57



ministries responsible for education in the development and review of programs. But in fact, there is a delay in the requirements to take effect. This is one of the flaws of the training system. The programs are not always adapted to professional needs either. Everything seems to be unilaterally decided even when consultation platforms are recommended.

However, with the adoption of the Licence-Doctorate-Master system in higher education, some companies present their needs after hiring a trainee. They present their needs to the trainers stressing the skills they desire. This first step of contribution is too little to say that they are involved and participate in educational improvements.

#### 3.4. TVET teacher education student population

#### 3.4.1. Enrolment in TVET TE programs and background of students

The number of open seats in the entrance examination in ENIET varies according to the needs and specialties: 1610 in 2010/2011; 2590 in 2012-2013. In 2012, 1,301 candidates were registered in CAPIET against 1330 in 2013 for a total this year alone of 3132 master-students. Between 2010 and 2013, the pass rate in CAPIET was an average of around 88.9%, i.e.: 93.7% in 2010; 73.7% in 2011; 91.7% in 2012 and 96.8% in 2013.

In 2012, ENSET Bambili issued 619 DIPET I and 332 DIPET II; the Douala ENSET 591 DIPET I and 325 DIPET II. In previous years, between 2007 and 2011, the Douala ENSET, the first of its kind in Cameroon, had produced 11,210 graduates distributed as follows:

	2007/2008			2008/2	2009		2009/2010 2010/2011					
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total
ENSET- Douala	1529	696	2225	3033	1813	4846	3223	1138	4361	3425	714	4139

Source: Ministry of Higher Education (2012)

#### 3.4.2. Motivation for enrolling in a TE TVET program

The need for employment is considered a far bigger motivation to enrol in TE TVET than the desire to be a teacher. Teaching in general, particularly in technical education is characterized by difficult working condition and non-rewarding salaries, particularly in comparison to other jobs such as police officer, or civil administrators. As many do not see as their ideal job, many teachers find other activities and work to gain sufficient money.

#### 3.4.3. Drop-out of the TVET program TE

Drop-outs from the teacher training program are most often related to the facts that the winners of "concours" have found better work opportunities elsewhere:

- access to prestigious competitions: Gendarmerie NCOs, police inspectors, custom officers, tax inspectors, etc.
- Hiring after training by employers with more rewarding salaries, especially in industrial training.



#### 4. CHALLENGES, SOLUTIONS AND EMERGING THEMES

#### 4.1. Key messages of this chapter

- **Key Message 1**: TVET is central to many speeches and programs to develop education, but the actions on the ground fail to be effective due to a diluted political will in structures that lack coordination.
- **Key Message 2:** The working conditions of TVET teachers limit the social visibility of the profession. In combination with the lack of appropriate equipment the relevance of the type of education is problematic.
- **Key Message 3**: Due to a lack of sufficient qualified personnel and practical learning environments, training in TVET is more theoretical than practical.
- **Key Message 4:** Continuous education for teachers is required. Besides seminars and national courses, the training of trainers needs to be made accessible at international level.
- **Key Message 5:** The policy of creating training institutions of TVET and school trainers should be based on a perspective and efficient educational planning.

#### 4.2. Challenges of the TVET system

Overall, TVET faces<sup>7</sup>:

- Very low level of financing of vocational education. Less than 3% is spent on TVET, while this is on average 15% in developing countries.
- the absence of a clear policy directing vocational training and techniques;
- the lack of a central control system of vocational and technical training;
- the absence of a policy of valorisation of TVET: in speeches, TVET is presented
  as the main driver of the national economy; but in fact, the number of
  establishments created in the sector and actually functioning remains low and
  badly equipped in comparison to general education;
- the slow implementation of the strategy document on vocational education;
- the relatively weak provision (in qualitative and quantitative terms) of TVET;
- the scattering of vocational training through a multitude of structures: various ministries are involved in TVET without an existing coordination;
- the lack of coordination between sub-systems;
- Limited labour market relevance of many programmes set up by various ministries only to ensure their own employees
- a lack of alignment between the initial and continuous vocational education;
- the absence of a dynamic strategy of forecasting needs;
- the absence of genuine partnerships at all levels, with business groups, labour unions, chambers, associative groups;
- the absence of an overall policy of investments and sectoral development

The creation of MINEFOP in 2005 (see Decree No. 2005/123 of 15 April 2005 to organize the MINEFOP) aimed to address these challenges. But its responsibility is disputed by ministries involved in TVET including: MINADER; MINTP; MINPOSTEL; the MINFOPRA; MINEPIA; MINAS; MINFI; MINFOF; the MINSEP and MINJEC; MINDEF; DGSN; MINATD and MINJUSTICE.

MINAEPAT, "Etude Sur Le Diagnostic de La Formation Professionnelle et de La Qualité Des Ressources Humaines (R-1)" (Yaoundé: Ministère des Affaires Économiques, de la Programmation et de l'Aménagement du territoire, 2002).



#### 4.3. Challenges TVET teachers are facing

The most important challenges facing TVET teachers in general are:

- The working conditions and impacts on their private lives. Despite of a favourable legal framework in relation to the salary grid and career plan, the teachers feel they are not sufficiently valued by society. Teachers are paid less than workers in uniform (police officer, policeman, military, customs, prison warden), or for instance professionals from the health and justice sector, etc.
- the quality of infrastructure and facilities: either these do not exist or they are old, unsuitable with regard to technological developments or insufficient to meet demand;
- textbooks and training programs: while in general education curricular guides and books are provided at the beginning of each school year, teachers of TVET should collect the material by themselves.
- Understaffing: because of the deficit of teachers, the ones that are teaching are overloaded, and their teaching does not enable sufficient opportunities for everyone to everyone to benefit fully of lessons and tutorials;
- quality of continuous training for teachers: it is usually more theoretical than practical;
- continuous education. While increasingly experiences are exchanged with enterprises and educational seminars, internships abroad are uncommon and not facilitated, even when the teacher would find it itself.

#### 4.4. Challenges the TVET teacher education system is facing

In ENIET and ENSET, the main challenges are those related to:

- Personnel: trainers are few and sometimes unskilled. Consequently, the system consistently use contracted teachers and professionals;
- equipment and equipment for practical education: very few laboratories / practical learning locations are properly equipped. Where equipment is available, it mostly concerns outdated equipment, inadequate in the light of technological developments or insufficient given the number of students;
- the training content: Curricula are often too theoretical, do not cover all required elements and are not linked to the reality of business. Finally, these are often not much updated in relation to the international developments in the field
- the structures: insufficient or obsolete rooms for courses and furniture, spaces nonexistent or inadequate, absence of and dilapidated school canteens s, etc.).

#### 4.5. Potential improvements to overcome challenges for the TVET

- The perception of TVET education sub-sector, formerly marginalized and disqualified8, needs to be improved. TVET needs to be made into a national priority, and for this a national communication plan is necessary to have the project adopted by different groups and social partners at all levels;
- The living and working conditions of TVET teachers must be improved. It is a paradox that teachers are poorly paid, even though they form the gray matter required for national development;
- The creation of more TVET institutions, including more institutions for teacher training, where students can enrol in future-minded programmes avoiding situations of under-equipment;

Bacques-Philippe Tsala Tsala, "L'enseignement Technique Au Cameroun: Le Parent Pauvre Du Système?," Carrefours de L'éducation 2, no. 18 (February 2004): 176-93.



- The quality of the equipment and infrastructure are obsolete and inadequate, if they even exist;
- The timing and selection procedure of beneficiaries for initial and continuous training. Teachers are not always aware of areas where continuous trainings abroad are allowed.
- Program quality and content.

## 4.6. Potential improvements to overcome challenges for the TVET Teacher Education

- Trainers and students recruitment policy. Trainers generally stay in ENSET schools on average between 5 to 10 years. This requires the administration of these schools to use individual contractors who mostly lack expertise in education;
- The provision of technical facilities in TVET colleges should be revised. It must be based on technological developments and be accompanied by a maintenance team that is able to deal with outages;
- Currently, the training curriculum does not take the analysis of the labour situation of professionals into account and even less the specific and transversal skills required for potential employers.
- Currently, the system of TVET has been established on paper, without a
  perspective and planning that identifies the specific needs and constraints. It is
  therefore necessary to review the policies underlying the creation of TVET
  institutions.
- Development of a national office for vocational education that has the competence to work across the different sectoral ministries.



#### **ANNEX TO THE COUNTRY REPORT**

## A glossary list: Including all acronyms, specific terminology used, and abbreviations

Acronyms and abbreviations	Meaning
APEE	Association of Students Parents and Teachers
APERP	Support for the Promotion of Employment and Poverty Reduction
BAC	Baccalaureate
BEP	Patent of Professional Studies
BEPC	Patent of First Cycle Studies
BTS	Patent Technician
C2D	Contract Debt Reduction and Development
CAAP	Support Unit at the Pedagogical Action >>
CAP	Certificate of Professional Competence
CAPIAET	Certificate of Professional Competence of the Teacher Assistant of Technical Education
CAPIET	Pedagogical Aptitude Certificate of Teachers of Technical Education
CC	Course Manager
CCIMA	Chamber of Commerce, Industry and Handicrafts
CCIU	Consultative Committee of University Institutions
CCAR	Consultative Commission Recruiting Assistants
CEFAM	Training Centre in Municipal Administration
CEGEP	College of General and Professional Education
CEMAC	Economic and Monetary Community of Central Africa
CETIC	Colleges of Industrial and Commercial Technical Education
CFJA	Young Farmer Training Centres
CFM	Training centres for Crafts
CFP	Vocational Training Centres
CFPR	Rapid Vocational Training Centres
CFR	Rural Training Centres
CENAJES	National Centres for Youth and Sport Animation
CNFDP	National Centre for Trainers and Programme Development
CNFZV	National Centres of Zootechnical and Veterinary Training
CO	Guidance Counsellor
COSUP	Centres Orientation School, University and professional Douala and Yaoundé
CQP	Professional Qualification Certificate
CRA	Regional College of Agriculture
DAUQ	Branch Academic Accreditation and Quality
DCAA	Directorate for Coordination of Academic Activities
DDES	Agency for Development of Higher Education
DEA	Advanced Studies Diplomas
DESTP	Directorate of Secondary and Technical Education
DEFOP	Directorate of Training and Vocational Guidance
DGNS	General Directorate of National Security



	Commission
Acronyms and abbreviations	Meaning
DIPENIET I	Normal Schools Teachers Diploma of Technical Education Teachers 1st cycle
DIPENIET II	Normal Schools Teachers Diploma of Teachers of Technical Education 2nd cycle
DIPET I	Professor of Technical Education Diploma 1st Round
DIPET II	Professor of Technical Education Diploma 2nd Round
DQP	Diploma of Professional Qualification
DUT	University Diploma in Technology
EMIA	Joint Military School
ENAAS	National School of Social Affairs
ENAM	National School of Administration and Magistracy
ENAP	National School of Penitentiary Administration
ENEMEC	Ecole Normale household sewing and Education
ENIET	Normal Schools Teachers of Technical Education
ENP	National Police Academy
ENSET	Normal Schools of Higher Technical Education
ENSPT	National School of Posts and Telecommunications
ENSTP	National School of Public Works
ESF	Social and Family Economics
ESP	Higher Education Professional
ETA	Technical Schools of Agriculture
ETFP	Technical Education and Vocational Training
F CFA	Franc of the African Financial Community
GCA A-Level >>	General Certificate of Education Advanced Level
GCE O-Level >>	General Certificate of Education Ordinary Level
HND	Higher National Diploma
IGE	General Inspectorate of Teaching
IGF >>	General Inspectorate of Training
IET	Teacher of Technical Education
IAET	Assistant Teacher of Technical Education
INJS	National Institute of Youth and Sport
INS	National Statistics Institute
IPET	Principal Teachers of Technical Education
IUT	Technology University Institutes
KOICA	Korea International Cooperation Agency
LEG	High Schools of General Education
LMD	Licence-Master-Doctorate
LT	Technical High Schools
MC	Lecturer
MINADER	Ministry of Agriculture and Rural Development
MINAS	Ministry of Social Affairs
MINATD	Ministry of Territorial Administration and Decentralization
MINDEF	Ministry of Defence
MINEDUC	Ministry of Education



Acronyms and abbreviations	Meaning			
MINEFOP	Ministry of Employment and Vocational Training			
MINEPIA	Ministry of Livestock, Fisheries and Animal Industries			
MINESEC	Ministry of Secondary Education			
MINESUP	Ministry of Higher Education			
MINETFOP	Ministry of Technical Education and Vocational Training			
MINFI	Ministry of Finance			
MINFOF	Ministry of Forests and Fauna			
MINFOPRA	Ministry of Public Service and Administrative Reform			
MINJEC	Ministry of Youth and Civic Education			
MINJUSTICE	Ministry of Justice			
MINPOSTEL	Ministry of Posts and Telecommunications			
MINSEP	Ministry of Sports and Physical Education			
MINTP	Ministry of Public Works			
NAP	New Pedagogical Approach			
OFPPT	Office of Professional Training and Work Promotion			
ONEFOP	National Observatory of Employment and Vocational Training			
PAENIET	Assistant Professors of Normal Schools of Teachers of Technical Education			
PAMOFPE	Improvement of Vocational Training Offer for Employment			
PARETFOP	Project of Support to the Reform of Technical Education and Vocational Training			
PASECA	Support to the Cameroonian educational system			
PCET	Professor of Technical Education Colleges			
PNIET	Normal Schools for Teachers of Teachers of Technical Education			
PIAASI	Integrated Support Project for Informal Sector Actors			
PLET	Professor of Technical Education High Schools			
Pr.	Professor			
ROAME	Operational Directory African Trades and Jobs			
SAR / SM	Sections Artisan Rural / Sections Housewives			
STT	Sciences and tertiary technologies			
TP	Practical works			
TVET	Technical and vocational education and training			
UE	Teaching Unit			
UNESCO	United Nations Educational, Scientific and Cultural Organization			
VAE	Validation of Acquired and Experience			



#### A list of interview sources, their institutional affiliation, and job title

Name	Institutional affiliation and job title				
TITCHO Florence Aimee	LET, Active Member of MANIDEM (Education Section). Kumasi Technical High School.				
ADIAMY A Goufan Serge Olivier	CPO, Head of school counselling service, Lycée Technique Akonolinga				
MBIADEJU Célestin	CPO, Former executive in the PARETFOP project MINESEC				
Jean Pierre MBOHOU	Head of Examinations and Competitions Service, MINEFOP				
Mathias BONONGO	Educational Attaché, General Inspectorate of Training, MINEFOP				
NKALLAH	PLET, ENIET Douala				
HONDT Hermence Nicole	PNIET, Director ENIET Douala				
Joseph BOMDA	Teacher Associate, ENS Yaoundé				
Jeannette SOCPA	Regional Secretary (Littoral) of the National Autonomous Union of Secondary Education SNAES; Focal Point (Douala) Cameroon's Committee of Women Teachers (COCAFE), Cameroon branch of trade unionists Teachers Network of Central Africa (RESAC) and sub regional African Network of Women in Education (AWEN)				

#### A list of background literature used in preparing the review and the report

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- Act No. 92-007 of 14 August 1992 on the Labour Code in Cameroon
- Law No. 98/004 of 14 April 1998 on the orientation of education in Cameroon;
- Law No. 2001/005 of 16 April 2001 on the orientation of Higher Education;
- Law No. 004/022 of 22 July 2004 laying down rules on the organization and operation of private education in Cameroon;

#### b) Decrees

- Decree No. 66 / DF / 466 of 28.9.1966 creating the Normal School of Education Household and Sewing (ENEMEC)
- Decree No. 93/035 of 19 January 1993 on the special status of higher education personnel
- Decree No. 94/199 of 7 October 1994 on the general status of the Civil Service of the State amended and supplemented by decree No. 2000/287 of 12 October 2000
- Decree No. 2000/698 / PM of 13 September 2000 concerning the permanent civil service training scheme
- 2000/059 Decree of 5 December 2000 on the specific status of the bodies of Education
- Decree No. 001/041 of 2 February 19, 2001 on the organization and functioning of public secondary education;
- Decree N ° 2008/099 of 7 March 2008 revaluing the salaries of civilian and military personnel



 Decree N ° 2014/253 of 7 July 2014 revaluing the salaries of civilian and military personnel

#### c) Orders

- Order No. 113 / CAB / PM of 31 August 1978 creating the ENIET-Boys
- Order No. 141 / CAB / PM of October 7, 1980 creating the ENIET of Mbengwui
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- Order No. 045 / MINESUP / DFO of 27 November 1995 fixing the criteria for the operation of University Institutions Advisory Council (CCIU)
- Order No. 365 / B1 / 1464 / MINEDUC / 062 / CF / MINEFI of 19 September 2001 applying certain provisions of Decree No. 001/041 of 2 February 19, 2001 on the organization and functioning of public institutions' secondary education;
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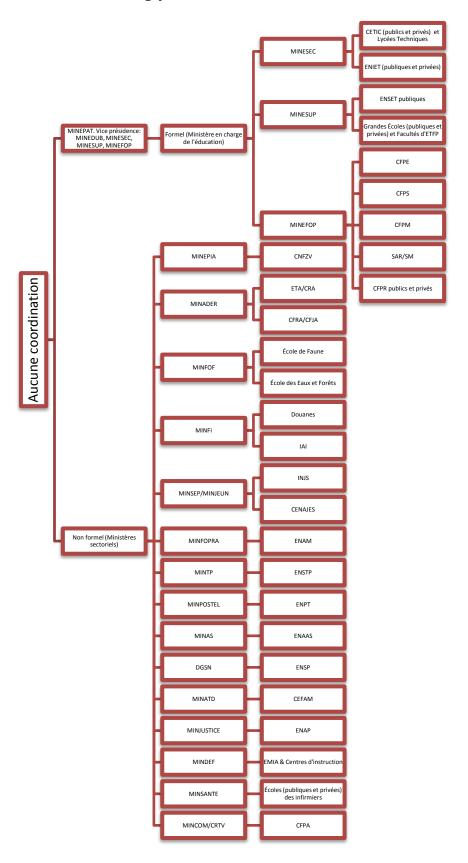
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#### **ANNEX TO BRIEFING NOTES**

# Overview of TVET training providers in Cameroon





# 5. NATIONAL BACKGROUND OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) - SOUTH AFRICA

# 5.1. Key messages of this chapter

- Key Message 1: TVET in South Africa has been in a process of transformation since 1998, with several key policy interventions between 2006 and 2014.
- Key Message 2: TVET colleges form part of the post-school system in SA that includes universities and adult education under a Ministry for DHET that is separate to that of general schooling
- Key Message 3: TVET students receive bursary funding via the National Students Financial Aid Scheme (NSFAS) which has increased access to colleges exponentially since 2009
- Key Message 4: Public TVET colleges are funded by the State to deliver official national curricula with a prescribed syllabus and assessment regime
- Key Message 5: There is evidence of high level linkages between TVET and the labour market being fostered

# 5.2. National TVET system: key characteristics and relation to other sectors

A recent policy review of Vocational Education and Training in South Africa (Field et al. 'A Skills beyond School Review of South Africa' 2014) is a useful recent reference for information on the national background of TVET in South Africa, though statistics used are that of the DHET (2014) Statistics on Post-School Education and Training in South Africa:2012. So too is the 2013 White Paper on Post-School Education and Training and the Human Resource Development Council for South Africa (HRDSA) Profile of the TVET sector (2013), as well as recent Ministerial Speeches. All of these documents highlight the path that vocational education has followed in South Africa, the challenges that remain, and the present status of developments. The Minister of Higher Education and Training has also recently provided useful information on the current situation (see Ministerial speeches in Nov 2014 and Jan 2015). Taken together, the overview of TVET in SA is as follows.

Reform policies and processes have been ongoing since the first FET Act of 1998 that merged 152 colleges of varying sizes into 50 multi-site colleges across the 9 provinces of South Africa. The FET Act of 1998 attempted to bring about a measure of equity and coherence to the colleges landscape, as colleges were fragmented along racial and resource lines, with stark differences across rural, urban and historically racialized divides. By 2002 previous free-standing colleges were merged, resulting in a single head of the larger college and other ex-principals becoming campus managers or deputy managers in the new structures. At the time colleges were under the authority of each of the 9 provincial departments of education who was also the employer of teaching staff, although funded through a grant from the national government. Colleges were assigned staff based on student numbers, but could also appoint staff in terms of contract funding which they had secured themselves.

A new FET Act in 2006 legislated the transfer of all staff except Principals and Deputy Principals, to College Councils, in a move to create stronger, more autonomous Councils, but this happened with minimal preparation of council members and college managers, resulting in heightened tensions between them. College lecturers in particular experienced anxiety, fearing a loss of security as state employees.

In 2007 a new curriculum (National Certificate Vocational - NCV) ushered in full-time, year-long programmes, in contrast with the kind of offerings colleges were known for. When the Minister indicated that the older, outdated programmes would be phased out, there was a strong backlash from the wider college community and industry, and these programmes were then allowed to remain and continued to be funded by the DHET. The new curricula were preceded by a flurry of teacher in-service training initiatives aimed at introducing the new curricula and its assessment regime. Training was conducted through a so-called 'cascade' methodology, whereby senior lecturers attended the training and were supposed to train others at their college in turn. Due the complexity of the new curricula this methodology caused great dissatisfaction among college lecturers who felt overwhelmed by the many demands of new subjects and their assessment administration. Nonetheless the new NCV programmes were intended to be college 'flagship' programmes and received strong financial support from government as well as a new system of bursary support to college students. Student bursaries via the National Student Financial Aid Scheme (NSFAS) had previously only been available to university students. Colleges now also introduced stronger student support systems to cope with recruitment and placement in the new programmes.

An issue that continued to plaque policymakers and colleges was the question of 'purpose' of FET colleges as they were known at the time. Most of the college community wanted a stronger identification with training and the workplace rather than with academic tracks, hence the re-naming of FET colleges as TVET colleges in the FET Amendment Act of 2012 and the White Paper for Post-School Education and Training (2013) was largely welcomed as it gave a better indication of what colleges' purpose ought to be. The nomenclature was also in line with countries having more mature vocational systems. The amended Act announced the transfer of vocational colleges from provincial authorities to the national Department of Higher Education and Training, and that all employees would revert back to being employees of the State. The FET Amendment Act (2012) furthermore outlined a new support agency in the form of an intended SAIVCET (South African Institute for Vocational and Continuing Education and Training) which will perform a research and development coordinating function inter alia, to bring coherence to the system. A government respondent noted that pilot work has started within the DHET and this work will be transferred to SAIVCET once funding has been obtained. It is likely that pilot work will only focus on 3-5 of the SAIVCET functions and the other functions will be addressed at a later stage (SR1)9.

In 2012 the long awaited Policy on Professional Qualifications for TVET College Lecturers was gazetted, which set out a suite of new qualifications intended to be delivered by universities, for both initial and continuing education of vocational teachers.

Initial professional qualifications for TVET College lecturers are identified in the policy as follows:

- Diploma in Technical and Vocational Teaching (NQF level 6 360 credits)
- Bachelor of Education in Technical and Vocational Teaching (NQF level 7 480 credits)
- Advanced Diploma in Technical and Vocational Teaching (NQF Level 7 120 credits)

The post-professional qualifications selected for TVET College lecturers are as follows:

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<sup>&</sup>lt;sup>9</sup> Note that in this Report respondents are anonymised by referring to systems respondents as SR; teacher education respondents as TE; and college educator respondents as CE; numbered sequentially according to the interviewees in the respective target populations.



- Advanced Certificate in Technical and Vocational Education and Training (NQF level 6 120 credits)
- Advanced Diploma in Technical and Vocational Education and Training (NQF Level 7 - 120 credits)
- Postgraduate Diploma in Technical and Vocational Education and Training (NQF level 8 120 credits)

Qualifications at the Bachelor of Education (Honours (120 credits - NQF level 8), Masters Degree (180 credits - NQF level 9) and PhD (360 credits - NQF level 10) can be specifically adapted to TVET but will follow the prescriptions outlined in South Africa's Higher Education Sub-Qualification Framework.

The following statistics describe the size and shape of Post-School education and training in  $SA^{10}$ :

Around 2009 the country had what is called an 'inverted pyramid', with almost double the number of students in universities (1 million) than in vocational colleges (about 400 000 in 2010). The introduction of bursaries for public college students has increased college numbers steadily, to the extent that bursary funding is constantly under pressure. Students are expected to complete 12 years of schooling, but may enter a TVET college having passed Grade 9 in the school system.

In **2012**<sup>11</sup>, there were **657 690** students enrolled in TVET colleges; **953 373** students in universities; and **44814** students in Technical High Schools. Student enrolment in public Adult Education and Training (AET) centres was **306 378.** TVET colleges and universities fall under the Department of Higher Education and Training, while Technical High Schools fall under the Department of Basic Education which is responsible for all schooling from Grades 0-12.

Within the private sector, **115 586** students were enrolled in TVET colleges; **97 487** students in private higher education and **8 690** in private AET centres. Post-School provision is conducted through 23 public HEIs, 119 private HEIs, 50 public FET Colleges and 536 registered private FET Colleges, as well as 3 150 public AET centres and 150 private AET centres.

Targets set for TVET in the White Paper (2013), envisages a far greater public TVET sector (including Adult Ed) than University sector. Enrolment in public **TVET colleges** and adult centres are set at **4 million by 2030**, while the **university enrolment target is 1.6 million by 2030**. This attempts to correct the inverted pyramid.

TVET colleges offer programmes at parallel levels to the general schooling system i.e. at equivalent levels 2-4 of the National Qualifications Framework or Grades 10-12 of the school system. However, there are a number of colleges that offer programmes beyond Level 4/Grade 12, at Levels 5 and 6 or what could be considered the first year level of a university qualification. These N4-N6 certificate programmes in some instances allow access into university with some credits, but articulation between colleges and universities remains difficult. The official college qualifications offered are the NATED programmes at levels 1-6, traditionally in fields of Engineering and Business Studies, but also in Hospitality, ICT and a few others. The 'N' courses as they are known, vary in duration from 3-6 months, in trimesters or semesters. The new curricula introduced to colleges in 2007 are the National Certificates Vocational (NCV) at NQF levels 2-4 of which there are about 18 programmes that range across fields of Engineering, Business, Tourism/Hospitality, Educare and so on. There are three levels of the NCV which are one year-long per level, and offered as full-time certificate

Post-school education and training refers to those in universities, TVET colleges, and adult education centres. For purposes of this report we focus on TVET colleges and universities.

<sup>&</sup>lt;sup>11</sup> DHET, 2014. Statistics on Post-School Education and Training in South Africa: 2012



courses. Both the N courses and the NCV programmes have officially nationally prescribed curricula and assessment regimes including national examinations. TVET colleges also offer occupational programmes on contracts that are funded by the relevant Sector Education and Training Authority (SETA). These programmes could be learnerships, apprenticeships or skills programmes of varying durations, all of which ought to have a workplace learning component governed by contractual relationships between a student, employer(s) and provider(s) and hence require support of industry for student placements.

A diagrammatic representation of post-school provision against the levels of South Africa's National Qualifications Framework is provided below that includes Technical High School and Schooling provision for comparative purposes.

National Qualifications Framework Levels	Adult Education and Training provision	Schools and Technical High School provision	TVET College Provision		University provision	
			NATED Programmes	National Certificate Vocational Programmes	SETA/QCTO programmes	
10						PhD
9						Masters Degree
8						Honours Degree Post-Graduate Diploma
7						Advanced Diploma Bachelor Degree
6					NQF L 6	Diploma
5			N4-N6 programmes*		NQF L 5	Certificate
4		Grade 12 National Senior Certificate	N3 programmes*	NCV L 4	NQF L 4	
3		Grade 11	N2 Programmes*	NCV L 3	NQF L3	
2		Grade 10	N 1 programmes*	NCV L 2	NQF L 2	
1	ABET Level 4	Grade 9			NQF L 1	

<sup>\*</sup> These are approximate levels as NATED N1-N6 programmes have never been formally aligned to the National Qualifications Framework levels.

National qualifications are reviewed periodically. A DHET respondent stated that the 2012 review of the NCV qualifications is complete and recommendations have been forwarded to Umalusi (SR1). Umalusi is expected to put policy changes in places for the NCV by January 2016. The NCV programmes will remain offered by TVET Colleges in spite of stakeholder opinions expressed at the FET Round Table meeting in 2010 that the NCV should be offered by Technical High Schools. NATED N1-N3 qualifications remain under the quality assurance of Umalusi while NATED N4-N6 qualifications are under the quality assurance of QCTO. QCTO has started a review process of these qualifications. For NATED qualifications, it is not ideal that two quality assurance



bodies (Umalusi and QCTO) share responsibility for these qualifications as the NATED qualifications are a key route to apprenticeship and artisanship. The first QCTO occupational qualification to be reviewed is a financial qualification which will be gazetted for public comment shortly. It should be noted that the bulk of the offerings at colleges are offered in a pre-employment format, which is historically different from the traditional Nated 'sandwich' format which consisted of block releases of trainee workforces from industry to complete semester or trimester programmes and then to return to industry experience. The pre-employment format contain workplace experience as an integral part, but workplace experience is requirement for acquiring artisan status in one of the limited number of trades (trades are mainly limited to the engineering and textile disciplines).

Colleges are finding it hard to overcome the perception and stigma that TVET is for those students who cannot succeed academically in general schooling. Around half of the students who enter schools in Grade 1 annually, do not reach their matric year, having dropped out mostly between Grade 9 and Grade 12. This presents a huge challenge to government, since in 2012 the NEET population (not in education, employment or training) was found to be almost 3 million (over 40 %) between the ages of 16-24. This finding has sparked renewed efforts to bring young people into learning through funded studies but at the same time college facilities, equipment and staff will need to be improved in order to accommodate increased numbers of students.

#### 5.2.1. Funding

In the 2012/13 financial year<sup>12</sup>, public universities received about R21 billion in state funding (77% of government expenditure on post-schooling); TVET colleges received about R 5 billion (or 18% of expenditure); and R1.4 billion (5% of expenditure) went to Adult Education and Training centres (which still fall under provincial education departments). TVET funding increased from R3.9 billion in 2010 to R5.6 billion in 2013.

Colleges are funded in terms of a budget formula supplied to them by the DHET, and in terms of which they are funded to offer the official curricula (NATED and NCV). Included in the funding formula is the number of lecturing and support staff in terms of a 'staff establishment' ratio determined by the DHET. The lecturer staff establishment is determined by student enrolments per college according to an 'optimal' teacher to student ratio (1 teacher to 35 students). This ratio is problematic for TVET colleges since all programmes cannot accommodate this norm, for instance, workshops are limited according to the equipment available as well as safety regulations, and would require a much lower teacher:student ratio, e.g. 1:15. Funding norms and standards are however in the process of review at present.

In 2010 bursaries were awarded in the amount of ZAR318 million to 61 703 students, and this grew exponentially in 2014 to bursaries awarded to the value of ZAR 2.107 billion, for 233 958 TVET students.

In order to accommodate a significant increase in the number of TVET students, 12 new college campuses are being built. This will increase the number of campuses across the 50 public colleges to over 300.

<sup>&</sup>lt;sup>12</sup> DHET, 2014. Statistics on Post-School Education and Training in South Africa: 2012.



## 5.2.2. TVET system: organisation and stakeholders

Since 2009, the national Minister of Higher Education and Training is responsible for universities, TVET colleges, Adult Education Centres; and Sector Education and Training Authorities (SETAs) which were previously under the Department of Labour as well as the NQF bodies. The Department of Higher Education and Training (DHET) under the authority of the Minister: DHET has executive responsibility for TVET which is now a national mandate, in that all of the 50 public colleges fall under the national DHET. The VCET (Vocational and Continuing Education and Training) branch within the DHET is responsible for TVET colleges and adult education.

Colleges have been decentralised under a system of co-operative governance with defined autonomy and are governed by stakeholder based college councils appointed by the Minister upon nomination from a broader public process. Other statutory bodies for the governance of colleges include elected Academic Boards and Student Representative Councils who have consultative powers. Colleges are managed by Principals<sup>13</sup>, Vice Principals and in some cases Chief Financial Officers appointed by the DHET. The dual accountability of the Senior management (to both the college council and the DHET) has been a source of potential role confusion. The autonomy of the college councils is a defined/managed autonomy however in the sense that they are subject to national guidelines and policies as regulated by the FET Colleges Act, and 'steered' by funding and assessment regimes, including the setting of targets,

Sector Education and Training Authorities (SETAs) oversee training in the various industry sectors and also fund the occupational programmes (through employer levies) that colleges deliver training on. Some SETA supported programmes have stronger input from industry than others, for example Hospitality, Hairdressing, Automotive engineering have strong ties with the labour market since these industries tend to employ college graduates. There is no formal feedback loop between the labour market and colleges directly, though SETA forums are a broad stakeholder body which includes TVET colleges, and where skills development issues are discussed and reported on by the SETA. The Ministry has in the White Paper on Post-School Education and Training (2013) and in many other public forums exhorted industry to open up training spaces and internships for college graduates.

Regarding links between TVET and the labour market, various role players (business, labour, community and government) signed a National Skills Accord, committing the role-players to (ambitious) targets. As noted later however, for a number of the stakeholders the operationalization of these targets requires attention. In terms of the colleges, some of these targets have been operationalized in the form of instructions to key areas to the college. These include college targets for enrolments and certification rates, student and staff work experience placements, and graduate placements in employment. A DHET respondent (SR2) noted industry connections though a pilot project for training automotive manufacturing college lecturers using a video based approach with a local automotive manufacturer as a partner. 6 clusters of college lecturers have been organised and the project will shortly go to scale as a result of the video based approach.

In another intervention SSACI, the Swiss-South Africa Cooperation Initiative which has had a long-term engagement in vocational education in South Africa, initiated the placement of lecturers and NCV students in workplaces, which is detailed in Section 3.1.7 below. As a result of this intervention, NCV students spend a minimum of 15 days in workplaces as a part of their NCV qualification.

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<sup>&</sup>lt;sup>13</sup> Whilst the term 'principals' is the official term, colleges use various terms to refer to the same position for example CEO and Deputy CEO.



Furthermore, recognising the challenges of TVET-industry partnerships, the Human Resource Development Council of South African (HRDCSA) conducted a review of college partnerships in 2014, which concluded that there is no clearly defined regulatory framework for college partnerships with industry and put forward the following recommendations:

- the DHET in consultation with SAIVCET should develop TVET partnership guidelines and a policy framework;
- the policy document should include a set of good practice guidelines and code of conduct to assist TVET colleges and stakeholders with establishing partnerships;
- the partnership framework should provide a sound theoretical and conceptual basis for mainstreaming partnerships. Appropriate policies and procedures should be established based on the framework to guide partnership formation;
- the guidelines should offer directives and guidelines on how to implement and structure partnerships, primarily in areas such as finance, access, equity, social dialogue and procurement. The regulatory framework should be developed with the
- full participation of all principal actors concerned;
- government should state the degree to which it is prepared to delegate authority and responsibility to stakeholders and TVET colleges and the degree of control it wants to retain

It is clear from the evidence on the ground that the issue of linkages between TVET colleges and industry is receiving high-level attention and intervention.

#### 5.3. Quality of TVET programmes

Quality assurance of education and training in South Africa is governed by the NQF Act. This Act has established 3 Quality Councils; the Higher Education Quality Council (HEQC), the General and Further Education and Training Quality Council (known as Umalusi), and the Quality Council of Trades and Occupations (QCTO), each responsible for their own subframework within the broader National Qualifications Framework (NQF). The Quality Councils are responsible for inter alia quality assurance and certification of the qualifications under their ambit and report to the Minister of Higher Education and Training whom they advise on policy for their sub-framework. These Quality Councils exist as statutory bodies reporting to the minister, and organisationally separate from the Department of Higher Education and Training.

For official college qualifications (NATED and NCV) the quality assurance body is Umalusi which also awards the certification. Umalusi quality assures General and Further Education and Training qualifications within the schooling sector, as well as TVET College qualifications up to NQF level 4. A national examinations body within the DHET is responsible for setting all exams and conducting moderation. These examinations are then quality assured by Umalusi. For occupational qualifications that colleges choose to offer, they are required to be accredited by Sectoral Education and Training Authority (SETA) Quality Assurance bodies (who operate under the auspices of the QCTO) and to carry out the assessment and moderation procedures prescribed by them. The Quality Council for Trades and Occupations (QCTO) is currently revising all occupational qualifications and will take on quality assurance functions currently performed by SETA Education and Training Quality Assurance bodies (ETQAs). The QCTO (Quality Council for Trades and Occupations) will be responsible for all occupational qualifications from NQF level 1 – NQF level 6.

A working group was established in May 2015 between the Department of Basic Education (responsible for school and Technical High School qualifications) and the DHET that will look at the alignment of the NCV qualifications and technical high



school qualifications. The immediate focus is on electrical engineering qualifications and foundational programmes. The DHET respondent (SR1) noted that there may be a need for three foundational programmes in engineering, business studies and finance respectively.

# 5.4. TVET system and international developments

South Africa's National Qualifications Framework (NQF) was one of the first 'second generation' NQF's to be implemented after the introduction of NQF's in Australia, New Zealand, the UK and Ireland (Keevy 2006). Third generation NQFs have been implemented in the English speaking Caribbean community and the European Union. South Africa's NQF drew heavily on Australian, New Zealand and Scotland's experiences in establishing the NQF, although the redress imperative of the apartheid qualifications system is a unique feature of the South African NQF. The South African Qualifications Authority (SAQA) has been involved in discussions with SADC countries to develop a regional qualifications framework for the recognition and standardisation of qualifications across the region, but to date this has not been implemented. South Africa's NQF and its outcomes based education and training system has been academically critiqued by authors such as Allais (2012), Muller and Young (2008). A central argument made briefly here, is that outcomes based education does not advance disciplinary and foundational learning, and that outcomes are unsatisfactory since they fragment the underpinning knowledge required for practice.

The TVET system has engaged with broader international developments in order to inform policy development and implementation. The Royal Danish Agency (Danida) funded key interventions and research within the TVET sector during the late 1990s and 2000, including capacity building for the introduction of the NCV. A key focus has been on the dual TVET system used by EU countries, particularly Germany and Switzerland. The Ministerial Task Team on the South African Institute for Vocational and Continuing Education and Training (SAIVCET – 2012) visited several EU countries to look at best practices on governance and management of the TVET system. SAIVCET is yet to be established however. The Department of Labour was initially responsible for SETA qualifications, which was then taken over by the Minister: DHET. The establishment of an Occupational Framework for Qualifications under QCTO was largely funded by German state funding and drew on best practice of occupational qualification frameworks.

NUFFIC awarded a tender to CINOP and South Africa's National Business Initiative (NBI) in collaboration with Wits University in 2010 for the following:

Strengthening of DHET and selected FET colleges to develop and deliver gender-sensitive, labour market linked programmes. In particular, it aims to strengthen the quality and relevance of learning and teaching of the National Certificate - Vocational (NCV curriculum). <a href="https://www.nuffic.nl/en/programme-administration/niche/countries-and-projects/south-africa/niche-zaf-022">www.nuffic.nl/en/programme-administration/niche/countries-and-projects/south-africa/niche-zaf-022</a>

A DHET respondent (SR1) noted a pilot of the Swiss dual system that SSACI is involved in. NCV learners with matric qualifications spend 2 days at college and 3 days in the workplace. This pilot has shown the limitations of existing labour law legislation. A problem identified was that it remains unclear as to whether companies are protected via insurance under existing labour legislation if they provide workplace exposure to students who are not company employees, and there is an injury on the job. SSACI is also involved in providing workplace experience for TVET College lecturers. DHET is also working with CINOP (Dutch agency) on TVET lecturer development.

A university has received funding from the Netherlands in respect of the development of an initial TVET College lecturer qualification which is currently being vetted by the higher education quality assurance body, the CHE.



From the above evidence it should be noted while international benchmarking has taken place to varying degrees, it has not been coordinated across government departments and stakeholders or undertaken in a systematic way for particular qualifications. With regard TVET lecturer qualifications benchmarking will be undertaken incrementally as new qualifications development comes on stream.



#### 6. THE PROFESSION OF TVET TEACHERS/LECTURERS

# 6.1. Key messages of this chapter

- Key Message 1: The current public TVET teaching cohort numbers around 10 000 college lecturers
- Key Message 2: TVET lecturers are still treated as part of the general school teaching body but a new dispensation specific to TVET college teaching is under way
- Key Message 3: A new policy on professional qualifications for TVET college lecturers was gazetted by government in 2013
- Key Message 4: TVET lecturers will have to hold a relevant disciplinary 3 year qualification in their specialist subject as well as a teachers qualification
- Key Message 5: A substantive number of TVET lecturers currently in teaching in TVET colleges will require upgrading to comply with the new government policy.

# 6.2. Types of TVET teachers

TVET lecturers in South Africa mostly refer to TVET lecturers at public TVET colleges. Trainers in the workplace and private TVET lecturers are not included in this analysis.

In 2012, the total number of lecturing staff within South African public TVET Colleges numbered 9877 (DHET 2014). The number of lecturers in the private TVET sector in 2012 was 6846.

Public TVET colleges employ, broadly, two categories of educator staff: permanent full-time staff paid for in terms of the State 'staff establishment'; and contract staff paid for by the College and employed by its Council. Contracts vary in length for quite short term to medium term, depending on the needs of the programme. For instance, the College could obtain a particular training contract from a company to train a certain number of students, and the college would then employ the appropriate persons on a short-term basis to teach within this company contract.

TVET teaching staff include professional teachers with university qualifications (exschoolteachers), lecturers with occupational qualifications, and artisans who are employed to teach both theory and practical subjects, as well as lecturing staff with N6 (NQF level 5) qualifications. Lecturers are employed on a full time permanent basis, while others are on a fixed contract, or TVET College Council appointees and some are appointed on short term contracts. For staff on short term contracts and longer fixed term contracts, their remuneration is topped up by an additional 37 % in lieu of benefits (e.g. medical aid, pension etc.). All contract staff employed by TVET College Councils must be employed on the same conditions as permanent staff (SR2). The following section 2.1.3 provides a detailed breakdown of available data on TVET College lecturer demographics and qualifications.

With regard to training of new lecturers, a government expert said that the European Union is making funds available for TVET College lecturer development, although it is unclear as to whether bursaries for college lecturers will be including in this donor support (SR1). Asked if there have been official projections of how many lecturers are likely to be needed, the government respondent said she was not aware of such a projection but that DHET has a critical need to attract good quality lecturers. There is a Funding Norms and Standards review under way, but it is not clear whether lecturer development forms a part of this. A difficulty DHET faces, she noted, is the replacement cost of lecturers who are engaged in further study. The MerSETA is



willing to place lecturers into a learnership leading to trade test qualifications but replacement lecturers would need to be funded in this instance.

## 6.3. Status of TVET lecturing profession

TVET college lecturers as a teaching cohort have historically been neglected, compared with school teachers who number around 500 000. Consequently issues that affect school teachers have enjoyed priority, this cohort also being strongly unionised. College teachers were previously part of the same bargaining chamber as school teachers, but after the FET Act 2006 which brought about the transfer of staff from provincial departments of education to College Councils, issues affecting college lecturers became more prominent and a separate section of the national Education Labour Relations Council (ELRC) was set up to deal with labour matters affecting college staff.

Generally college lecturers regard themselves as being poorly remunerated, especially after the introduction of the National Certificate Vocational in 2007 which made additional teaching and administrative demands on lecturers. College lecturers teach a wide range of subjects or courses: some teach workshop or employment related practice, while others teach more academic vocational subjects (e.g. Engineering drawings) or what are regarded as 'fundamental' subjects such as Language, Mathematics or Science.

Currently TVET Colleges recruit their own lecturers according to a national establishment regarding the number of staff members which can be employed on the State payroll. However the College is also able to employ lecturers out of college funds on shorter contracts, depending on programme needs.

The Policy on Professional Qualifications for TVET College Lecturers has yet to be implemented, but the remnants of a training system in terms of outdated policy still exist. In order for TVET lecturers to be remunerated at the level of a qualified teacher they are now required to hold a teaching qualification, which has had a variety of training trajectories. In previous years the tertiary education Technikons (now Universities of Technology) offered a Diploma in Education aimed at college lecturers who held trade qualifications but wanted to obtain a pedagogic qualification. This route to teaching has been discontinued, but some Universities of Technology still offer a National Professional Diploma in Education (NPDE), a school-teacher upgrading qualification which had been adapted to include TVET college teaching in 2003. This qualification primarily focuses on theory and pedagogy required for teaching competence and relies on TVET College lecturers past working experience and occupational qualifications (Papier, 2011), but this will be phased out as the new specialised college teaching qualifications come on stream.

Given South Africa's racialized apartheid past, the current demographics of the TVET teaching profession do not reflect the race and gender composition of the South African population. In 2012, 16 000 staff were employed in the public TVET sector, of which 9 200 were TVET lecturers (HRDCSA, 2013). The average lecturer to student ratio in TVET Colleges in 2012 was 1:55. Research on the TVET teaching profession is minimal and to date studies on the profile of TVET lecturers have only been conducted in four provinces. An audit conducted by the HSRC in 2010 found that nearly 20 % of TVET College lecturers held qualifications below a Diploma level, which is not considered as being adequate for teaching purposes. Data from three research studies between 2009-2011of TVET College lecturers in four provinces show that TVET College lecturers are under-qualified according to the requirements set out in the 2013 Policy for Professional Qualifications for Lecturers in TVET as illustrated below. Note that academic qualifications refer to discipline specific qualifications, and are here distinguished from teaching/education related qualifications:



#### Eastern Cape (2011)

48 % of lecturers held teaching qualifications 70 % held academic qualifications 30 % had work experience

# Gauteng and KwaZulu Natal (2012)

43 % of lecturers held teaching qualifications 43 % of lecturers had industry experience and industry qualifications

## Western Cape (2009)

62 % of lecturers held teaching qualifications 55 % of lecturers held occupational qualifications 64% of lecturers held academic qualifications

The Western Cape study showed that less than 20% of lecturers have occupational qualifications, teaching qualifications <u>and</u> academic qualifications as prescribed by the new 2013 TVET lecturer qualifications policy.

These studies also showed significant age, gender and race differences across TVET College lecturers in the four provinces.

In the Eastern Cape, the average age of lecturers was 37 years; 53% of lecturers were women; 70 % were African<sup>14</sup>; 13 % were Coloured; and 16 % were White.

In Gauteng and KwaZulu Natal the average age of lecturers was 40 years; 52 % were women in Gauteng and 42 % women in KwaZulu Natal; 66 % were African, 1.6% Coloured, 10.4 % Indian, and 21.9 % White.

In the Western Cape the average age of lecturers was 45 years; 52 % were women; 11% were African, 17 % Coloured, 1 % Indian and 46 % White. More research is needed to describe the demographics of the entire TVET college staff in South Africa.

A survey conducted in 2012 by the Education, Training and Development Practices SETA, within which sector education and training falls, showed the average age of TVET lecturers to be 40 years. Also in a study commissioned by the ETDP SETA in 2012<sup>15</sup>, it was shown that the teaching experience of over 50% of lecturers ranges from 1-5 years, suggesting a high turnover rate of staff and a loss of more experienced teachers. The same study found that 37.7% of lecturers have an undergraduate diploma, but the data does not show the percentage of lecturers having both a diploma and a teaching qualification, which is a requirement for being regarded as qualified in terms of the new requirements for college lecturers. In this regard the provincial surveys referred to above are more informative with regard to training interventions required by college lecturers.

Challenges facing TVET Colleges in South Africa include the high level of TVET teaching staff who are employed on a contractual basis, which impacts on training opportunities since colleges are reluctant to invest in training for short-term/temporary staff. Attracting and retaining qualified and skilled staff remains a problem as qualified technical staff would earn higher salaries in the private employment sector. The migration of staff from the provinces to college councils and then to the national DHET over the past eight years has caused significant tensions leading to loss of experienced staff. Frequent curriculum changes and short-term training of staff has added to

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<sup>&</sup>lt;sup>14</sup> Race classifications as defined in the old Apartheid order and still used in compiling equity profiles. In these terms 'African' refers to 'Black' African.

<sup>&</sup>lt;sup>15</sup> Mgijima, N & Morobe, N. TNA Report, 2012.



frustration due to increased workloads. Within the colleges lecturers have to deal with a range of learner and learning issues that include<sup>16</sup>:

- Different age cohorts in the same classes;
- Psycho-social problems that learners manifest including poverty, gangsterism, crime in their communities, substance abuse, lack of support structures;
- Poor discipline
- Absenteeism
- Under-preparedness of students with regard to learning skills and gaps in prior knowledge
- Limited experience of the workplace and workplace expectations.

The new professional development policy for TVET College lecturers therefore faces a formidable task in seeking to prepare teaching staff adequately in the face of these challenges.

# 6.4. Access to the TVET lecturer profession and pathways for becoming a TVET lecturer

The 2013 Policy for Professional Qualifications for Lecturers in TVET has only recently been gazetted, and is not yet operationalized. Previously the TVET teacher population was regulated by the required educational qualification values which provided academically qualified teachers and qualified artisans licensed to teach in the TVET system. The effects of the previous alternative requirements can be seen in TVET workforce profiles given the previous section.

The new policy however requires a combination of workplace, teaching and academic qualifications. It is envisioned that this will be enabled by set of TVET specific initial teacher education qualifications.

A DHET respondent (SE3) noted that as the TVET lecturer qualifications framework has not yet been implemented, pathways into TVET colleges remain the same as before the new policy. New lecturers for TVET Colleges are taken on if they have qualifications suitable to the programme that they will teach on.

A TVET College manager (CE3) interviewed said that the minimum requirement for a lecturer to teach at a TVET College is a teacher's qualification (albeit the general school teacher's qualification). He noted that the college does appoint subject specialists especially in the engineering trades, who then enrol for their Teachers Diploma after being appointed. However, he stressed that the reason for this situation was because of the lack of specialist "trades" people who hold a teaching qualification.

A TVET College lecturer (CE1) in hairdressing noted that she had obtained her trade, worked in the industry for several years and then went on to do an Higher Diploma in Education (HDE) and a National Professional Diploma in Education (NPDE) before teaching at the college. In addition she also completed assessor and moderator training certificated by the ETDP SETA. She added that while college teachers faced many challenges including poor remuneration, she felt a great sense of job satisfaction and the reward was in seeing how the hairdressing qualification made a difference to young people's lives, enabling them to become self-sufficient and sustain themselves economically in spite of general unemployment in other sectors of the economy.

Another lecturer (CE2) obtained his plumbing trade qualification and was employed by the college with no teaching qualification. He subsequently completed assessor training and has completed a Vocational Education orientation Programme (VEOP), which is recognised as 30 credits towards a university of technology's teaching

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<sup>&</sup>lt;sup>16</sup> See Papier, 2013.



qualification. He did not feel that the lack of teaching experience prevented him from being an effective teacher as he was a TVET College graduate and stated that the syllabus had not changed since he had left the college to become an artisan.

#### 6.5. Recruitment of TVET teachers

A DHET respondent (SR2) confirmed that 63% of all TVET college staff on the payroll are now DHET state employees, while the remainder are college employees. It is envisaged that college appointed staff will increase according to occupational programmes taken on by the college in the future as colleges attempt to accommodate the increase in applicants.

The migration of staff from a provincial competence to a national DHET competence was finalised at the end of April 2015. This has implications for the recruitment of college lecturers as the TVET College staff complement will only increase if colleges engage in occupational programmes (e.g. SETA contracts). As public TVET Colleges are state entities, they fall under the provisions of the Public Finance management Act (PFMA). Colleges are therefore required to advertise all positions in national media. Potential candidates then interviewed by college interview panels consisting of management, programme and union representatives, and qualifications and references are checked by the HR division at the college.

Currently there are few studies documenting the routes that college lecturers have followed into the TVET workforce. It has been suggested, based on the previous entry requirements, that there are 'industry people turned teachers', and 'school teachers'. However available data suggests that the recruitment situation is more fluid, with lecturers entering the college via a variety of routes as indicated by the examples above. The profile of lecturers could be due to a number of factors including a shortage of TVET lecturers, changing regulatory requirements, the weakness of vocational teacher education, and internal college recruitment practices.

## 6.6. Working conditions and payments

A list of educator levels is printed below to show educational qualification requirements against which associated pay scales are applied. It should be noted however that these REQV levels were intended for teachers in general schooling, and were simply applied to TVET lecturers as well, with the addition of qualified artisans being recognised at REQV 13 (the officially endorsed benchmark entry level). This is in the process of changing, as conditions of service and remuneration levels and scales are being debated in the national bargaining chamber by the state as employer, and teacher unions. These negotiations are taking into account the new framework of prescribed qualifications specific to TVET college lecturers.

Current Educator Levels: REQV (Relative Education Qualification Values):

- REQV Level 10: Teachers with Grade 12 or lower, and without a teacher's qualification.
- National Certificate in ABET Practice (accredited by ETDP SETA)
- REQV Level 11:
- Grade 8, 9, 10 or 11 plus a teacher's qualification of at least two years' apposite training of which a wide range of educator certificates are recognised in this category
- REQV 12: Grade 12 plus one or two years' apposite training of which a wide range of educator certificates are recognised in this category.
- REQV 13: Grade 12 plus three years' apposite training
- REQV 14: Grade 12 plus four years' apposite training
- REQV 15: Grade 12 plus five years' apposite training



As indicated in Section 3.1.2 above, contract employees paid by the college are paid 37% as a top up to compensate for the benefits that State employees enjoy in their salary package. The Minister had also decreed in 2011 that TVET college lecturer salaries should be raised to be placed on par with those of school teachers.

The following salary schedule has been provided by a public TVET College and show indicative salaries per REQV level. The salary ranges reflect the total cost of employment before tax. A Euro equivalent is shown based on an exchange rate of Euro 1: R 13.94 (18 June 2015 - http://www.x-rates.com/table/?from=ZAR&amount=1)

Schedule 1: OSD salary notches with effect from 1 April 2014 for full-time employees: lecturers

		From	То
	REQV 10 ->	87789 (Euro 6298)	100893 (Euro 7238)
Post Level	REQV 11 ->	101901 (Euro 7310)	119619 (Euro 8580)
01	REQV 12 ->	120828 (Euro 8668)	148899 (Euro 10680)
	REQV 13 ->	150375 (Euro 10787)	196920 (Euro 14126)
	REQV 14 ->	198888 (Euro 14267)	247557 (Euro 17758)
PL 02 ->		250029 (Euro 17936)	294762 (Euro 21145)
PL 03 ->		297705 (Euro 21536)	363255 (Euro 26058)
PL 4 & 5 ->		366891 (Euro 26319)	762681 (Euro 54711)

# 6.7. Training opportunities for TVET teachers

Training opportunities for TVET College lecturers is currently conducted on ad hoc basis, in part due to changing curriculum and the absence of a coherent continuing professional development policy.

A DHET respondent (SE3) noted that the DHET has requested TVET Colleges to develop their own in-house training for capacity building of college lecturers. Colleges have to budget for personnel training covering areas such as induction, subjectspecific knowledge and assessment and moderation. However, budgets for continuous professional development (CPD) have not been provided by the DHET. There are also no set targets for CPD points to be achieved within a specific time period and debates are ongoing as to whether there is a need for a dedicated professional body to be established for this purpose. At this stage, TVET College lecturers are registered with the South African Council of Educators (SACE), but this professional body is primarily concerned with formal school teachers. A few provincial education departments have attempted to coordinate curriculum collaboration between colleges. The Western Cape Education Department established a College Curriculum Committee to assist TVET lecturers learn through communities of practice in specific curriculum areas and in so doing assist lecturer development through focus group engagement. However this is not a widely shared practice at provincial level and depends on the specific provincial education department's initiative.

An important CPD intervention has been conducted by the Swiss-South Africa Cooperation Initiative (SSACI), a non-profit company that uses donor funding. Since 2012, 420 TVET College lecturers (teaching both NCV and N courses) in 28 TVET Colleges have undergone Workplace Based Exposure (WBE) orientation, of whom 150 have spent time in industry (TE1). The balance of lecturers will undergo WBE in their June /July 2015 holidays and SSACI expects 350 to undergo WBE by then. SSACI has produced a manual that explains to the TVET College how lecturer exposure to WBE can work, e.g. documentation, planning etc. A second level of the manual is aimed at



college lecturers - how to plan ongoing CPD, develop a Portfolio of Evidence and to use Work Based Experience for qualification purposes.

Feedback obtained from the 150 lecturers exposed to WBE and the previous pilot in which lecturers self-reported on their learning, noted the following issues according to a SSACI representative (SE1):

- After visiting industry lecturers revised lessons plans based on examples/anecdotes to make their classes more relevant to industry.
- Having been exposed to changes in technology lecturers informed students and colleagues of this. A problem is that exams are based on existing materials that are often outdated.
- Lecturers supplemented core curriculum with other materials relevant to industry, such as cutting edge technology even though this is not an official part of the syllabus.
- A significant finding is that lecturers are starting to assign student activities to tasks according to work and assess students in the same ways that they would be assessed by industry, for example tasks that take cost and time constraints into account.. This has been an eye opener for lecturers.
- Lecturers talk to colleagues about their WBE which leads to cross pollination of ideas within the college.

The SSACI representative noted that less than 1000 out of 9 000 TVET College lecturers have had exposure to WBE as a form of CPD and felt that TVET College should be able to expose their lecturers to WBE as the colleges operate However there is TVET College lecturer resistance to spending additional hours on CPD. Currently only self-motivated lecturers engage in WBE during their holidays.

SSACI has also been engaging with universities that are interested in developing new TVET Teacher qualifications and has a formed a WBE committee with one university. There are different levels of college lecturer qualifications being developed by universities and the forum addresses overlaps and gaps in WBE as well as coherence in thinking of WBE and lecturer training. SSACI was invited to this forum because very few agencies have implemented WBE and few universities have worked closely with TVET colleges.

SSACI maintains that much can be learned from professions about their CPD models. There is a need to draw on the principle of 'relevant mentoring' for initial teacher training. There is also a need for accurate, good quality materials to be used in teaching that relate to industry. Universities need to keep an ongoing record on WBE through the qualification and use of RPL principles.



#### 7. SYSTEM OF TVET TEACHER EDUCATION

#### 7.1. Key messages of this chapter

- **Key Message 1:** The system of TVET teacher education is new and evolving as the new qualifications policy framework was only gazetted in 2013
- **Key Message 2:** Universities need financial and human resources to undertake TVET teacher development and delivery
- **Key Message 3:** The local knowledge base on TVET teacher education is still under-developed
- **Key Message 4:** Currently training is still being conducted in terms of historical qualifications that will be phased out
- **Key Message 5:** Training opportunities for TVET College lecturers are currently conducted on ad hoc basis, in part due to changing curriculum and the absence of a coherent continuing professional development policy.

#### 7.2. General characteristics

# 7.2.1. TVET teacher education policies

Teacher education in South Africa is the responsibility of university Faculties of Education, hence the new professional teaching qualifications for TVET lecturers also falls within the university ambit (SE3). South Africa has 23 public universities which predominantly offer primary and secondary school teaching qualifications. The public universities have been grouped into three separate categories, namely: universities of technology (previously known as technikons), comprehensive universities comprising of a merger between a research university and a university of technology, and research universities.

TVET teacher education remained marginalised in South Africa until the formation of the Department of Higher Education and Training in 2007 that placed an increased importance on technical and vocational education and training. In 2013 the DHET published its Policy on Professional Qualifications for TVET College Lecturers. In order for universities to respond to this policy, qualifications need to be designed and submitted first through university administrative processes, then to the DHET and the CHE (Council on Higher Education) for approval, before they can be placed within the university's Programmes and Qualifications Mix. The time period for this process typically takes at least 18 months, therefore no South African university is currently ready to offer qualifications under the new policy as yet.

The new Policy on Professional Qualifications for TVET Lecturers sets out a suite of initial and post-professional qualifications for TVET college lecturers. These new qualifications have been detailed earlier in Section 1.1.2 herein.

The policy does not specify Masters and PhD programmes in TVET as these will adhere to the same requirements outlined in the Higher Education Qualifications Sub-Framework. Recognition of Prior Learning is provided for the abovementioned qualifications ranging from 90 credits to 120 credits depending on the prior qualifications obtained. All new TVET lecturer qualifications require a Work Integrated Learning (WIL) component and may require collaboration with other university faculties to develop discipline-specific knowledge and specialised subject matter.

College lecturer research conducted by FETI in 2011 showed that lecturers require a combination of academic, pedagogical, workplace, curriculum and organisational

<sup>&</sup>lt;sup>17</sup> DHET, 2013. Policy on Professional Qualifications for Lecturers in Technical and Vocational Education and Training. Govt Gazette No.36554. www.gpwonline.co.za



competences (Papier, 2011). Papier notes the 'Bandung Declaration' (2008) that requested universities involved in vocational teacher education to structure programmes based on the following 'pillars':

- Vocational discipline that includes work process, curriculum and qualification analyses;
- Vocational pedagogy/educational sciences;
- Studies in cross-cutting key competences to support the specialisation in vocational disciplines, and
- Research competences in vocational disciplines/vocational pedagogy including a thesis at the end of the study (Papier, 2013).

More established TVET systems in Europe, Australia, UK, the USA and Scandinavia inter alia, have established a large body of knowledge on what constitutes a 'vocational pedagogy', which informs the kind of qualifications that are offered for the training of vocational teachers. In South Africa the local body of knowledge on this issue is still weak and emergent.

#### 7.2.2. Overview TVET teacher education institutes

To date, nearly all teaching of TVET College staff has been conducted by universities of technology and comprehensive universities, mainly through adapted senior secondary school teaching qualifications that have been broadened to include vocational subjects. Every university in South Africa has relative autonomy in terms of its own statutory act, although state funding is used as a lever to incentivise desired programmes and qualifications.

As the number of TVET College lecturers countrywide (approx. 10 000) is far smaller than that of school teachers (approx. 500 000), many universities need to be convinced of the viability of offering TVET teaching qualifications (TE1).

University responses to the new qualifications framework for TVET College lecturer qualifications have been varied but attempts to engage with it have been made. The UWC FET Institute worked with 6 universities, comprehensive universities and universities of technology to pilot a 30 credit Vocational Education Orientation Programme (VEOP), which arose from policy discussions on an earlier draft of the lecturer qualifications policy. Wits University has similarly convened a grouping of 12 universities to conceptualise an Advanced Diploma for TVET and to work on a common approach that all universities can then submit through their own individual Programmes and Qualifications Mix to the CHE for registration of these qualifications. The University of the Free State collaborated with an international funding agency to develop an entry level initial qualification which it is hoping to roll out in 2016 (TE2). The first new qualifications are likely to be implemented in 2016/2017 depending on the speed with which processes unfold.

Key challenges faced within South African universities include the lack of experience in integrating theoretical provision with practical workplace exposure, as well as a dearth of capacity of TVET professional teaching staff in universities. Thus it will require significant investment in improving postgraduate qualifications in TVET to build the university capacity necessary to offer initial and continuing professional TVET teacher development.



#### 7.2.3. Funding of TVET teacher education institutes

All South African universities are funded on a programmatic basis. Funding is based on student enrolment and throughput and is paid on a two yearly retrospective basis. As noted above, the presently small number of TVET college lecturers (less than 10 000) has led to universities querying the viability of undergraduate and postgraduate qualifications for TVET College lecturers, whereas numbers of school educators are much higher. A DHET respondent noted that ring fenced funding for TVET College lecturers has not yet been finalised by the DHET and currently no additional allocations have been made available (SR1). The Funza Lushaka fund is dedicated to providing bursaries and funding support to universities for the training of school teachers but this has not been extended to universities for the training of TVET College lecturers as yet.

A DHET respondent stated that the DHET is awaiting the results of an annual survey on TVET educator qualifications before numeric targets are set for universities to train TVET College lecturers. He noted that the DHET will need a range of funding sources to sustain TVET teacher training. He noted that the EU Funds for TVET teacher education will allow the DHET to establish a momentum. The DHET will also need to support individual lecturers stemming from the annual survey and will need a dedicated fund for continuous professional development. At the moment DHET had not set any financial plans in place for TVET College lecturer training.

The SETA for Education, Training and Development Practices (ETDP) SETA within whose ambit all education and training institutions fall, has within its Sector Skills Plan 2011-2016 included support to TVET colleges in the form of, inter alia, Management and Leadership training; training in Mathematics and Science Didactics; Pedagogy and Andragogy; WBE; subject specialisations; and so on. The ETDP SETA Annual Report 2013/2014 shows evidence of substantive funding to training of lecturers as assessors and moderators, and for them gaining industry experience and exposure. This funding source can possibly be tapped into for support of lecturers in obtaining the new prescribed professional qualifications, as well as support to teacher educator institutions for the development and piloting of new qualifications in the short to medium term.

#### 7.2.4. Quality assurance TVET teacher education institutes

The Council for Higher Education (CHE) is responsible for the overall quality assurance of higher education in South Africa. For TVET Teacher Educator institutions, the qualifications framework for TVET teaching guides future accreditation of TVET teaching programmes. In the case of a new qualification developed for TVET teaching, a university has to prepare a detailed submission of this qualification to internal university programme processes, including the Senate Academic Planning committee. Once approved internally the proposed qualification is forwarded to the DHET as well as the CHE.

The DHET expects that the development of qualifications will include international benchmarking and collaboration across universities in the country. Once approval from both authorities has been obtained, universities are able to advertise and recruit for implementation of the programme.

The CHE conducts regular quality audits of universities and their qualifications. Programmes are generally accredited for a specified period before they are required to be internally reviewed by the university and reports submitted to the quality assurance division of the CHE. The CHE also conducts external audits of qualifications according to specific fields. For example, the CHE audited the provision of MBA programmes across private and public institutions and some qualifications were deaccredited for various reasons of non-compliance.



## 7.2.5. TVET teacher education institutes and international developments

The development of the qualifications framework for TVET College lecturers drew on significant academic input from South African universities. As indicated earlier the local knowledge base on vocational teacher education is relatively thin. However, some comparative academic work has been undertaken, which informed inputs to the DHET during the policy development process. There is evidence of South African academics having participated in international forums and discussions on vocational teacher education issues<sup>18</sup>.

# 7.2.6. TVET teacher education institutes and postgraduate research

Wedekind (2008) conducted a review of TVET research undertaken in South Africa and concluded that the local knowledge base is under-developed. With the recent policy emphasis on TVET as an integral part of post-school provision, there has been increased research into TVET, with an increasing number of Masters and Doctoral studies located in TVET settings. A few universities have in the last 5 years established dedicated centres for TVET research and this is likely to increase the number of outputs in that domain.

To mention some examples of the growth in TVET related research, the FET Institute at the University of the Western Cape (now part of the larger Institute for Post School Studies) has been involved in TVET research and development since 2002, the Centre for Integrated Post-School Education and Training (CIPSET) at the Nelson Mandela Metropolitan University established in 2012 focuses on TVET and adult education, and the Wits University established the Centre for Research Education and Labour (REAL) in 2012, with a key focus on TVET and labour market research. In addition, the University of Stellenbosch's Centre for Higher Education and Adult Studies is involved in leadership and management programmes aimed at TVET Colleges while UKZN has also been engaged in TVET research and TVET lecturer qualifications for some time. The MerSETA in collaboration with Bremen University is involved in a PhD programme for South African TVET scholars in competency based education.

It is evident that TVET in South Africa is enjoying academic scrutiny and is a rapidly growing field though relatively small compared with other areas of educational research.

#### 7.3. TVET Teacher education programmes (initial and in-service)

#### 7.3.1. Organisational aspects of TVET teacher education programmes

All public universities in South Africa have a large degree of autonomy due to their statutory legislation. Most of the South African universities involved in TVET teacher education have located their provision within Faculties and Schools of Education, even though the development might take place in centres affiliated to the Faculty. As the new qualifications framework for TVET College lecturers has not yet been implemented, most of the existing TVET teacher qualifications have been adapted from formal schooling qualifications. Universities can largely decide on content for the curriculum and most attempts at collaboration between universities focus on key outcomes rather than specific curriculum content. For example, the collaborative work on the 30 credit Vocational Education Orientation Programme (VEOP) focused on key outcomes that needed to be addressed. Once this was agreed to, each university took responsibility for developing their own content and methodology for delivering the programme. The broad outcomes are described in the submissions to DHET and CHE together assessment methods and bibliographies. The content of the curriculum is

<sup>&</sup>lt;sup>18</sup> See publications by Wedekind, V.; Papier, J.; Akoojee, S. inter alia.



then decided internally by university staff within the faculty. The DHET has urged universities to work together on the development of new qualifications for TVET lecturers universities and this is likely to result in outcomes which can be used by faculties in their delivery of the qualifications.

# 7.3.2. Key characteristics of the ITE curriculum

Broadly speaking, the new framework for TVET teacher qualifications envisages a combination of 'top up' and full programmes. In South Africa, as in other countries, TVET is not necessarily a first career (though it can be), and lecturers enter from a variety of routes. In the new system it is envisaged that a full ITE 4-year qualification called the Bachelor of Education would provide for new entrants into TVET teaching, whilst a 'top-up' or capping qualification like the Advanced Diploma for Vocational Educators (ADVE) could be offered to university graduates who decide to enter TVET teaching as an option.

As new TVET teaching qualifications aligned to the qualifications framework for TVET College lecturers has only been recently gazetted, no South African University is offering these qualifications as yet. Responses obtained from university TVET teacher education staff on their proposed and existing qualifications are shown below. It is important to note that the universities listed below are not the only institutions offering TVET teacher education qualifications, as many universities of technology and comprehensive universities offer qualifications that have in the main been adapted from school teaching qualifications. The proposed structure of qualifications can be seen in the policy document as indicated earlier, which sets out a range of initial and post-professional qualifications for lecturers in TVET colleges.

University respondents interviewed about their envisaged new offerings to TVET candidates responded as follows:

- Cape Peninsula University of Technology (CPUT). CPUT will offer a National Professional Diploma in Education (NPDE): FET to its final cohort of lecturers as this qualification will be phased out. No practical training is offered as this qualification is aimed exclusively at practising TVET College lecturers. CPUT also offers a Postgraduate Certificate in Education (PGCE: FET). In 2017 there will be new qualifications in place. CPUT intends to offer a one year Advanced Diploma in TVET as a capping qualification to an undergraduate diploma. CPUT also intends offering an Advanced Diploma in Education: TVET in Maths and Business Studies, as well as a B.Ed. Honours in TVET. CPUT feels that there is no market for a B. Ed degree in TVET at the present time.
- University of the Free State (UFS). UFS is currently awaiting approval from the DHET on its proposed Diploma in Vocational Teaching (DVT). UFS will rely on faculties dealing with different subject areas (e.g. engineering) to develop the curriculum for TVET teacher education qualifications. The proposed DVT is a four year Diploma and will be initially offered from an Open Learning campus and is 368 credits. The 1<sup>st</sup> year of this Diploma is designed for students who do not have the pre-requisite entrance requirements and can be awarded through Recognition of Prior Learning. The proposed DVT has a fairly even balance between pedagogy, subject knowledge and practical workplace based training. Practice time for students has not yet been defined as the programme still has to be implemented, but it is likely to include the hours of site based experience as prescribed by the policy.
- University of KwaZulu Natal (UKZN). UKZN has an NPDE in Vocational
  Training, but this is in the process of being phased out. The NPDE is based in
  the School of Education in the College of Humanities at UKZN which does have
  postgraduate qualifications at Honours, Masters and Doctoral levels that could
  be undertaken by college lecturers. However these are research based
  qualifications rather than taught programmes. The current curriculum includes
  general policy and an educational studies component that focuses on emerging



policies re TVET as well as international comparisons. There is a strong classroom management focus, as well as on curriculum and pedagogy/teaching methods although these generic. There is also a focus on managing workplace learning, collegial relations, curriculum teams and tracking. A fairly big credit allocation is for the practical component assessed in colleges that consisted of 4 site based visits in which 3 lessons were observed and critiqued.

- University of the Western Cape. UWC intends offering a Postgraduate
  Diploma (PGDE) in TVET from 2016. This is envisaged as a two year part-time
  course consisting of 8 modules including a module on research methodology.
  Concentrations in the postgraduate diploma are in the areas of Mathematics
  and Language teaching, and Curriculum Development, aimed at developing
  TVET college leadership in these domains. The envisaged cohort will be existing
  TVET College lecturers.
- University of the Witwatersrand (WITS). Wits has started a collaborative process to develop an Advanced Diploma in TVET. Participating universities include the following: Central University of Technology (CUT); Cape Peninsula university of Technology (CPUT); Damelin (Private HE provider); Durban University of Technology (DUT); Nelson Mandela Metropolitan University (NMMU); North West University (NWU); Stellenbosch University (SUN); Tshwane University of Technology (TUT); University of Cape Town (UCT); University of the Free State (UFS); University of Johannesburg (UJ); University of South Africa (UNISA distance provider); University of the Western Cape (UWC); University of Venda (UNIVEN): Vaal University of Technology (VUT); Walter Sisulu University (WSU).

The qualification will deal with teaching expertise. It assumes disciplinary knowledge and has developed 5 areas that will become subjects. These are:

- Disciplinary learning basic study of education and Introduction to Education 32 credits;
- Pedagocial learning 48 credits mostly for specialisation e.g mechanical engineering lecturers studying pedagogy for their area of specialisation;
- Practical/WIL 8 credits on workplace experience and the remainder on teaching in a college- 24 credits;
- Situational Learning TVET context, economic environment, life skills (HIV/AIDS, Unemployment, Poverty etc.) and barriers to learning – socioeconomic factors affecting students – 8 credits.
- Fundamental learning no credits ICT and ability to convert to an African language before the qualification can be awarded.

Each university will develop subjects from outcomes that have been developed under each of these areas.

#### 7.3.3. Recruitment and selection for TVET ITE

The new policy on TVET teacher qualifications sets out a set of minimum criteria for entry into particular qualifications. In addition, universities are able to set their entry criteria as well. Some examples of current practice with soon to be phased out qualifications are as follows, as well as for envisaged new qualifications are as follows:

CPUT's entry requirement for the PGCE: FET is a three year degree or a diploma with at least 2 teaching subjects at second year level. For lecturers with working experience (e.g. artisans) they need 120 credits at NQF level 5 to enter the NPDE: FET.

UFS' proposed entry requirement for the DVT is a minimum of N2 with a trade test and/or an NCV at NQF level 4. These students will then be required to do the first bridging year of the 4 year diploma if they do not have sufficient RPL experience.



UKZN noted that there were flexible entry requirements for the NPDE. All students needed to be existing lecturers at TVET Colleges and hold a post-school qualification. No undergraduate degree was required for entrance. This caused some tension within the programmes as students with an N6 were joined by students with undergraduate degrees and some even with master's degrees.

UWC proposes a minimum of an undergraduate degree and a teaching qualification for entrance into the PGDE: TVET.

Wits proposes a 360 credit diploma (including the NATED N6 Diploma) or undergraduate degree in education. If students with diploma qualifications still need academic support, a range of bridging courses will be provided.

# 7.3.4. Early Career Support (ECS) and Continuous Professional Development (CPD)

Training opportunities for TVET College lecturers are currently conducted on ad hoc basis, in part due to changing curriculum and the absence of a coherent continuing professional development policy.

A DHET respondent (SE3) noted that the DHET has requested TVET Colleges to develop their own in-house training for capacity building of college lecturers. Colleges have to budget for personnel training covering areas such as induction, subjectspecific knowledge and assessment and moderation. However, budgets for continuous professional development (CPD) have not been provided by the DHET. There are also no set targets for CPD points to be achieved within a specific time period and debates are ongoing as to whether there is a need for a dedicated professional body to be established for this purpose. There is no evidence of CPD being written into the employment contracts of lecturers, nor is it legislated. At this stage it is unclear how staff development will be timetabled (time off), incentivised (e.g. promotions, pay increases, reward systems), or sponsored (e.g. bursaries). The Skills Development Act however does require that colleges budget one percent of payroll for staff development. This staff development budget is in practice discussed by the ETDPSETA which has established a TVET college chamber. It is as yet unclear who has authority over this staff development fund. In practice, timetabling staff development appears to be a major challenge, as there does not appear to be a staff replacement fund which would enable teaching to continue whilst staff are in training. This has resulted for example in lecturers being involved in training during their own holiday time and after hours.

At this stage, TVET College lecturers are registered with the South African Council of Educators (SACE), but this professional body is primarily concerned with formal school teachers. A few provincial education departments have attempted to coordinate curriculum collaboration between colleges. The Western Cape Education Department established a College Curriculum Committee to assist TVET lecturers learn through communities of practice in specific curriculum areas and in so doing assist lecturer development through focus group engagement, and a comparable arrangement has been established in the North West. However this is not a widely shared practice at provincial level and depends on the specific provincial education department's initiative. At the same time, colleges are currently migrating from being a competence under provincial education departments, to residing under a national department of higher education and training.

An important CPD intervention has been conducted by the Swiss-South Africa Cooperation Initiative (SSACI), a non-profit company that uses donor funding. Since 2012, 420 TVET College lecturers (teaching both NCV and N courses) in 28 TVET Colleges have undergone Workplace Based Exposure (WBE) orientation, of whom 150 have spent time in industry (TE1). The balance of lecturers will undergo WBE in their June /July 2015 holidays and SSACI expects 350 to undergo WBE by then. SSACI has



produced a manual that explains to the TVET College how lecturer exposure to WBE can work, e.g. documentation, planning etc. A second level of the manual is aimed at college lecturers - how to plan ongoing CPD, develop a Portfolio of Evidence and to use Work Based Experience for qualification purposes.

Feedback obtained from the 150 lecturers exposed to WBE and the previous pilot in which lecturers self-reported on their learning, noted the following issues according to a SSACI representative (SE1):

- After visiting industry lecturers revised lessons plans based on examples/anecdotes to make their classes more relevant to industry.
- Having been exposed to changes in technology lecturers informed students and colleagues of this. A problem is that exams are based on existing materials that are often outdated.
- Lecturers supplemented core curriculum with other materials relevant to industry, such as cutting edge technology even though this is not an official part of the syllabus.
- A significant finding is that lecturers are starting to assign student activities to tasks according to work and assess students in the same ways that they would be assessed by industry, for example tasks that take cost and time constraints into account.. This has been an eye opener for lecturers.
- Lecturers talk to colleagues about their WBE which leads to cross pollination of ideas within the college.

The SSACI representative noted that less than 1000 out of 9 000 TVET College lecturers have had exposure to WBE as a form of CPD and felt that TVET College should be able to expose their lecturers to WBE as the colleges operate However there is TVET College lecturer resistance to spending additional hours on CPD. Currently only self-motivated lecturers engage in WBE during their holidays.

SSACI has also been engaging with universities that are interested in developing new TVET Teacher qualifications and has a formed a WBE committee with one university. There are different levels of college lecturer qualifications being developed by universities and the forum addresses overlaps and gaps in WBE as well as coherence in thinking of WBE and lecturer training. SSACI was invited to this forum because very few agencies have implemented WBE and few universities have worked closely with TVET colleges.

SSACI maintains that much can be learned from professions about their CPD models. There is a need to draw on the principle of 'relevant mentoring' for initial teacher training. There is also a need for accurate, good quality materials to be used in teaching that relate to industry. Universities need to keep an ongoing record on WBE through the qualification and use of RPL principles.

Early Career Support and Continuous Professional Development take place in an ad hoc fashion at present and are largely initiated by the college itself. However the DHET has undertaken development workshops in respect of changes in curriculum and training for assessment. Universities offering existing undergraduate TVET teacher qualifications do offer induction into the vocational field at a generic level, but very few universities offer CPD. CPUT in collaboration with UWC has offered the VEOP as an induction programme for college lecturers. UFS intends offering part of their proposed DVT as skills programmes, such as the VEOP and ICT skills for lecturers. UKZN was approached to offer short courses and some work was done around assessment, classroom management, leadership and assessment. UWC has also over many years offered workshops for colleges at the request of the provincial education department or the individual college itself.



The DHET has run a number of interventions, such as the cascaded training and orientation of the NCV curricula, but these are not for upgrading purposes. TVET College management do provide opportunities for TVET lecturers to engage in CPD in areas identified through performance management evaluations, but these are not necessarily credit bearing courses. Examples of credit bearing courses include the VEOP, which has has been delivered to TVET College lecturers in the Free State, Gauteng, Eastern Cape and Western Cape. Colleges have also arranged regular workshops based on lecturer need for training in ICT, fundamentals teaching, product specific training for industry and the like.

#### 7.3.5. Aligning the TVET TE to the professional needs

College managements have at various points in the development of the qualification been consulted as to the outcomes desired, but universities have not particularly sought such consultation in the design of the new qualifications nor is there a specific forum for such feedback. UFS consulted with SETAs, specifically the ETDP SETA and MerSETA, in their design of the proposed DVT but most SETAs did not take up this opportunity. UKZN noted there has been some informal involvement of colleges, primarily through the curriculum development team who also taught in colleges, but there was no formal consultation with TVET Colleges. At Wits University, the development of new TVET teacher qualifications has involved SSACI, based on their experience of workplace based exposure with TVET college lecturers, and a workplace based exposure forum has been established to assess ways in which Work Integrated Learning (WIL) can be infused into the curricula.

Accredited university curricula has to satisfy university quality assurance requirement, however it is envisaged that once programmes are implemented there will be the opportunity to improve and review, including feedback from the users.

#### 7.4. TVET teacher education student population

## 7.4.1. Enrolment in TVET TE programmes and background of students

This information is not available as no new programmes have yet been implemented. Neither has data on TVET participants in other university offerings specifically been gathered. Respondents interviewed were not able to provide specific statistics for this grouping. However, generally TVET candidates in university teacher education offerings have been mature students undertaking part-time studies, and are in-service college lecturers.

Generally in South Africa college teaching has not been a career track of choice, in that there is no pathway directly into TVET college teaching. Present college employees have entered college teaching after a few years in high school teaching or after several years in the workplace which is higher paying than a college. More recently and especially in areas where suitably qualified staff are hard to find, colleges have employed their N6 graduates as part-time teachers – these would be younger students with little or no real work experience.

## 7.4.2. Motivation for enrolling in a TVET TE programme

Anecdotal evidence from TVET College lecturers is as follows:

- A lecturer noted that it was good career choice to become an artisan for 5 years and then return to the college to become a lecturer. He felt motivated in teaching students a trade so that they can earn a living.
- Another lecturer entered the TVET teaching profession as she is a single parent
  and wanted a reliable stable income. She also felt that she wanted to 'give back
  to industry' and to aspiring learners. She felt that becoming a TVET lecturer
  was a good choice as it allowed her to empower other skills to become



entrepreneurs. She noted her passion for teaching and that it was rewarding to see learners from school develop and mature while still having fun in the process.

# 7.4.3. Drop-out of the TVET TE programme

Statistics on this question were not available. Information from the TVET TE sources consulted was that drop-out rates are not as high as that of the mainstream university cohort. College lecturers undertaking the present (phasing out) formal qualifications do so part-time and while they working full-time at a college. The self-motivation from such students is already there at the outset, since they choose to undertake further studies and improve their skills. Dropping out therefore would be for mostly personal and domestic reasons for instance illness, childcare arrangements, work pressure or marital problems.



#### 8. CHALLENGES, SOLUTIONS AND EMERGING THEMES

#### 8.1. Key messages of this chapter

- **Key message 1**: The Vocational Teacher Education system is weak, and has only recently been regulated.
- Key message 2: The vocational teacher education requires support in the following areas
  - Development costs
  - Bursaries
  - Faculty prioritisations
  - Student placements (at colleges and Workplaces)
- **Key message 3:** There is a lack of clarity around support to staff and staff incentives
- **Key message 4:** The knowledge base around vocational teachers and teaching is still emergent in South Africa.

# 8.2. Challenges of the TVET system

Overall respondents commented about the lack of capacity in the country to drive vocational teacher development. The vocational teaching sector is small and is dwarfed by the needs of the general schooling system. University faculties of education are by and large unfamiliar with the vocational system and the needs of vocational teachers. University faculties would therefore have to grow/buy in the capacity to assign to the nurturing of a vocational teacher cohort and the knowledge needed to service that domain. The DHET therefore requires funding dedicated to the support of qualifications development in universities as well as for TVET student teacher bursaries.

The new framework of teacher qualifications for TVET lecturers also places a new set of requirements on Teacher Education. This includes setting up relationships with colleges and workplaces for placement of trainee lecturers.

Viable models for delivery of new qualifications are necessary, for example blended learning approaches that enable college lecturers who have little access to contact learning situations, to also undertake formal qualifications.

Additional challenges faced within the national TVET system include the ongoing policy transition facing TVET Colleges since 1998 that affect the 'purpose' of TVET Colleges. Whilst the White Paper on Post-School Education and Training (2013) has largely answered this challenge through the alignment of TVET to training and the workplace rather than with academic tracks, the implementation of policy support measures such as SAIVCET (South African Institute for Vocational and Continuing Education and Training) have not yet taken place.

TVET Colleges also face a perception that Colleges are students who are unable to succeed academically, which is not easily overcome especially as the mainstream curricula is academically challenging. Quality assurance of TVET Colleges is currently split across two sub-qualification frameworks (General Education and Training under Umalusi and occupational training under the QCTO), which has led to multiple quality assurance frameworks that are not compatible with each other.

With regard to TVET offerings, a challenge facing the TVET system is a lack of differentiation. All public TVET Colleges offer similar curricula and programmes across the country, which do not easily respond to local and regional training needs and contexts. In response to a question about possible differentiation, a government



respondent said that The DHET is attempting to align 16 trades across the 15 SIPS (Special Infrastructural Projects initiated by the State) with the TVET Colleges so that colleges can deliver to SIPS needs. The pilot province is likely to be Limpopo and the aim is to try and identify college areas of specialisation. This project is in a concept phase and seeks to align college planning with centres of specialisation according to subjects and programmes. (SR1).

#### 8.3. Challenges TVET teachers are facing

TVET college lecturers have been under tremendous and sustained pressure since 2006, with successive policy interventions requiring their response. Curriculum shifts, particularly with regard to assessment and administration have caused stress and fatigue as lecturers have struggled to keep abreast of the changes and comply with demands. The NCV curriculum has been cognitively challenging not only for TVET students, but also for their teachers, as subjects demand that research be undertaken and the use of high level equipment and ICT. An outcomes based approach to education has also demanded innovation in pedagogy and learner centred strategies, which many lecturers used to 'chalk and talk' methodologies have struggled to come to terms with. Expansion of student numbers and easier access through the bursary scheme has brought shifts in the student population that lecturers have to cope with. More students who are not necessarily well prepared for college study have confronted lecturers with classroom difficulties.

The new policy on lecturer qualifications sets out to address both challenges of subject knowledge and methodology/pedagogy within a vocational context, as well as expose college lecturers to the world of industry. However, the policy will need to be sensibly and sensitively introduced and implemented, mindful of the constraints that in-service candidates face. It may not be possible for the policy on lecturer qualifications to be implemented within the envisaged time frames, as the majority of TVET College lecturers do not conform to these lecturer qualification requirements, and will likely not meet university entrance requirements so that a RPL process will have to be embarked upon in order to identify prior learning that might afford entry to higher education. Funding needs to be clarified for lecturer replacement and continuous professional development needs to be formally located under a professional body that can coordinate ongoing development of TVET College lecturers.

The level of support for further study in order to meet the new TVET lecturer qualifications is unclear. For example, there are not clear policy statements as to whether lecturers will be expected to study in their own time, on what basis (and if) bursaries will be available, and whether lecturers can expect additional remuneration or promotion to incentivise further study. In other words, it is unclear whether the onus of further study will fall on the lecturer, or on the TVET college system and if the former, how such learning will be supported by the college.

# 8.4. Challenges the TVET teacher education system is facing

A university TVET teacher academic summarises the challenges which are indicative of those mentioned by respondents in this research:

"Within our faculty there is the dominance of teacher education for schools, which completely outnumber TVET College lecturers. Within the university the status of the Education faculty is low in comparison to Business and Engineering Studies. Second, the subsidy value for teacher education has been watered down which does not help to build capacity. We are under-resourced and there appears to be a negative discourse on the future of Teacher education. Nearly all of our posts are contract posts for three years and many of our staff are poached within the university by other divisions and faculties offering permanent posts. Our teacher professional development centre envisages a ratio of 40 students to one lecturer and we have 4



staff members. We need specialists in certain areas. There is also a lack of understanding of teacher professional development models such as the need for different time frames to accommodate employed lecturers".

#### Another TVET academic noted:

The main challenges are internal capacity and a lack of commitment to vocational education and training as an area of focus. As long as there were external funding streams, the university was happy to provide the NPDE qualifications but there was no commitment to TVET teacher training as an academic field of study or focus and it remained peripheral. The university could only add capacity to generic teacher training as there was no capacity to offer specialist subject knowledge areas in vocational education and training. There was discussion around a possible B.Ed. degree where the university had capacity for foundational core modules e.g. NCV Maths Literacy, communication etc. as well as Business Studies and Accounting where there was potential overlap with other faculties. There was also some capacity for Agricultural Education and Training. If the university had gone the route of training new teachers on disciplinary pedagogy and content the university would have had to offer a very limited spread of qualifications.

Another academic stated that he struggled with the university management, to stress the importance of TVET teacher education. He noted that the university had only recently seen the value and market for TVET teacher education. He added that DHET needed to resource universities for TVET teacher education as it had taken the university up to two years to employ TVET specialists due to funding constraints.

An academic noted that it was difficult to convince their School of Education that they should be offering TVET qualifications, as most lecturers were solely focussed on formal school teacher training and did not understand the TVET sector. She also noted that the university was emphasising research whereas their unit was attempting to develop qualifications. However, the Head of the School of Education was supportive of their attempts to develop TVET qualifications as was leadership in the Faculty of Humanities. Despite this support, the discussion on TVE qualifications had taken 2 years before development of these qualifications had started.

A further challenge identified was to increase post-graduate programmes at university level in order to increase the capacity of universities to deliver an effective and relevant vocational pedagogy that integrates theoretical provision with practical workplace exposure, through the subsequent employment of TVET College staff with postgraduate qualifications.

# 8.5. Potential improvements to overcome challenges for the TVET

TVET Colleges will need systemic support from Institutes such as the envisaged SAIVCET, to bring coherence and stability to the national TVET system. Policy changes enacted to date are settling in and should be allowed time to mature before major policy shifts are made again.

Issues of student success and throughput in relation to the official curricula should now be the focus of attention and curriculum reviews in the NCV and NATED programmes, which have been conducted, should be implemented carefully, tracked and monitored.

While advocacy and career advice has been on the national agenda, consistent approaches to sensitise students to career and learning pathways within the TVET sector and academic expectations of these routes have to be made. This is to address the perception that TVET is 'second rate' or for those who are not academically successful.



Coherence in quality assurance approaches across the quality assurance councils that impact on TVET college programmes has to be pursued in order to lessen the burden of administration for colleges in satisfying a range of demands from quality assurance bodies, which are often conflictual.

# 8.6. Potential improvements to overcome challenges for the TVET Teacher education

The current policy on TVET lecturer qualifications provides a sound basis for the professionalization of TVET College lecturer staff at both initial and continuing professional development levels.

While the policy has not yet been implemented, the envisaged time frames set within the policy for the professionalisation of TVET staff may need to be extended to allow for TVET teacher education institutions to holistically address challenges raised.

Universities themselves will need to build their own Education Faculty capacity to effectively address TVET teacher education and the development of relevant vocational pedagogy that can integrate theoretical provision with practical work placement. Faculties of Education have not had the opportunity to sufficiently theorise the nature of vocational learning, and the local research base in this regard is thin. Teaching and research incentives will go a long way towards building the capacity that the vocational teacher education system needs. Funding avenues will need to be clarified so that universities can prioritise the TVET sector, which includes the subsidisation of TVET teacher education delivery and bursaries for TVET teacher candidates.



# **A**NNEX TO THE COUNTRY REPORT

# A glossary list: including all acronyms, specific terminology used, and abbreviations

Acronyms and	Meaning
abbreviations	
ABET	Adult Basic Education and Training
СВО	Community-based organisation
CHE	Council on Higher Education
CIPSET	Centre for Integrated Post-School Education and Training
CPUT	Cape Peninsula University of Technology
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DoE	Department of Education
DST	Department of Science and Technology
DTI	Department of Trade and Industry
ELRC	Education Labour Relations Council
ETDPSETA	Education, Training and Development Practices Sector Education and Training Authority
FET	Further Education and Training
FETI	Further Education and Training Institute
FTE	Full-time equivalent
GETC	General Education and Training Certificate
HDE	Higher Diploma in Education
HEI	Higher Education Institution
HEQC	Higher Education Quality Committee
HSRC	Human Sciences Research Council
N-programme	Nated/Report 191 Programme
NAMB	National Artisan Moderating Body
NASCA	National Senior Certificate for Adults
NCV	National Certificate (Vocational)
NDP	National Development Plan
NEDLAC	National Economic Development and Labour Council
NEET	Not in employment, education or training
NGO	Non-governmental organisation
NMMU	Nelson Mandela Metropolitan University
NPDE	National Professional Diploma In Education
NQF	National Qualifications Framework
NSA	National Skills Authority
NSC	National Senior Certificate
NSDS III	Third National Skills Development Strategy
NSF	National Skills Fund
NSFAS	National Student Financial Aid Scheme
ODL	Open and distance learning
OER	Open education resources
PALC	Public Adult Learning Centre
	. ab., c., take Learning Contro



Acronyms and abbreviations	Meaning
PFMA	Public Finance Management Act
QCTO	Quality Council for Trades and Occupations
REAL	Researching Education and Labour
REQV	Relative Educational Qualification Value
RPL	Recognition of prior learning
SACE	South African Council of Educators
SADC	Southern African Development Community
SAQA	South African Qualifications Authority
SDA	Skills Development Act
SET	Science, Engineering and Technology
SETA	Sector Education and Training Authority
SIPS	Special Infrastructural Projects
SSACI	Swiss South African Co-operation Initiative
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UCT	University of Cape Town
UFS	University of KwaZulu Natal
UKZN	University of the Western Cape
UWC	University of South Africa
Unisa	Vocational Educators' Orientation Programme
VEOP	Work-integrated learning
WIL	Work based education
WBE	University of the Witwatersrand
WITS	Workplace skills Plan
WSP	University of Cape Town



# A list of interview sources, their institutional affiliation, and job title

Country	Category	Institution	Interviewee	Timeframe
study				
template no.				
2.1.2	National TVET System	DHET	Gerda	April 2015
2.1.3	TVET systems organisation and	DHET	Magnus Danita	May 2015
2.1.3	TVET system: organisation and stakeholders	טחבו	Welgemoed?	May 2015
2.1.4	Quality of TVET programmes	DHET	Gerda Magnus	April 2015
2.1.5	TVET system and int'l developments	DHET	Witty Green	April 2015
3.1.2	Types of TVET teachers	DHET	Danita Welgemoed	May 2015
3.1.3	Status of TVET lecturing profession	DHET	Danita Welgemoed	May 2015
3.1.4	Access to TVET lecturer profession and pathways	TVET Principal/ management	Manager: College staff development unit	May 2015
3.1.5	Recruitment of TVET teachers	SACPO	Corrie Myburgh	May 2015
3.1.6	Working conditions and payments	DHET	Danita Welgemoed	May 2015
3.1.7	Training opportunities for TVET teachers	DHET SSACI	Karin Hendricks Ken Duncan	May 2015
4.2.1	TVET teacher education policies	DHET	Whitty Green	April 2015
4.2.2	Overview TVET teacher education institutes	FETI	Joy Papier	May 2015
4.2.3	Funding of TVET teacher institutes	DHET	Whitty Green	April 2015
4.2.4	Quality assurance of TVET teacher institutes	CHE	?	May 2015
4.2.5	TVET teacher education and international developments	FETI	Joy Papier	May 2015
4.2.6	TVET teacher institutes and postgraduate research	REAL	Volker Wedekind	May 2015
4.3.1	Organisational aspects of TVET Teacher education programmes	UFS/CPUT	Andre vd Bijl	April and May 2015
4.3.2	Key characteristics of the ITE curriculum	CPUT	Andre vd Bijl	April 2015
4.3.3	Recruitment and selection for TVET ITE	DHET	Whitty Green Andre vd Bijl	April 2015
4.3.4	Early Career Support and CPD	DHET	Karin Hendricks	May 2015
4.3.5	Aligning TVET TE to professional needs	DHET	Witty Green	April 2015
4.4.1	Enrolment in TVET TE programmes and background of students	DHET	College lecturers	May 2015
4.4.2	Motivation for enrolling in a TVET TE	DHET	College	May 2015



Country study template no.	Category	Institution	Interviewee	Timeframe
	programmes		lecturers	
4.4.3	Drop out of the TVET TE programme	CPUT	Andre vd Bijl	May 2015
5.1.2	Challenges of the TVET system	FETI	Joy Papier	May 2015
5.1.3	Challenges TVET Teachers are facing	DHET	College lecturers	May 2015
5.1.4	Challenges the TVET teacher education system is facing	DHET	Whitty Green	April 2015
5.1.5	Potential improvements to overcome challenges for TVET	DHET	Gerda Magnus	April 2015
5.1.6	Potential improvements to overcome challenges for TVET Teacher Education	FETI	Joy Papier	June 2015

#### A list of background literature used in preparing the review and the report

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# 9. NATIONAL BACKGROUND OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) - GHANA

# 9.1. Key messages of this chapter

- **Key message 1:** Technical and Vocational Education and Training (TVET) in Ghana is offered both in the formal and informal sectors of the Ghanaian economy and delivered in five categories. These are:
  - Formal with Public funding
  - Formal with Private funding not for profit (NGOs and Faith based)
  - Formal with private funding for profit (commercial entities)
  - Informal with private funding not for profit
  - Informal with private funding for profit
- Key message 2: Technical and vocational education in Ghana is governed by
  the National Vocational and Technical Institute (NVTI) Act, (Act 351 of 1970)
  and Council for Technical and Vocational Education and Training COTVET ACT
  (718) of 2006. The COTVET act gives the Council the responsibility to formulate
  national policies for skills development across the broad spectrum of pretertiary, tertiary formal and informal sectors of the economy
- **Key message 3:** The Ministry of Education receives about 20% of the national budget of which only 1% is allocated on average to the TVET sector. Ministry of Employment and Labour Relations allocates 12% of its budget to the National Vocational Training Institute(NVTI), the opportunity Industrialization Centre (OIC) and the Integrated Community Centres for Employable Skills (ICCES). But this budget is also inadequate in terms of quantity: it's smaller than the allocation for TVET from the Ministry of Education. There is no documented budget allocation from other Ministries to TVET.
- **Key message 4:** The national parliament gave its approval to the COTVET Legislative Instrument (LI 2195, 2012) in October 2012, as legal basis for the establishment and implementation of the National TVET Qualifications Framework and for the Recognition of Prior Learning (RPL) policy.
- Key message 5: Ghana is collaborating with the Association for the
  Development of Education in Africa (ADEA) and the Economic Community of
  West African States (ECOWAS) for the upgrading of technical and vocational
  skills development, through the promotion of a national and regional TVET
  Qualifications framework. Other Development Partners supporting TVET in
  Ghana include the World Bank, The Danish Embassy, The German Embassy and
  the African Development Bank.

#### 9.2. National TVET System: Key characters and relation to other sectors

In Ghana, Technical and Vocational Education and Training (TVET) issues can be found in the whole structure of the educational system, (pre-tertiary and tertiary). TVET is however fully considered as a secondary level education after the basic education. It is run in parallel with the grammar secondary education (i.e. academic) for a period of three years, and managed by the Technical and Vocational Education Division of Ghana's Education Service (GES). Currently, there are 46 technical schools under the Ministry of Education. There is also the Council for TVET, under the Ministry of Education, which has the responsibility of formulating national policies for skills development, across the broad spectrum of pre-tertiary, tertiary formal and informal sectors of the economy. The Council coordinates and supervises the activities of the technical and vocational education institutes in the country and sees to the



harmonization of the assessment and certification of TVET delivery in the country, for both the formal and informal sectors. At the secondary level (second cycle), specialization is available in a number of TVET subjects. Technical Institutes, Farm Institutes and Vocational Training Institutes provide an alternative to the more academic curriculum at the Senior High Schools. At the tertiary level, there are ten (10) Polytechnics, nine (9) public Universities, and 34 private universities offering degree and Higher National Diploma (HND) programs. These also offer some TVET courses, however, they operate mandated by their Councils and Academic Boards.

The progression from Basic Education to second cycle education remains relatively low. According to the 2010 Education Sector Annual Review (ESAR), less than 50% of all students graduating from Junior High School (JHS) progress to Senior High Schools (SHS), and about 10% to TVET institutes. Meanwhile, various other Ministries such as the Ministries of Employment and Labour Relations, Food and Agriculture, Local Government and Rural Development, Trade and Industries, Transport and Communication, have also established other vocational institutes, training centers, and other skills training programs in some parts of the country, with their respective independent mandates. Appendix 1 provides a table of the number of TVET institutes under the various Ministries. The delivery of TVET in Ghana has therefore been governed by separate ministerial mandates while the informal sector also operates with its own conditions.

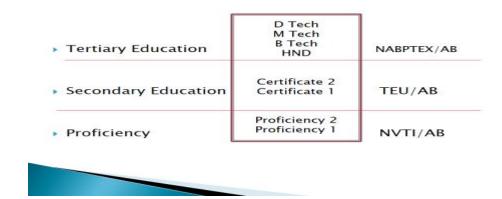
The training in technical and vocational institutes is mixed: theoretical training in the classroom is accompanied by practical training at the workshops. With the passage of the COVET LI, introducing the competency-based training (CBT), students are assessed and certified within the new TVET Qualifications Framework. Students also expect to gain some practical experience, which forms integral part of the training, carrying credit value and contributing to the final assessment and certification. There are three distinct categories of qualifications offered in all the above-mentioned institutes. These are shown in Table 1 below and depicted in Figure 1 as well.

Table 1: Categories/Levels of Qualifications and Assessment Bodies

Category/Level	Qualification	Assessment Body
Tertiary	<ul> <li>Doctor of Technology</li> <li>Master of Technology</li> <li>Bachelor of Technology</li> <li>Higher National Diploma</li> </ul>	National Board for Professional and Technical Examination (NAPTEX), individual Institutes and any accredited body by COTVET
Secondary	<ul><li>Certificate 2</li><li>Certificate 1</li></ul>	Technical Examinations Unit (TEU) any accredited body by COTVET
Proficiency	<ul><li>Proficiency 2</li><li>Proficiency 1</li></ul>	National Vocational Training Institute (NVTI) any accredited body by COTVET



Figure 1: Categories and Levels of Qualifications and Assessment Bodies



Enrolment in TVET compared to SHS

Table 2 below indicates the number of SHS and TVET institutes under the Ministry of Education and their subsequent enrolment. Both SHS and TVET are considered a form secondary education. Data for the TVET institutes under the other Ministries is not available.

Table 2: Enrolment trends in SHS and TVET under Ministry of Education

	2009/2010	2010/2011	2011/2012	2012/2013
SHS	537,332	728,076	758,468	842,587
TVET	64,155	71,848	62,303	61,496

Source: Educational Management Information System (2014) Funding of the TVET sector as compared to other educational sectors

The Ministry of Education receives about 20% of the national budget of which only 1% is allocated in average to the TVET sector of the Ministry. The Ministry is however proposing to increase this percentage to about 2.8% by 2015. This is very unlikely, as only 1.1% was allocated in 2014. Allocation to the various sectors of education is indicated in the Table 3 below. Ministry of Employment and Labour Relations also allocates 12% of its budget to various TVET institutes under its supervisions: These are NVTIs, Opportunity Industrialization Centres (OIC) and Integrated Centres for Community Employable Skills (ICCES) but this budget is also inadequate and smaller than the budget allocated from the Ministry of Education.



Table 3. Education Expenditure by Sub-sector

Subsectors	2002	2005	2008	Target (2015)
Kindergarten	7.4%	3.4%	3.4%	5.7%
Primary	34.0%	29.9%	35.0%	33.4%
Junior High	22.7%	17.8%	16.3%	21.9%
Non-Formal	0.5%	1.9%	0.4%	1.2%
Inclusive and Special Education	0.5%	0.4%	0.3%	0.8%
Senior High	15.2%	20.8%	12.6%	17.2%
Tech Voc & Skills Development	1.2%	1.2%	0.6%	2.8%
Teacher training	4.5%	3.9%	2.6%	2.5%
Tertiary	11.5%	19.6%	23.0%	14.1%
Management & Subvented Agencies	2.5%	1.0%	5.5%	0.4%
HIV&AIDS	<0.1%	0.1%	0.2%	<0.1%
Total	100.0%	100.0%	99.9%	100.0%

Source: Ministry of Education, Education Sector Plan (2010-2020)

#### 9.2.1. Recent policies and strategies aimed at the TVET system

There are some ongoing programs in the TVET sector aiming at improving the efficiency of the sector and the quality of graduates entering the labour market. This includes:

- Operationalization of the COTVET Act leading to the introduction of Competency Based Training (CBT) and the associated Workplace Experience Learning Policy.
- Parliamentary approval of COTVET Legislative Instrument (2195, 2012) which gives legal backing for the establishment and implementation of the National TVET Qualifications Framework and Recognition of Prior Learning (RPL).
- World Bank-DANIDA supported Skills Development Fund (SDF), managed by COTVET and providing a demand-driven response to the critical challenges encountered by the productive sectors of Ghana: (i) an adequately qualified labor force; (ii) the urgency of providing new entrants to the labor market with gainful, employable skills; and (iii) inadequate access to new technologies and innovations.
- The African Development Bank (AfDB) funded project, with a component to support the upgrading of the College of Technology and the Kumasi Campus of University of Education in Winneba by improving the infrastructure and upgrading the competencies of selected faculty members.

#### 9.2.2. TVET system: organization and stakeholders

Technical and vocational education is governed by the National Vocational and Technical Institute (NVTI) Act, (Act 351 of 1970) and the Council for Technical and Vocational Education and Training COTVET ACT (718) of 2006. The NVTI Act mandated the establishment of the National Vocational and Technical Institute to "co-ordinate, at the national level, all aspects of vocational training including apprenticeship while the COTVET Act provides legal backing for COTVET to reform technical and vocational skills development in the country, by coordinating and overseeing all aspects of technical and vocational education and training. In effect, there are two government institutions working in the skills development sector in Ghana, COTVET and the NVTI, with seemingly overlapping tasks and responsibilities. However, during the research, it was made clear that a committee has been set between COTVET and NVTI to resolve coordination issues related to various Acts on the two institutions. At the informal side,



Trade Associations for various sectors have now recently come together to form the Federation of Trade Associations of Ghana.

Currently, technical and vocational skills development (formal and informal) in Ghana is delivered by very different entities - multiple ministries, private for-profit and non-profit institutes, NGOs and informal apprenticeships. The different TVET systems in Ghana are indicated below:

- The formal public system, which includes primarily time-bound, institution-based, graded, and certified training. It is offered by institutions such as the National Vocational Training Institute (NVTI), Ghana Education Service (GES), and youth training institutions.
- Formal private non-profit TVET, facilitated by various faith based organizations and NGOs.
- Formal private and for profit TVET, with a variety of Private Vocational Training Schools, which has profit making as one of its objectives.
- The informal can also be divided between profit and non-profit. This system
  includes a wide range of flexible programs and processes through which
  individuals acquire skills and knowledge from designated training venues
  outside their place of residence and, in some cases, at home. Traditional
  apprenticeships account for the majority of the informal sector and are mostly
  in the following trades: cosmetology (hairdressing braiding and beauty
  therapy), carpentry, electronics dressmaking, auto mechanics and welding and
  fabrication.

Figure 2 below gives the types of TVET delivery in Ghana



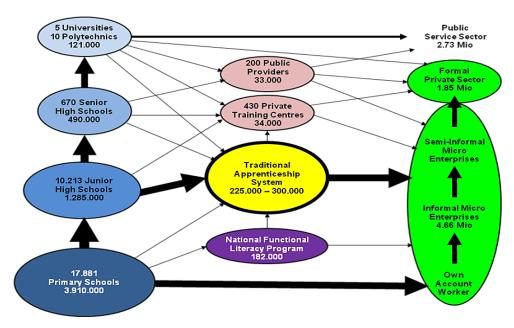


#### 9.2.3. Linkages between TVET and labour market

Artisans, Trade and Professional Associations, Private Proprietors of Vocational Training Institutes (VTIs) including NGOs and religious bodies all play roles within TVET delivery in Ghana. Figure 3 below gives an overview of the linkages between skills development and the labour market. It also portrays the avenues for skills development and its linkages to employment or unemployment, be it in the formal or informal sectors. It also shows the large number of persons enrolling for primary education and the numbers that end up in National Functional Literacy Programmes, Traditional Apprenticeships, Junior High Schools, Senior High Schools, TVET institutions and Universities.



Figure 3: Linkages Between TVET System and Labour Market



Source: Planco Consult 2012 (GIZ voucher system feasibility studies)

# 9.3. Quality of TVET programmes

In fulfilment of the LI 2195, a quality assurance system has to be put in place. COTVET has establish a Training Quality Assurance Committee (TQAC) with the following functions:

- Establish basic quality assurance standards and processes for training providers, teaching personnel, assessors and auditor/ verifiers.
- Establish policies, criteria, regulations and procedures for the registration and accreditation of training providers.
- Evaluate applications for registration and accreditation of training providers and make recommendations to the Board.
- Monitor and regulate the activities of training providers and ensure that they implement programmes in accordance with plans they present for accreditation.
- Establish basic quality assurance standards and procedures for TVET qualification awarding bodies.
- Establish policies, criteria, regulations and procedures for the registration and accreditation of awarding bodies.
- Evaluate applications for the registration and accreditation of awarding bodies and make recommendations to the Board.
- Monitor and regulate the activities of awarding bodies and ensure that they implement programmes in accordance with plans they present for accreditation.
- Monitor and ensure that programmes developed and implemented by accredited training providers adequately meet the requirements of occupational standards developed by the relevant ITAC Sub – Committees.
- Monitor the compliance of training providers with established quality assurance management.
- Investigate and act on complaints received from learners, parents/ guardians, employers and other stakeholders regarding the quality of training, assessment and award of qualifications.



### 9.4. TVET system and international developments

Ghana is working with the Association for the Development of Education in Africa (ADEA) and the Economic Community of West African States (ECOWAS), for the upgrading of technical and vocational skills development, through the promotion of the establishment of a national and regional TVET Qualifications framework.

The issue of national qualification frameworks has become particularly important since the decision to replace the concept of TVET with that of Technical and Vocational Skills Development (TVSD) has been approved at the ADEA Triennale by 33 Ministers of Education and Training. This paradigm shift is based on the fact that NQFs should no longer be reserved for qualifications in the formal system, as is currently the case in most countries in the region, but should also take into account all the various different ways, means and methods of acquiring technical and vocational skills. In other words, NQFs should cover skills acquired through both formal and non-formal/informal training and qualification channels.

ADEA is therefore leading the regional referencing of the regional qualifications framework in Africa. At the second meeting of the Inter-Country Quality Node on Technical and Vocational Skills Development (ICQN/TVSD), which was held in Abidjan from 19 to 21 September 2011, the ministers and representatives of the 20 participating countries (including Ghana) decided to create three thematic groups:

- one on the transition to work,
- one on national qualification frameworks,
- and one on the role of trade/business associations in the field of TVSD.

Several countries have made attempts and taken initiatives to recognize the various forms of skills<sup>19</sup>. However, these forms of recognition are still struggling to be included in NQFs, which are based solely on qualifications issued by the formal system. Two countries in the SADC region, South Africa and Mauritius, have developed NQFs that provide recognition for all the ways in which skills are developed. The design and creation of NQFs that aim to take into account the whole field of TVSD are also identified as key training policy objectives in countries such as Ghana, Mozambique, Ethiopia, Kenya, Tanzania, Tunisia, Nigeria and Senegal.<sup>20</sup> . The creation of NQFs is a trend in almost all education and training policies in developed, transition and developing countries.<sup>21</sup> ADEA recently held a seminar on NQFs, on 8 and 9 July 2013 in Abidjan, Cote D'Ivoire, to produce a final synthesis to be adopted by the participating countries, which was submitted to the ministerial meeting of the ICQN/TVSD in mid-September 2013.

The African Union (AU), also recognising the importance of skills to poverty reduction and socio-economic development, has adopted a policy framework for promoting TVET in Africa<sup>22,</sup> the objectives of which are:

To revitalize, modernize and harmonize TVET in Africa in order to transform it
into a mainstream activity for African youth development, youth employment
and human capacity building in Africa;

<sup>19</sup>Examples include the Vocational Qualification Certificate and Vocational Trades Certificate in Benin, the Basic Qualification Certificate, Vocational Qualification Certificate, Vocational Qualification Diploma and Technician Qualification Diploma in Burkina Faso and the Apprenticeship Completion Certificate in Mali.

The countries listed here are mentioned in the study "National qualification frameworks developed in Anglo-Saxon and French traditions", which was produced under the responsibility of SAQA, in the framework of Sub-theme 2 of ADEA's Triennale 2012 preparation process.

21 This observation was made in another study for the Triennale on the introduction of NQFs, which was conducted by the German Agency for International Cooperation Agency, GIZ: "Lessons learned from selected National Qualifications Frameworks in Africa."

<sup>&</sup>lt;sup>22</sup> African Union: 2007. Strategy to revitalize TVET in Africa. Addis Ababa, Ethiopia.



- To position TVET programmes and TVET institutions in Africa as vehicles for regional cooperation and integration as well as socio-economic development as it relates to improvements in infrastructure, technological progress, energy, trade, tourism, agriculture and good governance;
- To mobilize all stakeholders in a concerted effort to create synergies and share responsibilities for the renewal and harmonization of TVET policies, programmes and strategies in Africa.

Although the important role of TVET in economic development and poverty reduction is universally acknowledged, there appears to be some inertia in policy implementation in several African countries. This view was reiterated by the Third Conference of ECOWAS Ministers of Education and the 36th Ordinary Session of Heads of States, both of which took place in 2009. It was for this reason that UNESCO BREDA and the ECOWAS Commission organized a workshop in August 2009 to discuss strategies for revitalizing TVET in the ECOWAS sub-region. The workshop (which brought together government officials from the 15 member countries, development partners, TVET policy makers, experts and teachers) underscored the need to move up from problem identification to actual implementation of good practices founded on innovative partnerships.

At the end of the Abuja workshop, the following recommendations were made:

- On the issue of curriculum, it was recommended that countries should update and localize their TVET curriculum in line with international best practice and encourage the sharing of expertise in the development of teaching and learning materials through the establishment of regional TVET centres of excellence. The importance of National Qualifications Frameworks in skills development and lifelong learning was emphasized, leading to the recommendation that UNESCO and other Agencies should provide technical support to countries to develop their vocational skills qualification frameworks.
- The lack of data on TVET was identified as a major limitation to effective policy formulation and implementation and management of TVET systems. It was therefore suggested that national and sub-regional observatories be established with the assistance of UNESCO/UIS for collecting, analyzing and updating TVET data.
- The Abuja Workshop also recognized the critical role of the teacher in skills acquisition programmes. It was therefore strongly recommended that technical teacher training and the training of trainers be strengthened so as to continually update the pedagogical and professional skills of technical teachers.



# 10. THE PROFESSION OF TVET TEACHERS/LECTURERS

### 10.1. Key messages of this chapter

- **Key message 1:** TVET teachers/lecturers are subject specialist (e.g. in automobile, fashion etc). At the secondary level of TVET, about 93% have had technical training in addition to the formal teacher training. This gives them the technical competence and relevant capacities to teach in the technical institutes.
- Key message 2: The status and perception of the TVET lecturing profession have not been formally documented, however evidence on the ground suggests that there is more prestige in becoming a teacher in the grammar schools, compared to being a lecturer/instructor in TVET institutes. Within the TVET sector, technical institutes under the Ministry of Education are given more value than the vocational institutes under the Ministry of Employment and Labour Relations.
- **Key message 3:** Only three agencies are responsible for the recruitment process into the TVET institutes at the secondary level. These are: the National Service Secretariat (6%), Individual Schools (9%) and Ghana's Education Service (85%). These figures are for the Brong Ahafo Region, however, stakeholders indicated that they are representative at the national level as well. Data for teachers recruited by other Ministries apart from MOE is not available.
- **Key message 4:** The establishment of the Fair Wages Salaries Commission (FWSC) has improved the salaries of TVET teachers considerable, with resultant improvement in retention of teachers and a reduction in the numbers of TVET teachers who migrate to look for jobs outside Ghana.
- **Key message 5:** INSET programme organized by the Ghana National Association of Teachers (GNAT) mostly focused on programme implementation and helping participants to pass their promotion examinations. NVTI has a training school for the training of newly recruited teachers.

### 10.2. Types of TVET teachers

As indicated earlier, TVET issues are found in the whole educational structure but in the formal sector, TVET is mainly considered as a secondary education, polytechnics included. At both the technical and polytechnic levels all TVET teachers are subject specialists, e.g. Automobile, Mechanical, Building, Fashion etc. There are therefore TVET teachers at the vocational school level, secondary level, technical Institute level, tertiary level, who are trained within the general education teacher training framework. However, apart from the general pedagogical training they receive, some are trained on technical subjects and are therefore considered as teachers with technical qualifications.

According to the Educational Management Information System (EMIS) of the Ministry of Education (MOE), for the 2012/13 academic year, there were 3423 teachers in both public and private TVET institutes at the secondary education level. Out of this number had formal teacher training with technical qualification. Data of teachers outside the Ministry of Education is not available. Table 4 below gives the breakdowns for both public and private TVET Institutes for the 2011/12 and 2012/13 academic years.



Table 4: Breakdown of the number of teachers in TVET institutes at the secondary level, with percentages of the number trained without technical qualification and those trained with technical qualification.

Type	Total of TVET		%Trained with no		% Trained with technical		
	Teachers		technical qualification		qualification		
	2011/12	2012/13	2011/12	2012/13	2011/12	2012/13	
Public	2,212	2,766	78.0	73.2	95.8	91.6	
Private	750	657	54.7	39.0	86.0	91.0	
Total	2,963	3,423	72.1	66.6	93.3	91.5	

Source: EMIS May 2014 (MOE)

The appointment of the TVET teachers falls into two descending Levels: TVET Teacher and workshop assistant. In Tamale technical institute for example, there are 92 TVET teachers and 4 workshop assistants: all of them take part in the TVET delivery at the school.

#### 10.3. Status of TVET lecturing profession

The status and perception of the TVET lecturing profession has not been formally documented however evidence on the ground suggest that there is more prestige in becoming a teacher in the grammar schools, compared to being a lecturer in TVET institutes. According to Sherry K. Amedome and Yesuenyeagbe A. K Fiagbe, in their Challenges Facing Technical and Vocational Education in Ghana, 'TVET in Ghana faces a lot of challenges. The problems are so serious that a survey in 2002 of public TVET teachers found that none of the 87 respondents wanted their children to attend a technical or vocational school because they themselves as teachers are not given the needed recognition as compared to their other colleagues.'

That is how serious the teachers themselves look at the TVET. The issue became more evident during the research. A TVET teacher interviewed during the research had this to say

`From my own point of view, previously, people look down upon TVET lecturing, but these days, the image has improved. In the Polytechnic, those teaching business see themselves to be more important than those of us teaching Technical subjects because of their students numbers. These days we are gradually growing so they accord we the technical teachers some respect'.

One other lecturer also indicated that 'The public do not motivate people to go into tvet education. Most teachers in it use it as the last resort if they do not get admission to teach in the grammar school'

The past Director of TVET at the Ministry of Education also indicated that while  $CHASS^{23}$  actively participates in decision making at the Ministry, APTI's contribution and influence is minimal. There is every indication that even TVET deans are not recognized, compared to deans in grammar schools.

# 10.4. Access to the TVET lecturer profession and pathways for becoming a TVET lecturer

In the new structure of teacher education the existing Diploma Awarding institutions and the Specialist Teacher Training Colleges have been upgraded to Colleges of

<sup>24</sup> APTI stands for Association of Principals of Technical Institute

<sup>&</sup>lt;sup>23</sup> CHASS stands for Conference of Assisted Secondary Schools



Education to offer higher training in specialised fields. These Colleges concentrate on training teachers for Junior High Schools, Senior High Schools and Technical and Vocational Institutes. Colleges have been grouped in five specialized fields. These are:

- (i) Colleges of Science and Mathematics.
- (ii) Colleges of Technical and Vocational Training.
- (iii) Colleges of Social Studies.
- (iv) Colleges of Cultural Studies.
- (v) Colleges of Languages.

Seven out of the 38 Colleges of Education have been given additional functions and train in technical subjects to prepare the teachers for TVET institutes at the secondary level.

#### 10.4.1. Entry requirement into Colleges of Education (Technical)

As per the recent (March 15 2015, Daily Graphic) advertisement, admission into any of the 38 Colleges of Education (three year Diploma in Basic Education - DBE) for the 2015/16 academic year, required a West Africa Senior Secondary Certificate (WASSCE) or Senior Secondary School Certificate Examiations (SSSCE) and: Credit in five (5) subjects comprising three (3) core subjects and two (2) elective subjects. (Credit for WASSCE holders means A – D).

In addition to the general requirement, the requirement to enter into any of the seven designated schools for TVET training is credit in English language, Core mathematics, Integrated science and two elective subjects in the mathematics, science and technical education areas of the Senior High School (SHS) program.

The University of Cape Coast and the University of Education Winneba and its campuses also train for the secondary level education (including TVET institutes) and the polytechnics. Basic entry requirements and other program specific requirements are also set.

According to the brochure of the University of Education in Winneba, the University is charged with the responsibility of producing professional educators to spearhead a new national vision of education, aimed at redirecting Ghana's efforts along the path of rapid economic and social development. The University of Education in Winneba is expected to play a leading role in the country's drive to produce scholars whose knowledge would be fully responsive to the realities and exigencies of contemporary Ghana and the West African sub-region. Basic entry requirements and other program specific requirements are also set.

The basic requirements for SHS certificate holders are:

- Must have at least, six (6) WASSCE Credits including three (3) Core Subjects: English Language, Mathematics and Integrated Science, as well as three (3) Electives in relevant subjects with the total aggregate of 36 or better.
- Must also satisfy Special Programme requirement(s) for chosen programme(s).

#### 10.4.2. Pathways to become a teacher/lecturer in TVET

There are 38 colleges of education in Ghana, two universities involved in teacher education programs, and various in-service training measures. Different modalities are adopted for rolling out teacher training programs. These included the traditional residential mode, distance education, sandwich (similar to summer sessions where teachers receive training during vacation periods), and school attachment modes. Upon graduation, teachers receive different certificates and diplomas based on their program choice. Table 5 below depicts the different pathways; where programs are held, who the implementing agencies are, how long it takes to complete the program,



the structure and mode adopted, and the specific certificate or qualification received upon successful completion.

Table 5: Pathways to become a teacher/lecturer in TVET<sup>25</sup>

Pathways of teacher education	Location	Implementi ng agencies	Duration	Structure	Mode	Qualification
Pre-service or initial teacher education	38 CoE	GES/TED	3yrs	IN-IN-OUT	Traditional/DE sch attachment	Diploma
	University	university	4yrs 1yr	IN-IN-IN-OUT Sandwich/Full time	Traditional Traditional	Bed PGDE/ Cert in Education
Induction?	Schools?	GES?	NA*	NA	NA	Teaching license?
In-service upgrading	UEW	UEW	4yrs	IN-IN-IN-OUT	Traditional/DE	Diploma/BEd
In-service upgrading	UCC	UCC	4 yrs 3yrs	IN-IN-IN-IN 6wk practicum Out-out-out	Traditional  DE/Sandwich	Bed Diploma
In-service cluster	School cluster	GES	variable	variable	traditional	NA/ certificate of attendance
In-service- lifelong	individual	individual	1ife1ong	variable	variable	NA

#### 10.5. Recruitment of TVET teachers

Recruitment of TVET teachers in vocational schools follows the same pattern laid down by the Ghana Education Service (GES) for the secondary level of education. Almost all teachers are recruited by GES, through interviews, at the headquarters and regional offices, and then posted to various schools. However, individual school heads and the national service secretariat also recruit some teachers. A recent survey<sup>26</sup> conducted by Alex Ansu Ebo as part of his master's degree on recruitment and retention of secondary level education teachers in Brong Ahafo region, indicated that only three agencies are responsible for the recruitment process. These are:

- National Service Secretariat (6%)
- Individual Schools (9%)
- Ghana Education Service (85%)

In all these processes however, while heads of institution are directly involved in some of the recruitment process, in some cases, they're only informed of the posting of a particular teacher.

Stakeholders indicated that the figures shown for the Brong Ahafo Region are representative at the national level. Figures for other institutes outside the Ministry of Education are not available.

In the polytechnics, the recruitment process is different as all vacancies are announced internally and externally mainly through the printed media. The first point of the advert is internal, the vacancy being published in the schools' notice boards. The same advert is then published in the printed media. Applications are selected

Source: Anamuah Mensah, Presentation at UNESCO Conference (2010, Italy and updated by Researcher
 Alex Ansu, Master Thesis on Recruitment and Retention in Secondary Level Education in Brong Ahafo

Region, 2012



based on the curriculum vitae, then interviews are held by a panel comprising the head of department, the registry and the human resources department.

#### 10.6. Working conditions and payments

#### 10.6.1. Teachers' remuneration

In Ghana, allowances covering accommodation, uniform and utility bills are included in teachers' salaries for public pre-tertiary schools, including TVET. Because of this initiative the Government does not provide accommodation, uniform and pay utility bills for teachers. As a result, most of the teachers live in private houses and just a few are given government houses (paying a rent to the Government).

As of 2011, a graduate professional teacher's salary up to the professional rank of Assistant Director II (the third promotion after recruitment) is about \$475 per month, depending on the person's additional responsibilities (like principal of a basic school or primary or junior high school). Other responsibilities are: Assistant principal (for both basic and senior high schools), Senior Housemaster/mistress, Housemaster/mistress, Head of Department or Form master/mistress (only for senior high schools). Within the Ghana Education Service one key determinant of a teacher's salary is his or her number of years in a rank, technically called step or incremental jump. A step or incremental jump is a yearly salary increase that teachers get on the first of September each year, in order to differentiate them from those on the same rank but juniors in terms of job experience. This means that two teachers could be in the same rank but their salaries could differ depending on their seniority within the same position.

#### 10.6.2. Single Spine Salary Structure (SSSS)

As part of the Government's effort to improve the working conditions of public and civil servants in Ghana, an act of Parliament (Act 737,2009) established the Fair Wages Salary Commission (FWSC) in June 2009, with the mandate to ensure fair, transparent and systematic implementation of government's public service pay policies named 'single spine salary structure' (SSSS). Among others, the objective was to minimise disparities, discrepancies and distortions in salaries within the public sector and to make the budget easier and manageable for estimation and forecasting. (FWSC 2009, 2013).

While the intention of the SSSS was laudable, leading to a reduction in the number of workers and teachers migrating overseas, there have been some difficulties: the electronic payments systems didn't always work properly, there have been delays in negotiating some of the specific allowances; there have been difficulties of interpretation in payment arrears and tensions over which categories of workers are entitled to retention.

The Ghana National Association of Teachers (GNAT) and the Teachers Workers Union (TEWU) have however reported that given the same level of qualification, public servants in the health and police services are better paid than under the new salary structure. This situation is not helping the teaching profession in the second cycle education in Ghana.

#### 10.7. Training Opportunities for TVET teachers

TVET teachers, like most teachers of second cycle institutions in Ghana, have limited training opportunities in terms of long term training, as the few available ones are highly competitive. One major training opportunity for TVET teachers in the second cycle education is the study leave with pay policy. This is a policy that helps teachers to go on study leave for a long period (one to three years), have their salaries still



being paid by the service and come back having the possibility to regain their position or a higher position depending on the certificate or degree acquired.

#### 10.7.1. Eligibility for Study leave with pay

The Ghana Education Service in 2012 after series of consultation reviewed its policy on study leave. In the update policy, eligibility for grant of study leave is as follows:

- 1. The minimum number of years to serve before qualifying for the grant of study leave with pay is five (5) years.
- 2. Applicants who apply for study leave in the critical subject areas should be allowed to teach initially for two years before embarking on study leave with pay. This is to enable more applicants qualify to increase the number required by the Service.

Critical subjects as per the definition of GES are:

- Mathematics
- English/Linguistics
- Science
- French

The policy also stated also stated that an applicant shall be eligible for study leave with pay subject to the following; Good conduct, Good Performance and recommendation by immediate supervisor.

# 10.7.2. In service training (INSET) of the Ministry of Education

One of the training opportunities for TVET teachers in Ghana is the INSET. Discussions during the research with teachers it became clear that the INSET programme mostly focused on programme implementation and helping participants to pass their promotion examinations. Such programmes are mostly organised by the Ghana National Association of Teachers (GNAT) Teacher Education Division, the Institute of Education, the Institute of Educational Planning and Administration and the District and Regional Education Office.

#### 10.7.3. Ghana Skills for Industry Project capacity building

Under the Ghana Skills for Industry Project of the Council for TVET (COTVET) there is a component specifically meant to strengthen human and institutional capacity of TVET. The component aims to finance:

- refresher training programme for pedagogy for 150 TVET teachers (of which 30 % for female instructors);
- Training of 500 master craftsmen to support skills delivery in the traditional apprentice program;
- Design and implementation of a management course tailored to the peculiarities of TVET to benefit 50 managers of TI (5 % of female managers)
- Training of 25 faculty members (20% of female faculty members) at the instructor training to attain the minimum of master's degree.

This programme is sponsored by the African Development Bank (AfDB) for a five year period, ending 2017.

# 10.7.4. COTVET support to College of Technology Education (COLTEK), University of Education, Winneba

In 2012 COTVET signed a Memorandum of Understanding (MOU) with the College of Technology Education (COLTEK) Kumasi Campus, University of Education, Winneba, to support the college in training of 20 faculty members (15 up to Master degree and 5 up to Doctorate degree). This support is part of the AfDB financing of the Ghana Skills



for Industry Project with the aim of improving teaching and learning in selected TVET training institutes.



#### 11. SYSTEM OF TVET TEACHER EDUCATION

#### 11.1. Key messages of this chapter

- **Key message 1:** Recent policies for TVET teacher training are embodied in the 2007 Education Reform and 2008 Education Act. There is also the National Teaching Council which is emanated from 2008 Education Act. However the Council for TVET under its Act 718 of 2006 with its Legislative instruments 2195 of 2012 has some aspect of arrangements that are specifically meant for the registration and accreditation of TVET teachers.
- Key message 2: TVET teacher training takes place at two levels. These are
  the Colleges of Education level and the University level. There are 38 Colleges
  of Education, 2 (two) public universities and 1 (one) private university
  responsible for TVET teacher training. It must be mentioned that TVET teacher
  training does not take place exclusively in any of the institutions but part of the
  general strategy for the preparation of teachers to teach at various levels of
  the education ladder
- **Key message 3:** Colleges of Education (COEs) are running a five-semester programme. This means that students spend the 1st and 2nd years and the second semester of the 3rd year on campus. They use the first semester of the third (or final) year for their Off-campus Teaching Practice. UCC runs a 4 year program, for in service and upgrading on 'in-in-in-in' basis at UCC with a 6 week practicum during the last year and 'in-in-in-out' system at the University of Education Winneba and its various campuses
- Key message 4: The Ghana Education Service of the Ministry of Education in 2012 developed a policy framework document for the development and management of pre-tertiary teacher professionals to guide and direct early carrier support and continuous professional development of teachers for pretertiary education including TVET in the country. This includes induction and inservice training.

#### 11.2. General Characteristics

#### 11.2.1. TVET teacher education policies

Policies, strategies and guidelines for TVET teacher training in Ghana (mainly for the technical training institutes under the Ministry of Education) have always been put in place by the Ghana Education Service as part of the main grammar teacher training policies. These are contained in the various educational reforms that the nation goes through. Recent policies for TVET teacher training are in the 2007 Education Reform and 2008 Education Act. There is also the National Teaching Council which is emanated from 2008 Education Act. NVTI, OIC and ICCES have their policies, strategies and guidelines formulated in line with the mandate of the Ministry of Employment and Labour Relations, while the other Ministries formulate policies for the TVET institutes they supervise.

However the Council for TVET under its Act 718 of 2006 with its Legislative instruments 2195 of 2012 has some aspect of arrangements that are specifically meant for TVET teacher training.



#### 11.2.2. TVET Teacher Education under the 2007 Education Reforms

A Committee was established in 2006 to review the entire educational system in Ghana with the view to making it more responsive to current challenges confronting Ghana as a nation. It was to study the pre-school, basic, secondary, technical, vocational, teacher and tertiary education. Certain recommendations were made by the committee to improve teacher education delivery in Ghana. These included the upgrading teacher training colleges to diploma-awarding institutions. They were to use the title "Colleges of Education". They were also to be affiliated to education oriented universities. In line with the demands of the 2007 Education Reforms, all colleges of education in Ghana, were affiliated to the University of Cape Coast.

Secondly, remedial programmes have been provided for people without the minimum requirements to be trained in the Colleges of Education and the Presbyterian Colleges have benefited from the programme. Thirdly, the Untrained Teachers' Diploma in Basic Education (UTDBE) programme is being run through the Modular system for them to qualify to become professional teachers. They are awarded the Diploma in Education after their successful completion of the programme. The first batch started in 2007 and completed their UTDBE programme in 2010 to qualify for the award of the Diploma

#### 11.2.3. Outcome of the 2007 Education Reform on TVET teacher training

Since 2007, the Colleges of Education has been running a regular 3-Year Diploma in Basic Education (DBE) programme. It used to be structured on the "in-in-out" basis. It means students spend the first two years in school to study the prescribed courses, and use the last year to go out of campus to do teaching practice. Currently, the "in-in-out" programme has been reviewed. It was expected that with effect from the 2013/2014 academic year, all colleges of education in Ghana will be running a five-semester programme. This means that the students will spend the 1st and 2nd years and the second semester of the 3rd year on campus. They will use the first semester of the third (or final) year for their Off-campus Teaching Practice.

#### 11.2.4. National Teaching Council

The National Teaching Council (NTC) is mandated by the Education Act, 2008 (Act 778) to improve professional standing and status of teachers and provide licensing and registration of teachers in Ghana.

The functions of the Council which affect TVET teachers as well and its operationalization was scheduled to in  $2014^{27}$  are: The Council shall:

- Advise the Minister responsible for Education
  - On matters relating to the professional standing and status of teachers,
  - On the teacher education, including the provision of facilities for inservice training, and the employment of teachers;
- Recommend to the Minister professional standards required for the registration of teachers;
- Periodically review professional practice and ethical standards for teachers and teaching;
- Register teachers after they have satisfied the appropriate conditions for initial licensing and issue the appropriate licence;

<sup>&</sup>lt;sup>27</sup> The Board for the Council has been established and an Executive Director (Registrar) has been appointed while other staff are being recruited as at March 2015. The delay for the implementation of the NTC is not specifically known.



- Review, through its disciplinary committees, appeal cases of professional misconduct and confirm, vary or rescind the decision of the district disciplinary committee;
- Confirm, vary or rescind a decision of the district disciplinary committee;
- Revoke a teacher's licence to teach after establishing a case of grave professional misconduct;
- Give approval for the suspension of a teacher from teaching after satisfying itself that the teacher has contravened laid down regulations governing the professional conduct of teachers; and
- Approve the re-registration of a suspended teacher who has served the suspension and has been recommended for re-registration by the district disciplinary committee.

#### 11.2.5. Regulation for the registration and accreditation of facilitators and trainers

The legislative instrument of the COTVET Act (LI2195 of 2012) which operationalized the COTVET Act, indicated that: In accordance with the COTVET Act and the National Policy Framework which provides for a demand-driven and competency-based technical and vocational education and training system the Council shall register and accredit facilitators<sup>28</sup> who offer technical and vocational education and training programmes to ensure quality delivery in technical and vocational education and training. Among others, the LI also said that; for purposes of sub-regulation:

- registration is a formal recognition that, following a formal evaluation against set criteria or a quality audit, an applicant has been found to be fit and of good character to be a Facilitator or Trainer; and
- a facilitator in the competency-based training is the person who guides the learner in attaining the competencies outlined in the occupational standards and such a person replaces the teacher or instructor in the traditional TVET system and are sometimes referred to as Coaches or Mentors.

#### 11.2.6. Registration of facilitators or Trainers

The regulation has clearer stated that: A person shall not provide training in technical and vocational education and training unless that person is registered as a Trainer or Facilitator by the Council.

#### 11.2.7. General requirements for registration

The general requirement to be registered as a facilitator or TVET trainer is that an individual who desires to be registered shall

- be fit and have the attributes of a Facilitator or Trainer;
- complete an application form and provide supporting documents;
- pay the fee determined by the Council.

The applicant shall show evidence of three years post qualification experience in addition to any of the following:

- vocational area qualification which is at least one level above the level the applicant wishes to operate; and a qualification in pedagogy/facilitation skills; or
- a training qualification; or
- a minimum of one year industrial experience in the trade area.

The regulation further stated that an applicant who does not meet all the requirements for registration may be granted conditional registration by the Council and given time to meet all the requirements.

<sup>&</sup>lt;sup>28</sup> In the COTVET CBT, teachers are referred to as facilitators



### 11.2.8. Overview of TVET teacher training institutes

TVET teacher training takes place at two levels. These are the Colleges of Education level and the University level. There are 38 Colleges of Education, 2 (two) public universities and 1 (one) private university<sup>29</sup>. It must be mentioned that TVET teacher training does not take place exclusively in any of the institutions but part of the general strategy for the preparation of teachers to teach at various levels of the education ladder.

#### 11.2.9. Structure of Teacher Preparation in Ghana

Presently, Ghana runs the following pre-service teacher education programs:

- Three-year DBE (for basic school—kindergarten, primary, and junior high schoolteachers). These teachers are prepared in the CoE.
- Two-year post-DBE (for basic schoolteachers). These teachers are trained either in the University of Cape Coast or the University of Education, Winneba, for teachers who already possess the DBE.
- Four-year bachelor's degree. These are graduates from the University of Cape Coast and University of Education, Winneba.
- Master's degree (for second cycle schools and CoE). These also are graduates from the University of Cape Coast and University of Education, Winneba.
- Two-year DBE (sandwich) program for teachers who already possess initial professional teacher's Certificate "A" 3-Year post-secondary qualification. This is offered through the CoE by the University of Cape Coast.
- Four-year (distance education) Untrained Teacher's Diploma in Basic Education (UTDBE) for practicing teachers who have not received initial professional teacher training (non-professional teachers). It is offered in the CoE in partnership with the TED of the Ghana Education Service as an ad hoc measure to increase teacher numbers to handle basic schools especially in rural communities.
- Three-year (distance education) Certificate "A" program for practicing (informal) teachers who were on the UTDBE program but could not meet all the requirements for the award of the UTDBE certificate. These teachers too have not received initial professional teacher training. This program is also offered in the CoE in partnership with the TED of the Ghana Education Service as an interim measure to increase teacher numbers to handle basic schools in rural

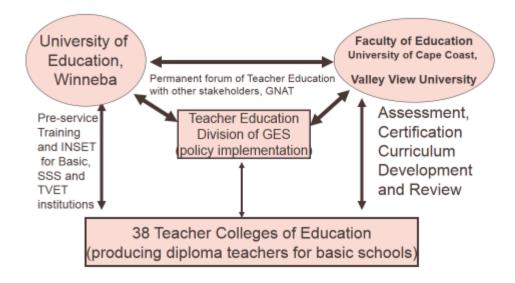
The framework of teacher training in Ghana which includes TVET teacher training is illustrated in Figure 4 below<sup>30</sup>.

<sup>&</sup>lt;sup>29</sup> The list of the TVET teacher training institutes is attached as Appendix 2

<sup>&</sup>lt;sup>30</sup> Anamuah Mensah 2010 and updated by Researcher



Figure 4: Framework for Teacher Training in Ghana



#### 11.2.10. Funding of TVET teacher education institutes

The Ministry of Education receives about 20% of the national budget, but only 1% of that amount is allocated on the average to the TVET sector of the Ministry and about 2.4% to the teacher training which also trains TVET teachers. There is no exclusive budget to teacher training in TVET specifically. This has been explained earlier in Table and discussions on this are similar to the earlier discussions.

#### 11.2.11. Quality assurance TVET teacher education institutes

Tertiary or Higher education institutions in Ghana have adopted various processes and practices (such as external examiner system, programme and course approval procedures, evaluation of teaching and course, and student feedback) for the assurance of quality of education provided (Utuka, 2011).

The Public Colleges of Education for instance have an external examiner system managed by the University of Cape Coast, whereby the university under the Institute of Education manages examinations, sets and moderates examination questions and administer examinations. There is an award committee that comprises of some principals of the Colleges, the Director and Senior Members of the Institute of Education in the University of Cape Coast, the Vice Chancellor of UCC, Dean of the Faculty of Education UCC, NCTE, representatives from Ghana National Association of Teachers (GNAT) and West Africa Examination Council (WAEC). This committee is responsible for issues related to administering of examinations, and presentation of examination results. The assessment of examinations scripts is organized by the Institute of Education whereby there is a structure made up of subject chief examiners, team leaders and markers selected from tutors from the Colleges of education and the university of Cape Coast.

Presently there are a number of challenges in relation to ensuring quality in Colleges of Education in Ghana as they go through the formative stage of being tertiary institutions. According to Ndago (Chairman of Conference of Principals of Colleges of Education) the transition of Colleges of Education to the tertiary sector can be described as frustrating, uncertain and disconnect between what we know about tertiary status and reality on the ground (Daily Graphic Dec 16, 2011). Many changes are occurring such as the management of the institutions as tertiary institutions,



change in curriculum, and the upgrading of all resources, be it human, physical and material facilities.

#### 11.2.12. TVET teacher education institutes and international development

In September, 2007 all of the 38 Public Teacher Training Colleges which were under the Teacher Education Division of the Ministry of Education, were upgraded into Colleges of Education and placed under the National Council for Tertiary Education (NCTE). The Colleges of Education are therefore now regarded as tertiary institutions. This process aimed to further build up the country's human resources and improve academic standards of education institutions. The Colleges of Education moved from certificate awarding institutions to diploma awarding institutions. All the Colleges of Education are affiliated to the University of Cape Coast, which awards the Diploma in Education to graduates (NAB, 2009). Qualifications and certificates issued by the University of Cape Coast are internationally recognized.

#### 11.2.13. Collaboration with Canadian Teachers' Federation

The Ghana National Association of Teachers (GNAT) and the Canadian Teacher's Federation (CTF) have for the past 20 years jointly organized periodic collaborative inservice workshops for teachers in the country. The training is aimed at updating teachers' knowledge and skills in the light of new development in teaching techniques and educational research, empower teachers to develop innovations in teaching practice as well as help weaker teachers to become more effective. TVET teachers in the Ministry of Education have been part of this intervention, however information on the numbers that have participated in this is not available.

# 11.2.14. Operationalization of National Teaching Council through the Ghana Education Decentralization Project (GEDP)

The Ghana Education Decentralization Project (GEDP) is owned by the Government of Ghana through the Ministry of Education and the Ghana Education Service and with support from the United Stated of America International Development (USAID) GEDP is implemented by World University Service of Canada (WUSC). The project which started in 2010, ended in 2012 and was been mandated by the Ministry of Education (MoE) to develop a framework for the transfer of decision making authority and responsibility from the Ghana Education Service (GES) to District Assemblies, the Regional Coordinating Councils, and the three autonomous bodies, namely National Inspectorate Board (NIB), National Teaching Council (NTC) and National Council for Curriculum and Assessment (NCCA). The mandate covers TVET teachers of the Ministry of Education but not TVET teachers in the other Ministries who have their own policies and does not cover the private sector as well.

Two key tasks were involved in the GEDP mandate regarding the decentralized education framework:

- Task 1: To establish an operational framework for the transfer of decisionmaking authority over management, finance and operational issues from the GES Headquarters (GES HQ) to District Assemblies.
- Task 2: To establish three separate operational frameworks for the NIB, NTC and NCCA.

#### 11.2.15. TVET teacher education institute and postgraduate research

There has been inadequate funding for research facilities especially equipment to enhance the training of TVET teachers in the training institutes. Education in Ghana is however constructed to the overall objective of development, namely economic growth and poverty reduction. However the over-emphasis on primary education at the expense of other levels of education has removed the indigenous capacity for research



and innovation which is centrally important to link education to indigenously determined future development of the country (Tkly, 2004). Research facilities in the TVET teacher institutes is woefully inadequate, particularly within the Colleges of Education,

### 11.3. TVET teacher education programmes (initial and in-service)

#### 11.3.1. Organizational aspects of TVET teacher education programmes

As indicated earlier, teacher education is not exclusively focused on TVET; it is embedded in the general teacher training in the country. The Colleges of Education in Ghana are institutions devoted to the training of student-teachers to enable them to acquire the necessary professional and academic competencies for teaching in pretertiary institutions (including TVET institutes) and non-formal education institutions (Government of Ghana, 2012).

The Colleges of Education Act, 2012, Act 847 provides that a College of Education is to:

- Train students to acquire the necessary professional and academic competencies for teaching in pre-tertiary institutions and non-formal education institutions;
- Build the professional and academic capacities of serving teachers though regular continuing education;
- Provide programs that will promote the effective teaching of science, mathematics, information and communication technology and other related subjects to meet the needs of contemporary society; and
- Foster links with relevant institutions and the community in order to ensure the holistic training of teachers.

Regarding the functions of Colleges of Education, the Colleges of Education Act, 2012 provide that a College of Education shall decide on the subjects to be taught based on their special relevance to the needs of the educational system of the country and for national development. Colleges of Education are also required to ensure that basic research and action research form an integral part of teacher education, among others. The Councils of Colleges of Education have the responsibility for approving the educational programs developed by their academic boards. This is in regards to the mandate of the college; and prescribing terms and conditions for admissions of persons selected for a course of study organized by the college (GOG, 2012).

The Colleges of Education Act, 2012 has other relevant provisions. Indeed, the Act provides that the development of academic policies, regulation of courses, development of academic standards, the conduct of examinations and award of diplomas should be undertaken in consultation with an affiliated institution. Additionally, section 19 of the Colleges of Education Act, 2012 specifies that the development of statutes for the regulating the governance and management of the Colleges Education is subject to the approval of the Minister of Education.

#### 11.3.2. Key characteristics of the ITE curriculum

Since 2007, the Colleges of Education have been running a regular 3-Year Diploma in Basic Education (DBE) programme. It used to be structured on the "in-in-out" basis. It means students spend the first two years in school to study the prescribed courses, and use the last year to go out of campus to do teaching practice. Currently, the "in-in-out" programme has been reviewed. Since 2013/2014 academic year, the COEs are running a five-semester programme. This means that students spend the 1st and 2nd years and the second semester of the 3rd year on campus. They will use the first semester of the third (or final) year for their Off-campus Teaching Practice.



The college runs other programmes (Sandwich) which is used to train teachers with Certificate "A" for a 2-year period to qualify for the award of a Diploma in Basic Education. Similarly, those with Diploma in Education qualification have been admitted to do a 2-year Sandwich "top-up" programme that will qualify them for the award of a B. Ed. Degree in Basic Education. This has given teachers the opportunity to upgrade themselves, in order to improve upon their professional knowledge and competence.

The two universities also run a 4 year program, for in service and upgrading on 'in-in-in-in' basis (which is full time) at UCC with a 6 week practicum during the last year and 'in-in-out' system at the University of Education Winneba at its campuses. A summary of the type of teacher training in the colleges and the universities with degrees awarded, location and duration of training is given in table 6 below.

Table 6: Types of teacher training, location, degrees awarded and duration<sup>31</sup>

Type of teacher training	Location	Implementi ng agencies	Duration	Structure	Mode	Qualification
Pre-service or initial teacher education	38 CoE	GES/TED	3yrs	IN-IN-OUT	Traditional/DE sch attachment	Diploma
	University	university	4yrs 1yr	IN-IN-IN-OUT Sandwich/Full time	Traditional Traditional	Bed PGDE/ Cert in Education
Induction?	Schools?	GES?	NA*	NA	NA	Teaching license?
In-service upgrading	UEW	UEW	4yrs	IN-IN-IN-OUT	Traditional/DE	Diploma/BEd
In-service upgrading	ucc	UCC	4 yrs 3yrs	IN-IN-IN-IN 6wk practicum Out-out-out	Traditional  DE/Sandwich	Bed Diploma
In-service cluster	School cluster	GES	variable	variable	traditional	NA/ certificate of attendance
In-service- lifelong	individual	individual	1ife1ong	variable	variable	NA

#### 11.3.3. Curricula

Writing on capacity building for lead teacher training institutions in Ghana, Adegoke (2003) indicated that the "Basic principles underlying the nature of the Basic Teacher education curriculum include demand, integration of theory and practice, school/classroom focus, competency and process assessment" (p. 8). Adegoke and the Institute of Education (2005) indicated that the curricula designed for the training of teachers for first and second cycle schools in Ghana have the following components:

- Foundation academic studies consisting of the subjects taught at the first cycle level;
- Specialized personal development studies covering communication and study skills as well as socio- economic issues that underlie national development;
- Educational studies focusing on the learner in the context of the school situation and linked with the teaching-learning process and assessment;
- Curriculum studies and methodology dealing with the study of the content of basic school subjects;

<sup>&</sup>lt;sup>31</sup> Source. Anamuah-Mensah & Benneh (n.d). Note. COEs = Colleges of Education; ? = Not finalized yet; GES = Ghana Education Service; TED = Teacher Education Division; IN–IN–OUT = 2 years on campus and 1-year practicum; DE = Distance Education; IN–IN–OUT = 3 years on campus and 1-year practicum; IN–IN–IN = Four years on campus; Out–Out–Out = Non-residential program; BEd = Bachelor of Education; PGDE = Post-Graduate Diploma in Education; NA = not applicable; UEW = University of Education, Winneba; UCC = University of Cape Coast.



 Practical training made up of school visits, school attachments, on-campus practice teaching, design and production of teaching and learning materials, and external school-based practice teaching lasting one academic year.

Even though this information may be 10 years old, unfortunately there has not been any change in the situation as at 2015, and these apply to TVET teachers as well. With the emergence of Colleges of Education and seven of them dedicated to TVET, it is hoped that the situation may change.

#### 11.3.4. Recruitment and selection for TVET ITE

As indicated earlier, initial teacher education in TVET starts from the Colleges of Education colleges. The recruitment and selection processes begin with the advertisement of vacancies for first year students to apply for admission. This activity takes place between February and March every year and on print and electronic media. Sometimes it is also announced on national and local television and radio stations.

The entry requirement as already indicated for admission into any of the 38 Colleges of Education to undertake a three year Diploma in Basic Education (DBE) for the 2015/16 academic year, the general requirement for both West Africa Senior Secondary Certificate (WASSCE) and Senior Secondary School Certificate (SSSCE) holders is; Credit in five (5) subjects comprising three (3) core subjects and two (2) elective subjects. (Credit for WASSCE holders means A1 – C6 and that for SSSCE holders means A – D).

In addition to the general requirement, the requirement to enter into any of the seven designated schools for TVET training is credit passes in English language, Core mathematics, integrated science and two elective subjects in the mathematics, science and technical education areas of Senior High School (SHS) program.

When applicants are admitted, one important issue is for the applicant to seek sponsorship from a District Director of Education. Failure to get such sponsorship normally leads to the withdrawal from the college. Applicants are required to present their admission letters to the District Director of Education of the sponsoring district for their forms to be endorsed. After completing the forms, applicants are advised to return these forms to the Principal of his or her College.

There is also the University of Cape Coast and the University of Education Winneba and its campuses which train for the secondary level education (including TVET institutes) and the polytechnics there are basic entry requirements that must be fulfilled and other program specific requirements.

#### 11.3.5. Early Career Support (ECS) and Continuous Professional Development (CPD)

The Ghana Education Service of the Ministry of Education in 2012 developed a policy framework document for the development and management of pre-tertiary teacher professionals to guide and direct early carrier support and continuous professional development of teachers for pre-tertiary education including TVET in the country.

The policy draws on the 2008 Education Act, which calls for the establishment of a National Teaching Council (NTC) with the responsibility for setting professional standards and code of practice for professional development, registration and licensing of teachers. Section 10 of the Act stipulates that the NTC shall be responsible for establishing (a) the framework for employing teachers, (b) in-service education and training (INSET) and (c) the periodic review of professional and ethical standards for teacher and teaching. The teacher development and management policy framework defines the areas of achieving these goals of the 2008 Act.



# 11.3.6. The vision of the Pre-tertiary Teacher Professional Development and Management (PTPDM)

The vision of the PTPDM in Ghana is to prepare teachers to enable them function effectively in the basic and second cycle schools in Ghana and to develop and nurture them to become reflective and proficient practitioners capable of providing quality education for all children in Ghana.

The PTPDM has introduced the signing of contract stating teachers' duties and responsibilities at the Beginning Teacher stage. It emphasizes in particular teachers' commitment to attend school regularly and on time and commitment to ensure a congenial school environment that respects the rights of children to pursue an education of high quality. It has also stated that benefits, career progression and opportunities for continuing professional development shall be used to enhance the status of teaching as a worthwhile career in society. It has also state clearly that the District education budgets shall include a budget line for training INSET facilitators, managing INSET activities as well as sponsoring teachers to participate in INSET programs. This applies only to TVET teachers in the Ministry of Education and as it has always been the case, there are budget lines with allocation indicated for this program but hardly are releases made its implementation.

#### 11.3.7. General structure PTPD framework

The general structure of PTPD in Ghana consists of

- Initial Teacher Training Programs (3 -4 years)
- Induction and Initial INSET program (within one year after pre-service training)
- In-service education and training (INSET) continuous for updating/upgrading professional knowledge and skills (requirement for promotion)
- Upgrading of programs including Open and Distance Learning (ODL) programs and sandwich programs.

#### 11.3.8. Induction and Initial INSET program

The Ministry of Education and GES organize induction and initial INSET program within the first year for Beginning Teachers. The induction program normally consist of the following

- Professional code of practice
- Classroom management
- Professional standards in teaching
- School-community relations
- Assessing regulations and practices
- Developing teaching and learning materials

#### 11.3.9. Aligning the TVET TE to the professional needs

The PDPM has also made room for aligning the TVET teacher education to professional needs through in-service education and training at three levels. These are: District Based INSET, Cluster Based INSET (CBI) and School Based INSET (SBI). The program has been designed to moves from the District through the cluster and finally to the schools to enable as much participation as possible and also give visibility to program.

In general, INSET seeks to accomplish the following:

- Improve teachers' subject matter knowledge, and pedagogical content knowledge
- Improve teachers' capacity to promote effective teaching
- Develop teachers' as reflective practitioners
- Improve teachers' management and leadership skills, and



• Promote teachers as a community of practitioners engaged in collaborative problem-solving to improve student learning and achievement.

#### 11.3.10. Role of employers in occupational standards generation and validation

The Council for TVET (COTVET) has five standing technical committees <sup>32</sup>, all of which are led by industrialists with other relevant industry representation. These Committees also have other sub-committees for some occupational areas. Membership of the sub-committees are drawn from relevant industries, professional bodies and trade associations and they generate the occupational standards that are used for education and training. The curricula and outcomes are set based on the occupational standards generated by industry. The standards indicate the general area of competence and the relevant skills that learners should acquire. These are then translated into curricula and outcomes for education and training by selected teachers in the relevant trades. All the processes are convened by COTVET. Per international best practice and for the fact that CBT is demand driven and the needs of industry change rapidly all training programmes are to be reviewed after every five years apart from ICT which will be reviewed every five years. These processes are led by industry and have representation from relevant bodies.

There are two major sub-committees under the Industrial Training and Advisory Committee. These are:

- Occupational standards generation sub-committee (SITAC) five members per sub-committee. These groups are responsible for generating occupational standards for specific trades for education and training and
- Occupational standards validation sub-committee (SITACOS) five members.
  They are responsible for validating occupational standards to ensure that the
  standards meet the skills needs and demands of relevant industries. In
  addition, they assess the relevance of the standards in terms of best
  international practice, opportunities for progression, and employment
  opportunities among other things.

#### 11.4. TVET teacher education and student population

#### 11.4.1. Enrolment in TVET TE programmes and background of students

Entry requirement into TVET TE is upon completion of SHS where the age group is between 17 and 19 years in most cases. Table 7 below gives enrolment into all CoEs and enrolment of students undertaken technical subject directly related to TVET.

Table 7: Percentage of Technical Students Enrolled in CoEs (2009 -2013)

	2009/2010	2010/2011	2011/2012	2012/2013
Total Enrolment in CoEs	26,629	26,636	27,576	27,677
No. of students taking technical courses related to TVET	2,640	2,914	1,431	1,732
Percentage of TVET students	9.91%	10.94%	5.19%	6.26%

Source: EMIS May 2014 Report

The Standing Committees are, 1. Industrial Training Advisory Committee, 2. Training Quality Assurance Committee, 3. National TVET Qualifications Committee, 4. National Apprenticeship Committee and 5. Skills Development Fund Committee

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The table above indicates that there is no trend in percentage of students taking technical course as compared to total enrolment, however, it can be concluded that less than 10% in all cases of total student enrolment undertake technical course and sometimes it can go as low as about 5%.

#### 11.4.2. Gender enrolment of technical students in CoEs

Gender enrolment of technical students in all the CoEs is given in table 8 below.

Table 8: Gender enrolment of technical students in CoEs (2010-2013)

	2010/2011			2010/2011 2011/2012			2	012/201	3
	М	F	Total	M	F	Total	M	F	Total
Year 1	791	69	860	133	162	295	129	195	326
Year 2	831	167	998	125	129	254	245	295	540
Year 3	946	110	1,056	384	448	882	374	492	866
Total	2,568	346	2,914	642	739	1,431	748	982	1,732

Source: EMIS May 2014 Report

#### 11.4.3. Motivation for enrolling in a TVET TE programme

Even though during the research much information was not received on the issue of motivation for enrolling in a TVET TE programme, desk research from a paper produced by Kofi Osei Akuoko, Peter Dwumah and Wahab Mahama Baba on Teacher motivation and quality education delivery in Ghana with emphasis in Tamale of the Northern Region of Ghana gave some indications.

During their research and in response to a question as to why respondents decided to become teachers, 58.7% of the formally registered teachers said they were interested in teaching. Majority (55%) of the teachers in the informal sector gave the same reason. Also, 20.4% of the formally registered teachers stated lack of employment opportunities as the reason why they decided to join teaching profession and 40% of the teachers in the informal sector stated the same reason. In relation to pay, only 7.7% of the formally registered teachers stated pay as the reason why they chose teaching as their profession. With working hours and school holidays, 9.7% of formally registered teachers said they decided to join the profession because of the working hours and holidays enjoyed by teachers. Interestingly, 3.6% of the registered teachers gave other reasons such as "a stepping stone", "lack of financial support to further their education at the university" and "they followed their parents" advice".

The above analysis which was not exclusive to TVET teachers but inclusive with the general teaching profession could be used as a benchmark and may not reflect the actual nationwide but as a guide for discussions.

#### 11.4.4. Drop out of the TVET TE programme

This research did not get any data on the dropout rate in TVET TE programmes but discussions with authorities suggested that it less than 5% from first to third year.



### 12. CHALLENGES, SOLUTIONS AND EMERGING THEMES

#### 12.1. Key message of the chapter

- **Key message 1:** The TVET system in Ghana is facing governance, coordination and supervision challenges as there are still conflicting mandates between COTVET and NVTI. Both institutions as per the laws that established them have similar mandates for coordination and supervision of TVET in the country. However, as per discussions with the two institutes during the validation workshop, they indicated that a committee has been established to study the laws of both COTVET and NVTI to be resolve any conflicting issues.
- **Key message 2:** Due to low salaries paid to TVET teachers, unfavourable pension package and lack of motivation, TVET teachers who have industrial experience and can best teach in the institutes are attracted to industries who can pay them better and also give them favourable pension package resulting in experience TVET teachers leaving the classrooms to work in industries.
- **Key message 3:** Even though TVET issues can found at all levels of the education system in the country, Ghana has no dedicated TVET teacher training college or university solely and dedicated to train TVET teachers for teaching at all the levels of the education ladder.
- **Key message 4:** The Government should as a matter of urgency take steps to streamline the governance system of TVET by affirming the mandate of one ministry to have oversight responsibility on TVET and also harmonize the legal frameworks of NVTI and COTVET to avoid conflicting responsibilities
- **Key message 5**: Government should take steps to dedicate at least two Colleges of Education and one University solely and dedicated to train TVET teachers to teach at all levels of TVET delivery in Ghana

#### 12.2. Challenges of the TVET system

Despite the renewed Government focus on TVET which led to the establishment of (COTVET), the sector continues to be plagued by a number of challenges. Some of these challenges are enumerated below.

12.2.1. Conflicting mandate for governance, supervision and coordination of TVET

One of the major concerns that led to the establishment of COTVET is the governing structure of public TVET under separate ministerial mandates creating conflicts. COTVET was thus established with the view of harmonizing all activities and issues of public TVET include the informal sector to ensure effective delivery of TVET and effective utilization of limited resources. Unfortunately there are still conflicting mandates between COTVET and NVTI as both institutions have similar mandates set by law for coordination and supervision of TVET in Ghana.

12.2.2. Neglect and poor perception of Technical and Vocational Education and Training

There is generally a poor perception of TVET among the general public. with the view that TVET is meant for 'drop outs' culminating in underfunding of the sector by



government, less commitment from government to tackle TVET issues as compared the commitment government pays towards issues of the grammar schools and other disciplines in the polytechnics.

#### 12.2.3. Limited linkage between training providers and industry players

There is limited linkage between training providers and industry players. This is reflected in the development of learning materials with no input in most instances from industry. There are also limited opportunities for instructors to undertake periodic training in industries to be abreast with dynamic changes that are taking place at the world of work. This may largely explain the limited application of practical and case studies in teaching in the TVET institutes. The emphasis on supply driven approach to skills development as compared to demand driven is due mainly to that limited engagement with industry for training providers to acquaint themselves with the actual occupational standards, skills and competencies needed by industry players.

#### 12.3. Challenges TVET teachers are facing

From the discussions and interview supported with desk research, one of the major challenges of TVET is the issue of recognition. Teachers in the grammar schools are more recognized and respected as compared to those teaching in TVET institutes.

Most of the TVET teachers do not get the opportunity to upgrade their skills and competencies through industrial attachment or internship. This has led to lack of knowledge in updated technologies to help train the students. There are also limited opportunities for continuous skills improvement for TVET teachers through short term courses and even rising to the higher level of their educational qualification.

Low salaries, unfavourable pension package and lack of motivation to encourage the TVET teachers are some of other challenges. Due to low salaries paid to the TVET teachers, unfavourable pension package and lack of motivation, TVET teachers who have industrial experience and can best teach in the institutes are attracted to industries who can pay them better and also give them favourable pension package which to the teachers are very important.

#### 12.4. Challenges TVET teacher education system is facing

### 12.4.1. No dedicated TVET teacher training college or university in Ghana

Even though TVET issues can found at all levels of the education system in the country, Ghana has no dedicated TVET teacher training college or university solely and dedicated to train TVET teachers for teaching at all levels of the education ladder. Out of the 38 COEs, 7 have been given the responsibility to teach technical subjects but these colleges are not dedicated solely to train TVET teachers. The same applies at the university level, the College of Technology, Kumasi campus of University of Education Winneba, is supposed to train in technical programs including TVET but not solely dedicated to train TVET teachers, facilitators and instructors.

#### 12.4.2. Lack of accurate data in the TVET teacher education system

There is limited data on the activities of TVET teacher education in the system. This is partly because TVET teacher education issues at college and university levels are considered as part of the general issues at the colleges and universities. This makes informed decision taken on TVET teacher education based on accurate data very difficult. For example, this research found it difficult to get accurate data and had to rely on other research document to supplement the scanty data received from



interviewees. The lack of accurate data has also led to a situation where there is no proper and well-structured system that allows and individual choose a career that aligns with his/her interest, talents and capabilities.

#### 12.4.3. Poor quality of infrastructure and limited engagement with industry players

Many training institutions that teach technical subjects related to TVET lack modern equipment and tools as well as good quality classrooms, libraries and sanitation facilities to promote effective teaching and learning for the production of high quality TVET teachers to teach in the TVET institutions at all level of the education ladder. There is also limited engagement with industry players, for TVET teachers to update their skills in industry and also for industry players to support and facilitate some teaching and learning in the colleges and universities.

### 12.5. Potential improvement to overcome challenges for the TVET

The following bullet points may be considered for potential improvement to overcome some of the challenges for TVET

- Identify successful TVET graduates to showcase their work as a way of addressing poor perception about TVET and improve government commitment and funding also as a way to indicate that government pays equal attention to both TVET and grammar training in the country
- Streamline the governance system of TVET by giving the mandate to one ministry to have oversight responsibility on TVET and harmonize the legal framework of NVTI and COTVET to avoid conflicting responsibilities
- Step up government funding of TVET to improve training facilities and equipment of TVET institutions to make it more attractive
- Bridging the gap between industry and training/academic institutions through
  - Participation of industry in curricula design
  - Development of internship mechanism for students or trainees
  - Measures that offer instructors opportunity to spend time periodically with relevant industry and relevant sectors of world of work to be in tuned with new developments at the work place
- The proposed national TVET qualification framework must be implemented to harmonize and provide for articulation and progression from the main education stream to TVET.
- Government must be pushed to provide funding to implement the Competency Based Training (CBT) methodology to address the challenge in skill gaps.

#### 12.6. Potential improvements to overcome challenges for the TVET Teacher

Government could take steps to dedicate at least two Colleges of Education and one University solely and dedicated to train TVET teachers to teach at all levels of TVET delivery in Ghana. Already 8 of the 38 COEs are offering technical courses, at least two of such can be dedicated to TVET teacher training and the College of Technology (Kumasi) of the University of Education Winneba, has the potential to be converted to be dedicated to train TVET teachers.

Steps could be taken improve the image of TVET teachers in the second cycle institutions by given them more responsibilities according to their abilities. Recognition that is given to Conference of Heads of Assisted Secondary Schools (CHASS) in the GES for example, same may also be accorded to APTI. Similarly the recognition given to University Teachers' Association (UTAG) can also be extended to Conference of Rectors of Polytechnics (CORP).



Even though it is difficult to increase the salaries of only TVET teachers, in relation to other teachers (particularly as TVET is part of the pre-tertiary and tertiary education system), it is important that government finds alternative ways of increasing TVET teachers through top up and subject specific teaching payment.

Compensation packages toward retirement should be improved considerably to equal that which is being paid at industry if not better. This will secure the future of TVET teachers and contribute to retaining them for longer periods.



#### **A**NNEX TO THE COUNTRY REPORT

# A glossary list: including all acronyms, specific terminology used, and abbreviations

Acronyms and abbreviations	Meaning	
AB	Awarding Body	
ADEA	Association for Development of Education in Africa	
AfDB	African Development Bank	
APTI	Association of Principals of Technical Institutes	
BeD	Bachelor in Education	
СВІ	Community Based INSET	
CBT	Competency Based Training	
CHASS	Conference of Heads of Assisted Secondary Schools	
CoE	College of Education	
COLTEK	College of Technology Education, Kumasi	
CORP	Conference of Rectors of Polytechnics	
COTVET	Council for Technical and Vocational Education and Training	
CPD	Continuous Professional Development	
CTF	Canadian Teachers' Federation	
DBE	Diploma in Basic Education	
DE	Distance Education	
ECOWAS	Economic Community of West African States	
ECS	Early Career Support	
EMIS	Educational Management Information Systems	
ESAR	Education Sector Annual Review	
FWSC	Fair Wages Salary Commission	
GEDP	Ghana Education Decentralization Project	
GES	Ghana Education Service	
GIZ	German Development Cooperation	
GNAT	Ghana National Association of Teachers	
GoG	Government of Ghana	
HND	Higher National Diploma	
ICCES	Integrated Community Centres for Employable Skills	
ICT	Information Communication Technology	
ICQN	Inter-Country Quality Node	
ITAC	Industrial Training Advisory Committee	
IN-IN-IN	4 year study with residential accommodation on campus	
IN-IN-IN-OUT	3 year study on campus, 1 year outside for practicum	
IN-IN-OUT	2 year study on campus, 1 year outside for practicum	
INSET	In-service Training	
JHS	Junior High School	
LI	Legislative Instrument	
MoE	Ministry of Education	



Acronyms and abbreviations	Meaning	
MOU	Memorandum of Understanding	
NAB	National Accreditation Board	
NABPTEX	National Board for Professional and Technical Examinations	
NCCA	National Council for Curriculum and Assessment	
NCTE	National Council for Tertiary Education	
NGO	Non-Governmental Organization	
NIB	National Inspectorate Board	
NQF	National Qualifications Framework	
NTC	National Teaching Council	
NVTI	National Vocational Training Institute	
ODL	Open and Distance Learning	
OIC	Opportunity Industrialisation Centre	
OUT-OUT-OUT	Non-residential training	
PTPD	Pre-tertiary Professional Development	
PTPDM	Pre-tertiary Professional Development and Management	
RPL	Recognition of Prior Learning	
SBI	School Based INSET	
SDF	Skills Development Committee	
SHS	Senior High School	
SITAC	Sub-ITAC	
SSSCE	Senior Secondary School Certificate Examination	
SSSS	Single Spine Salary Structure	
TE	Teacher Education	
TED	Teacher Education Division	
TEU	Technical Exams Unit	
TQAC	Training Quality Assurance Committee	
TVET	Technical and Vocational Education and Training	
TVSD	Technical and Vocational Skills Development	
UCC	University of Cape Coast	
UEW	University of Education, Winneba	
UNESCO	United Nations Education, Science and Culture Organisation	
USAID	United States Agency for International Development	
UTAG	University Teachers' Association of Ghana	
UTDBE	Untrained Teacher's Diploma in Basic Education	
VTI	Vocational Training Institute	
WAEC	West African Examination Council	
WASSCE	West African Secondary School Certificate Examination	
WUSC	World University Service of Canada	



#### A list of interview sources, their institutional affiliation, and job title

Name	Institutional affiliation and job title	
Isaac Eze	Director TVET, GES	
Stephen Amponsah	Director NVTI	
John Ocran	Deputy Director, Assessment and Certification, NVTI	
Sebastain Deh	Executive Director, COTVET	
Samuel Thompson	Coordinator, Policy Planning COTVET	
Linda Adjei	Director, Vocational Training	
	Tamale Polytechnic	
Prof Okai	College of Technology Kumasi, University of Education, Winneba	
	Cape Coast Polytechnic	
	Accra Technical Training Centre	
	Accra Polytechnic	
Frank Lartey Jnr	Deputy Director, Youth Leadership Training Centre	
	Modesco Technical Training College	
	Accra Polytechnic	
	Kimbo Technical Institute	
	Kumasi Technical Institute	



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#### **APPENDIX 1: NUMBER OF TVET PROVIDERS IN GHANA**

PUBLIC TVET PROVIDERS	NUMBER
Ministry of Education (Technical Institutions)	46
Ministry of Employment and Labour	98
ICCES 61	
NVTI 34	
OIC 3	
Ministry of Youth and Sports (Youth Training Centres)	11
Ministry of Local Government and Rural Development	24
(Community Development Centres)	
Ministry of Food and Agriculture	8
(Institutes: 3; Colleges: 5)	
Ministry of Tourism, Culture and Creative Arts (HOTCATT)	1
Ministry of Trade and Industry (GRATIS)	10
Ministry of Roads and Highways (Training School)	1
Ministry of Gender, Children and Social Protection	24
Rehabilitation Centres: 9	
Sheltered Workshops: 3	
Vocational Training Centres: 12	
Sub-Total	223
Private TVET Providers	355
Total	578

#### NB:

The 10 Polytechnics and the Universities run some TVET programmes but because of the degree of autonomy they enjoy, they are not classified typically as TVET institutions. (Source: COTVET 2015)



#### **APPENDIX 2: LIST OF COLLEGES OF EDUCATION IN GHANA**

- Abetifi College of Education
- Accra College of Education (Mixed)
- Ada College of Education\*
- 4. Agogo Presby College of Education (Women only)
- 5. Akatsi College of Education Akatsi (Mixed)
- 6. Akrokerri College of Education (Mixed)
- 7. Atebubu College of Education (Mixed)
- 8. Bagabaga College of Education Tamale (Mixed)
- 9. Berekum College of Education (Mixed)
- 10. Dambai College of Education (Mixed)
- 11. E. P. College of Education Amedzofe (Mixed)
- 12. E. P. College of Education Bimbilla
- 13. Enchi College of Education (Mixed)
- 14. Foso College of Education Foso (near Cape Cost) Mixed
- 15. Gbewah College of Education Bawku (Mixed)
- 16. Holy Child College of Education Takoradi (Women only)
- 17. Jasikan College of Education Jasikan (Mixed)
- 18. Kibi College of Education –Kibi (Mixed)
- 19. Komenda College of Eduacation Komenda (Mixed)
- 20. N. J. Ahmadiyya College of Education Wa (Mixed)\*
- 21. Offinso College of Education (Mixed)
- 22. OLA College of Education Cape Coast (Women only)
- 23. Peki College of Education Peki (Mixed)
- 24. Presby College of Education\*
- 25. Presby Women's College of Education Aburi (Mixed)
- 26. S. D. A. College of Education Asokere (Mixed)
- 27. St. John Bosco's College of Education Navrongo (Mixed)\*
- 28. St. Joseph's College of Education Bechem (Mixed)
- 29. St. Louis College of Education Kumasi (Women only)
- 30. St. Mary College of Education Somanya (Mixed)
- 31. St. Monica's College of Education
- 32. St. Teresa's College of Education Hohoe (Women only)
- 33. St. Francis College of Education Hohoe (Mixed)
- 34. Tamale College of Education Tamale (Mixed)
- 35. Technical Teacher's College of Education, Mampong Ashanti (Men only)
- 36. Tumu College of Education Tumu (Mixed)
- 37. Wasley College of Education (Mixed)
- 38. Wiawso College of Education (Mixed)



# 13. NATIONAL BACKGROUND OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) - TANZANIA

#### 13.1. Key messages of this chapter

- Key Message 1: TVET assists youths to secure a meaningful livelihood option when not able to vertically progress into academics
- Key Message 1: Unequal distribution of TVET provision between rural and urban areas where about 65.6% of VET providers are located in urban areas leaving the rural areas with limited access to proper skills for supporting livelihoods The concentration of TVET offerings in the urban areas where about 20% of the population resides is to the disadvantage of 80% of the Tanzania population which is rural and basically depending on subsistence agriculture for its economy. Such unequal distribution deprives the rural areas with relevant skills for improving livelihoods and the economy. An example from the Northern VETA Zone VET data of 2014 showed the rural areas having 58 (36%) and urban areas 103 (63%) VET colleges.
- Key Message 1: Differing institutional arrangements and placement of VET in the National Qualifications Framework provides a weaker perception of Vocational Education and Training (VET) when compared to the Technical Education and Training (TET) part of TVET, That is VET under Vocational Education and Training Authority (VETA), has been assigned the lower levels of the qualifications ladder of levels 1to3, while Technical Education and Training ( TET) under the National Council of Technical Education Training (NACTE) has been assigned the upper levels of the qualifications framework of levels 4 to 8.
- Key Message 1: The current financing system at both TET and VET level favours government-public institutions. Government-public get government funds regardless of their performance. Introduction of performance based financing mechanism will provide room for competition for TVET funding for sustainable and quality TVET

## 13.2. National TVET system: key characteristics and relation to other sectors

The education system in Tanzania of 2-7-4-2 (2 years of pre-primary, 7 years of primary, 4 years of ordinary level secondary school, and 2 years of advanced level secondary school) delineates distinct division between general education and TVET. While secondary education at Ordinary ('O') form four level and Advanced ('A') form six level offers a base for vertical progression into the academic tracks, TVET and particularly VET offers an alternative path towards skills for employability particularly for primary school leavers who complete standard seven and are not admitted into secondary schools. VET offerings provide the youths an opportunity to take long, as well as short courses to enable qualify for jobs as self-employees or as wage employees. This situation had in the past seemingly lowered the perception of TVET and in particular VET as an option for those who are not able to excel academically.

The decision taken by the government to move Vocational Education and Training Authority (VETA), a government agency responsible for Vocational Education and Training (VET), from the ministry responsible for labour to the ministry responsible for education and training has been a major step towards both improving the perception of VET and harmonizing general education and skills development. From 2008 Both VETA and the National Council for Technical Education (NACTE) a council responsible for Technical Education and Training (TET) are located in the same Ministry of Education and Vocational Training (MoEVT). This same ministry also houses primary, secondary, and higher university education. Both VETA and NACTE have been



established by parliamentary Acts. VETA was upon its establishment entrusted to transform VET in the country from being supply oriented into demand driven so as to meet the labour market demands to which VET is supposed to directly serve. Institutionally, VETA maintains a dual mandate of a provider of public-government owned VET institutions which allows her to provide VET level skills up to level 3, at the same time VETA has a regulatory mandate of all VET provision both public and private. . On the other hand NACTE as an institute has a single legal mandate of regulating public-government TET level of provision from levels 4 to 8. NACTE as an institution does not have a provision mandate. This means that within one TVET system there are two operating bodies each with full legal mandate. As regulatory bodies VET under VETA, and TET under NACTE operate different qualifications frameworks. VET offers National Vocational Awards (NVAs) up to level III. TET offers National Technical Awards (NTAs) from level IV to level VIII. These differences have resulted into difficulties in defining pathways for VET graduates who wish to vertically progress into TET programmes or other general education programmes. Discussions are in place on how to harmonize the qualifications framework so that VET as a choice in career remains a significant option in that VET graduates are able to vertically progress professionally.

On the other hand, while NACTE's mandate is over regulatory of all TET offerings, VETA's legal mandate include regulating all VET offerings, financing the VET system through employer based Skill Development Levy (SDL), and managing VET institutions inherited from the government, and establishing and managing new government institutions based on government directives.

The current education sector in Tanzania portrays the following picture in terms of outputs and absorptions between different education levels:

- 1. According to the Ministry of Education and Vocational Training Basic Education Statistics in Tanzania (BEST) 2009-2013 National Data, on average, 600,000 STD VII, Form IV 'O' level and Form VI 'A' leavers are not able to join respective general academic oriented education annually. While that is the case, the total enrolment of learners in 2012/13 was y 113,080 in TET and 145,511 in VET in the year 2012. This indicates that there is a good number of general academic education graduates who could benefit through expansion of VET and TET offerings.
- 2. In terms of equitable distribution, one observes that TVET institutions are concentrated in urban areas (about 65.6% of VET providers operate in urban areas, according to MoEVT BEST 2014 National Data), leaving marginal training opportunities in the rural areas, where 80% of the population resides. Rural areas are thus left without adequate access to proper skills for supporting livelihoods.

While both VETA and NACTE have been legally established by Acts of the parliament, they fall under different financing mechanisms as follows.

In VETA's dual roles as a provider and regulator, VETA as a provider inherited the vocational training centres formerly operating as a Department under the ministry responsible for Labour. At the time of their inheritance the public institutions were run down in terms of equipment and general infrastructure. In order to enable operate the inherited institutions sustainably, and in order to manage the reforms, it was legally provided that VETA operations be financed through a 2% skills development levy (SDL) which is an enterprise/industry based levy. According to the ACT which established VETA, VETA was given the legal mandate to manage the SDL and use it for both its operations and in promoting VET in the country. VETA and promotion of VET in Tanzania is therefore funded through SDL, fees payable by the users of its various institutions, development partners, and donations both local and international.

On the other hand NACTE operations, as a TET regulator are directly financed by the Government through the MoEVT who are the direct managers of NACTE. NACTE as a



council submits its budget for adoption by the ministry. Likewise TET institutions operating under the government jurisdiction are also financed by the government through fiscal budgetary allocations. Government-public TET institutions while benefitting from government subsidy they have in addition launched their own income generating activities by charging fees for the services not covered by the government budget. Such income-generating activities include consultancies, workshop or laboratory production activities, and services.

At the moment the government does not finance privately owned TVET institutions. These are funded through own budgetary support initiatives. For example faith based owned institutions are funded by faith based owners. Such institutions also get funding from the fees charged for the goods and services which they offer. The issue of TVET funding in particular at the level of VET has of recent been a matter of discussion especially for the privately owned including faith based institutions. The faith based, which in most cases are located in the rural area cater for the low income target groups, thus needing considerable additional financial support if they are to operate sustainably. VETA as a promoter of VET through SDL has been looking into ways of how to offer financial support to the private 'vet institutions and in particular those operating as non-profit.

In view of the above, the government of Tanzania in its Technical and Vocational Education and Training Development Programme (TVETDP) has come up with recommendations on how to reduce the implications on resource allocation with a view to ensuring equitable access to TVET. These include increasing the number of TVET providers and therefore teachers. An increase of the number of TVET teachers increasing teacher training facilities, and promoting collaboration with industries for providing trade and professional related skills for teachers needing practical skill experience or for those wishing to update technological skills. Furthermore, as one of the TVETDP strategy, there is focus on improving the TVET teachers' conditions so as to attract and retain quality teachers. On the other hand ICT in particular E-learning has been given significant attention as an instrument for improving access. Another area where VET is focusing on as an area for enhancing access and relevance of VET is the reintroduction of apprenticeship schemes and other part time modes of TVET delivery.

#### 13.3. TVET system: organisation and stakeholders

Since VET and TET are different in structure, they likewise differ in organizational structures. At the VET level, its structure has been strongly influenced by reforms which aim at creating a VET system which is managed and regulated by the labour market. The institutional arrangements set to supervise VET were designed such that they would ensure that the ensuing VET system in the country would move away from supply, to the labour market demand orientation. To ensure this VETA as a supervisor of VET in the country has been set to operate under the supervision of a Board of directors which is driven by the labour market partners and stakeholders comprising of a tripartite plus representation of the following:

- Employers and industry representatives through the Association of Tanzania Employers (ATE), Confederation of Tanzania Industries (CTI), and Tanzania Chamber of Commerce and Industries and Agriculture (TCCIA)
- Workers and Teachers representatives through Researchers, Academicians and Allied Workers Union (RAAWU), and Teachers Workers Union (CWT)
- Government representatives from the ministries responsible for labour, education and training, and industries and trade
- Private faith based VET providers representatives through Tanzania Episcopal Council (TEC), The Muslim Council of Tanzania (BAKWATA), and the Christian Council of Tanzania (CCT)



Different from VETA which is a semi- autonomous government authority, NACTE as a council operates more directly under the supervision of the MoEVT.

Because of its labour market orientation VET training is particularly valued by the market. A tracer study conducted by VETA in 2011 documented the employment and income status of about sampled 5000 VET graduates. It showed that VET leavers' average employment rate is close to 85%; their likelihood of finding permanent employment is slightly higher still, and in about 87% of cases, there was a direct connection between graduates' training and their job. These results suggest that the quality of skills and qualifications is reasonable. Indeed, VET graduate unemployment is close to 15%, mainly attributed to a mismatch between training and availability of related jobs and due to the lack of resources to start business.

#### 13.4. Quality of TVET programmes

There is growing pressure on TVET subsector to support new socio-economic developments and ensure that a growing number of basic and secondary school leavers are provided with adequate skills to enable them to develop full potentials in the workplace and for livelihoods. Both NACTE and VETA as regulatory entities have therefore undertaken measures for quality assurance which include the following:

- Institution of registration and accreditation standards and procedures for institutions wishing to be recognized as providers of quality TVET education and training
- Change from knowledge based education and training approaches to adoption
  of competence based education and training (CBET) at the VET level, and an
  outcome-based training approach at the TET level
- Institution of registration and licensing standards of the TET level teachers
- Institution of effective monitoring mechanism to make TVET more responsive to labour market demands has been put in place. Under VETA, zonal Labour Market Analysts regularly collect data that is then compiled at the national level, and complemented with mini market surveys to track current and prospective industry needs.

#### 13.5. TVET system and international developments

In order to relate with international developments TVET in Tanzania has adopted approaches including:

#### 1. Establishing networking agreements

- At SADC level the Ministry of Education and Vocational Training has signed a
  protocol with SADC member countries where a number of projects have been
  initiated including the one for developing a Sub-regional qualifications
  framework. Member countries including Tanzania have been assigned to work
  on their respective National Qualifications Frameworks and a Joint Committee
  organizes meetings to discuss progress with the view to come up with a subregional qualifications framework
- Tanzania in particular at VET level has been an active participant to forums, meetings, and workshops organized by UNESCO-UNEVOC where networking and sharing of best practices with the support of UNEVOC on the current trends in TVET have been discussed. n example being a workshop which was held in collaboration between UNESCO- BREDA and UNESCO-UNEVOC in Malawi in 2005 for SADC member countries discussed the understanding reached between ILO and UNESCO on the introduction of articulation of pathways between general education and training within TVET; heralding the move and relocation of TVET from the ministries responsible for labour to ministries responsible for education and training in the sub-region.



- At East Africa level, TVET institutions are collaborating and have exchange programmes whereby students and teachers visit one another to learn from each other's best practices
- 2. Establishing collaboration agreements when addressing specific TVET delivery or specific issues related to TVET management for example:
  - Collaboration with the Community Colleges of Canada to enhance the employability of TVET graduates through the Improving Skills Training for Employment Programme (ISTEP) programme
  - Collaboration with a USAID funded organization namely International Youth
    Foundation (IYF) at VET level, whereby VETA had through the Tanzania Young
    Scholars (TYS) programme support was contracted to undertake a VET
    livelihood promotion project to five regions in Tanzania. The task was for VETA
    through use of IYF application of best practices in the areas of psychosocial
    support, and assessing the projects performance based on the graduates job
    placement or self -employment rates was the focus. This was a major shift
    where in the past VET performance has basically been based on pass rates.
    Programmes for ensuring how to deal with youths psychosocial behaviour and
    those for ensuring employability had to be put in place
  - Partnership with VSO, a British based volunteer organization, and the Kelvin Glasgow College of Britain. VETA is working with the two on a project for enhancing employability through vocational training (EEVT). The project is focusing on how to address employable skills gaps in the Liquified Natural Gas (LNG) and oil sector in Mtwara and Lindi regions in South Eastern part of Tanzania, Specific objectives for the project include establishing a consolidated picture that exist between Tanzania's national VET standards currently delivered by VETA in gas-related programmes and the standards required by the international oil and gas industry; to gain better understanding of government and non-governmental initiatives for VET in oil and gas sector; and to identify a range of actions and initiatives required to address capacity and quality gaps in target programmes. It is expected that, implementation of recommendations contained in the report will be carried out in 26 centres across Tanzania owned and managed by VETA, as it is through these centres where the majority of gas-related programmes will be delivered. The project has already embarked on training VETA teachers in Mtwara and Lindi to enable them teach students in accordance with international standards. The current activity involves shadowing of VETA teachers by VSO volunteer tutors. The VETA teachers will have to pass through City and Guilds Accreditation. The project is funded by British Gas.
  - Partnership with the Hamburg Chamber of Skills Craft. The objective of this
    partnership is to revive the apprenticeship programme by adapting the German
    Dual Model. Two VETA centres of Dar es Salaam and Moshi have been picked
    as pilots. The pilot is covering trades including hospitality, motor-vehicle
    mechanics, and electrical.



#### 14. THE PROFESSION OF TVET TEACHERS/LECTURERS

#### 14.1. Key messages of this chapter

- Key Message 1: TVET teachers are divided based on those teaching VET or TET level learners
- **Key Message 2:** Professional or trade related work experience and proficiency plus pedagogy are key requirements for TVET teachers
- **Key Message 3:** Low perception about TVET teachers when compared to other professions
- Key Message 4: Efforts geared at enhancing the relevance of TVET teacher development

#### 14.1.1. Types of TVET teachers

The existing distinction between Vocational Education and Training (VET) and Technical Education and Training (TET) within the TVET system, has led to a similar divide in the TVET teachers into two main groups. The first group consists of those working for the VET level trainees namely the vocational training centres (VTCs), and the second group consists of those working for TET level trainees most of them called TET colleges or institutes.

- 3. According to the MoEVT Basic Education Statistics in Tanzania (BEST) 2009-2013-National Data the focus of Folk Development Colleges (FDCs) and VET centres is to provide relevant knowledge, practical skills, and attitudes for gainful employment in a particular trade or occupational area for social economic development. The training programmes at this level thus prepare learners for both horizontal exiting into the labour market and at times for vertical progression into TE. For the purpose of vertical progression, the practical skill focused curriculum has been complemented with a number of general and trade related subjects. The VET level therefore call is for the following teacher categories:
  - 3.1 Those teaching cross cutting subjects such as entrepreneurship, life skills, and communication skills to improve the employability of the graduates. The cross cutting subject teachers are categorised based on their educational background that is salary schemes will differ based on whether they have a diploma, or degree and work experience in terms of years.
  - 3.2 Those teaching practical skills or the trade profession such as brick laying, carpentry, tailoring and , welding and fabrication and the like, include the following categories:
    - Auxiliary technicians whose qualifications include Ordinary level
       Certificate of Secondary Education (CESEE) plus National Vocational
       Award (NVA) level II III in the related trade.
    - Vocational instructors or teachers whose minimum qualifications include CESEE, NVA level III or National Technical Award (NTA) Level IV and above, Teacher qualifications at certificate or diploma level, and minimum of three years' work experience in the relevant field.
  - 3.3 Those teaching related subjects such as technical drawing, engineering science and, general science geared at improving the scientific explanations of the specific trade or skill, are also categorized based on their educational level such as holding a diploma, or degree and related work experience.
- 4. At the TET level the focus is to prepare graduates who are equipped to under-take middle to higher level professional jobs which require higher levels of skills, knowledge and understanding. These graduates take responsibility for respective areas of specialization as technicians, and associate professionals. In Tanzania TET is considered as part of higher education obtained in non-university -institutions.



BEST statistics for 2012/13 indicate that there is a total of 1182 teaching staff in the government and non-government TET colleges. The following teaching categories are found in the TET institutions:

- 4.1 Instructors whose minimum qualifications include NTA level VII.
- 4.2 Tutorial Assistants whose minimum qualifications include NTA level VII with GPA 3.8 or above.
- 4.3 Assistant Lecturers whose minimum qualifications include Masters Degree.
- 4.4 Lecturers whose minimum qualifications include Masters Degree with GPA 4.0 or above.

#### 14.2. Status of TVET lecturing profession

Discussions with key stake holders reveal that like in general education, the general image, and or attractiveness of TVET teacher profession has been relegated to low perception. When compared to counterparts working as professionals in their respective trades TVET teachers especially at VET level, are relegated to lower salaries and pay packages due to unclear vertical progression paths.

When referring to VET teachers for example, a number of them have left their professions and trades, and joined higher learning institutions to undertake courses which lead them to become managers of TVET leaving the TVET teacher profession. The main reason given being the limitations contained in the vertical progression in the TVET teacher profession at the VET level.

From discussions with NACTE it is noted that a research was conducted which led to the improvement of the perception of TET, in that TET institutions which were intending to move from TET under NACTE to become universities under Tanzania Council of Universities (TCU), decided to remain as TET institutions under NACTE. The main reason that made them remain as TET institutions under NACTE was research Report and related recommendations which included ensuring that the TET progression structure received recognition to offer professional degree to PHD awards in the proposed national qualifications framework as would be for the universities under TCU. The salary structure for TET teachers in public institutions was likewise improved to match that of institutions under TCU, and according to discussions with NACTE, because of that the TET institutions are attracting and retaining teachers.

### 14.3. Access to the TVET lecturer profession and pathways for becoming a TVET lecturer

Different from those teaching general education subjects, TVET teachers are required to transfer skills. A TVET teacher must therefore possess both pedagogy and practical skills that he or she is called to transfer. This being the case, there are therefore two distinct pathways for entry into a TVET teacher profession both at the VET and TET levels:

The first pathway is through direct entry which requires a teacher with the following qualifications:

- 4.5 Having a professional qualification which is one level higher than the level one is to teach
- 4.6 Having a recognized TVET teachers certificate
- 4.7 Having work experience in the professional field one is to teach

In this case a potential teacher may be recruited having work experience and the required qualification but lacking actual teaching experience. It is the responsibility of the employer to provide the required teaching qualification to the respective teacher.



With VET however, there is one college which is dedicated to providing pedagogy training to Vocational Training Centres (VTC) teachers. Due to the high demand of VET teachers, the college-Morogoro Vocational Teachers Training College (MVTTC) being the only VET teacher training college with capacity for 120 teacher trainees for in campus 1 year certificate level programme does not suffice to supply to the demand. To address this limitation, the college has started running block release off campus classes with the enrolment of 500 trainees per a cohort of an 18 months vocational teacher training course. This number is however, not able to meet the supply demand for the required teachers for close to 800 existing VTCs in the country, and further to meet the demand for the proposed new district level VTCs to be constructed in the country. Note that the current 28 VTCs are at the level of the region. That is why there is a project to develop an E-teacher learning project so as to expand access into VET teacher education.

The second pathway, mainly used by VTCs, is the development of an auxiliary in the profession. In this case an auxiliary is identified in a respective trade-profession. It is then the responsibility of the employer to make sure that the auxiliary acquires both the required work experience and teaching certification. The same approach is used at TET level whereby colleges offer to the best graduates an opportunity to work as Tutorial Assistants (TAs). After a period of time depending on the policy of the respective college, TAs get opportunities to develop their teaching skills.

While in VET, vertical progression is through acquisition of higher educational qualifications, with TET a university system has been adopted whereby, a combination of acquisition of higher educational qualifications and the number of research and publications one has produced from time to time are used as basis for vertical progression.

#### 14.4. Recruitment of TVET teachers

Recruitment of TVET teachers is the responsibility of respective employers as follows:

- 1. Public Institutions including municipalities: Since these fall under government mandate, they follow prescribed government procedures which include advertisement, shortlisting, interviewing, and then placement. After employment, teachers falling under the mandate of municipalities, or government will be covered by salary schemes and benefits prescribed by the government. Such institutions include post primary skill centres working under municipalities; Folk Development Colleges operating under the ministry responsible for community development, VETA owned VTCS, and government technical education training colleges, and the technical institutions.
- Private Institutions: In general terms, there are no set procedures or regulations governing the recruitment of TVET teachers in terms of prescribed tests or interviews in private institutions.

#### 14.5. Working conditions and payments

Working conditions of public TVET teachers are guided by the public civil service regulations, whereby of recent remuneration for the public sector follow public guidelines with the intention of attracting and retaining quality staff. The public sector is further able to pay their teachers well because of the subsidy which they get from government. For example at VET level, all remuneration is covered by the SDL. The public VET teachers are further able to make extra income through charging fees for the goods and services they offer as part of their training programmes.

The situation is different with private institutions. When interviewed, privately operated institutions, indicated that running a sustainable privately owned TVET institution was quite challenging. Such institutions had to operate as business entities



depending on learner's fees, and charges made for goods and services on offer as part of their training programmes. The institutions therefore demanded teachers who could produce quality in terms of skilled graduates, and when it came to services and goods on sale they had to be highly competitive. This meant that while they were competing to maintain the number of learners so as to breakeven, they were also competing in the surrounding non training goods and service market so as to market and sell their goods and services to make money for meeting running costs of the institutes including paying salaries for staff.

It was however observed that in the public institutions, teachers with permanent contracts were more secured in retaining their jobs, compared to those with short term contract whose outputs were immediate and had to work harder to prove their worth.

#### 14.6. Training opportunities for TVET teachers

Both VETA and NACTE regulators offer in-service training for their respective teachers as support to the professional development to respective teachers. Such training is also offered to help the teachers meet the described standards TVET registration and accreditation requirements.

At VET level, having the advantage of VETA owning a VET teacher's college - MVTTC, the college offers both short courses and workshops to address specific issues and skill needs for VET teachers. Some of trainings provided include the following:

- With support from NUFFIC (the Netherlands) the college has developed entrepreneurship training packages for orienting VET teachers to improve the employability of learners specifically in the area of self- employment. Through the project 219 teachers from 76 both VETA owned and non-VETA owned VTCs had gone through the programme by 2012.
- The college has of recent started a Skills Upgrading Programme (SUP) where by VTC teachers are attached to industries for acquisition of industrial experiences

At TET level, in view of the absence of a TET level teacher training college, NACTE continuously organizes short courses for initial teacher education for teachers who are without pedagogical skills.



#### 15. System of TVET TEACHER EDUCATION

#### 15.1. Key messages of this chapter

- **Key Message 1:** MVTTC Is the only TVET teachers college but focusing on the VET level only. There is no provision for TET teachers training college.
- **Key Message 2:** With existence of MVTTC the ITE is reasonably regulated at VET level
- **Key Message 3:** Generally there is limited supply of TVET teacher education supplies when compared to demands at both TET and VET levels
- Key Message 4: Current infrastructure of TVET teacher education focuses on pedagogy alone. Noting that TVET teachers require both pedagogy and practical skills, there are initiatives at MVTTC to coordinate skills upgrading programmes using the Regional based VETA centres.

#### 15.2. General characteristics

#### 15.2.1. TVET teacher education policies

Teacher Education for TVET in Tanzania is organized at two levels of VET and TET. The policy and subsequent VET Act established VETA as a legal instrument for the supervision of VET in the country with an added mandate to establish Vocational Teachers Training Colleges. As a result VETA has established the only TVET related teachers training college in the country focusing on the VET level namely the Morogoro Vocational Teachers Training College (MVTTC). The college objectives are to provide the following:

- Short and long courses for vocational teachers;
- Skills upgrading and updating for vocational teachers;
- Consultancy; and
- Conducting Research and Development

Currently the college runs the following main programmes:

#### Certificate programme

This is a nationally recognized Vocational Teacher Certificate Course (VTCC) established in 1993; with five modules: Communication Methods; Education Studies; Training Methodology; Practical attachment/field work; and Training Workshop Management. The certificate course is delivered in two modes, namely in-campus and off-campus. At the moment there are fourteen (14) off-campus centres scattered across the country.

#### Diploma Programme

Diploma in Vocational Education and Training (DVoET) was established in 2008. The programme covers the following modules: Curriculum studies; Management of vocational training functions; Development studies; Research; and Special needs education. The capacity of the College is 120 for a certificate course and 30 for a Diploma course. The College has trained a total of 1,028 teachers for a period 2011-2014.

In terms of governance, the college is governed by the principal who is answerable to the Director General of Vocational Education and Training Authority (VETA). The Principal is assisted by Head of education Department (HoED). Supporting departments for the college include Human Resources (HR), Finance and Procurement. As an institute, MVTTC operates under the college governing council consisting of members from VETA HQ, the ministry of Education and Vocational Training, NACTE, and the college itself which provides the secretariat.



When interviewed, NACTE confirmed that there was no specific college focusing on teachers training at the TET level. It was however, confirmed that NACTE registration and accreditation require that all TET teachers are trained in pedagogy to enable transfer of skills. As an initiative to ensure pedagogy training at the TET level teachers, NACTE has developed a teachers training curriculum with assistance of NUFFIC of Netherlands but the curriculum is yet to be in use. At the moment there is no established system for training teachers at TET level.

Recent policies related to the VET level, are embodied in the VETA Corporate Plan IV (VCPIV) for years 2012/13-2016/17. The VETA VCP IV seeks to enhance the capacity of MVTTC to provide diversified education and training programmes and opportunities. In this strategy the college will; develop Postgraduate certificate programme develop a module for leadership in vocational training; and implement training through Open and Distance Learning (ODL) to increase equitable access to VET teacher education in the country, and update database for Vocational Teachers in the country.

At the TET level, the ministry and NACTE plan to institutionalize TET teachers training programme by either using one of the TET institutions or reviving the former Technical Education (TE) Teacher Training Colleges to create capacity to offer regular TVET teacher training programmes at TET levels.

#### 15.2.2. Overview TVET teacher education institutes

Despite the big demand for TVET teachers, currently Tanzania has one operational TVET teacher education college focusing on VET teacher education, the Morogoro Vocational Teacher Training College [MVTTC]. The college aims at improving VET training programmes qualitatively, quantitatively and sustainably in order to meet national and sectorial demands in the global context.

The college has the following functions:

- A. Train persons to become teachers in vocational training centres;
- B. Award certificates and diplomas;
- C. Develop and provide short courses in: Instructional methods; Curriculum development; Educational inspection; Learning materials production; Skills testing; Vocational education management; and other special training programmes related to VET.
- D. Establishing entrance requirements for various courses both in academic and professional spheres;
- E. Conducting on its own or jointly with other relevant national institutions, courses, seminars, workshops or research;
- F. Offering probationary or induction training for vocational teachers with basic qualifications but who are not yet qualified for registration;
- G. Evaluating and equating vocational teachers' education award issued by colleges other than those managed by the authority;
- H. Registering vocational education teachers who have completed an approved probation period; and
- I. Providing in-service training for vocational education teachers and managers.

#### 15.2.3. Funding of TVET teacher education institutes

Operating under the mandate of VETA, funding of VET teacher education in Tanzania is primarily covered through Skills Development Levy [SDL] paid to Vocational Education and training Fund. Part of fund is used to finance VET teacher education and paid to Morogoro Vocational Teachers Training College [MVTTC]. Currently 5.05% of the total



budget i.e. Tanzanian shillings 41, 800,000,000.00 about 21m USD, or 21m Euro at an exchange rate of about Tshs. 2000.00 from the VET fund goes to MVTTC and is used in funding VET Teacher Education. VET teacher education is highly subsidised by the Government of the United Republic of Tanzania through use of SDL. While the actual certificate course unit cost in the country is 2,700,000.00 Tanzanian Shillings per year, including full board and tuition, students pay only 600,000.00 Tanzanian shillings, for diploma courses, and full board and tuition totalling 270,000 Tanzanian shillings per annum for certificate programme.

#### 15.2.4. Quality assurance TVET teacher education institutes

Quality assurance (QA) in TVET teacher education is mainly done through assessments conducted to students enrolled in the TVET teacher training courses at Morogoro Vocational Teachers Training College (MVTTC). There two types of assessments done by the college which include continuous Assessment (CA) and Final Assessment (FA) which is to a larger extent is summative assessment. The continuous assessment is done by using the criterion competence based assessment. FA is done through students sitting for final examinations at the end of the certificate course whereby external examiners are involved.

#### 15.2.5. TVET teacher education institutes and international developments

The only existing TVET teachers training college at the VET level was established as part of the VET reforms spearheaded in 1994 through support from development partners including DANIDA, SIDA, and GTZ. The college therefore is continuously in touch with international developments so as to support VET transformation in the country. Example of adopted international developments include the following two key examples:

- 1. Adoption of competence based education and training (CBET) curriculum at the college to replace the former knowledge based curriculum. CBET was adopted as a national teaching approach by the National VET Board VETA in 2008.
- 2. Integration of entrepreneurship training skills as part of a key component in TVET teachers' development. NUFFIC of Netherlands has been the key development partner who has worked in collaboration with MVTTC to develop entrepreneurship training modules currently used by teachers at the VET level to prepare VET graduates for developing into future entrepreneurs.

#### 15.2.6. TVET teacher education institutes and postgraduate research

At the moment there are no post graduate research programmes taking place at the only existing teacher education institute, the MVTTC. Courses offered at MVTTC are limited to certificate and diploma levels.

#### 15.3. TVET Teacher education programmes (initial and in-service)

#### 15.3.1. Organisational aspects of TVET teacher education programmes

The only institution offering initial and in-service teacher education is the MVTTC. The institution managed by VETA is organized as a college focusing on providing pedagogy skills to VET teachers at certificate and diploma levels. Currently, the college runs the following certificate and diploma level courses:

 A 1 year in-campus VET teacher's certificate course held at Morogoro. This is a full time boarding programme. The course accommodates 120 boarders at a time. The teaching is done by VET teacher tutors located at Morogoro. Students cover the syllabus which includes theory at the college, and practical teaching field attachment outside the college.



- 2. An 18 months off- campus VET teachers certificate course held in a block release format as a day programme at 14 sites in the VETA Regional Vocational Education and Services Centres (RVTSCs) located across the country. The off- campus course gives an opportunity to VET teachers without pedagogical skills to attend a teaching course and at the same time work without being compelled to move to Morogoro. In the off-campus programme the VET teacher tutors from MVTTC move to the 14 sites at prescribed times, normally for two weeks and offer contact hours to the VET teacher learners. Off-campus do field practical attachment as part of their training.
- 3. A VET teachers' diploma course for those already holding teaching certificates. This is a boarding course offered at the college in Morogoro taught by the VET teacher tutors. Participants to the diploma course also do field practical attachment as part of their training.

#### 15.3.2. Key characteristics of the ITE curriculum

The key characteristics of the ITE curriculum at MVTTC are based on the purpose to which it was established which is to provide pedagogical skills to VET teachers. The curriculum in use is flexible and modularized combining theoretical training in classroom, and field attachment for practical experience at a VTC. The curriculum is designed to cater for the following ITE needs:

- A continuous 1 year full time boarding long course for those who are able to attend long continuous course at the MVTTC in the form of in-campus structure.
- A continuous 1 and half years block release off-campus long course for those
  who are not able to leave their work stations for various reasons but would like
  to acquire pedagogical skills.
- Short courses based on the long course modules for those who are not able to commit a long duration in the form of in-campus or off-campus, but want to acquire pedagogic skills.

Due to limited facilities for trade related practical workshops, the current curriculum's focus is however mainly on pedagogy. This is besides the desire for a mixed curriculum where related work experience and pedagogy could be offered to the VET teacher trainees. The curriculum is designed in such a way that all teacher trainees do micro teaching as part of the pedagogy skills in classroom as part of the theory.

#### 15.3.3. Recruitment and selection for TVET ITE

Besides their holding NVA, or NTA qualifications, plus work experience of three years in a relevant field, there are no prescribed pre entry exams. The key element is the applicants' own desire to enrol for one of the necessary courses as a condition for employment in a VTC.

#### 15.3.4. Early Career Support (ECS) and Continuous Professional Development (CPD)

At VET level the responsibility of ECS and CPD is basically the responsibility of the following:

• Through ECS individual VTCs take the responsibility to ensure that their staff get the necessary qualifications to meet the registration and accreditation standards. This happens in particular to the newly recruited staff when they lack either the pedagogical, or practical work skills to enable them meet the performance standards of a given job. It is therefore the responsibility of individual VTC to liaise with respective zonal offices to secure training opportunities for their respective staff. Most of these programmes are offered by MVTTC.



- The VETA zonal offices organizes ECS and CPDs as part of the regular support to strengthen the delivery capacity of the VTCs and to enhance the quality of VET programmes; and
- At MVTTC as part of the short course programmes ECS and CPD are offered under the sponsorship of VETA. Most significant is the Skills Upgrading Programme (SUP), a programme designed by the college to enable the VET provider's staff to upgrade and/ or update their practical skills.

#### 15.3.5. Aligning the TVET TE to the professional needs

Through use of dacum chart approach teacher curriculum development at both VET and TET level involve the employers. AT TET level for example the TE curriculum was developed with the support of NUFFIC had involved TE employers. The curriculum though developed is not yet in use.

#### 15.4. TVET teacher education student population

#### 15.4.1. Enrolment in TVET TE programmes and background of students

As indicated above teachers enrolling at MVTTC are for teachers for vocational training centres since the college programmes have been designed for the VET level. The college offers two main programmes at certificate and diploma levels. The following are the characteristics of the TE students at the college:

- a) Certificate Level Course: The required minimum entry qualification for certificate course is CESEE, NVA level III, and three years of work experience in a relevant field. The majority of entrants into VET TE have the following background at entry level:
  - Are experienced skilled workers with regular income
  - Typical age profile is above 25 given the attainment of level III qualifications and three years of work experience
  - Gender-wise like most of the entrants into VET, entrants into TE is about 30% females against 70% of the entrants who are males
- b) Diploma Level Course: The required minimum entry qualification for diploma course is previous teaching certificate, NVA level III, or NTA level IV and above plus two years of work experience. In brief TE entrants in Diploma course share similar characteristics as those at certificate level course in terms of socioeconomic, and gender, but are of slightly more advanced age given the fact that one of the qualifications is holding a certificate in teaching.

#### 15.4.2. Motivation for enrolling in a TVET TE programme

Motivation for enrolling in a VET TE programme include:

- The inspiration by assurance of employment by the graduates to get employment due the policy of the government to increase the number of VTCs, meaning that there is a high demand for qualified VET teachers to meet the need in the new VTCs.
- Teaching as a profession has many doors for professional development and academic advancement.
- The existing pre condition for VET centre registration/categorization which requires teaching staff to possess teaching methodology qualifications as among other things.
- An employment opportunity for many seeking wage employment.



#### 15.4.3. Drop-out of the TVET TE programme

There are very few cases of dropout at MVTTC. Records reveal that the average dropout rate per year for the past 3 years is 2-3 students per year out of the 120 incampus, and 500 nationwide for off-campus enrolees, for reasons including:

- illness
- not managing the academic rigour; and
- family obligations



#### 16. CHALLENGES, SOLUTIONS AND EMERGING THEMES

#### 16.1. Key messages of this chapter

- **Key Message 1:** Low perception of TVET and in particular at the VET level
- **Key Message 2:** Inadequate funding for the TVET particularly for the private providers, private providers are responsible for financing their training programmes, while public institutions benefit from public/government funding.
- Key Message 3: Inadequate quantity of quality TVET teachers compared to the growing demand for teachers especially in the growth sectors such as tourism and hospitality
- **Key Message 4:** Uneven distribution of TVET providers, there are more providers in the urban areas compared to rural areas

#### 16.2. Challenges of the TVET system

Major challenges facing the TVET system in Tanzania according to (United Republic of Tanzania, MoEVT Technical and Vocational Education and Training Development Programme (TVETDP)-2013/2014-2017/2018, incorporated inputs by Stakeholders and TVET-Working Group, Dar es Salaam, 2013) include:

- Quality TVET is an expensive undertaking. Competing priorities (with other sectors of the economy and other education sub-sectors) result in low and/or irregular inflow of financial resources to TVET which is liable to threaten its contribution; Poor/wrong perception on TVET and particularly on VET that is the preserve of those who are poor performing, may negatively affect learner enrolment expansion;
- Lack of clear differentiation of roles and benefits of TVET graduates in workplaces compared to others may be a disincentive; Potential change of policies by development partners and/or donor fatigue may threaten support to TVET;
- The proposed sectoral approach in SDL management in the Five Year Development Plan (FYDP) may affect skills development in the informal sector and the least developed sectors, if not cautiously operationalised.

#### 16.3. Challenges TVET teachers are facing

Challenges facing TVET teachers can be clustered as follows:

- At the VET level the teachers face a challenge of limited vertical progression. Currently, vocational teachers can only progress up to diploma level when seeking pedagogy qualifications, such limitation further emphasizes the low perception about VET;
- The teacher development system faces a challenge of limited teacher training infrastructure. Currently there is only one designated teacher training college at VET level, with no TVET teacher available at the TET level;
- Salary schemes favour more the public owned TVET institutions teachers where
  they receive government subsidy at the TET level, and SDL at the VET level.
  This factor acts as a disincentive for the private TVET providers to recruit and
  retain quality teachers
- Inadequate regular opportunities and programmes for skills updating and upgrading for TVET teachers in the relevant fields of work in an environment of dynamic and frequent changes in technology. Inadequacy of such opportunities and programmes result into TVET teachers to lag backwards when compared to the labour market the teachers are supposed to service.



#### 16.4. Challenges the TVET teacher education system is facing

At the TVET teacher education system the country faces the following challenges:

- Low capacity of the only existing TVET teachers college at the VET level due to insufficient infrastructure and human resources .leading to the college not being able to train adequate number of teachers needed in VET centres.
- There is only one designated TVET teacher training college -at the VET level,
   the TET level colleges needs for teaching skills remain unattended
- Lack of skills upgrading and updating facilities at the only VET level teacher training college
- Limited application of diversified forms TVET teacher education such as E-Learning, and open and distance learning (ODL) by the existing VET level teachers training college leading to limited access to VET teacher training courses offered through in-campus and off-campus modes;

More specifically, the Morogoro College experiences the following challenges in development of vocational human resources:

- 1. Limited capacity of the college to train adequate number of human resources needed in TVET caused by insufficient infrastructure and human resources.
- 2. Limited learning progression for vocational teachers. Currently, vocational teachers can only progress up to diploma level.
- 3. Inadequate in campus teaching and learning facilities, for effective training in skills upgrading and updating.
- 4. Low application of ICT in teaching and learning processes.
- 5. Inadequate resources for effective collaboration and networking with similar institutions both internally and externally.

#### 16.5. Potential improvements to overcome challenges for the TVET

The following potential improvements are recommended to overcome the challenges:

- Review so as to harmonise and make coherent the institutional arrangements and related qualifications framework so as to improve the perception of VET which is currently perceived lowly when compared to TET.
- Ensure equitable distribution of TVET to the rural areas so as to improve access and therefore livelihoods in the rural areas.
- Introduce TVET funding systems that are performance based so as to enable equitable access to TVET financing to both public and private TVET institutions.

### **16.6.** Potential improvements to overcome challenges for the TVET Teacher education

The following potential improvements to overcome the challenges for the TVET teacher education:

- Expand access of TVET teacher education by reviving the former TE teacher training colleges so as to increase the number of TVET teacher education colleges
- Introduce and reinforce registration and licensing requirements for teachers at both VET and TET Levels
- Introduce E- learning and open and distance learning for to improve access of TVET teachers to pedagogy qualifications.
- Review the current TVET teacher education curriculum so that it contains both pedagogy and practical skills acquisition and updating
- Enhance the capacity of the TVET teachers training college(s) to include when recruiting TVET teachers



- Experienced TVET practitioners in relevant fields be given priority when recruiting teachers
- Introduce equitable funding and performance based funding to enable private providers funding so to competitively access to improve remuneration of the teachers irrespective of whether they are employed by the public or private sector



#### **ANNEX TO THE COUNTRY REPORT**

# A glossary list: including all acronyms, specific terminology used, and abbreviations

Acronyms and abbreviations	Meaning
DIT	Dar Es Salaam Institute of Technology
FDC	Folk Development College
FYDP	Five Year Development Programme
ICT	Information and Communications Technology
LNG	Liquefied Natural Gas
MoEVT	Ministry of Education and Vocational Training
MoF	Ministry of Finance
NACTE	National Council for Technical Education
NTA	National Technical Awards
NVA	National Vocational Awards
SDL	Skills and Development Levy
STD	Standard
TE	Technical Education
TET	Technical Education and Training
TTC	Teachers' Training College
TVET	Technical and Vocational Education and Training
VETA	Vocational Education and Training Authority
TVETDP	Technical and Vocational Education and Training Development Program
VSO	Voluntary Services Overseas

#### A list of interview sources, their institutional affiliation, and job title

Name	Institutional affiliation	Job title	
Mr S.Lazaro	MVTTC	College Principal	
Mr T. Katebalirwe	MoE	Director-TVET	
Mr E. Kayani	MoEVT	Deputy Director- TVET	
Mrs M. Mongella	MoEVT		
Ms K. G. Modu	NACTE	Director-Information, Research & Planning	
Dr A.B, Rutayuga	NACTE	Director-Institutional Guidance & Support	
Mrs L.D. Lukindo	VETA	Director-Vocational Education & Training	
Mr W. Soko	VETA	Director-Western Zone	
Mr A. Ngonyani	VETA	Director- Northern Zone	
Fr Thomas	Don-Bosco VTC DSM	Principal-Don-Bosco	
Mr E. Ngonyani	Don-Bosco VTC DSM	Head of Training	
Mr Y. Mtera	DSM RVTSC	Auxiliary Teacher/ MVTTC in campus certificate-student	
Mr F. Komba	VETA	Dual-Apprenticeship Training Project	



Name	Institutional affiliation	Job title
		Coordinator
Ms A. Mbamba	Self Employed Taylor	MVTTC in campus certificate student
Mrs A. Macha	VETA	Corporation Secretary/Ag Director HR & Administration
Dr. Mgaya	DIT	Head of Department of Civil Engineering
Prof. C. Nyahumwa	DIT	Deputy Principal Academic, Research and Consultancy

#### A list of background literature used in preparing the review and the report

Technical and vocational education and training development programme (TVETDP) situational analysis (SITAN) the government of united republic of Tanzania ministry of education and vocational training (2012)

Technical and vocational education and training development programme (TVETDP) 2013/2014-2017/2018 united republic of Tanzania ministry of education and vocational training 2013

Basic education statistics in Tanzania (best) 2009-2013, national data the united republic of Tanzania, ministry of education and vocational training (march, 2014)

The study on national skills development to facilitate Tanzania to become a strong and competitive economy by 2025 final report, the united republic of Tanzania president's office, planning commission(2014)



# 17. NATIONAL BACKGROUND OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) - EGYPT

To understand the Technical and Vocational Education and Training (TVET) landscape in Egypt and to assess its importance and potential for improving the country's competitiveness and economic development, one must first look at the overall political, socio-economic and labour market context in which it operates.

The revolutions of January 2011 and June 2013 have changed the landscape of the Egyptian political and social system. There were numerous motivations for the first uprising: the frustration of the society towards its government system, in particular towards corruption and the violation of human rights, and the aspirations of the society for effective democracy. In addition, an economic dimension has to be taken into consideration: the growth and relatively good economic functioning that Egypt had enjoyed in the few years before the first revolt (as a result of deep restructuring and changes since 2004) led to wealth concentration in certain segments of the society, excluding middle and lower levels. SMEs, who represent more than 90% of the employment in the country, had not managed to benefit from the same developments as larger companies. With a large amount of the population living below the threshold of poverty, the wide regional differences (among Governorates, but in particular also between cities and rural environments), the unequal distribution of wealth, the high youth unemployment triggered the final stream of the protests.

The recent political dynamics set down both opportunities and challenges for democratic, economic and social progress. The revolution period was characterised by a great degree of uncertainty and instability: political tensions (e.g. terrorist attacks), but on the other hand, it led to economic and social developments, having an impact on major government policies, such as the education reform and employment promotion initiatives. These changes have also put great emphasis on social equality and youth empowerment in all aspects of society. Successfully tackling youth unemployment remains one of the most urgent challenges of the country and a high priority on the political agenda.

#### The economic perspectives

From the mid-2000s to 2011, the Egyptian economy grew at a rapid pace. Yet, this economic performance has not significantly improved the country's overall competitiveness<sup>33</sup>, nor has this growth provided more decent jobs to the Egyptian population. In 2004, the Government of Egypt embarked on a structural reform program of liberalization and privatization, which, combined with high oil prices, booming economies in the Gulf countries, and strong global economic growth, led to real GDP growth of over 7 percent per year between FY06 and FY08. The subsequent global financial, food, and fuel crises dampened economic growth in Egypt to an average of 5 percent in FY09 and FY10, a strong performance according to international standards. However, since 2011, the macroeconomic picture has deteriorated due to unresolved political tensions and policy inflexibility.

Egypt and its current government will need to build on the economic strengths and diversity of the country to come out rapidly of the present macroeconomic situation. There will be a need to balance short-term remedies to address urgent social problems

<sup>&</sup>lt;sup>33</sup> Despite this economic growth, Egypt remains modestly competitive, according to the 2009/2010 Global Competitiveness Index (GCI), ranking 70<sup>th</sup> out of 133 countries and further declined to 119th out of 144 countries in the GCI for 2014/2015. This poor ranking is mainly owing to low scores for macroeconomic environment (141th out of 144 countries) labour market efficiency (140<sup>th</sup> out of 144 countries) and for education and training at all levels (111<sup>th</sup> out of 144 countries). The Egyptian labour market also receives low rankings in the GCI, primarily as a result of over-regulation. (sources from Global Competitiveness Index (GCI) Report 2014/15).



with long-term sustainable and strategic development and economic stimulation. In mid March 2015 the government organised a successful and high profile international economic development conference attracting a large number of domestic and foreign investors. The conference unveiled plans for a number of mega projects that may lead to new job opportunities in sectors like construction, logistics, energy, tourism, manufacturing and retail, within the next 15 years. These projects are also accompanied by a new and favourable investment law. If they materialize, great emphasis will be placed on education and training in general and TVET in particular, in order to prepare youth to these new opportunities. We will look at the challenges of the TVET sector later in this report, after a sub-section on the current characteristics of the Egyptian labour market.

#### Labour market characteristics.

With a population of 88 million, Egypt ranks as the most populous among the Arab countries<sup>34</sup>. With an estimated growth rate of more than 2%, it has one of the fastest growing populations in the world. Some 60% of the total population is under 30 years of age. At the end of the fourth quarter 2014, the labour force was estimated to be 27.7 million, compared to approximately 23 million in 2005. It will continuously grow, with approximately 850,000 new entrants to the labour market each year<sup>35</sup>. Since the 2011 Revolution, the unemployment rate has been constantly growing: from 9% in 2010 to 12% in 2011, rising again to 12.7% in 2012 and reaching 12.9% by the end of 2014. This represents about 3.5 million jobless Egyptians. However, according to labour market experts, actual unemployment is probably substantially higher than reported by official figures and underemployment (population working less than full time, involuntarily) has also dramatically increased.

Youth (between 15-30 years) and women are particularly affected by unemployment. Compared to the overall official unemployment rate, the average women's unemployment rate reached almost 23%, exceeding even 60% for the group of young women between 15-25 year olds<sup>36</sup>. Compared to other countries, Egypt has a very high record of unemployment among highly educated job-seekers, followed by those who completed their middle and above-middle education (especially graduates of TVET). Almost 44% of highly educated people, being less than 30 years old and 38% of graduates of technical education are unemployed<sup>37</sup>. In contrast, those with lower educational achievements face relatively fewer problems in finding a job, but are mostly employed by the (more vulnerable) informal sector.

For those who succeed in finding employment, transition from education and unemployment to employment usually takes a long time. Approximately half of the male graduates have to wait between two and seven years before they can find their first job. For female school graduates, the situation is even worse (about 16% only!), especially taking into account that in the end only one of four female school graduates ever succeeds in finding a job. The consequences are severe, especially for those who have no other choices than to work for free within their family network. Furthermore, the low labour market participation rate gives an indicative number of people excluded from Education, Employment and Training (NEET) sectors: labour market participation rate for 15 to 19-years-old is 17%, 52% for 20 to 24-years-old and 62% for 25 to 29-years-old. Consequently, many young men and even more young women completely withdraw from the labour market.

<sup>&</sup>lt;sup>34</sup> http://en.wikipedia.org/wiki/Central\_Agency\_for\_Public\_Mobilization\_and\_Statistics (March 2015)

 <sup>35</sup> El-Ashmawi, A., TVET Profile – Background Paper on Assessing Responsiveness of Education and Training Systems to the Demand for Skills, World Bank, 2011

<sup>&</sup>lt;sup>36</sup> ENCC/TVET Reform Programme/ETF, Building a Competitiveness Framework for Education and Training in Egypt, 2010

<sup>&</sup>lt;sup>37</sup> According to the Minister of TVET in a TV interview on March 25<sup>th</sup> 2015 on CBC Channel.



On the other hand the employment challenge in Egypt is represented not only by the low number of jobs, but also by their specific characteristics. Especially in the formal sector, despite expectations, only a limited number of job opportunities have been created. This is primarily the consequence of the current structure of the Egyptian economy. Investments in dynamic sectors (mainly petrochemicals, cement, gas, and telecommunication) have been capital-intensive and have resulted in a decrease in labour utilization. Some of the main economic activities (Suez Canal, petroleum and gas) only create few jobs. It is estimated that only 10% of the labour force is employed in the modern sectors, vis-à-vis 90% in traditional and government sectors. Although millions of jobs have been created during the last decade, most of these jobs are in the informal sector and are dominated by low productivity as well as low job quality (not 'decent work', e.g. low pay etc.<sup>38</sup>). The Oxford Business Group estimated that almost 75% of the jobs created between 1998 and 2006 were in the informal sector. In 2006, about 58% of those who were employed in the private sector were in the informal sector<sup>39</sup>. In addition, only one-third of total youths in paid jobs have legal contracts<sup>40</sup>, of which those having a social or medical insurance represent only 30% and 21% respectively. Furthermore, only 15% of them are members of a labour syndicate or a union and just 23% are entitled to paid holidays and sick leave.

In addition, there are deficiencies regarding adequate guidance and counselling opportunities, since there is no placement service provided within the education and training system and there are also no adequate placement services for the unemployed. While in the past, many stakeholders and policy makers assumed education and training were most likely to solve the problem of youth unemployment, there is a growing understanding of the importance of addressing other major labour market imbalances such as greater employer engagement in TVET reform, consistent, reliable and institutionalised labour market information systems in the framework of which not only data is being gathered but which also provide suitable analysis and disseminate the results to the relevant policy makers and practitioners for TVET planning and reform purposes. Furthermore, there is a lack of communication and collaboration involving public, private and civil society stakeholders, because of the complex and fragmented TVET structure.

#### 17.1. Key Messages of this Chapter

- Key message 1: The TVET landscape in Egypt is complex and highly fragmented with many players. The Ministry of Education has the responsibility for the largest number of TVET schools, teachers and around 1.8 million students, while vocational training is divided between a multitude of ministries and authorities;
- **Key message 2**: there are existing but weak links between TVET institutions and employers and other social partners;
- Key message 3: There is a historic disconnection and there are only weak linkages between (i) general education and technical education (with the latter having a less favourable image in society) on one hand and (ii) technical education and vocational training on the other hand;
- **Key message 4**: The TVET quality assurance system in Egypt is fragmented and thus weak, with many of the features like accreditation, standard setting, and citification still underdeveloped and uncoordinated;
- **Key message 5**: Although there has been a strong presence of international

38 Almost one third (30%) of unemployed youth refused a job because it did not match their level of qualification; GiZ EPP Evaluation report (2015) unpublished.

Said (2014) even assumes a large increase in irregular work since 2006, and more: First jobs are dominated by informal private wage work!

40 It is reportedly also common practice in many private enterprises to force their new job applicants to sign their resignation beforehand in order to be able to dismiss these workers any time and deny them their legal rights.



development agencies and partners in Egypt during the past 20 years supporting reform pilots, initiatives and knowledge transfer, there has been limited work on formal transnational qualifications frameworks and/or benchmarking to international systems.

### 17.2. National TVET system: key characteristics and relation to other sectors

Technical and Vocational Education and Training (TVET) is widely recognised as a major challenge before the country's efforts to reduce unemployment, create social equality and enhance the country's global competitiveness. To understand the low quality and relevance of the TVET system, one must first look at the system as a whole, and understand its complex and malfunctioning governance structure. This, in an attempt to trace the policies and activities that highlight the tension and often contradicting functions of TVET as (1) a traditional instrument to address the failure of general education and provide a less than favourable alternative to social inclusion and the more modern function of (2) fostering a knowledge-based economy and improving the competitiveness and dynamism of enterprises.

TVET in Egypt is a term understood in a Life-long Leaning perspective. It encompasses: technical education at preparatory, secondary and post-secondary technical education levels, vocational education, vocational training, continuing training and retraining. However, there is a traditional separation between the concept and system of technical and vocational education and that of vocational training. In 2009 there was an attempt to bridge this separation to a certain extent through the development of a TVET strategy by all key stakeholders, which applied to all subsectors. However, at the implementation level and due to the fact that this strategy was never approved or mobilized, most of the dichotomy between education and training still subsists<sup>41</sup>. Subsequently, this separation in direction and vision has been further emphasized by the launch, in September 2011, of the Ministry of Education's strategy for technical education In this same period, the EU funded "TVET Reform Programme" drafted a comprehensive National Strategy for TVET reform in Egypt and there was little evidence of any link or synergy between the work that was done on both ends. In early 2014 a strategy for Pre-university Education 2014/2030 including technical education was developed as well as a decree to establish an Executive Council for TVET under a new National Council for Human Resource Development, under the leadership of the Prime Minister; however, these initiatives are still not functioning. Most recently in March 2015 a new Ministry of Technical Education and Training (MoTET) was established, for the first time in Egypt. The Ministry was working with international partners like the EU<sup>42</sup>, World Bank and UNESCO to develop a comprehensive TVET strategy. However, this Ministry was dissolved in September 2015 and its technical education functions re-integrated within the Ministry of Education and vocational training back to the different ministries, which reemphasises the fragmentation of the system again.

At present, the most important feature that characterises the Egyptian TVET system is its extreme complexity. The lack of clear leadership and high fragmentation of the institutional framework for education and training, with more than 30 institutions involved in TVET, leads to a high degree of miss-coordination and ineffectiveness of the allocation and management of limited resources. This includes the two Education Ministries (MoE and MoHE), as well as around 17 Ministries active in vocational training. In addition, there are several other agencies operating in this sector, like the

ETF, Torino Process Report- Egypt, 2010

<sup>&</sup>lt;sup>42</sup> Through the EU-funded TVET II reform project.



recently cancelled Supreme Council for Human Resource Development (SCHRD), the National Authority for Quality Assurance and Accreditation in Education (NAQAAE), the sectoral Training Councils (Industrial, Building and Construction), the Social Fund for Development (SFD), just to mention a few.

In addition to the fact that there is no clear leadership for TVET in Egypt, there is also no formal role occupied by employers from the private sector, although they are occasionally involved in boards or committees at all levels. The system looks as if it has all the elements and components of an effective TVET landscape, yet at the implementation level there is little coordination, almost no evidence-based impact assessment, and most pilots remain as such, with no attempt to mainstream successes.

#### 17.3. TVET System: Provision, Organisation and Stakeholders

By absorbing more than 55%<sup>43</sup> of young people at the secondary level, the technical secondary education pathway and its agricultural, industrial, commercial and dual system streams (three- and five-year programmes) represent a large part of the Egyptian education system at this level. The Ministry of Education and Technical Education (MoETE) is by far the largest TVET provider in the system, administering around 1,300 industrial, commercial, agricultural and dual system Technical Secondary Schools (this figure is sometime expanded to 2,000 TSSs if the additional classes that apply different types of the 4 segments of technical education are added) with more than 1.8 million students enrolled in three-year technical diploma or five-year advanced technical diploma tracks<sup>44</sup>. Most TVET graduates are directly obliged to enter the labour market and have very limited (around 5%) opportunity to access higher Education.

Since the 1950s, although not under the MoE, but under the Productivity and Vocational Training Department (PVTD) of the Ministry of Industry, Trade and SMEs<sup>45</sup> there is also existing a formal apprenticeship scheme. At the end of this three-year-long scheme, students receive a diploma, recognised by the MoE and equivalent to the TSS diploma. There are around 25,000 students enrolled in around 45 VTCs across the country. In addition to this long term programme, considered as a type of vocational education, the PVTD also offers short courses for public and private sector employees and job seekers. Furthermore, it recognises the need to expand its marketing department, in order to create more awareness regarding its services, traditionally provided to the declining public sector.

On the higher education level, there were 45 middle technical institutes that were integrated into 8 regional technical colleges, administered by the Ministry of Higher Education (MOHE). The TVET system also includes four Industrial Education Colleges (IECs), supervised by the MOHE, offering four-year-long programmes to train technical teachers for technical secondary schools, leading to a Bachelor of Technology. The IECs accept graduates from technical secondary schools (both three and five-year systems) and graduates from the industrial technical institutes. Institutes of postsecondary vocational education in Egypt can be classified into eight different categories. All of the PVE institutes have two-year programmes sanctioned by a diploma; an exception is the faculties of IECs, with four-year programs sanctioned by a Bachelor degree.

<sup>&</sup>lt;sup>43</sup> Egypt Country Report fort the 2014 Ministerial Conference on Youth Employment, 2014

<sup>&</sup>lt;sup>44</sup> MoE, Technical Education Strategy Report, September 2011

<sup>45</sup> In May 2015, the affiliation of the PVTD was transferred to the new Ministry of Technical Education and Training and then in September 2015 transferred back to the Ministry of Industry.



It should be noted that graduates from the 5-year programme (under the MoETE now) of the technical secondary education (also called Secondary Vocational Education SVE) have the same degree and level as the graduates from the technical colleges. Yet the curricula and requirements are not synergised or coordinated by both ministries. Figure 1 illustrates the formal education structure in Egypt between March and September 2015, as of September 2015 the Ministry of Technical Education was merged with the Ministry of Education and Technical Education and the PVTD was moved back to the Ministry of Industry.

Ministry of Social Solidarity Ministry of Education Other Ministries Ministry of Higher Education Vocational Training IJ Basic Education (Compulsors) Higher Education Kindergartens (15-17 year olds) (6-14 year olds) <del>\_\_\_\_</del> Post-secondary TVE (15-17 year olds) Middle Technical (17-19 year olds) Labor Market & Society

Figure 1: Education Structure in Egypt

Source: Adapted by author from SABER (2014) Workforce development report.

While technical education provided by the Ministry of Education can be considered the most prominent, in terms of number of students and schools, it is at the same time the most inefficient in terms of outputs. It mainly (with some exceptions) focuses on the social inclusion function or TVET, rather than its quality. On the other hand, TVET encompasses other middle-level technical institutions, affiliated to other ministries, providing technical education and training specific to their sector. Other forms include training through industry attachments or cooperative education (e.g. dual system and apprenticeships schemes), in-service training and re-training of both employed and unemployed workers in the labour force. Entry-level vocational training is provided to around 480,000 trainees a year in about 823 (600 public and 223 private or semi private, owned by NGOs and regulated by the Ministry of Social Solidarity) vocational training centres (VTCs), managed by several, sectoral ministries<sup>46</sup>.

The 600 public sector VTCs and institutes are divided into 317 formal or systematic training centres offering long training programmes (minimum one year) issuing technical diplomas, and 283 non-formal training centres offering short technical courses (less than one year). These centres served around 69,500 trainees in formal training and 359,500 in non-formal vocational training during the academic year  $2009/10^{47}$ .

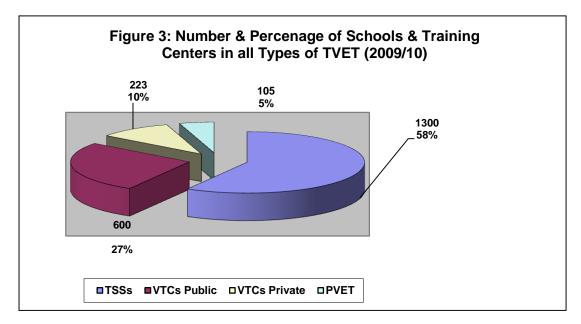
<sup>&</sup>lt;sup>46</sup> El-Ashmawi, A., TVET Profile – Background Paper on Assessing Responsiveness of Education and Training Systems to the Demand for Skills, World Bank, 2011.

<sup>&</sup>lt;sup>47</sup> PVET in Egypt Country Background Report, 2011



The so-called 223 private sector VTCs include 219 non-formal training centres and around 5 formal training centres and schools. In 2010, they provided training to around 700 trainees in formal programs and 51,500 in non-formal courses<sup>48</sup>. Most of these short courses target disadvantaged groups, particularly women, disabled and unemployed youth and are conducted within community-based centres, designed to meet community development needs.

Figures 2 & 3 below summarise the numbers and percentages of students and trainees enrolled in all the different types of TVET mentioned so far, as well as the number and percentage of schools and training centres for 2009/10. To conclude, the largest number in terms of students and schools are the MoE TSSs with 72% of all students and 58% of all schools. Private sector VTCs have the lowest number of students: 2% of students are trained in 10% of centres.



Source: various sources, including MoE Technical Education Strategy and PVET Country Background Report, 2011

Given that the majority of TVET providers are from the (large) public sector, considerable investments need to be done to achieve the required reform. Given the large expenditures on wages<sup>49</sup>, the key challenge is related to the few resources available to cover developmental expenses and investments in reform initiatives (teaching and learning materials, equipment and infrastructure status). Without sustained additional mid-term funding, there will be no option but to put in most of the available budget into recurrent expenditures (wages) with almost no budget left for development of programmes to offer quality mainstream education. As a result, schools will continue to be under-financed, which has a severe effects on quality and equity. Another challenge for the Egyptian system is to use funds in a cost-efficient way. There is reason to say that the running of the education system as a whole costs more than necessary. The available capacity is far from being fully used due, among others things, to the management and pedagogical organisation structure, the official working hours of school, etc.<sup>50</sup>.

<sup>&</sup>lt;sup>48</sup> PVET in Egypt Country Background Report, 2011

<sup>&</sup>lt;sup>49</sup> The share of wages and salaries in total sector expenditure has steadily increased, from 71% in 2000/01 to 83% in 2006/07. At the same time the share of other recurrent expenditure (mainly student-related and school operation-related expenditure) has declined to 12% in 2006/07.

<sup>&</sup>lt;sup>50</sup> ETF, Torino Process Report, Egypt, 2010



#### 17.4. Quality of TVET programmes

Although the figures above may indicate a positive trend in terms of diversity and number of TVET provision, the fact is that the quality and relevance of the TVET system at large is very low. In this section we summarize the main features of the quality assurance system in TVET.

TVET has traditionally made an implicit choice for access rather than quality. TVET, being considered as a second choice option (in relation to general education, which paves the way for university), fell in a vicious circle of low esteem, low quality, low results, which is not yet completely overcome. In addition to working on its image and status, the system needs to have:

- a unified National Qualifications Framework,
- a well developed well communicated standardisation, accreditation and certification framework,
- standardised methods of updating and reforming curricula and teaching methods, more practical learning,
- rationalising of the number and type of specialities,
- investments in upgrading the capacity of teachers, trainers and managers as well as their career conditions
- upgraded infrastructure and equipment.

The establishment of the National Authority for Quality Assurance and Accreditation in Education (NAQAAE), as an independent quality assurance and accreditation body with administrative and financial autonomy linked to the Prime Minister, is seen as part of a greater emphasis on accreditation mechanisms and processes, aiming at improving the delivery of education. NAQAAE focused on quality assurance in education covering technical schools as well as general education ones. Currently, it does not cover vocational training centres affiliated to other ministries, including the PVTD.

NAQAAE started its operations in 2005 and by the end of 2009 accredited 200 schools from 270 which applied. This means that around 30% of schools didn't meet the requirements. In the academic year 2009/2010 about 800 schools applied for accreditation<sup>51.</sup> The work of this body has the potential for contributing to the overall quality assurance and accountability framework within which schools could be granted increased substantive and procedural autonomy. The accreditation framework developed and adopted by NAQAAE is in line with international benchmarks. There are 9 areas covered by the Quality Assurance Framework: (1) Vision and mission of the institution; (2) Leadership and governance; (3) Human and financial resources; (4) Civil society participation; (5) Quality improvement and accountability; (6) Learner; (7) Teacher; (8) Curriculum; (9) Education environment. Every area is then supplemented by specific criteria and described through specific set of indicators<sup>52</sup>. This indicates that there is a political commitment to support the quality assurance system and the institution leading this process. A clear evidence is the decision taken in 2010 by the Prime Minister to entrust NAQAAE in leading the work on the development of a national qualifications framework (NQF), although some stakeholders have expressed concerns regarding the absence of a participatory approach and the limited dissemination of information adopted by NAQAAE regarding NQF.

Taking into account the time and policy pressures, the lack of resources and expertise, there is a risk that NAQAAE will not be able to conduct more than a cursory investigation on most institutions, given the number of education and training institutions in the country. For example, in its report on education in Egypt, NAQAAE

<sup>&</sup>lt;sup>32</sup>NAQAAE, Education in Egypt. Downloaded from <u>www.naqaae.org</u> 2010.

<sup>52</sup> ETF, Review of Secondary Education in Egypt, July 2010



mentions as main challenges for its operations: legislative constraints, resistance of academic staffs to change and the adoption quality assurance concepts and regulations, shortage of financial resources and lack of engagement of NGOs and civil society organizations on education outcomes. Another major weakness of NAQAAE institutional role concerns the organizational setup of NAQAAE and the lack of transparency of its reporting systems: reports on the accreditation of institutions are not published, nor shared with the MoE and the schools. In this way, access to lessons learned on proven processes, best practices and overall progresses are not shared and made available to other education institutions and stakeholders.

Furthermore, with regards to the assessment and awarding of qualifications, there is an on-going lack of clarity about roles and responsibilities. In most cases accreditation and quality assurance mechanisms are not based on outcomes-based qualifications or competency standards, and have a far greater focus on more traditional aspects, which have come to be known as 'inputs', such as curricula and duration, qualification of staff, and so on. This is the case for higher education and secondary education including TVET. Development of quality assurance is not linked to changes in qualifications development and validation, certification and assessment systems. In fact, certification currently happens through ministries, with separate systems for each awarding ministry, and this is likely to continue. There is only a unified certification system for secondary vocational education issued and organized by the Ministry of Education, which also approves the three-year diplomas issued by Don Bosco and PVTD.

In Egypt, the number, diversity and complexity of the qualifications offered is wide. This arises from historical attempts of ministries and other institutional bodies to respond to the needs of a broad range of learners (for example school drop-outs, low achievers, job seekers, adults, etc.). This diversity in qualifications leads to inconsistencies that reduce quality, confidence and trust. The bodies offering the qualifications are also diverse and this leads to weaker cooperation between them. The following table lists the key players within the Egyptian qualifications system, dealing with Technical education, vocational training or both:

Table 1: Key Institutions and Functions in the Egyptian Quality Assurance Landscape

Table 1. Rey Institutions and Functions in the Egyptian Quality Assurance Landscape			
Name of Organization/Initiative	Function(s)	Remarks	
National Qualifications Framework (NQF) under NAQAAE	Describes all qualifications and other learning achievements and defines the relationships between these in a coherent way	Still not extensively implemented, only in a few sectors and not very participatory.	
National Authority for Quality Assurance and Accreditation in Education (NAQAAE) under the Prime Minister	Provides quality assurance and accreditation for all elements of the educational process (VTC, TSS, etc.)	Important institution, however lacks resources to cover its mandate and it transparency is sometimes questioned.  Doesn't extend its function to vocational training institutions, just technical education.	
National Skills Standards Project (NSSP) <b>Under</b> <b>ITC (MoIFT)</b>	Develop standards, catering for workers' certification referring to their abilities and competencies; transferable credits that carry students across education/training	Despite the great effort exerted in this project and the current initiatives in involving chambers and expanding these standards into PVTD and MoMM, there are still differences in terms	



Name of	Function(s)	Remarks
Organization/Initiative		
	routes; and objective independent assessment mechanisms and accreditation procedures	of achievements in the different sectors. Some sectors are not addressed as well as they have not been "officially" recognized as the one and only national standards although they have been benchmarked with the SQA.
National Council for Vocational Accreditation (NCVA) under establishment <b>under MoMM</b>	<ul> <li>Approves and issues         National Skill Standards</li> <li>Approves and issues         standards for jobs,         occupations, trainers,         exams, as well as         licenses for testing         regulations</li> </ul>	Not adequately functioning.
Sectoral Chambers (under the Federation of Egyptian Industries)	Identifies the needs of industry in terms of jobs and occupations, as well as the requisite skill levels for each.	Only involved if they are paid by ITC, otherwise they are not effective or active.
Enterprise-TVET Partnership (ETPs) under MoIFT	<ul> <li>Provides work analyses and develops Job &amp; Occupational Profiles</li> <li>Currently establishing certification units to certify personnel working in certain occupations in specific sectors of industry. ETPs are preparing to be accredited by EGAC as certifying bodies.</li> </ul>	The ETP concept as a link between industry and TVET providers linked with the chambers is a sound and needed function in the system; however the implementation of some of these ETPs needs review and the roles must be well defined. The certification units, although needed, have still to be agreed upon by most stakeholders especially the training councils.
Egyptian Accreditation Council (EGAC)_under MoIFT	Provides accreditation (based on ISO standards) for bodies that certify training workshops and personnel.	EGAC is the only Egyptian body mandated to accredit any national certification body. Although it has a good track record in these activities, it's still in the process of receiving international recognition, in order to extend them to HR-related fields.
Technical Secondary School & VTCs under MoE and many other ministries.	Implements all the education and training process (formal, nonformal and informal)	These are ministry-specific awards, not subject to accurate validation processes (with the exception of MoE).



Source: Adopted from the table on Egyptian Institutions involved in Standardization, Accreditation and Certification from the TVET Reform Programme's study on National Occupational Standardization, Accreditation and Certification System, 2011
Table 1 above, outlines the number of institutions affiliated to the different stakeholders, one can only again conclude that the TVET system has all the components, yet it lacks coordination and clarity in determining the responsibilities and mandates of all its players.

# 17.5. TVET system and international developments

TVET has received growing attention from foreign governments and donors, during the past 20 years. The most prominent supporters being the EU and German Government, followed by Italy and the United States. Each international partner pilots initiatives and projects based on their country experiences and tailored to the Egyptian context. However, few of these pilots are mainstreamed within the Egyptian TVET system. They usually remain as pilots and are often interrupted when the funding ends. Some of the key initiatives involving international partners are:

- **1995**: The Mubarak-Kohl Initiative-MKI (now known as the Dual System) was launched through German support as one of the first initiatives to link education with industry through a dual system model of cooperative technical education. As of May 2009, the system has been adopted by 76 MKI technical secondary schools, in cooperation with 1,900 companies, to train about 24,000 students. With 85% of graduates immediately receiving job offers<sup>53</sup>, the outcomes have been positive. However, compared to the number of technical secondary schools and students within the system, MKI still remains in the pilot phase with not serious attempt to mainstream the experience and create a critical mass of high quality graduates;
- 2000: the National Skills Standard Project (NSSP) was initiated by Egypt's Social Fund for Development (SFD) and supported by a team of local and international consultants (through a consortium led by the British Council) in cooperation with employers. It worked in three industries (manufacturing, tourism, and building & construction) to develop: standards, catering for workers' certification as per their abilities and competencies. By the end of the project in 2005, the NSSP had developed standards for around 106 trades. The project remained on hold for a little while, with the establishment of the three Training Councils (2006, 2008 and 2010) new resources have been made available for the updating, completion and benchmarking of these standards with the Scottish Qualifications Standards, through the Industrial Training Council (ITC). The standards are yet to be adopted in all educational institutions at a national level;
- **2004**: Launch of the Skills Development Project (SDP), a 6-year pilot project implemented by the Ministry of Trade and Industry in cooperation with the World Bank. The objective was to stimulate private sector demand for skills development training, by piloting a demand-driven and competitive-based financing mechanism, in order to provide technical training directly related to the production process for Small and Medium Enterprises (SMEs). SDP ended in 2010 and is currently integrated within ITC, becoming a rare example of the institutionalisation of donor technical assistance projects;
- **2005**: Launch of the national TVET Reform Programme (TVET 1) co-funded by Egypt and the EU to pilot mechanisms that lead to a decentralised and demand-led TVET system, provide capacity building and infrastructure support to TVET providers, and propose the features of a TVET Reform Policy Platform and a Master Plan for the implementation of a comprehensive TVET regulatory and policy reform in Egypt. One of its many achievements was the establishment of 12 sectoral Enterprise TVET Partnerships (ETPs) which are

<sup>53</sup> Egypt Human Development Report, 2010



employer led bodies attempting to link education with industry modelled after the British Sector Skills Councils;

- 2006: key TVET stakeholders decided to set up an Egyptian Observatory for Education, Training and Employment (EOETE) with support form the European Training Foundation (ETF). The Observatory has been since then hosted at Information and Decision Support Centre-IDSC (Cabinet of the Prime Minister) and governed by a Steering Committee where all key Ministries, agencies, private sector representatives and NGOs are included. However, the Observatory does not exist as a formal entity (with its own resources and mechanisms) and this limits its possibilities to actually implement the important task for which it was set up;
- 2010: Launch of the USAID funded Egypt's Competitiveness Project (ECP) with a small component on TVET working closely with Technical secondary Schools (TSS) in several governorates to establish school-based training units for teachers and school-based employment units to support students in their transition to work.
- **2011**: Lead by NAQAAE and with support from the European Training Foundation (ETF), which also involved other countries in the region (Jordan, and Morocco), and three North Mediterranean countries (Spain, France and Italy) to pilot links for the development of a joint NQF. This effort is however is limited to two sectors (construction and tourism) and is driven by labour mobility among the pilot countries.

The period following the revolutions in Egypt marked an increasing attention by donors to be more active in TVET and employment promotion. Currently Egypt is expecting to start several large-scale projects at more or less the same time. The largest of which is the EU funded TVET II (117 million Euros as cost-share between the EU and GoE with 67 million and 50 million respectively). USAID is also in the tendering phase of a large workfare development project worth \$25 million, and a large loan being negotiated with the World Bank, which will also include a technical assistance component. This is in addition to other smaller projects by the Germans, Italians, UNESCO and the IOM. The activities expected under all these projects will include:

- Support to the TVET governance structure
- Support to developing a sector-wide TVET strategy
- Improving quality assurance and the development of a National Qualifications
   Framework
- Curricula development
- Teacher training
- Transition to work
- Labour market information
- Active labour market progarmmes
- School-based reform
- Reform and expansion of the Duel system
- Changing the image of TVET

The above-mentioned planned donor interventions will require exceptional coordination from the Egyptian Government.



## 18. THE PROFESSION OF TVET TEACHERS/LECTURERS

With a highly fragmented and complex TVET system as described above, it is not difficult to lose focus on some of its key features that determine the system's effectiveness, like the development of the profession of its teachers, trainers and lecturers. This section of the report outlines the characteristics of the profession of TVET teachers, highlighting issues related to their type, status, pathway, recruitment, working conditions and training opportunities. It will focus on the three main providers of formal TVET, the Technical Secondary Schools (TSS) affiliated to the Ministry of Education and Technical Education, the Technical Colleges, affiliated to the Ministry of Higher Education, and the PVTD centres affiliated to the Ministry of Industry, Trade and SMEs. Some references will be made to other small-scale institutes within the system.

## 18.1. Key Messages of this Chapter

- **Key message 1**: There seems to be, in Egypt, a general appeal towards the teaching profession, however the status and image of TVET teachers in particular, is less appealing than the general more academic stream.
- **Key message 2:** There seems to be a clear disconnection between theory and practical teachers and trainers in terms of educational background, recruitment and continuous development.
- **Key message 3**: There seems to be several different pathways and requirement leading to the profession of TVET teacher, without clear standards and teacher-specific qualifications, especially those graduating from non-education faculties.
- **Key message 4**: TVET teachers have low salaries in real terms with unfavourable working conditions, especially in case of promotion.
- **Key message 5**: Although in-service training opportunities are offered to TVET teachers, they seem unstructured, ad-hoc and not sufficient to cover all teachers in the system. With the exception of PVTD, there is no evidence of a structured induction or introduction programme for new teachers with limited early career support.

## 18.2. Types of TVET Teachers

There are several different types of training-related jobs and job titles within the system, depending on the Ministry regulating the particular TVET school, centre or institute, but there appears to be very few comprehensive and competence-based job descriptions for these positions. The emphasis too often seems to be on which academic degree or qualification is held, rather than a specific list of the duties that the training job requires. It should be noted that there is a traditional separation within the TVET system of teachers; there are teachers for theoretical subjects and teachers for practical subjects. Attempts have been made in the past to merge these functions in some pilot institutes and schools, but this separation still persists in most TVET schools. Based on the educational background of the potential teacher he/she are then categorised into the following different types of teaching role/title:

- **Core subject teachers**: the term "core" refers to the cross-cutting subjects that are taught , regardless of the technical specialisation of the programme. For example mathematics, science, languages, humanities and religious studies.
- **Technical teachers/trainers**: these teachers, trainers and lecturers teach the theory of more technical subjects. Those are divided into three main sectors and more specific specialisations. The main sectors are industrial, agricultural and commercial (including tourism) subjects.
- **Practical trainers/instructors**: they are responsible for training practical



sessions inside training workshops and labs, using machines and equipment where relevant.

Master trainers: responsible for training teachers. The master trainers are
mostly located at the central level of the ministry or within specialised
departments or institutes responsible for teacher training. They are not located
at the school level. There is no specific academic qualification for master
trainers.

Table 2 summarises the number of teachers/instructors and students in each of the three key types of TVET providers<sup>54</sup>.

Table 2: Numbers of students and teachers as well as breakdown between theory and practical teachers (2014/2015)

TVET Provider/duration of study	Total number of Students	Total number of teachers/ trainers	% of teachers teaching core and theory subjects	% of practical instructors
Technical Secondary Schools (TSS) <sup>55</sup> - 3 and 5year programme	1,800,000	142,056	63.5%	36.5%
PVTD 3 year apprenticeship programme <sup>56</sup>	25,000	1,278	15.5%	84.5%
Technical Colleges <sup>57</sup> - 2 year programme	70,000	1,232	75% <sup>58</sup>	25% <sup>59</sup>

Source: data obtained and from different sources including interviews and UNESCO background report on Egypt for the Regional Report on Teachers Training (2014).

Despite the difficulty in getting data for all types of TVET providers, the table above gives an indication of the numbers and types of teachers. There is a clear bias towards recruiting general and theory teachers within the Ministry of Education, the main provider of TVET in Egypt. As it will be shown later in this report, the bias also includes better training and clearer promotion and quality assurance procedures for core or general subject teachers.

#### 18.3. Status of TVET teaching profession

The TVET system has not been yet successful in improving its image (vis-à-vis other types of education and professional options). Students going to TVET are normally those excluded from the secondary general education by the system of examinations and marks. Once in the TVET system, graduates have a low social profile, very strongly felt in the Egyptian social system, with the exception of graduates from the Don Bosco Institute, MKI, and to a lesser extent PVTD who are very much sought after

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<sup>&</sup>lt;sup>54</sup> Please note that information on the total number of teachers in the TVET system is very hard to obtain. These figures only include the three main formal TVET education types and do not include the many other non-formal vocational training providers described in chapter 1. It also includes only teachers and instructors not administrative and other support staff.

<sup>55</sup> Affiliated to the Ministry of Education and Technical Education (MoETE)

<sup>&</sup>lt;sup>56</sup> Affiliated to the Ministry of Industry, Trade and SMEs (MoITSME).

<sup>&</sup>lt;sup>57</sup> Technical Collages remain under the admiration of the Ministry of Higher Education at the time of drafting this report.

<sup>&</sup>lt;sup>58</sup> Estimation by the country expert

<sup>&</sup>lt;sup>59</sup> Idem



in the market. Despite the relatively higher quality of these students and graduates and the early work-place exposure they receive, they still represent a very small fraction (1 to 2%) of the new entrants to the labour market every year<sup>60</sup>. This vicious circle of low esteem, low quality, low status and low results does not only affect students but also teachers within the TVET system.

One stakeholder interviewed in the framework of this study acknowledged that teachers and instructors within the TVET system suffer from their social image and status, compared to teachers within general education. This factor negatively affects their self-esteem, which, as a consequence, affects the self-esteem of students and the image of the system itself. According to the results gathered from a series of focus groups with TVET students, teachers and administrators, conducted by the World Bank<sup>61</sup> in 2011, it was not clear to what extend the teachers provide informal career advice to students to support them and create a positive image of the teacher occupation, but the general impression was that it was not happening in a structured or professional manner. Therefore, the link between trainer and student is not very strong and teachers don't represent strong role models for students<sup>62</sup>. There were also suggestions by participants to remedy the traditional divide between theoretical teachers and practical instructors. Stakeholders believe that the quality would improve if there is more integration, especially in areas related to the use of terminologies and shared practical experiences, for the benefit of the students.

This low status of TVET teachers and trainers does not only exist between the TVET system versus other educational systems, but is also emphasised within the different categories of the TVET system itself. For example, academic teaching staff within the technical colleges consider themselves of higher status vis-à-vis teachers within the TSSs, because they are affiliated to the Ministry of Higher Education. Furthermore, there is a clear distinction in terms of status between teachers and practical instructors, due to their educational background and pay scale within the TSSs. Furthermore, teaching staff within the PVTD vocational training centres are seen as having lower status than those within TSSs, that were until recently affiliated to the Ministry of Education. These factors create a superficial hierarchy, based on perceptions rather than on an actual discrimination through bylaws and legislation, which is thus more difficult to change.

# 18.4. Access to the TVET lecturer profession and pathways for becoming a TVET teacher

Teachers and trainers' employment conditions have significant effects on their perceived status in the society in which they operate, including what qualifications they are required to obtain, how they were selected and which opportunities they have for progression. This sub-section outlines the requirements in terms of education and qualifications, to become a TVET teacher. These requirements differ between teacher's categories, as highlighted below.

# **Technical Secondary School (TSS) teachers and instructors**

TSS core subject teachers (as described above in section 2.2) are required to successfully obtain a university degree from one of the faculties of Education, affiliated to the Ministry of Higher Education. It is not clear whether a minimum level or grade

 $^{60}$  El-Ashmawi, Ahmed, Background Paper on Assessing Responsiveness of Education and Training Systems To the Demand for Skills, World Bank (2011) p.17.

<sup>61</sup> El-Ashmawi, Ahmed, Background Paper on Assessing Responsiveness of Education and Training Systems To the Demand for Skills, World Bank (2011).

<sup>62</sup> During the site visit to one of the VTCs where the focus groups were conducted, the instructor was smoking while conducting the session in the workshop in front of the students.

 $^{63}$  Innovative Practices in Teacher and Trainer Training in the Mashrek Region, ETF (2003) p.17



upon graduation is required to become a teacher or if there are further assessments conducted before their appointment.

For TSS technical teachers and trainers teaching theory, a university degree is required, depending on the technical specialisation. The majority of theory teachers typically have a university degree in engineering, but can also be graduates of the faculties of agriculture, tourism or commerce among others. They can also be graduates of one of the four colleges of Industrial Education.

TSS practical trainers and instructors are mostly graduates of the TSSs (five years) themselves, graduates of the Don Bosco Institute (five years) or the top students of technical colleges affiliated to the Ministry of Higher Education. There was also an attempt, by the faculty of industrial education, to merge both the theory and practical teacher/instructor, however this has not been successful yet at the implementation and recruitment stage. These instructors are not required to have real-life practical experience in industry, before assuming their duties, something that many stakeholders have emphasised as an effective tool for bridging the gap between TVET and industry needs.

#### **Productivity and Vocational Training Department (PVTD)**

PVTD instructors and trainers are typically graduates of TSS (five years), top students from PVTD, graduates of technical colleges or graduates of the Faculty of Engineering. In the past (until the mid 1980s) all instructors were formally required to have a minimum of three years practical experience in industry, although still articulated in the regulations, this is no longer applied at the recruitment phase. Today, when positions for instructors are announced, the selection is done centrally. Once appointed, instructors undertake pedagogical and aptitude assessments at the Staff Training Institute (STI) affiliated to PVTD. If they are unsuccessful in the assessments, they don't become instructors and are given an administrative position. Successful appointees then undertake a series of pedagogical and technical trainings before they assume their position.

# Technical College Middle Technical Institutes (MTI)- Ministry of Higher Education

Within the technical colleges, lecturers and teachers are mostly university graduates and around 30% of them have a post-graduate degree, including PhDs from the Faculty of Engineering or others, depending on the specialisation. These colleges should also be recruiting practical instructors, acting as workshop supervisors. They should be graduates of the technical colleges themselves. However, for some years, none of the institutes have had practical instructors, due to a recruitment freeze for civil servants. Lecturers are often selected among top graduates of University and are not required to undertake any specific assessments before their appointment.

### 18.5. Recruitment of TVET teachers

As the majority of TVET providers and institutes are public, it must be noted that since the late 1990s, there has been a general freeze on recruitment of civil servants, teachers included. Any new recruitment needed approval from the Prime Minister and shortages were mostly addressed by providing teachers with part-time or fixed-term contracts, rather than the traditional permanent contracts (that made the public sector very attractive). Generally, and independently from the freeze, the regulations for the recruitment of teachers are well defined and structured. They are mostly done through announcements at the governorate level, with the main selection criterion being the attainment of an academic degree (or another qualification required for each type of teacher, as outline above). Candidates present evidence of their qualifications and are interviewed centrally with no involvement from the schools in which they will be



posted<sup>64</sup>. With the exception of PVTD teachers and instructors, no assessments are conducted at the selection phase. The primary recruitment route seems to be the attainment of a degree.

In 2014, in response to the rising public pressure and youth unemployment as a result of the recent revolutions, the Ministry of Education announced its desire to recruit 30,000 young teachers. The process, which took the form of a nationwide competition, included applications on the Internet, minimum academic university degree, passing an electronically administrated test, an accredited ICT course for the Supreme Council of Universities and passing a personal interview with a specially established committee from the Ministry<sup>65</sup>.

# 18.6. Working conditions and payments

Like all civil servants, public TVET school and college teachers with permanent contracts (around 97% of teachers are employed as civil servants<sup>66</sup>) benefit from job security. It is very difficult to dismiss them<sup>67</sup> and the regulations for pay scale according to level, promotions and supplementary incomes are clearly articulated. This makes the teaching profession attractive, compared to less secure jobs in the private sector, despite the fact that the basic salary for teachers in the government is relatively lower<sup>68</sup>.

A professionalized, merit-based framework was introduced in 2007, which saw teachers' compensation packages rise between 50 and 150%, depending on their level<sup>69</sup>. In 2013 the Egyptian Government applied a new minimum wage for civil servants, including teachers, of 1200 Egyptian Pounds (\$ 158) per month. While teachers' starting salaries are relatively competitive by world standards as a percentage of the country's GDP per capita (equivalent to 152%) - substantially more than what most high-performing systems pay (around 82-119% of their GDP per capita)<sup>70</sup>,- it must be noted that Egypt's GDP per capita is quite low relative to other countries in the region (Egypt \$3,243, Jordan, \$5,174, Lebanon, \$10,077, Israel, \$36,926, Qatar,  $\$98,986^{71}$ ). Moreover, in Egypt, the basic salary is very low and a complex set of additional incentives has developed over the years: teaching allowance, cadre allowance, examination allowance. This system often reduces transparency and may work against the promotion of good performance<sup>72</sup>. Furthermore, teachers' salaries rise moderately along their career: after 15 years, a teacher holding the minimum educational qualifications can expect to earn approximately 1.42 times the starting salary, and after 30 years, 4.2 times the starting salary<sup>73</sup>. However, information on teachers' salaries differ from source to source. According to the 2014 UNESCO report on TVET teachers in Egypt, starting salaries within the Ministry of Education range from 30 to 35% of GDP per Capita for 2011 and then rise to 85% of GDP per capita after 15-20 years of service, reaching

66 World Bank (2010) Saber Country Report- Teacher Policy, p. 6

<sup>&</sup>lt;sup>64</sup> For part-time or fixed-term candidates, school principles or department heads may take part in the recruitment process and have more say in the termination of their contracts (UNISCO, Technical and Vocational Teachers and Trainers in the Arab Region, A Review of Policies and Practices on Continuous Professional Development- 2014 p. 38)

<sup>65</sup> www.moe.gov.eg

<sup>&</sup>lt;sup>67</sup> There is legislation currently being drafted to amend the civil service law to make continued employment more performance based which could lead to dismissal of civil servants if appraisal is not good, however this is still not implemented yet.

<sup>&</sup>lt;sup>68</sup> For the 30,000 new teachers competition mentioned in section 2.5 of this report, the Ministry received more that 1.6 million applications indicating the popularity of the teaching profession in Egypt.

<sup>&</sup>lt;sup>69</sup> World Bank (2010) Saber Country Report- Teacher Policy, p. 6

<sup>70</sup> World Bank (2010) Saber Country Report- Teacher Policy, p. 6

<sup>&</sup>lt;sup>71</sup> IMF World Economic Outlook Database, 2014.

<sup>&</sup>lt;sup>72</sup> UNISCO (2014),-Technical and Vocational Teachers and Trainers in the Arab Region, A Review of Policies and Practices on Continuous Professional Development- p. 40

<sup>&</sup>lt;sup>73</sup> World Bank (2010) Saber Country Report- Teacher Policy, p. 6



more than 100% when nearing retirement.

Other benefits offered to TVET teachers include; pension entitlements, healthcare, sick leave, maternity/paternity leave, long annual leave during summer and relatively short working days (which allows some teachers to hold a second job to make ends meet). This latter trend is quite common among male teachers who moonlight in various occupations or operate their own small businesses, depending on their technical specializations. Unlike teachers from the general education stream, TVET teachers don't have the same opportunities to give private courses because most TVET students are from low-income families who cannot afford these extra fees. Many of the students themselves are working to support their families.

Part-time for fixed-term TVET teachers on the other hand do not benefit from most of the above-mentioned packages in terms of salaries, security, personal development or perks. It is acknowledged that these teachers' starting salaries are much lower than those with full tenure. Many of these teachers have been demonstrating for better working conditions after the January 2011 revolution, which forced the government to comply to some demands: since 2011 many part-time contracts became permanent.

## 18.7. Training opportunities for TVET teachers

This section briefly outlines the in-service training opportunities available to TVET teachers once recruited. For TSS teachers the process is less structured and clear than for other TVET providers (PVTD and technical colleges): it is mostly linked to the courses and certificates needed as stipulated by the Professional Academy for Teachers - PAT) and not based on actual training and development needs. A clear and structured induction or introduction programme for new teachers does not exist in practice, although stated in legislation.

In-service technical, pedagogical and interpersonal soft skills training is often provided through donor-funded programmes for teachers and instructors within target schools. These programmes are often designed according to the actual needs of teachers and they could also be linked to the training on the equipment provided by the donor. They can also be based on new curricula, developed with the support of the donor. The most prominent examples of this are the longstanding trainings provided by the German Government for the dual system, the EU-funded TVET reform programme (that trained more than 8,000 TVET teachers between 2006 and 2013) and the USAID Egypt's Competitiveness Project (that through a cascading programme trained 14,000 in-service teachers). Some of those trainings could be delivered by international trainers and could include training in the host country. However, as indicated by the figures, they are quite limited in proportion to the total number of teachers in the system. National agencies supporting teacher trainings and other development activities for TSSs, include the Industrial Training Council (ITC). Until a few years ago, MoE had an operational training centre for practical teachers and instructors, dedicated to the 5-year schools and specialising in training them on new equipment bought for these schools.

Within the PVTD, the situation in terms of initial induction training is different. Newly appointed teachers and instructors have to attend a ten-week pedagogical course and a nine-to-twelve- week technical training course at the STI. Until the early 1990s this induction training lasted for a whole year. Regulations currently stipulate that after three years of service, instructors and teachers should attend an advanced refresher programme<sup>74</sup>. Further training opportunities are available, based on specific needs, decided at the level of the PTVD and approved by the Director of the Centre. Ad-hoc

<sup>&</sup>lt;sup>74</sup> This is not strictly adhered to at present, according to STI most teachers and instructors are not motivated to attend this advanced programme, complaining that peers with similar skills are training them.



in-service training is also provided for instructors by international donors, based on agreements made at the central level. Major international donors that have worked with the PVTD for teachers' training include GiZ, the EU, JICA, and the South Korean government. ITC has also provided capacity building programmes for teachers in recent years.

For Middle Technical Institutes of the Technical Colleges, there is no evidence of a structured induction or introduction training programme for newly appointed lecturers and instructors. The Egyptian Technical College Project (ETCP), affiliated to the Ministry of Higher Education, provides support to technical colleges, and administrates and funds an extensive schedule of short training courses (up to two weeks) for teachers and instructors. Between 2012 and 2014 ETCP offered more than 100 different training courses in pedagogical, technical and soft skills, provided by external agencies and individual trainers. Middle Technical Institutes provide their training needs to the ETCP, which develops the annual schedule. Some of the training topics of the last three included:

- Training of trainers and presentation skills
- Human resource management
- Leadership training
- Team building skills
- CNC
- AutoCAD
- Computer-aided fashion design
- Tourism and hospitality courses including food and beverage
- Inventory management
- English language
- Management information systems
- Know About Business (entrepreneurial skills)
- Maintenance management
- Textile machines
- ICT



## 19. THE SYSTEM OF TVET TEACHER EDUCATION

## 19.1. Key Messages of this Chapter

- Key message 1: Policies for teacher education may be well articulated, however, inconsistency in implementation exists and varies drastically according to the different types of teachers, especially among those teaching core or general subjects and those teaching practical subjects.
- **Key message 2**: There seems to be a need for legislative reform to facilitate the transition of students from Industrial Education Faculties into the teaching profession.
- **Key message 3**: While policies and legislation exist for quality assurance in teacher education, the process and implementation is still unclear and not fully functioning, especially in vocational training institutes.
- Key message 4: The system of teacher education in Egypt is quite underdeveloped. Coordination between different stakeholders, standards of education, curricula, attractiveness and motivation of students, links to international good practice are generally poor.

#### 19.2. General characteristics

#### 19.2.1. TVET teacher education policies

The Ministry of Education and the Professional Academy for Teachers (PAT) are the primary institutions responsible for all teacher (including TVET teachers) policies, until the end of the secondary education stage<sup>75</sup>. In implementing policies, the MoE and PAT take on a strong role alongside the Educational Directorates at the Governorate Level. Furthermore, in overseeing policy compliance, the MoE works alongside the Educational Directorates at the Governorate Level, the National Authority for Quality Assurance and Accreditation of Education (NAQQE) and the National Center for Examination and Educational Evaluation (NCEEE, created in 1990 as a semi-independent organisation)<sup>76</sup>.

PAT sets the requirements for becoming a teacher. In 2010, around 39% of all applicants were admitted to initial teacher education programmes. All teachers can enter both concurrent (where the knowledge of the subject and the pedagogical skills can be acquired simultaneously) and consecutive training programmes (where the knowledge of the subject must be acquired first and pedagogical skills are learned at a later stage,)<sup>77</sup>.

#### **Core-subject teachers**

All core-subject teachers in TSSs graduate from the faculty of education or from a relevant specialised University, completing an intensive education diploma for one year. Would-be TVET teachers, and students within faculties of education, specialize in languages (English, Arabic), science, mathematics, history, geography, or chemistry. Students divide their study time between the subject/area of specialisation (75%), foreign languages (5%) and pedagogy theory and methods (20%). All applicants to teacher education programmes are selected for admission through the following criteria and processes: (i) strong performance in secondary school; (ii) results of the Thanawiya Amma (Egypt's compulsory secondary school leaving certificate); (iii) an

77 World Bank (2010) Saber Country Report- Teacher Policy, p. 5.

<sup>&</sup>lt;sup>75</sup> The Ministry of Higher Education regulates post-secondary technical education and the PVTD is regulated by the Ministry of Industry, Trade and SMEs.

<sup>&</sup>lt;sup>76</sup> World Bank (2010) Saber Country Report- Teacher Policy, p. 4.



interview assessment<sup>78</sup>.

The Central Bureau for Admission to the University allocates students to the Faculties of education and sets an internal faculty-based entrance examination test. However, all candidates are given a passing grade and gain admission. Despite the importance of the teaching profession on future generations, it is often more difficult to enter other Faculties, like Medicine or Engineering. Although it varies each year, in 2010 the required secondary school passing grade in the national examination for the admission to the Medical School was 96-98%. In comparison, to be admitted into the Faculty of Education, the average required passing grades are between 80 to 88% for the Science and Mathematics major, 75 to 85% for Literature majors<sup>79</sup>.

## Technical and practical teachers and instructors

The situation for technical and practical teachers and instructors in TSS, PVTD and Technical Colleges is less structured and sometimes unclear. These teachers and instructors can receive their initial education from different sources like University (e.g. Faculties of engineering, agriculture, tourism, commerce...), the four Industrial Education faculties or from technical education five-year programmes. It is not clear whether they are subjected to the one-year intensive education diploma as mentioned earlier for core-subject teachers.

Trainers have thus a varied range of qualifications, sometimes with little or no specialist trainer training. The main qualification does not appear to be a (pedagogical) trainer competence, but rather the possession of an academic degree, often in a subject not necessarily related to the one taught<sup>80</sup>. This is often reflected in the training methods employed, that are very traditional and not student-centred. Stakeholders interviewed in the framework of this study suggest that Egypt should create more teaching positions for top graduates or experienced professionals.

## 19.2.2. Overview TVET teacher education institutes

In addition to the diversified academic pathways TVET teachers and instructors can go through, before entering their position (Faculties: engineering, commerce, agriculture or tourism for example, or five-year technical secondary schools or two-year technical colleges for practical instructors)<sup>81</sup>, there are two types of specialised Initial Education institutes for teachers; (i) the faculties of Education, and (ii) the faculties of Industrial Education.

#### **Faculties of Education**

There are 26 Faculties of Education in Egypt, affiliated to different public Universities, under the supervision of the Ministry of Higher Education. These faculties shape not only TVET teachers, but also teachers for both technical and general education. There are specialised departments for the instruction of technical schoolteachers and the course is four years long. Most of the teachers graduating from these faculties and working in technical schools, usually teach core subjects like foreign languages, mathematics, social studies and science. These faculties mostly issue bachelor of art degrees, but provide also post-graduate degrees.

In theory, PAT is working closely with the MoE and the faculties of education to ensure that teacher education curricula prepares students with the required teacher standards. Furthermore, PAT is responsible for setting accreditation requirements for teacher education programmes, which must all be accredited. This requirement forces

80 Innovative Practices in Teacher and Trainer Training in the Mashrek Region, ETF (2003) p.25

 $<sup>^{78}</sup>$  World Bank (2010) Saber Country Report- Teacher Policy, p. 5.  $^{79}$  World Bank (2010) Saber Country Report- Teacher Policy, p. 5.

<sup>81</sup> Students in these universities, technical schools and collages do not receive any specialised training on becoming teachers like any other student but can apply for teaching positions when they graduate.



institutions seeking to offer teacher training to be evaluated and earn certification that their courses reach the system-wide standard and have the potential to train students into successful teachers<sup>82</sup>. However, there is no documentation or evidence indicating that these requirements are applied.

#### **Faculties of Industrial Education**

Around the early 1990s it was observed that Faculties of education were not training technical teachers adequately: there were no adequate workshops and labs for practical training, especially in the Engineering disciplines. Therefore, two Industrial Education faculties where established within Helwan and Bani Suef Universities, to address this deficiency. Later on, two more faculties were established in Suez and Sohag.

Industrial Education colleges provide a four-year programme for students and issue a bachelor degree, accredited by the Ministry of Higher Education. Around 1,000 students graduate from all four colleges each year and specialize in sectors like automotive, air conditioning, electricity, electronics and industrial production. 90% of the students are TSS graduates. The remaining 10% come from general secondary education. Not all graduates end up working as teachers. There seems to be a legislative and administrative bias, giving priority to graduates from the Faculty of Engineering in teacher's recruitment. Most graduates end up working as skilled workers in factories, but they tend to be treated differently from engineering graduates.

Starting in the third year of study, students start their practical on-the-job training by working in factories during summer holidays, while in the fourth year they co-teach at TSSs for one day a week. There is no evidence that PAT has a role in setting standards or curricula on this topic, since the current curricula has not been developed or updated since 1997.

#### 19.2.3. Funding of TVET teacher education institutes

The public sector is still the main provider of educational services. Teacher education institutions are funded as part of the Government's civil service employee expenditure, and their budget is therefore difficult to be clearly quantified. Costs of training trainers are also difficult to be quantified<sup>84</sup>. Public expenditure on education reached EGP33.7 billion (US\$5.02 billion) in 2008, representing 12% of the total public expenditure, compared to 17% in 2000/01, 16% in 2005/06 and 12.5% in 2006/07. The ratio of public education expenditure to GDP decreased from 5.3% in 2000 to almost 3.7% in the two years before the revolution<sup>85</sup>. This declining trend indicates that education was not receiving its due priority on the government's agenda. Most recently and after the approval of the current constitution, expenditure on all levels of education should not be less than 4% of GDP and increase gradually to reach international best practices.

Average public expenditure per student in Egypt, in purchasing power parity terms, was estimated to be 902 constant 2005 international dollars in tertiary education (which includes teacher education faculties), which is quite low if compared to other countries in the region or countries with similar demographic or developmental characteristics<sup>86</sup>.

<sup>82</sup> World Bank (2010) Saber Country Report- Teacher Policy, p. 5

<sup>83</sup> Estimation of the country expert.

<sup>&</sup>lt;sup>84</sup> Innovative Practices in Teacher and Trainer Training in the Mashrek Region, ETF (2003)

<sup>85</sup> ENCC/TVET Reform Programme/ETF, Building a Competitiveness Framework for Education and Training in Egypt, 2010

<sup>86</sup> Countries include Chile, India, Jordan, Malaysia, Peru, and the Philippines.



In Egypt, funding of education in general, and TVET in particular, is mostly based on historical expenditure data<sup>87</sup>, with no links to performance and no consideration of national socioeconomic priorities like improved teacher quality. In general, there are no formal reviews of the impact of funding on training programme beneficiaries. Additionally, there is limited private sector investment in public education at the national level. However, some recent positive developments include: (i) increases in education and training budgets; (ii) efforts to decentralise the management of budgets to the governorate level; and (iii) several ministry-driven efforts to fund training in partnership with industrial federations and in alignment with market needs.

For in-service teacher training and short continuous development programmes, funding is usually supplemented by international donors engaged in projects covering some aspects of the TVET system.

The two Don Bosco Institutes, which are considered as a good practice example in terms of output and performance, apply annual fees of around LE 6800 (\$870) per student and receive funding and donations from the Italian Embassy and other sources.

## 19.2.4. Quality assurance of TVET teacher education institutes

It is difficult to assess the quality assurance of TVET teacher education institutes separately from the overall TVET quality system in place. Although PAT is ultimately responsible for the quality of the teaching profession, including TVET teachers, it operates in collaboration with other bodies, like the NAQAAE. It must also be noted that while bylaws and legislation exist to govern quality assurance of education, practice and implementation don't necessarily adhere to them, given the fact the these are relatively new (less than 10 years old) and are constantly going through transitional periods especially due to the political changes that took place since 2011. Table 3 below outlines the different responsibilities for quality assurance.

Table 3 – Mode of decision making when setting quality standards

Quality aspect	Responsibility	Obligatory consultation
Quality standards: learning environment	NAQAAE	Universities Federation of Industries
Quality standards: learning outcomes	NAQAAE	Universities Federation of Industries
Quality standards: teaching	PAT	MoE NAQAAE
Standards for provider <sup>88</sup> accreditation	NAQAAE MoMM	Universities Federation of Industries

Source: Adapted from the ETF (2015) Torino Process Report- Egypt

TVET has traditionally focused on access, rather than on quality, though improving the quality of TVET provision has been a major policy challenge for years. The draft but not yet adopted TVET Reform Strategy (2013), states that 'Quality is poor at all levels' and 'TVET lacks national systems of assessment, certification and quality assurance'<sup>89</sup>. Almost 60% of teachers in agriculture and 50% of teachers in commercial secondary schools are not educationally qualified. This indicator suggests that the quality of the agricultural and commercial TVET streams might be more problematic than the

89 ETF (2015) Torino process -Egypt Report

<sup>87</sup> World Bank (2014) SABER Country Report- Egypt

<sup>&</sup>lt;sup>88</sup> This can also refer to individual programmes



industrial TVET stream. This could be a result of the fact that these former two streams don't have specialised teacher education institutes like the Industrial Education Collages mentioned earlier in the report.

A major milestone towards quality assurance was the establishment of NAQAAE in 2005. While most universities manage the accreditation process internally, some receive support from the Education Development Fund (EDF). Pre-university education institutions, including TVET, on the other hand are supported by the Quality Assurance Division, established within the MoE and reporting directly to the Minister of Education. The Division is responsible for supporting Quality Units at regional and local levels (Idarras and Muddiriyas) to foster a quality culture and support schools in the process of NAQAAE accreditation. The quality assurance framework adopted by NAQAAE addresses human resources within TVET institutes including teachers and is in line with international benchmarks<sup>90</sup>. However, it currently doesn't focus on student assessment.

Since the start of its activity and until the end of 2014, NAQAAE accredited around 4,130 institutions (approximately 10% of all education institutes in Egypt). The number of TVET institutions accredited so far is marginal and vocational training centres (VTC) like PVTD are not within the scope of NAQAAE. Up to now, only 11 technical schools have been accredited (0.26% of the 4150 institutes)<sup>91</sup>. None of these institutions provides teacher education. This raises questions on the attractiveness and suitability of the current accreditation model and framework to the context of TVET.

In terms of quality assurance for TVET teachers and their institutes, the most important developments have been the introduction of a Teachers Cadre and the establishment of PAT, both aiming at enhancing Teachers' Professionalism and providing a general framework for the professional development of teachers. The professional career structure of teachers is divided in 6 grades. Promotion from one grade to the next is subject to the completion of courses, the passing of a Government test and the performance appraisal led by their employing institution. New teachers are appointed as 'Assistant Teacher' for two years and after successful completion of their promotion requirements, they are upgraded to 'Teacher' (grade 1). After four years and the completion of all promotion requirement, a 'Teacher' is upgraded to a 'First Teacher' level, followed by 'First Teacher A', 'Expert Teacher' and 'Master Teacher' levels. Promotion carries an increase of the 'Teaching Allowance' as well as a rank increase on the civil servants' scale, including higher salary<sup>92</sup>. The career ladder shown in figure 4, applies to both the teaching profession and to instructors working within the Ministry of Education.

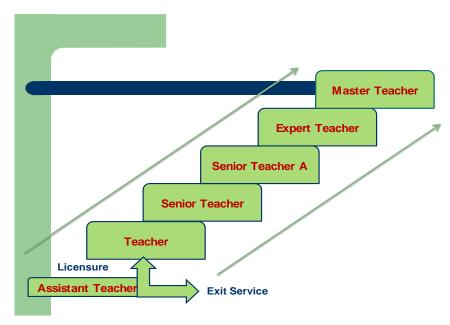
The framework comprises nine areas: vision and mission of the institution; leadership and governance; human and financial resources; civil society participation; quality improvement and accountability; learners; teachers; curriculum; educational environment. Each area is further defined by specific criteria and described through a set of indicators.

<sup>91</sup> Source: www.naqaae.eg.

<sup>&</sup>lt;sup>92</sup> UNESCO (2014), Technical and Vocational Teachers and Trainers in the Arab Region: A Review of Policies and Practices on Continuous Professional Development, Paris, p 82



Figure 4 – The new Teacher Cadre and its 6 levels



Source: MoE,2011.

As of 2013, any organisation involved in the training of teachers (not long term education), including donors and NGOs, had to be endorsed by PAT. Standards for the licensing of teacher training centres have been issued the same year, focusing on aspects such as the state of the facilities, the materials used, and the training programmes themselves. By 2013, 10 private and 2 public centres have applied for licensing, with the successful applicants acquiring a license for 3 years. Licenses can be revoked at any time by PAT, if the standards are not respected.

However, despite several achievements, some persons interviewed in the framework of this study expressed concerns about the criteria for the licensing of teachers: the main exam has been removed following protests of teachers, and has been replaced by rather softer criteria, likely to compromise quality.

For PVET and Technical college teachers and trainers, the situation is less clear in terms of how the standards and quality assurance are set and regulated.

## 19.2.5. TVET teacher education institutes and international developments

Almost all national policy documents referring to teacher education and training, mention a need to comply to international norms and standards. However, little information is available on how institutes are working to achieve this objective and which procedures are put in place at the operational level. From site visits in education institutes and technical colleges and from interviews with TVET teachers, no evidence has been found on the existence of practical mechanisms for international benchmarking in the field. The processes put in place by PAT and NAQAAE were developed based on international good practice. However, according to the ETF Secondary Education Review (2010), teacher training and career development still struggle to comply with good international practice and, probably more importantly, to meet the demands and needs of the local schooling system.

Strategic planning for teacher's training, should facilitate the development of collective responsibility (involving the MoE, secondary education and TVET institutions and the teachers academy). This would provide greater coherence in terms of objectives, programmes and initiatives. Coherence is also needed within initiatives to train support personnel and managers of vocational institutions.



A key question is the sustainability of Teachers' and Trainers' Training systems, more particularly concerning their funding. Unlike in other countries, another key element absent from the present policy design, is an instrument for the capacity building for the supervision, monitoring and assessment of teachers' performances.

Unlike international good practice, the teachers' cadre is mainly input-based and lacks key features of outcome-based and dynamic systems. Clear evidence is the recent testing system used to place teachers within the cadre. For instance, the exclusive use of written tests to assess teachers can be expected to hinder, rather than encourage genuine assessment of knowledge, skills and competencies. There is a need to review this process in order to genuinely take into account teachers' qualifications and experience as well as introducing a teachers' performance assessment system, determining, along the teacher professional development, teachers' salaries and promotion (in the teacher career development path). In the present cadre, there are elements of rigidity regarding the career paths and progress which don't take into account the individual capacities of teachers and the necessity for teachers to develop and evolve individually and collectively. There is also a lack of involvement in innovative and project-based initiatives. Furthermore, new knowledge, skills and competencies, acquired by teachers involved in accreditation processes and experimental and pilot projects, help teachers acquiring new knowledge, skills and competencies that should be recognised by the system. Portfolio-based mechanisms can be helpful in this sense.

It should be noted however, that the PVTD Staff Training Institute benefited from extended international support from GiZ between 2002 and 2012. Staff including teachers, benefited from German expertise both in Egypt and in Germany. Furthermore the PVTD recently benefited from a twining EU-funded project led with the Omnia, the Joint Authority of Education in Espoo Region – Finland. Similarly, NAQAAE took part in a twinning project with Finish and German expertise.

## 19.2.6. TVET Teacher Education Institutes and Postgraduate Research

Apart from post-graduate research, there are different institutions supporting the reform of the system, which should have a direct impact on TVET teachers. According to the 2010 ETF review of Secondary Education reform, both in general and technical secondary education, the Ministry of Education<sup>93</sup> and its various divisions and directorates are responsible the pre-university education system, with the support of three external centres: The Centre for Curriculum Development and Instructional Materials Development CCIMD, the National Centre for Education Research, and the National Centre for Examinations and Educational Evaluation. Each centre has its own focus in formulating education policies with other state-level committees as described below:

**The Centre for Curriculum Development and Instructional Materials Development (CCIMD)** is responsible for the design, building, experimenting, revision, monitoring, and production of curricula and instructional materials, as well as for the training of teachers and trainers on newly developed curricula and the corresponding instructional material. The main tools for skills identification and formulation of new materials are the curriculum committees, assembled on *ad hoc* basis, including experts from the MoE, from higher education (with post-graduate degrees), private sector and federations<sup>94</sup>.

The National Centre for Examination and Educational Evaluation (NCEEE) was established for conducting studies and scientific research needed for setting up and evaluating examination systems. The ultimate goals were the achievement of the

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<sup>93</sup> This may change after the establishment of the Ministry of TVET, however at present things are proceeding as before.

<sup>&</sup>lt;sup>94</sup> Whether this process happens all the time and involving all these stakeholders is not clear.



objectives set by the curricula, building student's characters, and promote their abilities, skills and creativity in various fields of culture, science and technology. It is considered as a think tank committed to all research and developmental aspects involved in the monitoring and evaluation of students' learning outcomes.

The National Centre for Education Research (NCERD) aims at providing educators with sound scientific and educational information. The NCERD is also responsible for investigating and exploring means of achieving an appropriate level of co-ordination between the educational policies specified by the MoE and the educational policies formulated by specialized national councils.

While the system seems to have most of the ingredients and institutions required for a sound TVET system and indeed progress has been made in establishing new bodies and policies, there seems to be a malfunction in terms of coordination for the achievement of positive outcomes. This could be a result of several causes, however one of the key issues seems to be the absence of a clear and communicated vision for education in general and TVET in particular.

## 19.3. TVET Teacher Education Programmes (initial and in-service)

#### 19.3.1. Organisational Aspects of TVET Teacher Education Programmes

Formal initial education programmes for teachers are mostly organised in faculties linked to universities. Examples mentioned earlier include the faculties of Education and the faculties of Industrial Education.

These are four-year programmes leading to a Bachelor degree. The content of curricula is usually developed at the university level: by specialised committees within the universities and approved by the Ministry of Higher Education and the Supreme Council of Universities in coordination with PAT, although it is not clear how this happens if it does indeed happen. In addition to these specialised teachers' education faculties, the majority of technical teachers and instructors graduate from normal universities or technical schools and colleges, without receiving any pedagogical training.

In-service, non-formal training institutions (like the PVTD's STI or the Technical Colleges ETCP) providing teacher training programmes, usually have internal units or departments. Curricula are developed centrally, through specialised committees with limited involvement from the institution itself. For the majority of TSSs teachers affiliated to the MoETE, pedagogical in-service training could be offered by PAT or PAT-approved centres; mainly for making it possible for the teachers to get promoted to the next teachers' level. Additionally some TSS teachers are offered in-service training in technical or interpersonal skills on ad-hoc bases, through international donor-funded projects (who are responsible for the curricula and content development). The Ministry of Education established a training centre offering 5-years programmes on new equipment purchased by the ministry or donated by international organisations; however, this Cairo-based centre is currently non-functional.

## 19.3.2. Key Characteristics of the ITE Curriculum

According to experts and the Ministry of Education itself, the process of developing and implementing a new curriculum in all schools, requires intensive initial and inservice teacher training.

The new curricula are expected to be substantially different from the existing ones (implying a paradigm shift in teaching, learning and assessment processes), and therefore challenging. Massive in-service teacher training, and further support at the school level, will be needed in order to help teachers acquire the necessary skills to



implement the new curricula. For the TVET sector some practical steps are still to be taken in partnership with employers, for example to ensure that vocational teachers have a good understanding of modern industry, and to develop workplace training as an integral element of most training programmes.

According to the World Bank SABER (2010) report, PAT is responsible for: (i) establishing the national curriculum for teachers' training, including pre-service education and training programmes; (ii) ensuring sustainable professional development of teachers; (iii) licensing teachers according to national standards while linking promotions to the license requirements; (iv) setting accreditation requirements for teacher education programmes; (v) enforcing practical professional experience through the recently developed Assistant Teachers' Program for new entrants; and (vi) enforcing new teacher mentoring programmes<sup>95</sup>. PAT should also be working closely with the MoE and the faculties of education to ensure that teacher education programs prepare future teachers with the required standards. Further, PAT should enforce the institutions' evaluation and certification system. The statutory requirements establishing the duration of educational programmes for preparing secondary school teachers are clearly defined: four years at the bachelor level with 20% of time devoted to pedagogy theory and methods; 75% for the selected discipline, and 5% for languages. This balance between subject-content training and pedagogic skills training is encouraging, because teachers' knowledge of the subject is strictly correlated with their effectiveness.

The above developments sound quite promising on paper. However, there is little evidence that these reforms are actually being implemented. Some stakeholders suggest that both PAT and NAQAAE have been focusing mainly on general education rather than the technical one.

The reforms aiming at creating a professionalised teaching force also suffer from this inconsistence between legislation and actual practice. Teachers are supposed to pass (cadre) examinations, however until 2010 only 19,980 teachers, both among the general and technical education systems (1.9% of the teaching force), passed the placement test but are still working on fulfilling the rest of the requirements. Many stakeholders mentioned that since the 2011 revolution, PAT has not been as active as it should have.

#### 19.3.3. Recruitment and Selection for TVET ITE

In Egypt, access to pre-service initial teacher education is relatively easy for those who successfully completed their academic secondary education (based on results of the Thanawiya Amma, Egypt's compulsory secondary school leaving examination). While access to a suitable degree programme (if individuals can afford to pursue higher education) is relatively easy <sup>96</sup>, access to employment is more difficult and access to a permanent contract even more. Furthermore, there is no evidence of special assessments undertaken at the selection stage for students into initial teaching programmes. Although regulations stipulate an interview assessment before selection <sup>97</sup>, it's not often led. In general, there are no fees for these programmes and modest allowances or bursaries are paid.

As explained earlier, practical teachers in secondary technical schools are not required to attend specialized initial teacher education programmes, unlike general teachers and theory teachers. Therefore, instructors can actually apply for any faculty at any

<sup>95</sup> After completing an induction program lasting for 3 to 6 months, beginning teachers take part in a mentoring program lasting 1-2 years (in line with the duration of programs in high-performing systems).

<sup>96</sup> UNÉSCO (2014), Technical and Vocational Teachers and Trainers in the Arab Region: A Review of Policies and Practices on Continuous Professional Development, Paris P.58

<sup>97</sup> World Bank (2010) Saber Country Report- Teacher Policy p.6



university, depending on the grade they received at the secondary level and end up becoming teachers.

There are more men in the Egyptian TVET workforce than women. In general, women represent about one third of TVET teachers and instructors, though this varies between vocational sectors<sup>98</sup>. In sectors like ready-made garments, commerce and tourism there are working more women than men.

Given that there is an excessive supply of graduates seeking to become technical teachers, experienced candidates from the professional world are not encouraged in becoming TVET teachers. In certain EU countries, such as England and Germany, such recruits bring extensive industrial experience to the TVET workforce. This type of experience is said to be lacking in most Arab countries, including Egypt (except in the 1%-2% dual education system).

The situation in terms of recruitment and selection of teachers and instructors within vocational training institutes, like the PVTD and within the post-secondary technical education institutes, like technical colleges is not substantially different. However, teachers' early career support and continuous development in these institutes is more structured.

# 19.3.4. Early Career Support (ECS) and Continuous Professional Development (CPD)

Section 2.7 of this report provided the details on the limited and ad-hoc nature of inservice training opportunities available for new teachers within the different types of technical and vocational education and training institutes. This section focuses on the actors responsible for in-service training and on the regulations that are being developed to expand these opportunities both as early career support and continuous professional development for TVET teachers.

Under the newly implemented Assistant Teachers' Program (2009/2010), theory and practice don't necessarily correspond. Incoming teachers are required to gain practical professional experience. When recruited, teachers should have around 2 years of practical professional experience as part of their training, together with high-performing systems' classroom experience requirements (1 year or longer)<sup>99</sup>. Furthermore, the Assistant Teachers' Program should comprise a strong mentoring component for all teachers: after completion of an induction programme lasting 3 to 6 months, newly-recruited teachers take part in a mentoring program lasting 1 to 2 years. The senior mentor is required to continuously assess and provide feedback to the newly-recruited teachers, in order to support him in meeting the system standards. Unfortunately, this mentoring component is not extensively implemented for TVET teachers, especially those teaching technical subjects.

Under the recent reforms, teachers must pass (cadre) examinations. By the end of 2010, around 19,980 teachers in general education and TVET (1.9% of the teaching force) passed the placement test, but are still working on fulfilling the remaining requirements. Egypt might look into developing its data management systems to ensure that data on teachers who meet preparation requirements can be filtered by both location and primary/secondary level<sup>100</sup>.

Though specific data on TVET teachers are hard to find, it appears that TVET teachers receive less support in terms of continued professional development than other teachers (which is mostly implemented through donor-funded projects). It also seems that the implementation of the Teacher's Cadre had less impact on teachers'

<sup>&</sup>lt;sup>98</sup> UNESCO (2014), Technical and Vocational Teachers and Trainers in the Arab Region: A Review of Policies and Practices on Continuous Professional Development, Paris. P.58

<sup>99</sup> World Bank (2010) Saber Country Report- Teacher Policy p. 7

<sup>100</sup> World Bank (2010) Saber Country Report- Teacher Policy p. 7

<sup>&</sup>lt;sup>101</sup> ETF (2010) Review of Secondary Education in Egypt, p.29



career progression in technical education than on teachers in general education. In 2012/13, the two highest levels of the Cadre (Senior Teacher, Expert Teacher) represented around 20% of the technical education's workforce (19% for 3-years and 22% for 5-years school teachers), while they represent 40% of the general secondary education's workforce. This is an indicator of the relatively low level of support offered to TVET teachers.

The PVTD has a dedicated Staff Training Institute (STI) that organises, funds and regulates structured initial induction programmes for newly appointed instructors as well as continuous professional development programmes after three years of service. The Middle Technical Institutes of the Technical Colleges, affiliated to the Ministry of Higher Education, have a dedicated project that funds and organises continuous development programmes, but limited early career support programmes (please see section 2.7).

## 19.3.5. Aligning the TVET TE to the Professional Needs

Although PAT is responsible for setting requirements to enter teaching and to set standards for initial education programmes for teachers, the focus has been on academic teachers and not on TVET teachers. This partly explains the lack of alignment with industry and employers at the initial education stage. Furthermore, since the faculties of education are under the supervision on the Ministry of Higher Education, there is limited coordination on the development of curricula for teachers' training between the MoE and the teachers on one hand and the universities on the other.

According to experts and stakeholders one of the main challenges of TVET in Egypt commonly stated by experts and stakeholders is the lack of communication between TVET provision and employers. As a consequence, there is a large gap between the supply of and demand for skills. Teachers and instructors naturally should play a leading role in linking TVET to the world of employers. However, the policies and actions intended to stimulate contacts between TVET and the companies tend to focus on giving exposure to industry to school students. During their initial teachers' education, learners are rarely involved in work-based training or in communication with industry or employers. After becoming teachers they are rarely involved in developing curricula for initial education of teachers. Even within the dual system where TVET students are learning both at school and in the enterprises, TVET teachers are not permitted to supervise students while at the enterprise. The role of supervision is given to non-teaching employers within specialized units of local investors associations called Regional Units for Dual System (RUDS).

In the framework of some donor-funded projects that provide training for in-service teachers training programmes have been developed according to the needs of specific sectors and employers. A few of those projects provide practical work-based training within industry for teachers. When this is the case it is ad-hoc and unstructured and not open to all teachers.

## 19.4. TVET Teacher Education Student Population

#### 19.4.1. Enrolment in TVET TE programmes and background of students

Due to the lack of official and reliable information regarding students who intend to become teachers and due to the fact that not all technical teachers (especially practical instructors) study in formal teacher education programmes, the official enrolment numbers, when looking at the TVET sector at large, are somewhat misleading. According to the persons interviewed in the framework of this study conducted the 26 specialised education faculties accept around 30,000 students a year (for both general and technical education in all specialisations) and around 1000



students within the 4 industrial education faculties within public universities. These numbers exclude the thousands of students who enrol in a multitude of other faculties that do not specialise in teacher education. These students may or may not enter university with the intention of becoming technical schoolteachers or instructors. Additionally, there are thousands of graduates of secondary technical schools who end up becoming practical instructors within TVET.

The profile of teacher education students varies according to their ultimate role within the TVET system. Core subject and theory teachers within TVET mostly enter teacher education as graduates of general secondary school with relatively high grades. Practical instructors could be graduates of technical secondary schools or general secondary schools. Most teachers within public schools in general come from modest socio-economic backgrounds and this is even more the case within TVET schools. Graduates of fee-applying private universities are hardly working as teachers in public schools. They rather work in the general education private schools.

Most students enter university at the age of 18. The majority of students within the education faculties are women while the majority of students within the four industrial education faculties are men.

#### 19.4.2. Motivation for Enrolling in a TVET TE Programme

According to the interviews conducted for this report, there are several reasons why students enrol in teacher education programmes:

- Around 50% of enrolled students actually want to become teachers because it
  will mean a secure public job (even if the pay is not high), with suitable
  working hours (especially for female teachers) which is socially and culturally
  accepted. When employment as a TVET teacher at the Ministry of Education no
  longer was guaranteed for students of the Helwan University faculty of
  industrial education, student applications declined from 1,200 to 200 per
  year<sup>102</sup>;
- Many of the students, just want a university degree for social status reasons regardless of the career prospects or aspirations. Knowing that education faculties do not require very high grades at secondary exams, they choose to become a teacher;
- The Don Bosco Institute (one of the good practice TVET schools in Egypt) teachers who are graduates from the same school want to become teachers there because they have an opportunity to study and train in Italy when recruited. They also know they will be treated with respect even if the pay is not much better than other public TVET schools.

It is important to mention here that Egypt does not have nationally functioning career guidance and counselling service for young students which could support them in identifying their strong qualities and could provide information on the labour market to aid them to take better education and career decisions.

#### 19.4.3. Drop-out of the TVET TE Programme

Information on student drop-out rates of teachers education programs is not readily available. Persons interviewed in the framework of this study estimate the rate between 5 to 10% throughout the four-year formal programmes. The reasons for drop-out the respondents mentioned include the following:

 Students change their mind and switch to other faculties after one or two years;

UNESCO (2014), Technical and Vocational Teachers and Trainers in the Arab Region: A Review of Policies and Practices on Continuous Professional Development, Paris P.58



- Female students, especially from rural areas, drop-out when they get married for social or family reasons;
- Few students drop-out due to financial obligations; although education is for free, the opportunity costs of being in full-time education and also the associated costs may be high for some families.



## 20. CHALLENGES, SOLUTIONS AND EMERGING THEMES

## 20.1. Key messages of this chapter

- **Key message 1**: Despite some important policies issued recently and more explicit government commitment to TVET as a key driver to economic development and improved competitiveness for Egypt, the system is weak and not performing according to labour market needs. The system has many deeprooted challenges that could be grouped into three main themes; (i) weak governance and financing, (ii) low quality and relevance of the system, and (iii) underdeveloped tools that facilitate the transition to work.
- **Key message 2**: Any meaningful and sustainable reform in TVET will require the drafting and implementation of a TVET vision and strategy that is well communicated and adhered to by all stakeholders. This has to be accomplished through extensive consultation with stakeholders and social partners including employers. The TVET strategy should also be aligned with Egypt's economic and social development plans.
- **Key message 3**: The professionalisation of TVET teachers is a major concern in Egypt. Unlike general education teachers and core-subject teachers within TVET schools, technical teachers and practical instructors are graduates of the technical secondary schools and other mid-level technical colleges, or technicians and engineers from non-teacher education faculties who provide training based on their acquired knowledge and experience but who have received limited formal initial or continuous training (and experience) as certified teachers/trainers.
- **Key message 4**: Extensive development and updating of teacher education curricula is needed. Some have not been updated for decades. The updating process should include teachers and trainers themselves. Also in-service teachers who are graduated and have working experience should be involved in curricula development at the schools or centres they work at. A greater variety of pedagogical approaches is required. The learning practice especially should become less academic, more practical, more student-centred and more work-related. The future economy of Egypt will develop a greater demand for new skills in new sectors, for example in areas such as ICT, languages, entrepreneurship, problem-solving and updated technical skills in sectors like logistics and renewable energy. Both curriculum and pedagogy in TVET must change in order to address these needs. TVET should be able to benefit from new technologies, new environments and new ways of working. However, TVET teacher education institutes have to understand the opportunities coming from these new developments.
- **Key message 5**: Support is needed to the Professional Academy for Teachers (PAT) to develop a coherent and practical system and strategy for teacher education, training, assessment and certification that is specially designed for TVET teachers. It should differ from the current one that focuses more on general education teachers.

# 20.2. Challenges of the TVET system

During the past 15 years the TVET system in Egypt has been extensively assessed and analysed within reports and documents by both national authorities  $^{103}$  and

<sup>103</sup> National documents and reports that assess the TVET system included Ministry of Education strategies in the past, Ministry of Higher Education reports, Ministry of Industry reports and strategies, specialized committees and other agencies.



international organisations<sup>104</sup>. The same period has also seen some important developments in TVET including; (i) increased national awareness about and commitment to the importance of TVET, (ii) successful piloting of alternative methods of TVET delivery like the duel system, and (iii) establishment of new bodies and initiatives to support the system, like the National Skills Standards Project (NSSP), the National Authority for Quality Assurance and Accreditation in Education (NAQAAE), the Professional Academy for Teachers (PAT) and the Enterprise TVET Partnerships (ETPs). However, despite these developments, the general consensus among stakeholders (especially among employers) is that the outcome of the system is still very weak and quite fragmented.

Based on the extensive document review and interviews conducted for this study, the key challenges of the Egyptian TVET system could be summarised and grouped into the following three broad themes:

#### Governance and financing of the system

While the Egyptian government has recently prioritized TVET for the country's economic progress (through the establishment of a dedicated Ministry in March 2015), there is little evidence indicating that TVET has actually been aligned with economic development plans. The roles and responsibilities of key stakeholders in TVET remain fragmented (more than 20 different authorities dispersed over several ministries), with no visible leadership and no unified or agreed vision and strategy. Even if the new TVET Ministry had survived more than six months and played the leadership role it would have taken time for it to structure itself internally, before it is able to develop the other TVET organisations Furthermore, the influence of employers and industry in shaping and implementing TVET priorities is still limited.

In terms of financing the TVET system, considerable investments need to be done to achieve the required objectives, given the size of the sector in Egypt and the fact that it is mostly publicly funded. Without sustained mid-term commitment there will be no option but to put in most of the available budget into recurrent expenditures (wages) with almost nothing left for development of programmes to address quality education and training<sup>105</sup>. The size of the expenditures on wages is very large<sup>106</sup>. The key challenge is related to the few resources available to cover developmental expenses such as teaching and learning materials and other inputs. Another challenge for the TVET system is the use (or miss-use) of resources in a cost-efficient way. The capacity available is far from being fully used due among others to the management and pedagogical organisation and miss-coordination between different public TVET providers. This is especially the case for buying and utilising equipment and the official working hours of school, etc<sup>107</sup>. Furthermore, financial management and results-based funding arrangements are weak. This is evidenced by the fact that there is no consistence between the size of public funding and performance, and by limited investment by the private sector 108. There also seems a problem related to donor coordination in TVET. This might even become more of a problem in the near future as large projects are planned with clear overlap in their objectives.

# Quality and relevance of the TVET system

TVET in Egypt has traditionally made an implicit choice for access rather than quality. TVET, being considered as a second choice option by students and parents (in relation

<sup>104</sup> These international organisations include; the European Training Foundation, EU, World Bank, OECD, ILO, GIZ, UNESCO, UNDP to mention some.

ETF (2011).Identification Report for new EU Intervention in TVET in ARE, unpublished. P. 10

<sup>&</sup>lt;sup>106</sup> The share of wages and salaries in total sector expenditure has steadily increased, from 71% in 2000/01 to 83% in 2006/07. At the same time the share of other recurrent expenditure (mainly student-related and school operation-related expenditure) has declined to 12% in 2006/07.

<sup>&</sup>lt;sup>107</sup> ETF, Torino Process Report, Egypt, 2010

<sup>108</sup> World Bank, Saber Country Report, Egypt on Workforce Development, Cairo, Washington. D.C, 2014 p.1



to general education, which paves the way for university), fell in a vicious circle of low esteem, low quality, low results which has yet to be overcome. In addition to working on its image and status, Egypt (despite existing institutions and mandates) needs to develop a coherent, well-structured, transparent, well communicated and consistently implemented national quality assurance system.

Reform is needed to improve quality in aspects related to curricula and teaching methods, practical learning, rationalisation of number and type of specialities, investment in upgrading the capacity of teachers, trainers and managers as well as their career conditions and the need to upgrade infrastructure and equipment of outdated schools and centres.

In terms of relevance to market needs, policymakers are well aware of the existing mismatch between the supply of and demand for skills in the labour market. Such a understanding is yet to be translated into a clear vision and a strategic focus towards youth employability and lifelong learning 109. Furthermore, employers provide only occasional input into training curricula, and there are no motivational policies to sustain their influence on the operations of state training institutions.

#### TVET's role in the transition to the labour market

Transition from both school and unemployment to work is a serious challenge in Egypt, and the TVET system, in coordination with other partners and bodies, has a role in developing tools and processes that facilitate this transition. The lack of an operating career guidance system does not allow young children and their parents to make sound career choices based on their abilities, aptitudes and market needs. This process usually starts too late: after students have entered the TVET path and selected specialisations that may not be needed in the labour market. Related to this is the lack of reliable, consistent and regular labour market information that informs TVET provision to develop curricula and programmes according to market needs. For job seekers, active labour market programmes are not common and when they exist, there are no mechanisms in place to ensure their planning was sound and no monitoring and evaluation mechanisms to measure impact.

# 20.3. Challenges TVET teachers are facing

The current challenges that teachers face are mostly related to the quality of their performance as well as the conditions within the system. These conditions have persisted for some time and it looks like they will still be present in the near future unless radical commitment to change is undertaken.

Generally, there is a shortage of trained TVET trainers/teachers (especially relative to administrative and support staff) due to the low pay and what is regarded by many as a socially unattractive position. The main motivator to become a TVET teacher is that it is a secure public job<sup>110</sup>. In many schools and centres including PVTD and TOMOHAR, technical and practical trainers are graduates of the TSS and other midlevel technical collages, or technicians and engineers who provide training based on their acquired knowledge and experience but who have received limited formal initial or continuous training and development as certified trainers. Few of the teachers and instructors have been reasonably trained: in the end of the last century only 35% had any pedagogical training and only 50% had attended any advanced practical training<sup>111</sup>. Although these figures are more than 15 years old, these percentages have probably not improved greatly due to the relatively low increase in non-wage investments in the education budget over the same period. Most initiatives that

World Bank, Saber Country Report, Egypt on Workforce Development, Cairo, Washington. D.C, 2014 p.1
 For example at Helwan Industrial education Collage, applications for earning teaching qualifications fell sharply when the guarantee of employment as a teacher was abolished.

<sup>111</sup> World Bank, Report of the Education, Training & Employment Sub-Committee, 2000



include a component on training trainers and teachers are still very much pilots or relatively limited in scope.

Substantial change in the pedagogical approach is still to be achieved. Among the various factors determining the successful implementation of a competency-based reform is the empowerment of teachers and the support they receive at school level. Hence, even if adequate teacher training is provided, other institutional and organizational constraints have key implications for effective teaching learning processes and for putting the learner at the centre of the learning process. For example, competency-based and learner-centred approaches adopted at national levels require resources and teachers capacities, at operational levels, that do not seem immediately available in most cases<sup>112</sup>. Moreover, the capacity of teachers, (teachers and practical instructors), to play a role as a team in the development process is weak and not openly encouraged.

The following list summarises the main challenges facing TVET teachers and instructors in Egypt from both their own perspective and the perspective of some of the main stakeholders:

# Challenges from the perspective of TVET teachers themselves

- Low wages.
- Low status and image of TVET and the TVET teaching profession
- Inadequate environment and resources at schools and centres in terms of infrastructure, buildings, equipment and raw material. This hinders the teachers from performing well.
- Inadequate continuous development offered and when it is offered it is ad hoc. There are no transparent criteria enforced for assessment and section of trainees, which leads to the abuse of the system.
- Limited early career support offered to teachers especially technical teachers
  and practical instructors. Although there is a system for new recruits to start
  their career as assistant teachers, this does not often happen for technical
  teachers and practical instructors due to the shortage of teaching staff (which
  on its turn is due to the freeze on public sector recruitment over the past
  decade. Also there is a phenomena of leave without pay (to work abroad for
  better pay) for long periods; teachers are guaranteed their position when they
  return and schools cannot replace them except with less experienced parttimers who are also not offered training opportunities;
- Many teachers complain about the extent of inter-school violence between students and teachers, which has increased after the revolution. Teachers feel unsafe and not respected by students and parents.

## Challenges from the perspective of stakeholders

- Most TVET teachers, especially technical teachers and practical instructors are not adequately trained for their jobs. Their initial education does not provide enough practical experience. There are no clear minimum requirements and only core-subject teachers are exposed to pre-service pedagogic training, while most technical teachers and practical instructors rely only on the technical knowledge they gain from non-teacher education institutions and universities.
- Despite developments in the past few years in terms of new policies and institutions, there is no clear vision regarding teacher development and professionalization. The process of qualifying and certifying teachers is still not consistently implemented and quite vague. Furthermore, the government has prioritised general education over TVET due to limited resources to cover both at the same time with the same attention.

<sup>112</sup> ETF, Review of The National Reform of Secondary Education in Egypt, Cairo, 2010, p.28



- The teachers' cadre for both general and technical teachers is mainly inputbased and lacks key feature of outcome-based and dynamic systems. Clear evidence is the recent testing system used to position teachers within the cadre. For instance, the exclusive use of written tests to assess teachers can be expected to hinder rather than encourage genuine assessment of knowledge, skills and competencies especially in highly technical subjects. In the present cadre, there are elements of rigidity regarding the career paths and career progress which does not take into account the capacities, and necessity, for teachers and instructors to develop and evolve individually and collectively through involvement in innovative and project-based initiatives. For example, involvement in the accreditation process and in experimental and pilot projects will help teachers acquiring new knowledge, skills and competencies that should be recognised by the system113.
- Due to the low salaries TVET teachers and instructors like most other public school teachers are not motivated to go the extra mile in terms of more research, better preparation for teaching sessions, investment in self-development or providing support for students beyond what is required. Therefore instead of spending time and effort in these issues, most of them are holding other jobs to make ends meet.
- The centralised education system, especially in terms of content and policy, has not encouraged the empowerment of TVET teachers to be involved in curricula development or school-based reform which may have provided some of the needed motivation.
- Most TVET teachers, especially technical and practical instructors, have limited practical work experience in industry and the private sector and also limited contact with these beneficiaries, making it quite difficult for these teachers to transfer real life examples and experience to students. Even within the dual education system, teachers most often not supervise students during workplace training, a role often given to advisors within business associations;
- Older teachers (the majority due to the government recruitment freeze) are not innovative enough and have problems in using technology to support their teaching methods.

# 20.4. Challenges the TVET teacher education system is facing

This section of the report looks at the challenges facing the teacher education system. Although we look at the present status quo, these challenges will remain relevant for the near future. Despite the existence of several bodies like PAT and NAQAAE which have the mandate to regulate the quality assurance in teacher education and training including teacher education institutions, the biggest challenge facing the teacher education system is the lack of unified and standardised qualifications and assessments for teachers within the different pathways available to become a teacher.

The following list summarises the key challenges that face teacher education institutions both at the system and institute level:

## Challenges at the system level

- There seems to be a bias towards teacher education for teachers in general education at all levels over those in TVET. This also reflects in the status and budgets allocated to teacher education institutes.
- There also seems to be a bias towards initial education and in-service training for core-subject teachers 114 over technical teachers and practical instructors in terms of both number of institutions (26 faculties of education versus only 4

<sup>113</sup> ETF, Review of The National Reform of Secondary Education in Egypt, Cairo, 2010, p.29

<sup>114</sup> Core-subject teachers teach subjects like mathematics, languages, history, religious studies and social sciences.



industrial education faculties and no education faculties specialising in agriculture, commerce or tourism) and how these institutions are quality assured.

- The coordination between PAT (which has the mandate to regulate teacher education and training) and TVET teachers education institutions is limited and not adequately activated.
- With the exception of PVTD's Staff Training Institute (STI), there are few institutes that provide continuous in-service development services to the system.
- Teacher education institutes get limited budgets from the government and these budgets are not linked to performance; at the same time financial autonomy of these institutions is limited and also related legislation for income generation is limited.

## Challenges at the institute level

- Despite the existence of the process and the procedures, none of the faculties
  of education and industrial education are accredited by NAQAAE, which is a
  reflection of the quality of their operations.
- A lot of the curricula have not been updated or developed for a long time.
- The industrial education faculties have administrative and legislative problems regarding the recognition of their students and due to the fact that the MoE prefers to recruit from the faculties of engineering over the faculty of industrial education.
- All the universities that provide education for teachers in different disciplines like engineering, agriculture, commerce, and tourism do not provide specific teacher or pedagogical training.

## 20.5. Potential improvements to overcome challenges in TVET

The first half of 2015 saw a number of important decisions, policies and initiatives that demonstrate the government and international donor community's commitment to TVET reform aiming at addressing some of the long-standing challenges within the system. Some of these developments are; (i) upgrading TVET to the level of the new Constitution and the drafting of a TVET law which is currently being reviewed by legislators, (ii) the initiation of a new civil service law, the main feature of which is a performance-based system for civil servants (including TVET providers) allowing the dismissal of non-performing civil servants<sup>115</sup>, and (iii) the launch of a number of donor-funded TVET and workforce development projects, including phase two of the EU TVET reform programme<sup>116</sup>; USAID workforce development project<sup>117</sup>; and a number of GIZ projects including phase two of the Employment Promotion Project (EEP)<sup>118</sup>..

In order for the above-mentioned policies and initiatives to create a positive impact on the TVET system, the following list has been often stated by stakeholders and experts as potential improvements necessary for addressing the current challenges:

#### Under governance and financing of the system

 The drafting and implementation of a TVET vision and strategy that is well communicated and adhered to by all stakeholders. Several drafts already exist, however, agreement needs to be reached to adopt one strategy that should include extensive consultation with stakeholders and social partners including

<sup>&</sup>lt;sup>115</sup> This was not possible in the old law making it very difficult and bureaucratic to dismiss non-performers. The new law will also give more responsibility at the institute level for assessing performance.

<sup>116</sup> Co-funding between the EU and the GoE with a budget of 117 million Euros (50 million grant form the

<sup>117</sup> Through a grant worth 25 million dollars.

<sup>118</sup> Grant of four million Euros



employers. The TVET strategy should also be aligned with Egypt's economic and social development plans;

- Based on the adopted TVET vision and strategy, the TVET landscape should be restructured to ensure that the components of the strategy are effectively coordinated and implemented under the leadership of a recognised TVET body, which itself should be structured with adequate financial and human resources. Among the important initiatives that this body should establish is a systemwide monitoring and evaluation mechanism aiming at assessing past, current and future reform pilots to mainstream them to create a critical mass for change. The new TVET body will also need to better coordinate donor-funded projects to make sure they all serve the common objective of TVET reform as articulated in the adopted strategy;
- An adequate financing mechanism should be designed and implemented making sure that resources are available for the reform intended. The financing mechanism should also include provision for cost-sharing by employers in order to ensure sustainability. This will require also the better use of existing resources in a cost effective manner. Financial reform should also include the restructuring and reactivation of the National Training Fund which has been non-operational for some time due to legal disputes;
- Institutionalisation of employer engagement in TVET reform at all levels including governance with a special focus on priority sectors important for Egypt's economic development. This may include the further development of Enterprise TVET Partnerships (ETPs)119 by providing them with capacity building and performance-based public funding as well as expanding ETPs in priority sectors which do not exist at present.
- Encouragement of private sector investment in TVET, both through the expansion of private schools and centres and through Public Private Partnerships.
- A well-designed and communicated national strategy for improving the negative perceptions associated with the image and status of TVET is required. This will require practical and urgent tools like national campaigns using different communication methods like social media, reality shows and drama. It will also require structural changes like creating technical pathways for students, recognition of prior learning and show casing society role models. This will also include the engagement of employers who have a role in improving the working conditions or blue-collar workers. Key to the changing perceptions of TVET from a second choice option for students and parents is the real improvement in the system's quality of provision.

## Under the quality and relevance of TVET

A clear and transparent national quality assurance system is urgently required which should include the development of a National Qualifications Framework (NOF), skills standards, accreditation and certification.

A national system for labour market driven curricula development is required and mechanisms in place to follow it including monitoring and evaluation.

A practical mechanism for teacher training is needed providing equality for all types of teachers and improving their status. This will include initial education, early career support and continuous development according to international TVET standards;

119 The ETPs are independent organizations established with support from the EU-funded TVET Reform Programme (TVET 1) that started in 2005. Modeled after the British Sector Skills Councils, they are 12

employer-led organisations that establish formal links between employers and TVET providers at the sectoral level. Some of their key mandates include providing labour market information at the sectoral level, support the development of sectoral occupational standards and provide capacity development including teacher training for TVET providers.



- A plan for improving school and centre infrastructure and equipment that has to be aligned to industry needs;
- The expansion of work-based learning and other forms of cooperative training and apprenticeships, which has been proven in many countries as an effective method for facilitating the transition from school to work. Furthermore, there is the perception that career opportunities for work-based (or training centrebased) trainers are, in general, inferior to those for school-based technical teachers, and that this unfairness should be addressed 120.

#### Under the transition to the labour market

- Create a functional national labour market information system that collects relevant data, provides analysis for current and future trends in labour market needs and that ensures that this information is communicated to relevant decision makers and TVET providers. Although certain bodies and agencies exist and have the mandate, the process is not consistent and needs coordination; a possible recommendation would be the further investment in and development of the Education, Training and Employment Observatory.
- The development of a national career guidance and counselling system that starts as early as possible in a child's life but also continues at every stage of careers.
- The development of effective job matching tools, including TVET-specific recruitment websites, school and VTC-based employment service units and the expansion of a national system for employment fairs;
- The development of active labour market programmes that are well monitored and evaluated on impact to ensure that job seekers get the required services.

# 20.6. Potential improvements to overcome challenges for the TVET teacher education

Although teacher education and training is incorporated in most policy documents and components of TVET reform projects, it is, however, not specifically prioritised despite its importance in the education process and tends to get lost amidst the many challenges facing the system. The following is a list of recommendations for potential and urgent improvements needed to overcome challenges within teacher education both at the system and institution level:

#### Potential improvements at the system level

- Support to the Professional Academy for Teachers (PAT) to develop a coherent and practical system and strategy for teacher education, training, assessment and certification that is not, like the current one, focused on general education teachers but specially designed for TVET teachers. This should also include teachers within technical colleges which are now not under the mandate of PAT:
- Based on the developed strategy for teacher education, the MoE should attempt to direct donor funding for a specific programme or project in TVET teacher training rather than it being a small part of existing projects. This could include a structured programme for creating a cadre of Master Trainers professionally trained in all important subjects to act as catalysts to cascade the training of most teachers in the system;
- More teacher initial education institutes focusing on technical teachers and practical instructors. There should be a balance between pedagogy and technical training. Initial training should also include practical work experience in industry for technical teachers and practical instructors;

<sup>&</sup>lt;sup>120</sup> UNESCO, Technical and Vocational Teachers and Trainers in the Arab Region: A Review of Policies and Practices on Continuous Professional Development, Paris, 2014 p. 95



- Establish specific initial teacher education programmes in disciplines that are currently under served like agriculture, commerce and tourism;
- Improve the recruitment, selection and assessment process for potential teachers to be in line with international standards;
- Provide structured, regular and consistent early career support and in-service continuous development programmes based on real needs of teachers and students;
- Improve the status, wages and working conditions of TVET teachers, basing
  promotions among other things on performance, self-development and
  practical assessments. To overcome some of the rigidity of governmental
  institutions when it comes to increasing salaries to motivate trainers, TVET
  providers could be granted more administrative and financial autonomy
  through an effective decentralised process to apply special programmes where
  instructors and management receive additional incentives to organize training
  according to the needs of industry;
- Information about TVET teachers and trainers are limited, therefore a knowledge base of TVET teachers is needed across all different providers and teacher training institutes in order to perform sound analyses and provide better solutions.

# Potential improvements at the institute level

- Provide capacity development for the existing four industrial education faculties and address their current technical, administrative and legislative challenges.
- Extensive development and updating of teacher education curricula is needed.
   Some have not been updated for decades, and this process should include teachers and trainers themselves. Also in-service teachers how have already graduated and working should be involved in curricula development at the schools or centres they work at;
- More involvement and decision-making power should be given to teacher training institutes to recruit and select their teaching staff;
- More teacher education institutes should apply for NAQAAE accreditation and should receive the required support to undertake the process;
- More cooperation and linkages with employers is needed in order to expose potential teachers to the labour market, this could be one of the performance indicators for assessing teacher education institutes;
- More cooperation and linkages are needed between teacher education institutes and TVET providers themselves that benefit from their outputs, this means better coordination when both develop their curricula for example especially as at the moment and due to centralisation, it is difficult for TVET providers to signal their needs to teacher education institutes if teacher recruitment is centrally controlled.



# **ANNEX 1: LIST OF ACRONYMS**

Acronyms and abbreviations	Meaning
CAPMAS	Central Agency for Public Mobilization And Statistics
CCIMD	Centre for Curriculum Development and Instructional Materials
D 4 CCU 144	Development
DACCUM	Developing a Curriculum
EDF	Education Development Fund
EGAC	Egyptian Accreditation Council
ENCC	Egyptian National Competitiveness Council
EOETE	Egyptian Observatory for Education, Training and Employment
EOS	Egyptian Organisation for Standardization
ETF	European Training Foundation
ETP	Enterprise TVET Partnership
EU	European Union
EVQs	Egyptian Vocational Qualifications
FEI	Federation of Egyptian Industries
GCI	Global Competitiveness Index
GDP	Gross domestic product
GIZ	Gesellshaft für Internationale Zusammenarbeit
GoE	Government of Egypt
IDSC	Information and Decision Support Centre
IEC	Industrial Education College
ILO	International Labour Organization
ITC	Industrial Training Council
ITEC	Integrated Technical Education Cluster
JICA	Japanese International Cooperation Agency
MKI	Mubarak-Kohl Initiative
MoE	Ministry of Education
MoETE	Ministry of Education and Technical Education
MoHE	Ministry of Higher Education
MoMM	Ministry of Manpower and Migration
MoTET	Ministry of Technical Education & Training
MTI	Middle Technical Institute
NAP	National Action Plan
NAQAAE	National Authority for Quality Assurance and Accreditation in Education
NCVA	National Council for Vocational Accreditation
NGO	Non Governmental Organizations
NQF	National Qualifications Framework
NQI	National Quality Institute
NSP	National Strategic Plan
NSSP	National Skills Standards Project
OECD	Organization for Economic Co-operation and Development
PAT	Professional Academy for Teachers



Acronyms and abbreviations	Meaning
PFS	Productive Families Scheme
PPP	Public-private partnership
PVE	Postsecondary Vocational Education
PVET	Postsecondary Vocational Education and Training
PVTD	Productivity and Vocation al Training Department
RUHDs	Regional Units for Human Development
SCHRD	Supreme Council for Human Resources Development
SDP	Skills Development Project
SFD	Social Fund for Development
SME	Small and Medium Enterprises
SPU	Strategic Planning Unit
SQA	Scottish Qualifications Authority
SVE	Secondary Vocational Education
TC	Technology Collage
TCC	Technology Competency Center
TFP	Total Factor Productivity
TOMOHAR	Training Organization of the Ministry of Housing and Reclamation
TOT	Training of Trainers
TSS	Technical Secondary school
TVET	Technical Vocational Education and Training
USAID	United States Agency for International Development
VET	Vocational Education and Training
VTC	Vocational training centres



## **ANNEX 2: LIST OF INTERVIEWEES**

- Two meetings with Dr, Mohamed Abdel Masoud, the Head of the Technical Education Information Centre, Ministry of Technical Education and Training. Went through the questionnaires in details and he is compiling all required information and some documents but waiting for the Minister's approval to share the information.
- Interview with Dr. Ahmed El Assal, the Head of the Egyptian Technical Collages Project (ETCP), Ministry of Higher Education responsible for the development of Middle Technical Institutes of the Technical collages.
- Interview with Dr. Ahmed El Geyoushy, the Dean of the Faculty of Industrial Education, Helwan University, the first teacher education institute for teachers in industrial technical schools.
- Interview with Eng. Nahed Badr, the Director of the Staff Training Institute (STI), Productivity and Vocational Training Department (PVTD), Ministry of Industry, Trade and SMEs. STI is responsible for teacher training at the PVTD.
- Interview with Dr. Kamel Wahba, the Director of Sahafeen Technical Collage, Cairo.
- Meeting with Ms. Carole Becquet from the management of Don Bosco Institute, Cairo.



#### ANNEX 3: BACKGROUND READING

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