Chapter 7 Technical and Vocational Education and Training in the Philippines: Development and Status Quo



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The Philippines located in Southeast Asia, full name the Republic of the Philippines, is a member of the Association of Southeast Asian Nations (ASEAN), covering an area of 299.7 thousand km² and having a population of 104.9 million (2017).¹ Malays as the main ethnic group in the country account for above 85% of the total population, and 85% of the Malays are Catholic. The Philippines is a presidential republic with a GDP of USD 389 billion and per capita GDP of USD 3593 (2017).² According to the statistics in 2018, in the labor market of the Philippines, the service industry accounts for 57.5%, agriculture 23.1%, and industry 19.4%.³ The national language of the Philippines is Filipino based on Tagalog, and English is the official language.⁴

7.1 The National Education System in the Philippines

The modern education system in the Philippines originating from the period of Spanish colonial rule has been significantly influenced by colonial rule, with the deepest influence coming from the period of American rule. The teaching language of Philippine schools is mainly English. Primary and secondary education is under the charge of the Department of Education, higher education under the charge of the Commission on Higher Education, and TVET under the charge of the Technical Education and Skills Development Authority. After the educational reform in 2013, the Philippine government announced to practice 13-year compulsory education, including

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¹WB (2018).

²Chinese Ministry of Foreign Affairs: A Survey of the Philippines [EB/OL]. (2018). ³PSA (2018).

⁴See Footnote 2.

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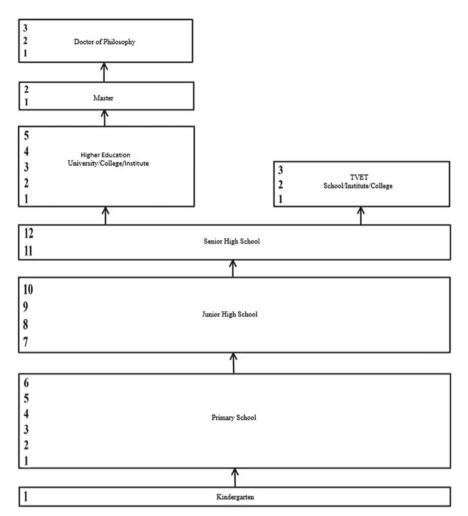


Fig. 7.1 Philippines's education system (WENR: Education in the Philippines [EB/OL] 2018)

1 year of preschool education, 6 years of primary school education, 4 years of junior high school education, and 2 years of senior high school education (Fig. 7.1).

7.1.1 Primary Education

By 2018, the Philippine Department of Education administers a total of 49,209 schools, including 38,648 schools, accounting for 78.54%, and 10,561 private schools, accounting for 21.46%.⁵ The main courses offered at primary schools includ-

⁵DepEd (2018).

ing Filipino, English, mathematics, natural sciences, social sciences, sports, arts, etc. The teaching languages at schools are English and Filipino.⁶

7.1.2 Secondary Education

The Philippine Department of Education manages a total of 13,396 regular secondary schools, including 7976 public schools, accounting for 59.54%, and 5420 private schools, accounting for 40.46%.⁷ Secondary education consists of two stages, junior high school education, and senior high school education. Since the Philippine K-12 reform in 2013, the education of both junior and senior high schools has been included in the scope of free compulsory education.

Junior high covers four years from grades 7 to 10 for students aged 12–16. Courses in junior high mainly include Filipino, English, mathematics, natural sciences, social sciences, sports, and arts, with English being the main teaching language. Students interested in TVET may start to explore the technical and livelihood education (TLE) courses from grades 7 or 8 and may select this direction at their senior high.

By 2017, the Philippines had 5965 public schools affiliated to the Ministry of Education providing senior high school education. Besides, 4830 other schools including private high schools, universities, vocational schools, and overseas schools provide education at the senior high level.⁸ Senior high covers two years from grades 11 to 12 for students aged 16-18. Before enrolling, students choose a specialization track (http://www.officialgazette.gov.ph/k-12). The four tracks are academic track, Technical-Vocational-Livelihood (TVL) track, sports track, arts, and design track.⁹ There is a certain correlation between Technical-Vocational-Livelihood (TVL) track and vocational education. At the high school level, students who have completed TLE courses and passed a vocational certificate test of the Technical Education and Skills Development Authority (TESDA) can also acquire a national vocational qualification certificate.

7.2 Higher Education

Higher education of the Philippines is regulated by the Commission on Higher Education (CHED). Universities provide students with academic education from the undergraduate level to the graduate level, conferring bachelor, master, and doctoral degrees. According to the statistical data of 2017–2018, the country has 2353 universities. Specifically, there are 680 public institutions, accounting for 28.90%, which

⁶WENR (2018).

⁷See Footnote 5.

⁸DepEd (2018).

⁹WENR (2018).

include 111 state universities and colleges (SUCs), 447 branch campuses of SUCs, 108 local universities, and 14 other universities. There are 1673 private institutions, accounting for 71.10%, including 350 schools founded by religious organizations and 1323 non-religious institutions. In 2017–2018, 2981,803 students were recruited for higher education, including 1,385,458 students in public institutions, and 1,596,345 students in private ones; 708,445 students graduated, including 358,486 students in public institutions, and 349,959 students in private ones.¹⁰

7.3 **TVET** in the Philippines

Recent years has seen rapid development of TVET in the Philippines. From 2000 to 2016, the number of students in TVET increased by 395%, from 574,017 to 2,270,000. Meanwhile, students' graduation rate from TVET also increased substantially from 83% in 2010 to 95% in 2016.¹¹ In 2016, totally 2,269,665 students were registered for TVET in the Philippines, and 2,151,236 students graduated.¹²

There are four types of TVET in the Philippines, respectively, school-based TVET, center-based TVET, community-based TVET, and enterprise-based TVET (Table 7.1). By sources of funding, TVET institutions can be classified into public TVET institutions and private TVET institutions. According to the length of education, TVET programs can be classified into short-term programs (within 3 months), mid-term programs (3–9 months), and long-term programs (1–3 years). By July 2015, a total of 4609 TVET institutions (including school-based and center-based

School-based TVET	TESDA Schools Private Technical/Vocational Schools Institutions of Higher Education
Center-based TVET	TESDA Regional Training Centers TESDA Provincial Training Centers Other Government Agencies
Community-based TVET	Community Training and Employment Centers Non-Government Organizations Local Government Units Government Agency Projects
Enterprise-based TVET	Apprenticeship Workplace-based Training Programs Dual Training Programs

 Table 7.1 Types of TVET institutions in Philippines

TESDA: TVET Program [EB/OL] (2018)

¹⁰CHED: Higher Education Indicators 2018.

¹¹WENR (2018).

¹²TESDA: Philippine TVET Statistics [EB/OL] (2018).

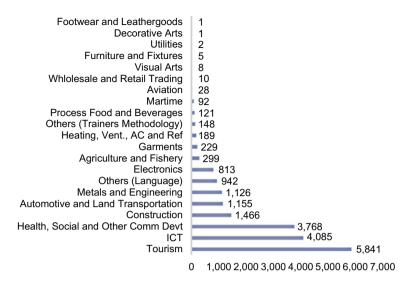


Fig. 7.2 Distribution of program offering of school-based and center-based TVET institutions by sector (Orbeta and Esguerra 2016)

TVET institutions) were certified by the Technical Education and Skills Development Authority (TESDA), offering 20,329 TVET programs (Fig 7.2).

7.4 School-based TVET

School-based TVET in the Philippines includes short-term, mid-term, and long-term programs, of which most programs are long-term programs, while short-term and mid-term programs account for a small part. Long-term TVET programs provided by TVET schools may be classified into one-year, two-year, and three-year programs. Of the long-term school-based TVET, different schools offer certificate programs and diploma programs based on their respective orientations.

(1) TVET schools

Based on sources of funding, TVET schools in the Philippines have two types, namely public schools and private schools. Except for schools directly affiliated to the Technical Education and Skills Development Authority, which are public schools, over 90% of the TVET schools are private ones. By 2018, there are 57 TVET schools affiliated to the TESDA, including 19 in agriculture, 7 in fishery, and 31 in trade.¹³

The Baguio City School of Arts and Trades is an example. This school established in 1994 is affiliated to the TESDA. The school's idea is to provide ability-based

¹³TESDA: School Based Program [EB/OL]. (2018).

Diploma programs	Two-year Diploma in Culinary Two-year Diploma in Restaurant Services
Certificate programs	Bread and Pastry NC II (20 days) Bartending NC II (36 days) Food and Beverage Services NC II (42 days) Housekeeping NC II (55 days) Cookery NC II (40 days) Front Office Services NC II (55 days) Barista NC II (22 days)
Trainers Development Course and Skills Upgrading	Trainers Methodology Course Level 1(20 days) Commercial Cooking NC III (30 days) Food and Beverage Services NC III(30 days)

Table 7.2 Baguio City School of Arts and Trades TVET programs

BCSAT: Program [EB/OL] (2018)

 Table 7.3
 Kabasalan Institute of Technology long-term TVET programs

Programs	Qualifications
Two-year certificate in automotive technology	Automotive Servicing NC I Automotive Servicing NC II Automotive Servicing NC III Driving NC II Motorcycle/Small Engine Servicing NC II
Two-year certificate in civil construction technology	Carpentry NC II Electrical Installation and Maintenance NC II Masonry NC II Plumbing NC II
One-year certificate in electronics technology	Computer System Servicing NC II Electronics Products Assembly and Servicing NC II
One-year certificate in garments technology	Dressmaking NC II Tailoring NC II

KITTESDA: TESDA Program [EB/OL] (2018)

TVET, featuring a dual system for the training of talents. This school mainly offers long-term programs, besides a small amount of short-term programs (Table 7.2).

Besides, the Kabasalan Institute of Technology is also a TVET school affiliated to the TESDA. Its predecessor was the Kabasalan Junior High School established in 1947, which was changed to the Kabasalan National Vocational School in 1963, and then renamed the Kabasalan Institute of Technology. The main objectives of the school are to provide students with knowledge and skills to be highly competent for employment; to inculcate desirable attitudes, values, and work ethics which are essential to national development; to equip students with increased capabilities for entrepreneurial endeavors for self-employment; and to provide education and training for individuals development and leadership to meet the emerging needs of the industrial society; and to instill in the students the love for TVET. The characteristic specialties of the school are automobile technology, civil engineering, and clothing technology (Table 7.3).

(2) TVET programs in universities

Many universities in the Philippines, besides providing higher education, also offer TVET programs as well as vocational course training certified by the TESDA. Some bachelor programs and diploma programs of universities are exploring the mode of Ladderized training to offer TVET and academic education to students at different stages of their study. In a four-year bachelor program of the mode of Ladderized training, the first year is mainly dedicated to vocational training, and at the end of the year students may attend a TESDA certificate test to acquire a national certificate; the education in the following three years integrate academic education and TVET; upon graduation students can acquire a bachelor's diploma and degree.

Ilocos Sur Polytechnic State College (http://www.ispsc.edu.ph/) is a comprehensive six-campus institution of higher learning mandated to give professional and technical training both in the undergraduate and graduate levels in the fields of economics, agriculture, fishery, trade, home industry, engineering, education, forest research and conservation, management, finance, accounting and business administration, public administration and other fields as may be relevant, besides providing for the promotion of scientific and technological researches which the college deems necessary in carrying out its objectives. Bachelor's programs in the Ladderized training mode are available in agricultural engineering, information technology, industrial technology, and hotel management. While participating in occupational training, students also study academic courses at the undergraduate level and acquire a bachelor's degree upon graduation (Table 7.4).

1.0	
Bachelor of Science in Agricultural engineering	1-Yr Certificate in Agricultural Building Construction technology
Bachelor of science in agriculture	2-Yr Certificate of Agricultural Science
Bachelor of science in information technology	1-Yr Certificate in PC Operation
Bachelor of science in hospitality management	Cert.in Housekeeping Cert.in Tour Guiding Cert.in Commercial Cooking Cert.in Front Office Management Cert.in Food & Beverage Service Cert.in Bartending Cert.in Pastry Production

 Table 7.4
 Ilocos Sur Polytechnic State College (http://www.ispsc.edu.ph/) (Santa Maria Campus)

 TVET programs

ISPSC: Program Offerings [EB/OL] (2018)

7.5 Center-based TVET

Center-based TVET in the Philippines mainly offer short-term and mid-term courses, ranging from 3 to 6 months, generally not exceeding one year. There are 60 training centers affiliated to the TESDA, including 15 regional training centers and 45 provincial training centers.¹⁴ Regional Training Center-Talisay provide 6 national certificate I programme and 36 national certificate II programme, including Automotive Servicing, Welding, Machining, Commercial Cooking, Massage Therapy, and Heavy Equipment Operation. The training duration ranges from 40 hours to 636 hours (Table 7.5).

Compared with regional training centers, provincial training centers are smaller and provide fewer training programs and contents. In the Bulacan Malolos campus, for example, this training center only provides four training programs for national secondary qualification certificates. According to the requirements of the TESDA, standards and quality requirements for training programs in different regions are completely the same (Table 7.6).

Besides training centers in the charge of the TESDA, some training centers affiliated to state ministries and commissions also provide TVET. The Philippine Ministry of Agriculture has 34 training centers providing training services to farmers and fishermen, aiming to train people working in agriculture and fishery, promote and accelerate the development of agriculture and remote areas through training, and ensure the promotion of research results among agriculture, fishery, and related

Training programme	Qualification	Training time
Flux Cored Arc Welding (FCAW)	NC I	156 h
Gas Metal Arc Welding (GMAW)	NC I	268 h
Automotive servicing	NC I	288 h
Machining	NC I	374 h
Heavy equipment operation (Backhoe Loader)	NC II	216 h
Flux Cored Arc Welding (FCAW)	NC II	268 h
Gas Metal Arc Welding (GMAW)	NC II	268 h
Shielded Metal Arc Welding (SMAW)	NC II	304 h
Machining	NC II	337 h
Commercial Cooking	NC II	436 h
Massage Therapy	NC II	560 h
Automotive Servicing	NC II	636 h

 Table 7.5
 Talisay Training Center Training Programme

Regional Training center Talisay [EB/OL](2018)

¹⁴TESDA: Center Based Programs [EB/OL]. (2018).

Table 7.6ProvincialTraining Center TrainingProgramme- Bulacan(Malolos)	Training Programme	Qualification	Training duration
	Flux Cored Arc Welding (FCAW)	NC I	156 h
	Trainers methodology level	NC I	264 h
	Shielded Metal Arc Welding (SMAW)	NC I	268 h
	Automotive servicing	NC I	288 h
	Machining	NC I	374 h

Provincial Training Center-Bulacan (Malolos) [EB/OL] (2018)

fields. Some training centers have a close partnership with the TESDA.¹⁵

Other government institutions also provide similar TVET services, but these institutions have little cooperation with the TESDA and its training programs. Therefore, training programs are not subject to the TESDA's supervision or management. These training centers include¹⁶:

- National Maritime Polytechnic (NMP)
- Metal Industries Research and Development Center (MIRDC)
- Philippine Textile Research Institute (PTRI)
- Technology Application and Promotion Institute (TAPI)
- Construction Manpower Development Foundation (CMDF)
- Philippine Trade Training Center (PTTC)
- Cottage Industry Technology Center (CITC)
- Department of Social Welfare and Development.

7.5.1 Community-based TVET

Community-based TVET is an informal form of education in the Philippines, mainly dedicated to the training of vocational skills, and the targets of training are mainly poor people and marginal groups, such as young school leavers and unemployed adults; most community-based training programs are mainly based on local demands and resources, providing trainees with some basic vocational skills. These public programs aim to help marginal groups increase their employment opportunities and also support local government's assistance of poor people to engage in productive work, thus promoting community development.¹⁷ Community-based TVET mainly

¹⁵Péano, et al. (2008, p. 41)

¹⁶Péano, et al. (2008, p. 42)

¹⁷TESDA: Competency Standards Development [EB/OL]. (2018).

has four different types of education providers and types, namely community training and employment centers, NGOs, local governments, and government organs.

7.5.2 Enterprise-based TVET

There are three training modalities being implemented in partnership with companies/establishments. These are Apprenticeship Program, Learnership Program, and Dual Training System (DTS). Enterprise-based TVET aims to combine the training at workplaces and theoretical teaching at schools. Course systems are established according to enterprises' talent demands to train qualified talents meeting enterprise demands.

Apprenticeship Program is a mode of TVET implemented through enterprises providing apprenticeship positions. The length of study for apprenticeship training in the Philippines is four months at the shortest and six months at the longest. Only enterprises whose apprenticeship programs are approved by and registered with the TESDA can employ apprentices. This kind of training aims to provide a mechanism to ensure the training of qualified technical workers meeting the needs of industries and enterprises. Its aim is to provide well-trained skilled talents by the participation of employers, workers, the government, and NGOs to establish a state apprenticeship programs and develop standards for apprentice training.

Learnership Program is an in-service training program. The length of the study generally does not exceed six months, and trainees may be employed by the enterprise after passing periodical assessment and acquiring a qualification certificate. Only enterprises approved by and registered with the TESDA can recruit trainees.

Dual Training System is another form of enterprise-based TVET in the Philippines. Trainees study alternatively between a training center (school) and an enterprise for a period from one and a half years to two years. By close cooperation between enterprises and vocational schools, appropriate employees are provided to enterprises. The advantage of dual system training is that apprentices may shift between enterprise practices and school study, which promote each other.

Dual Training System mainly helps apprentices improve their work style, increase their professional knowledge, and improve their work competency by providing highquality training and necessary skill training, to offer better opportunities for postmobilization. Meanwhile, such training helps enterprises to improve workers' skills, work efficiency and quality, and save production cost. The dual system training can help students to be familiar with reducing the sense of unfamiliarity with complex equipment and facilities, maximize the use of equipment and facilities, and provide good employment opportunities for graduates.

7.6 Governance of TVET in the Philippines

7.6.1 TVET Governance Authorities

According to the Law on Technical Education and Skills Development, the Philippine government established the Technical Education and Skills Development Authority (TESDA) in 1994, as a special government agency for supervising and managing TVET in the Philippines. The TESDA plays an important role in establishing standards and systems, providing policy guidance, preparing development plans, and regulating training organizations for TVET in the Philippines. Besides, the TESDA also cooperates with the Philippine government, enterprises, and training organizations to provide the society with industrial information and support young people's employment and entrepreneurship.¹⁸ The main functions of the TESDA are as follows:

(1) Competency Standards Development

The TESDA develops competency standards for targets of education, describing work by way of competency units. Competency units may be integrated into qualifications, corresponding to relevant occupations and key jobs in the society, as well as the relevant grades in the Philippine TVET Qualification Framework. The national training regulations (including competency standards, training standards, and assessment process) issued by the TESDA are the basis for competency assessment, course setup and registration and certification of TVET programs.¹⁹

(2) Competency Assessment and Certification

The TESDA assesses and certificates applicants' competency mainly through the Philippine TVET Competency Assessment and Certification System, to see if students have met relevant competency requirements. The TESDA has set up a special inquiry system, providing the certification information of people in various vocational fields nationwide. The TESDA has set up an assessment center and appraiser to provide competency assessment services to people applying for certification.²⁰ According to statistics, the TESDA has conducted competency assessment for 1,521,530 person-times, of which 1,398,780 person times were passed, with a pass rate of 91.9%.²¹

(3) Program Registration and Accreditation

TVET institutions in the Philippines, whether public or private, have to complete compulsory registration with the Unified TVET Program Registration and Accreditation System, which has been set up for the purpose of ensuring that learners reach

¹⁸TESDA: Mandate [EB/OL]. (2018).

¹⁹See Footnote 17.

²⁰TESDA: Assessment and Certification (2018).

²¹See Footnote 12.

the minimum standards required in the training regulations wherever they receive their training, thus ensuring training quality. Therefore, TVET institutions should be registered with the TESDA before providing learners with training programs. After completing all registration steps, they will acquire a certificate of program registration, and this training program will be formally listed in the TESDA's register. Should any problem arise in this training program or any complaint is lodged against it, the TESDA will regulate and audit it.²²

7.6.2 Philippines Qualification Framework

In 2012, the Philippine government promulgated the Philippines Qualification Framework, which aims to provide standards for mutual recognition of different learning results, so that learning results can be recognized and mobilized among different educational and training departments in the Philippines. At the same time, the framework also helps the qualification framework in the Philippines to be consistent with the international qualification framework, to promote the mutual recognition of Philippines and international certificates and diplomas. The qualification framework covers basic education, TVET and higher education, and its levels range from Level 1 to Level 8 (Fig. 7.3).

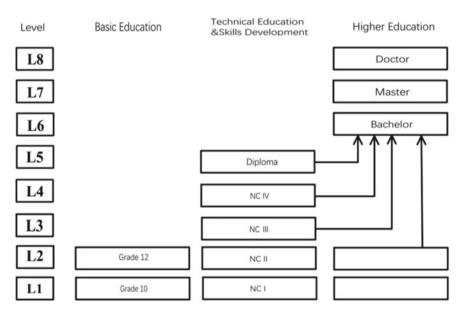


Fig. 7.3 Philippines qualification framework (WENR: Education in the Philippines [EB/OL] 2018)

²²TESDA: Program Registration and Accreditation [EB/OL]. (2018).

The Philippines Qualification Framework involves five levels of TVET. National certificate NC I and NC II are equivalent to intermediate professional qualifications, aiming to prove that certificate holders have proficient skills to some extent. NC I and NC II are equivalent to Grade 10 and Grade 12 academic degrees in regular education, respectively.

NC III, NC IV, and diploma are equivalent to advanced professional qualifications. To acquire these three professional qualifications, applicants should have NCI and NCII national certificates or high school diploma. Its training involves a higher degree of complexity and theoretical study, aiming to train skilled talents with management capabilities. National certificate programs stress application, mainly reflecting professional qualifications in the working world, while higher education degrees represented by bachelor's, master and doctoral degrees lay more stress on theories, representing academic levels, and are mainly completed and acquired in universities²³ (Table 7.7).

TVET in the Philippines stresses competency-based design, and consequently, some TVET programs tend to have no fixed term or academic year, as they are mainly implemented by way of modularization, and students participating in TVET probably do not have to strictly follow a fixed schedule. To acquire a qualification certificate, a student must complete a relevant TVET program and pass the qualification certificate test.

The effective period of a Philippine national certificate is five years. After five years, the holders of such certificates must apply for the upgrading and registration of the certificates. If the TESDA has upgraded new competency standards on the basis of new competency standards, applicants should apply for re-assessment of their competency based on these new standards.²⁴

7.7 Challenges Facing TVET in the Philippines

7.7.1 The Quality of TVET is yet to be Improved

Despite the substantive development of TVET in the Philippines, the infrastructure of TVET is yet to be strengthened. Skilled workers have a low degree of international skills, thus lacking skill advantages among international competitors. People's work tasks often mismatch with their level of skills. Of the ten competitive industries planned to develop in the Philippines, many skilled workers migrate to other industries as their level of skills fail to reach standards.²⁵

²³WENR (2018).

²⁴See Footnote 23.

²⁵YPT (2018).

	Knowledge, Skills and values	Application	Degree of independence
NC I	Knowledge and skills that are manual or concrete or practical and/or operational in focus	Applied in activities that are set in a limited range of highly familiar and predictable contexts; involve straightforward, routine issues which are addressed by following set rules, guidelines or procedures	In condition where there is very close support, guidance or supervision; minimum judgment or discretion is needed
NC II	Knowledge and skills that are manual, practical and/or operational in focus with a variety of options	Applied in activities that are set in a range of familiar and predictable contexts; involve routine issues which are identified and addressed by selecting from and following a number of set rules, guidelines or procedures	In condition where there is substantial support, guidance or supervision; minimum judgment or discretion is needed
NC III	Knowledge and skills that are a balance of theoretical and/or technical and practical. Work involves understanding the work process, contributing to problem solving, and making decisions to determine the process, equipment and materials to be used	Applied in activities that are set in contexts with some unfamiliar or unpredictable aspects; involve routine and non-routine issues which are identified and addressed by interpreting and/or applying established guidelines or procedures with come variations	Application at this level may involve individual responsibility or autonomy, and/or may involve some responsibility for others. Participation in teams including team or group coordination may be involved
NC IV	Knowledge and skills that are mainly theoretical and/or abstract with significant depth in one or more areas; contributing to technical solutions or a non-routine or contingency nature; evaluation and analysis of current practices and the development of new criteria and procedures	Applied in activities that are set in range of contexts, most of which involve a number of unfamiliar and/or unpredictable aspects; involve largely non-routine issues which are addressed using guidelines or procedures which require interpretation and/or adaptation	Work involves some leadership and guidance when organizing activities of self and others

 Table 7.7
 TVET Certificate

(continued)

	Knowledge, Skills and values	Application	Degree of independence
diploma	Knowledge and skills that are mainly theoretical and/or abstract with significant depth in some areas together with wide-ranging, specialized technical, creative and conceptual skills. Perform work activities demonstrating breadth, depth, and complexity in the planning and initiation of alternative approaches to skills and knowledge applications across a broad range of technical and/or management requirements, evaluation and coordination	Applied in activities that are supervisory, complex and non-routine which require an extensive interpretation and/or adaptation/innovation	In conditions where there is a broad guidance and direction, where judgment is required in planning and selecting appropriate equipment, services and techniques for self and others. Undertake work involvin participation in the development of strategic initiatives, as well as personal responsibility and autonomy in performing complex technical operations or organizing others

Table 7.7 (continued)

7.7.2 Employment Difficulties of TVET Students

As the Philippine society values degrees and diplomas of higher education more than TVET, the latter is generally regarded as inferior education, and the society does not fully realize the importance of TVET to the labor market.²⁶ Besides, structural unemployment caused by mismatching of supply and demand is found in the Philippines labor market. The qualification rate of TVET graduates reaches 88.0%, but their employment rate is still at a low rate of 60.9%.²⁷ Graduates of TVET face a limited employment market, which is largely caused by the poor quality of TVET and the irrelevancy of school learning with enterprise work practices.

7.7.3 Obvious Multi-department Non-concerted Regulation of TVET

The regulatory authority of TVET in the Philippines is the Technical Education and Skills Development Authority (TESDA), while the authority regulating K12 regular education is the Philippine Department of Education, and all higher education is under the charge of the Commission on Higher Education. As regular senior high

²⁶TESDA (2010).

²⁷See Footnote 25.

schools and many universities have courses of TVET nature, the connection of TVET with regular senior high schools and fields of higher education require the coordination and mutual help of different regulatory authorities. Such a multi-department non-concerted way of regulation poses a management challenge to upgrading and development of TVET. Despite the emergence of some stepwise programs inside higher education attempting to integrate TVET and regular education, on the whole, it is difficult for the TESDA to get involved due to the regulatory mechanism, especially with regard to TVET in the fields of higher education. Many challenges are still facing the connection and integration between TVET and regular education.

References

- WB. (2018). World Bank Data on Philippines [EB/OL]. https://data.worldbank.org.cn/country/PH. October 23, 2018.
- Ministry of Foreign Affairs of the People's Republic of China. (2018). An Overview of the Philippines [EB/OL]. [EB/OL]. https://www.fmprc.gov.cn/web/gjhdq_676201/gj_676203/yz_676205/ 1206_676452/1206x0_676454/. October 23, 2018.
- PSA. (2018). Labor Force [EB/OL]. https://psa.gov.ph/content/employment-rate-july-2018estimated-946-percent. October 23, 2018.
- WENR: Education in the Philippines [EB/OL]. (2018). https://wenr.wes.org/2018/03/education-inthe-philippines. October 23, 2018.
- DepEd. (2018). Historical Perspective of the Philippine Educational System [EB/OL]. http://www. deped.gov.ph/about-deped/history/. October 23, 2018.
- DepEd. (2018). List of Senior High Schools [EB/OL]. http://www.deped.gov.ph/k-to-12/senior-high-school/list-of-senior-high-schools/. October 23, 2018.
- CHED.(2018). Higher Education Indicators 2018 [EB/OL]. https://ched.gov.ph/higher-educationindicators-2018/. October 23, 2018.
- TESDA: Philippine TVET Statistics [EB/OL]. (2018) https://www.tesda.gov.ph/Download/Tvet_trends. October 23, 2018.
- TESDA: TVET Program [EB/OL]. (2018). TVET Program [EB/OL]. https://www.tesda.gov.ph/ About/TESDA/24. October 23, 2018.
- Orbeta, A., & Esguerra, E. (2016). *The national system of technical vocational education and training in the Philippines: Review and reform ideas* (p. 3). Quezon City: Philippine Institute for Development Studies.
- TESDA: School Based Program [EB/OL]. (2018). School Based Program [EB/OL]. https://www.tesda.gov.ph/About/TESDA/35. October 23, 2018.
- BCSAT. (2018). Program [EB/OL]. http://www.bcsat.edu.ph/programs/. TESDA statistics. October 23, 2018.
- KITTESDA. (2018). TESDA Program [EB/OL]. http://www.kittesda.com/TESDA_Programs_. html. October 23, 2018.
- ISPSC Program Offerings [EB/OL]. (2018). https://www.ispsc.edu.ph/academics/programofferings/. October 23, 2018.Regional Training centertalisay, https://tesdacourse.com/Regional-Training-Center-Talisay-3505.html. October 23, 2018.
- TESDA: Center Based Programs [EB/OL]. (2018). Center Based Programs [EB/OL]. https://www.tesda.gov.ph/About/TESDA/36. October 23, 2018.
- Regional Training center Talisay [EB/OL]. (2018). https://tesdacourse.com/Regional-Training-Center-Talisay-3505.html. October 23, 2018.
- Provincial Training Center—Bulacan (Malolos) [EB/OL]. (2018). http://tesdacourse.com/ Provincial-Training-Center—Bulacan-Malolos-3413.html. October 23, 2018.

- Péano, S., de Dios, B.V., Atchoaréna, D., & Mendoza, U. (2008). Investment in Technical Vocational Education and Training. Pairs: International Institute for Educational Planning.
- TESDA: Competency Standards Development [EB/OL]. (2018). Competency Standards Development [EB/OL]. https://www.tesda.gov.ph/About/TESDA/85. October 23, 2018.
- Mandate [EB/OL]. (2018). https://www.tesda.gov.ph/About/TESDA/11. October 23, 2018.
- TESDA Assessment and Certification [EB/OL]. (2018). https://www.tesda.gov.ph/About/TESDA/ 25. October 23, 2018.
- TESDA Program Registration and Accreditation [EB/OL]. (2018). https://www.tesda.gov.ph/ About/TESDA/26. October 23, 2018.
- YPT. (2018). Technical Vocational Education Training (TVET) Program-The Philippines [EB/OL]. https://yptoolbox.unescapsdd.org/portfolio/technical-vocational-education-trainingtvet-program-philippines. October 23, 2018.
- TESDA. (2010). Increasing public awareness in Philippines A Case Study[R], UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training 2010.