

# Technical Education and Skills Development Authority



# 2019 STUDY ON THE EMPLOYMENT OF TVET GRADUATES

**FULL REPORT** 







### MESSAGE OF THE SECRETARY



In this era of globalization and technological innovations, TESDA as an agency has to be responsive to cope up with changes and challenges that are taking place in the domestic and global labor markets. In view of this, TESDA puts premium in the conduct of researches and studies to serve as basis in coming up with fact-based and evidence-based policy and program decisions.

Conducted annually, the conduct of the Survey on the Employability of TVET Graduates (SETG) intends to assess the efficiency and effectiveness of TVET provisions based on the employment outcomes of its graduates. Results of the study also serve as a feedback mechanism on the implementation of TVET programs and policies. Likewise, findings from the study are important inputs in the formulation of new policies or in the review/ amendment of existing ones.

This report focuses on the determinants of TVET employability of 2019 TVET graduates to include assessment and certification, labor force participation and employment rate. It documents the performance of the TVET graduates measured in terms of their ability to find job or engage in livelihood making use of the skills gained from a TVET program.

We would like to convey our sincere appreciation and acknowledgement to all who participated and supported the conduct of this TVET annual employment study. Your contributions and valuable insights provided more relevance to the study results.

Rest assured that TESDA remains committed to fulfill its mandate in ensuring that skills training results to a job and livelihood after. Sound policies formulated out of the findings of researches and studies will redound to minimizing job-skills mismatch.

We are pleased to share with you the results of the 2019 study on the employment of TVET graduates (SETG) and we hope you find this useful.

SEC. ISIDRO S. LAPEÑA, PhD., CSEE

Director General



### MESSAGE OF THE DEPUTY DIRECTOR GENERAL



Coming out with sound policy and program decisons hinged a lot to the availability of timely and relevant information. Organizational leaders must be equipped with vital data and information to aid them in decision making. One of the better ways of generating evidence-based facts is through the conduct of researches and studies. The importance of research need to be underscored in the area of technical-vocational education and training (TVET) in order to ensure that more efficient and effective policies and programs are formulated and implemented.

TESDA as an agency remained steadfast in taking a more active role in generating more research-based labor market reports and TVET-related information. Through factual data coming out from researches like the Study on the Employability of TVET Graduates, TVET program relevance relative to the requirements of the labor market will be enhanced. Addressing the perennial problem of unemployment or even underemployment due to jobs-skills mismatch can be reduced as a result of these researches.

Conducted on an annual basis, this study provides meaningful assessment and discussion on the employment performance of TVET graduates. Recommendations to further enhance the delivery of TVET programs and services aside from the review of existing policies and programs of TVET are vital results of the study. Study findings will also help in leveraging the TVET image as problems, issues and concerns and other factors that affect the employability of TVET graduates are being discussed to generate appropriate recommendations.

We hope that our partners and stakeholders in the TVET sector find the contents of this document beneficial as TESDA charts the TVET directions with you. Our gratitude and appreciation to all those who participated and contributed to this study.

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Deputy Director General Policies and Plannina



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### **EXECUTIVE SUMMARY**

The Study on the Employment of TVET Graduates (SETG) is a tracer study that aims to track the activities of the graduates after their involvement in TVET programs.

The study aims to determine the factors associated with employment of TVET graduates. Data from the study can be used as a feedback on training quality, on the relevance of their training and the skills required in their job. The results will serve as a tool in determining recommendations that will guide TESD in its planning and policies for the TVET sector.

The SETG covers TVET graduates in all delivery modes: institution-based, enterprise-base and community-based. The 17 regions were considered as domains of the study. From each region, graduates were randomly selected using stratified random sampling. For 2019 SETG, graduates were randomly selected with the type of provider, sex and type of program as stratification variables using proportional allocation. The individual graduate is the unit of enumeration of the study. The study employed phone interview and online data gathering tool using a structured questionnaire. The design and methodology used was approved by the Philippine Statistics Authority.

The identified variables were considered relative to TESDA's performance commitments indicated in the annual GAA and to other oversight agencies/bodies.

### 1. Highlights of the Study:

- 1.1. A total of 2,074,384 Technical-Vocational Education and Training (TVET) clients graduated in 2018. National Capital Region (NCR) and Region IV-A (CALABARZON) produced the most number of graduates constituting 15.41% and 15.16% of the population of graduates, and the Autonomous Region in Muslim Mindanao (ARMM) had the least share at 0.74%.
- 1.2. Female (53.36%) outnumbered male graduates. TVET graduates were mainly from the 15 to 24 years age group, comprising almost 40% of the population of graduates, of which female to male distribution is nearly 1:1.
- 1.3. On the average, 2018 graduates were 30.63 years old with a standard deviation of 11.33 years. Female graduates were about two years older than males, on the average.
- 1.4. Highest educational attainment of more than half of graduates has reached a bachelor level of education, of which not all completed the degree. Also, a number (15.52%) of them were high school graduates from the old curriculum.
- 1.5. Among the modes of training delivery, institution-based programs posted the largest portion (62.37%) of the TVET graduates, followed by the community-based (33.72%) programs. Very few were graduates of mobile training programs, apprenticeship, learnership, and dual training system, with the latter having the least number of graduates
- 1.6. Of the 2018 TVET graduates, only 576,720 were recipients of a certain scholarship program offered by TESDA, which constituted 27.8% of the population of graduates. Among the regular scholarship programs in TESDA, Training for Work Scholarship Program (TWSP) got the highest share of 72.88% compared to the other programs such as the Private Education Students Fund Assistance (PESFA) and Skills Training for Employment Program (STEP).

- 1.7. Tourism continuously recorded as the top sector registered by TVET clients. It is followed by the social, community development sector, which is at par electrical and electronic sector.
- 1.8. An enormous number of graduates were under the With Training Regulations (WTR), as expected, which comprised about 73% of the population of graduate
- 1.9. Many of the TVET graduates enrolled TESDA programs for skills enhancement. Four in every ten 2018 graduates took TVET programs to upgrade or enhance their skills. A little more than a third of the graduates registered a TVET program for employment purposes. Meanwhile, a number took a program mainly for personal reasons or to satisfy their hobby.

### 2. Assessment/Certification

- 2.1. Among the 2018 graduates, only near 75% took a competency assessment.
- 2.2. All sectors recorded a significantly high number of WTR passers, entailing that majority of WTR graduates gained the required competency. About 80% of the passers were at their NC II, nearly 6% were issued COC, NC1 and NC III while very few received TM I.

### 3. Labor Force Participation

3.1. There is an estimated labor force participation rate (LFPR) of 70.43% in 2018, wherein about 8 in every 10 TVET graduates (84.15%) was estimated actively working at the time of the survey. Majority of the graduates across age groups who were active in the labor force had jobs during the conduct of the survey.

### 4. Employment

- 4.1. The biggest share of employed graduates came from age group 55 to 64 with an estimated employment rate of 96.04%, followed by those in their 45 to 54 years. TVET clients with at least bachelor degree posted the highest employment rate (Bachelor level at 87.63%, Masters level at 94.61% and Doctoral level at 100%).
- 4.2. Both graduates of TTIs and non-TTIs exhibited high employment rates that were on par to the national estimate of 84.15%. Majority of the TVET graduates across regions in were actively working at the time of the survey with an employment rate ranging from 74 to 90 percent
- 4.3. The top estimates were recorded in Region IV-A (89.67%), Region XII (88.17%) and Region X (88.10%). In contrast, Region VIII, Region IX, and ARMM placed the bottom three with estimates at 76.92%, 76.84%, and 73.57%, respectively.
- 4.4. About 8 in 10 TVET graduates from institution-based, mobile-training, and community-based programs were accounted to be actively working when the survey was conducted.
- 4.5. DTS, however, marked unsurprisingly low employment rate at 8.08%. In general, a great portion of graduates across the different sectors who were in the labor force had jobs at the time of the survey, except the utilities sector with only 47.85%.
- 4.6. Moreover, all scholarship programs have been recorded to have high employment rates, with PESFA bagged the highest, wherein approximately 9 in 10 scholars were employed at the time of the survey.
- 4.7. About 84% of those with certification were employed. Nonetheless, among the so few non-certified graduates, the majority were also in a job at 80.85%. NCIII certified graduates had the largest share at 91.22%, followed by the COC level with an

- estimate of about 87%. The lowest share (but still with considerably high rate) came from the NC 1 level at 82.65%, at par with NC II (83.61%) and TM 1 (84.95%)
- 4.8. Services and sales made up the largest share (19.14%) of employed graduates in 2018. Professional group came in second, comprising 17.74% of the employed. Smaller groups were composed of elementary, armed forces, skilled agricultural, forestry and fishery, and plant and machine operators and assemblers occupational groups.
- 4.9. Majority of the working graduates can be classified as wage and salary workers with an estimate of around 75%, own account workers comprised near 23% of the employed graduates, and very few were unpaid family workers.
- 4.10. A larger portion of employed graduates (38.42%) was engaged in a short-term or seasonal job. The prevailing majority (99.77%) of the employed graduates was working within their respective provinces. Among those who were able to find a job outside their province (but still within their region), mostly (68.25%) were female.
- 4.11. Based on the survey, about 40% of the 2018 graduates had already jobs before attending a TVET program. There were about 23% who were unemployed before and were able to find a job after attending a program. Also, there were some who got a promotion (1.53%) and were transferred (4.51%). Meanwhile, a large portion (30.3%) acquired new job after completing a TVET program.
- 4.12. There were a considerable large portion (36.22%) of the unemployed before who were still unemployed after accomplishing a training program. In addition, a few (4.51%) were reported employed before, but for some reasons became unemployed after attending a program.
- 4.13. On the average, the graduates' current monthly income, estimated at 14,371.54 pesos, was significantly higher than the one estimated before they attended a training which was 13,643.46 pesos (p-value=0.0005). Males, on the average, were earning pretty higher than females, estimated at 14,371.54 and 13, 912.49 pesos, respectively. At least fifty percent of females had monthly income of 10,000 pesos or below, while it was 11,000 pesos among males
- 4.14. Non-TTI bagged a higher monthly income with 14, 591.46 pesos compared to that of 12,981.47 pesos of TTI.
- 4.15. In 2018, NCR registered the highest mean monthly income of its graduates at 20.461.62 pesos, higher than the national estimate for TVET graduates. Region XI (Davao Region) came next with an estimate of 18.584.52 pesos, followed by CAR with monthly income of 15, 565.99 pesos, on the average. The other regions recorded a mean monthly earnings of approximately between 11,000 and 13,000 pesos. Contrarily, Region X (Northern Mindanao), with a small difference with ARMM, registered the lowest mean income of 10,732.74 pesos.
- 4.16. TWSP scholars acquired the mean monthly income of 15,992.06 pesos, higher compared to the other two programs PESFA (₱ 9,052.46) and STEP (₱ 9,781.59).
- 4.17. The TVET sector recorded the highest monthly income, with an average of 30,676.04 for the 2018 graduates. This is seconded by the Maritime sector with an estimated mean monthly income of 20,983.65 pesos. The rest of the sectors registered a monthly income of around 11,000 to 19,900, on the average, except for the Footwear sector which have a mean of 2,250 pesos monthly.
- 4.18. The 2018 graduates were able to obtain their job by walk-in applications (37.55%) and referrals from friends and relatives (23.62%). Some were employed thru internet job posting (4.91%) and some were recruited or absorbed by the employers (5%). A few got employed via Public Employment Service Office (PESO) (0.22%) and from

the newspaper advertisement (0.11%), while no one of the respondents mentioned about the blue desk.

### 5. Satisfaction level

- 5.1. The lion's share (approximately 93% to 98%) of the TVET graduates in 2018 across the different program delivery modes believed that they acquired the needed skills for their program after completing it.
- 5.2. Less than half (47.66%) of the employed graduates signified their satisfaction regarding the usefulness of the skills that they acquired from the TVET training in their work. However, a considerable portion of them (about 29%) found their trainings to be of no use in their current work.
- 5.3. About 82% of those who were not satisfied said that their current occupation (at the time of the survey) was entirely different with the training completed, while some mentioned that the skills they acquired were not needed in their actual work.

### 6. Determinants of Employability

- 6.1. The data generated from the 2018 graduates suggest no significant difference in the employment rates between sexes, between types of providers, among scholarship programs (and those with no scholarships as well), across sectors, between certified and non-certified graduates, and across certification levels, at 5% level of significance.
- 6.2. In contrast, significant differences in the employment rates in some regions can be inferred. In particular, those regions with lower estimates were found significantly different from those regions with higher estimates. In addition, DTS program delivery mode exhibited the significantly lower employment rate as compared to other modes. However, this estimate cannot be considered as reliable
- 6.3. Factors that were found significantly associated and determinants of employability of a TVET graduate include graduate's age group, region, educational attainment, the main reason for taking up a program, program delivery mode, type of program registered, and whether one is scholarship grantee or not

### **Recommendations**

- 1. This survey round revealed that majority of TVET clients have a bachelor level of education whose main reason is for skills enhancement. This shift of clients can be associated with the available access to TVET programs in the TVL track under the Senior High School in the K-12 program. TESDA has to consider the characteristics of its clients in the development of training programs, formulation of policies, allocation of scholarship programs and other initiatives. On the other hand, this calls TESDA's continuous support the operationalization of quality TVET in the TVL track.
- 2. It is worth to note that holders of NC III obtained high employment rate to those of holders of NC I and NC II (though the difference is not that significant). This adds to considerations to the type of TVET clients with higher level of qualifications as required by industries.
- 3. TVET certification remains not to be significant to the employment of TVET graduates locally. Few employers offered incentives among certified workers. To make a National Certificate (NC) a valuable tool for employment, the following may be considered
  - 3.1. Evaluation of existing partnership with industries and determine how it can be enhanced to make them more involved in the development and in the implementation of TVET programs which includes conduct of assessment and certification.
  - 3.2. Strengthen TESDA's organizational capacity and capability in the establishment and implementation of partnership to industries to provide venue in the promotion and recognition of NC.
  - 3.3. Maximize the Regional and Provincial TESD Committees, the TTI''s School Advisory to get vital inputs and determine strategies on how to increase the value of NC.
  - 3.4. Create opportunities for discussion with industries through the Recognized Industry Boards and industry partners to determine reasons of low appraisal to NC.
  - 3.5. Explore the possible accreditation/recognition of industry certification though the establishment of a Trade Regulations Office.
  - 3.6. Propose/advocate legislative measures putting weight on employing TESDA certified workers by industries.
  - 3.7. Operationalization of the Ladderized Education Law and recognition of the Philippine Credit Transfer System.
- 4. Continuous advocacy of the assessment and certification process among TVET graduates and workers.
- 5. Conduct an evaluation on the implementation of the Enterprise-based Training programs to determine gaps and areas for improvement.
- 6. On the account that a there are a little less than a quarter of employed graduates who indicated that they were unable to utilize skills learned in the training programs, the following may be taken into account:
  - 6.1. Correspondence of TVET programs to register and offer vis-a-vis on available, indemand or hard-to-fill jobs thru the availability of evidence-based Labor Market Information.
  - 6.2. Pursue the initiative to develop the supermarket of competencies to address the fast-changing industry requirements in the competencies of workers
  - 6.3. Look into other strategies and job facilitation mechanisms to bridge graduates to employment.
- 7. Framing up of concrete guidelines on the development of quality learning materials. This training component got the highest share of poor rating by the graduates.

### **RESULTS AND DISCUSSION**

### 1. Profile of 2018 TVET Graduates

Based on the TESDA's Management Information System, there were 2,074,384 Technical-Vocational Education and Training (TVET) graduates in 2018. This turns to closely 8% decrease when compared to the graduates in 2017. Similar from the previous years, National Capital Region (NCR) and Region IV-A (CALABARZON) produced the most number of graduates constituting 15.41% and 15.16%, respectively of the population of graduates. The Autonomous Region in Muslim Mindanao (ARMM) constantly had the least share at 0.74%. The distribution of graduates across regions is at par from the earlier years. Consistently, female (53.36%) outnumbered male graduates, with almost 7% difference this year (Table 1).

Table 1. Weighted Distribution of TVET Graduates by Region, Philippines: 2018

145.5 1. 110	Sex					
Region	Female		Male		Total	
	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>
NCR	205,254	64.21	114,418	35.79	319,672	15.41
CAR	23,665	52.05	21,804	47.95	45,469	2.19
I	56,369	50.77	54,656	49.23	111,025	5.35
II	29,939	51.03	28,728	48.97	58,667	2.83
Ш	117,211	53.26	102,881	46.74	220,092	10.61
IV-A	149,811	47.63	164,699	52.37	314,510	15.16
IV-B	33,809	47.85	36,849	52.15	70,658	3.41
V	41,093	57.71	30,116	42.29	71,209	3.43
VI	97,277	52.73	87,206	47.27	184,483	8.89
VII	55,457	54.17	46,917	45.83	102,374	4.94
VIII	34,787	52.97	30,890	47.03	65,677	3.17
IX	28,979	48.80	30,401	51.20	59,380	2.86
X	61,537	52.16	56,438	47.84	117,975	5.69
XI	55,118	56.61	42,240	43.39	97,357	4.69
XII	69,180	49.64	70,195	50.36	139,375	6.72
CARAGA	39,776	48.98	41,429	51.02	81,205	3.91
ARMM	7,564	49.58	7,692	50.42	15,256	0.74
Philippines	1,106,825	53.36	967,559	46.64	2,074,384	100.00

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

As indicated, there were more female graduates than males in 2018, which resulted in a sex ratio of 114 females per 100 males. This yielded a greater difference as compared to the previous year of 111 females per 100 males. Considerably higher number of female graduates were recorded in NCR, Region V (Bicol Region) and Region XI (Davao Region). Alternatively, there were more male graduates in ARMM, CARAGA Administrative Region, Region IV-A, Region IV-B (MIMAROPA), Region IX (Zamboanga Peninsula) and Region XII (SOCCSKSARGEN) (Table 2). This is similar to what was recorded in 2017.

Table 2. Sex ratios per region of TVET graduates. Philippines: 2018

Region	Female:Male
ARMM	98:100
CAR	109:100
CARAGA	96:100
NCR	179:100
1	103:100
II	104:100
III	114:100
IV-A	91:100
IV-B	92:100
V	136:100
VI	112:100
VII	118:100
VIII	113:100
IX	95:100
X	109:100
XI	130:100
XII	99:100
Philippines	114:100

Once again, TVET graduates were mainly from the 15 to 24 years age group, comprising almost 40% of the population of graduates, of which female to male distribution is nearly 1:1. Also, there were a little more than a quarter (29%) aged 25 to 34 years, of which the number of female graduates is close to that of males. There were very few graduates who were in the retiring age (0.75%), majority of which were female (Table 3). Moreover, 2018 graduates were 30.63 years old, on the average, with a standard deviation of 11.33 years. Female graduates were about two years older than males, on the average. At least fifty percent of the female and male graduates were 29 and 26 years old and younger, respectively (Table 4). Graduates of this year were a little younger than those of the previous year with a mean age of 32 years. Likewise, at least fifty percent of 2018 graduates were 27 years old or younger. The coefficient of skewness of 1.07 revealed that there were very few who were considerably older relative to the population of graduates, with 78 years as the oldest. The oldest female and male graduates were 78 and 74 years, respectively. Conversely, the youngest were 15 and 16 years old for female and male, respectively (Table 4 and Figure 1). The dispersion in the ages of graduates only shows that TESDA programs are indeed for every Filipino who wish to gain technical education and want to develop/improve their technical skills.

Table 3. Weighted Distribution of TVET Graduates by Age Group, by Sex, Philippines: 2018

			S	ex			
Age group	Fe	emale		Male		Total	
	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>	
Below 15	0	0.00	0	0.00	0	0.00	
15 – 24	408,398	48.91	426,650	51.09	835,048	40.26	
25 – 34	301,558	50.09	300,511	49.91	602,070	29.02	
35 – 44	211,817	59.06	146,848	40.94	358,665	17.29	
45 – 54	124,368	66.45	62,797	33.55	187,166	9.02	

	Sex									
Age group	Fe	male	٨	Nale	Total					
	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>				
55 – 64	48,092	63.44	27,714	36.56	75,806	3.65				
65 and over	12,592	80.56	3,038	19.44	15,630	0.75				
Total	1,106,825	53.36	967,559	46.64	2,074,384	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

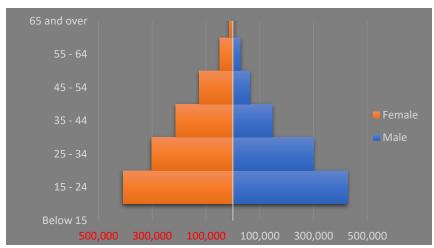


Figure 1. Weighted percent distribution of TVET graduates by age group and by sex. Philippines, 2018

Table 4. Summary statistics for Age by Sex, Philippines: 2018

Clarks the c	Se	Sex				
Statistics	Female	Male	Overall			
Minimum	15.00	16.00	15.00			
Maximum	78.00	74.00	78.00			
Mean	32.01	29.03	30.63			
Median	29.00	26.00	27.00			
Standard deviation	12.04	10.24	11.33			
Variance	144.98	104.87	128.47			
Skewness	0.88	1.28	1.07			

Highest educational attainment of more than half of graduates has reached a bachelor level of education, of which not all completed the degree. Many of these graduates were female. Also, a number (15.52%) of them were high school graduates from the old curriculum. This demonstrates that many Filipinos, especially those who have obtained high schools and no plan to enter tertiary, trust TESDA as a reform institution where they could be technically trained and be qualified for better employment opportunities. Similarly, even those who were able to earn bachelor, masters and doctoral level of education entered TESDA for skills development and many of them were female (Table 3). The educational profile of the graduate has continuously improved as revealed by the increasing proportion of graduates with bachelor units or degrees from 30.59% in 2016, 49.56% in 2017 to 55.45% in 2018.

Table 5. Weighted distribution of TVET Graduates, by Sex, by Highest Grade Completed,

Philippines: 2018

	Sex										
Highest Educational Attainment	Fer	male	N	\ale	Total						
Alldinmeni	Freq	%	Freq	%	Freq	%					
No grade completed	178	68.73	81	31.27	259	0.01					
Early childhood education	1,485	44.68	1,839	55.32	3,325	0.16					
Primary education (elementary) undergraduate	7,229	61.23	4,578	38.77	11,808	0.57					
Primary education (elementary) graduate	15,162	62.70	9,019	37.30	24,181	1.17					
Secondary education undergraduate (old curriculum)	54,160	57.68	39,730	42.32	93,889	4.53					
Secondary education graduate (old curriculum)	172,728	53.66	149,167	46.34	321,896	15.52					
Lower secondary education (junior HS) undergraduate (K-12 curriculum)	8,159	59.08	5,652	40.92	13,811	0.67					
Lower secondary education (junior HS) graduate	9,042	32.62	18,679	67.38	27,720	1.34					
Upper secondary education (senior HS) undergraduate	36,979	55.59	29,537	44.41	66,516	3.21					
Upper secondary education (senior HS) graduate	60,211	37.35	100,980	62.65	161,191	7.77					
Post-secondary non-tertiary education	30,147	41.47	42,557	58.53	72,704	3.50					
Short-cycle tertiary education	56,908	56.92	43,076	43.08	99,984	4.82					
Bachelor level education undergraduate	252,824	54.30	212,802	45.70	465,627	22.45					
Bachelor level education graduate	387,389	56.60	297,098	43.40	684,487	33.00					
Master level education	12,945	52.45	11,735	47.55	24,681	1.19					
Doctoral level education	1,279	55.44	1,028	44.56	2,307	0.11					
Total	1,106,825	53.36	967,559	46.64	2,074,384	100.00					

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Among the modes of training delivery, institution-based programs, as expected, posted the largest portion (62.37%) of the TVET graduates. This is seconded by the community-based (33.72%) programs leading to livelihood and self-employment opportunities. These two modes consistently covered the majority of TVET graduates. Conversely, very few were graduates of mobile training programs, apprenticeship, learnership, and dual training system, with the latter having the least number of graduates (Figure 2).

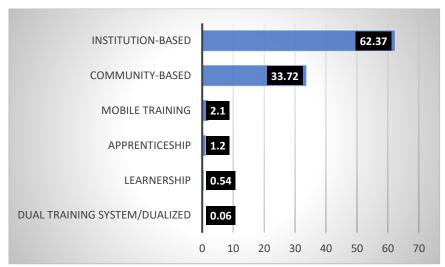


Figure 2. Weighted percent distribution of TVET graduates by program delivery mode. Philippines, 2018

Relative to their population of graduates, Region VIII (Eastern Visayas) and ARMM were the top two regions with the highest percentage of graduates of institution-based programs, with 88.63% and 85.71%, respectively. As for the community-based programs, a larger number were noted from Region VI (Western Visayas) and Region III (Central Luzon), which comprised 48.16% and 47.93%, respectively, of their population of graduates. Region III, moreover, exhibited the highest portion (7.88%) of mobile training program graduates, as compared to the other regions. Also, the highest number of graduates of apprenticeship and learnership came from Region IV-A (3.09%) and Region III (2.08%), respectively. Meanwhile, there were only observed graduates of the dual - training system in CARAGA Administrative Region (0.39%) and Region III (0.46%) (Table 6).

Of the 2018 TVET graduates, only 576,720 were recipients of a certain scholarship program offered by TESDA, which constituted 27.8% of the population of graduates. This shows a decrease in the number of scholars this year when compared to the estimated 32% in 2016 and 59% in 2017. Among the regular scholarship programs in TESDA, Training for Work Scholarship Program (TWSP) still got the highest share of 72.88% compared to the other programs such as the Private Education Students Fund Assistance (PESFA) and Skills Training for Employment Program (STEP) (Table 7). Moreover, more female than male graduates were scholars of PESFA and STEP (Figure 3). This observed distribution is different from what was recorded in 2017, wherein more male received a scholarship.

Table 6. Weighted Distribution of TVET Graduates by Region, By Delivery Mode of Training, Philippines: 2018

able 0. W	Program Delivery Mode													
Region	Institution- based		Mobile training program		Dual training system/dualized training program		Apprenticeship		Learnership		Community- based		Total	
	Freq	<b>%</b> ª	Freq	<b>%</b> ª	Freq	%ª	Freq	<b>%</b> ª	Freq	<b>%</b> ª	Freq	<b>%</b> ª	Freq	%⁰
NCR	189,947	59.42	836	0.26	0	0.00	1,749	0.55	0	0.00	127,140	39.77	319,672	15.41
CAR	31,816	69.97	244	0.54	0	0.00	551	1.21	1,102	2.42	11,757	25.86	45,469	2.19
I	81,078	73.03	3,529	3.18	0	0.00	899	0.81	603	0.54	24,915	22.44	111,025	5.35
II	29,534	50.34	1,791	3.05	0	0.00	937	1.60	0	0.00	26,406	45.01	58,667	2.83
III	85,760	38.97	17,342	7.88	1,017	0.46	5,902	2.68	4,588	2.08	105,483	47.93	220,092	10.61
IV-A	205,216	65.25	5,050	1.61	0	0.00	9,716	3.09	1,679	0.53	92,849	29.52	314,510	15.16
IV-B	47,145	66.72	1,725	2.44	0	0.00	186	0.26	189	0.27	21,414	30.31	70,658	3.41
٧	46,989	65.99	0	0.00	0	0.00	196	0.28	0	0.00	24,024	33.74	71,209	3.43
VI	91,031	49.34	3,808	2.06	0	0.00	788	0.43	0	0.00	88,856	48.16	184,483	8.89
VII	75,249	73.50	1,783	1.74	0	0.00	0	0.00	0	0.00	25,342	24.75	102,374	4.94
VIII	58,210	88.63	694	1.06	0	0.00	0	0.00	203	0.31	6,570	10.00	65,677	3.17
IX	45,083	75.92	2,294	3.86	0	0.00	809	1.36	212	0.36	10,982	18.49	59,380	2.86
Χ	78,836	66.82	2,245	1.90	0	0.00	1,341	1.14	479	0.41	35,073	29.73	117,975	5.69
XI	66,859	68.67	1,148	1.18	0	0.00	0	0.00	0	0.00	29,350	30.15	97,357	4.69
XII	100,911	72.40	361	0.26	0	0.00	475	0.34	1,901	1.36	35,727	25.63	139,375	6.72
CARAGA	47,062	57.95	632	0.78	318	0.39	1,274	1.57	318	0.39	31,601	38.91	81,205	3.91
ARMM	13,076	85.71	82	0.53	0	0.00	0	0.00	0	0.00	2,098	13.75	15,256	0.74
Total	1,293,802	62.37	43,565	2.10	1,335	0.06	24,823	1.20	11,273	0.54	699,585	33.72	2,074,384	100.00

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 7. Weighted Distribution of TVET Scholars with their Scholarship Program, by Sex,

Philippines: 2018

		Sex										
Scholarship Program	Fe	male	٨	Male	Total							
Hogiani	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>						
PESFA	15,965	54.72	13,209	45.28	29,174	5.06						
STEP	69,299	54.47	57,914	45.53	127,213	22.06						
TWSP	208,377	49.57	211,957	50.43	420,333	72.88						
Total	293,641	50.92	283,080	49.08	576,720	100.00						

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

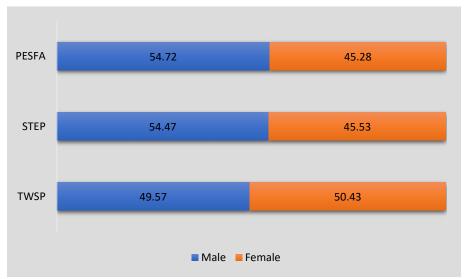


Figure 3. Weighted percent distribution of TVET scholars by their scholarship program, by sex. Philippines, 2018

Tourism continuously recorded as the top sector registered by TVET clients. This year, a little less than a third (31.84%) of the graduates were actually came from this sector, which is significantly higher than the other sectors. Also, the observed percentage is quite higher than in 2016 (22.75%) and in 2017 (26.71%). Tourism is followed by the social, community development sector (10.43), which is at par electrical and electronic sector (10.05%) (Figure 4). The former two sectors were dominated by females while the latter was dominated by males. In addition, females ominously outnumbered males from these sectors: (1) Footwear, (2) Garments, (3) Human Health/Health Care, and (4) Wholesale and Retail Trading. Meanwhile, sectors notably participated by males were (1) Utilities, (2) Heating, Ventilation, Air-conditioning, (3) Metals and Engineering, (4) Construction, and (5) Automotive and Land Transportation. The observed distribution is almost the same from what has been recorded among graduates in 2016 and in 2017.

For two consecutive years, many of the TVET clients enrolled TESDA programs for skills enhancement. Four in every ten 2018 graduates took TVET programs to upgrade or enhance their skills, of which female to male distribution is closely equal. A little more than a third of the graduates registered a TVET program for employment purposes, many of whom were male. Moreover, a number took a program mainly for personal reasons or to satisfy their hobby (Table 9). This pattern among graduates is close to that of in 2017.

Table 8. Weighted distribution of TVET Graduates by Sector and by Sex, Philippines: 2018

Tuble 6. Weighted	distribution of TVET Graduates by Sector and by Sex, Philippines: 2018  Sex											
	Female Male Total											
Sector	re		N									
	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>						
Agriculture												
Forestry and	47,227	44.15	59,747	55.85	106,974	5.16						
Fisheries Automotive and												
Land	27,269	14.98	154,825	85.02	182,094	8.78						
Transportation	_,_,_,		,									
Chemical,	_	_	_	_	_							
Plastic, Petrochem	0	0	0	0	0	0.00						
Construction	13,301	12.97	89,260	87.03	102,561	4.94						
Decorative												
Crafts	0	0	0	0	0	0.00						
Electrical and	61,208	29.36	147,267	70.64	208,474	10.05						
Electronics												
Entrepreneurship	0	0	0	0	0	0.00						
Footwear Furniture and	778	100	0	0	778	0.04						
Fixtures	0	0	0	0	0	0.00						
Garments	47,883	93.23	3,475	6.77	51,359	2.48						
Heating,	.,				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Ventilation,	506	5.05	9,520	94.95	10,027	0.48						
Airconditioning												
Human Health/Health	117,398	73.26	42,851	26.74	160,249	7.73						
Care	117,070	70.20	42,001	20.7 4	100,247	7.70						
Information and	38,401	53.45	33,445	46.55	71,846	3.46						
Communication												
Language	12,367	36.22	21,780	63.78	34,147	1.65						
Logistics	0	0	0	0	0	0.00						
Maritime	0	0	11,854	100	11,854	0.57						
Metals and Engineering	16,003	10.95	130,101	89.05	146,104	7.04						
Processed Food	0	0	0	0	0	0.00						
and Beverages	0	0	0	0	U	0.00						
Social,	175 000	00.00	41 1 40	10.00	01/077	10.40						
Community Development	175,229	80.98	41,148	19.02	216,377	10.43						
TVET	16,892	54.77	13,949	45.23	30,841	1.49						
Tourism (Hotel												
and Restaurant)	482,452	73.06	177,929	26.94	660,381	31.84						
Utilities	0	0	410	100	410	0.02						
Visual Arts	11,990	55.43	9,641	44.57	21,631	1.04						
Wholesale and	33,850	72.6	12,777	27.4	46,627	2.25						
Retail Trading Others	4,072	34.95	7,580	65.05	11,652	0.56						
Total	1,106,825	53.36	967,559	46.64	2,074,384	100.00						
aPercentage over the						100.00						

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

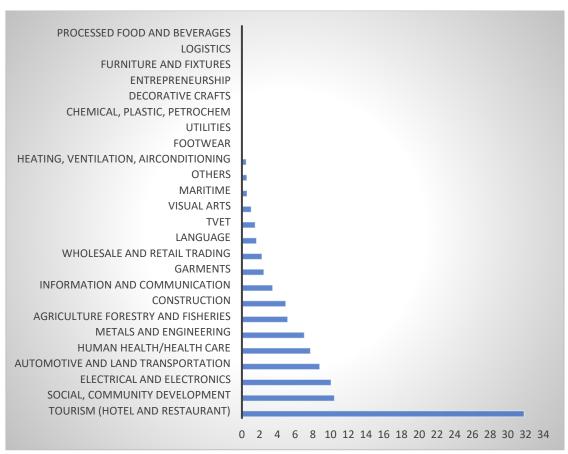


Figure 4. Weighted percent distribution of TVET graduates by scholarship program, by sex. Philippines, 2018

Table 9. Weighted distribution of TVET Graduates by their Reasons for Taking Up TVET Programs. Philippines. 2018

	Sex								
Reasons for taking up the	Fe	emale		Male	Total				
program	Freq	Percentage <sup>a</sup>	Freq	Percentage <sup>a</sup>	Freq	Percentage <sup>b</sup>			
Employment/to get job	353,555	51.34	335,160	48.66	688,715	33.20			
Promotion	9,175	55.79	7,272	44.21	16,447	0.79			
To increase in income	27,136	79.78	6,879	20.22	34,016	1.64			
Skills upgrading/enhancement	423,675	49.1	439,207	50.9	862,881	41.60			
TVET qualification is popular	4,220	64.01	2,373	35.99	6,593	0.32			
Personal use/ interest/ hobby	209,443	67.91	98,983	32.09	308,427	14.87			
Nothing to do	1,311	48.05	1,417	51.95	2,727	0.13			
Others	78,310	50.66	76,269	49.34	154,579	7.45			
Total	1,106,825	53.36	967,559	46.64	2,074,384	100.00			

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

TVET clients are encouraged to take a so-called career assessment test in order to guide them in choosing for a training program that suits them. Among the 2018 graduates, only about 44% participated in the said test, where slightly more males partaken (Figure 5 and Table 10). This is considerably lower than the recorded estimate of 53% in 2017. It could be either more 2017 graduates than 2018 graduates believed in the significance of taking such

test or the information about the test was better disseminated in 2017 than in 2018. It can be further noted that among the scholarship programs, PESFA had a larger portion (55.3%) of its scholars who took the test, more than half of which were female.

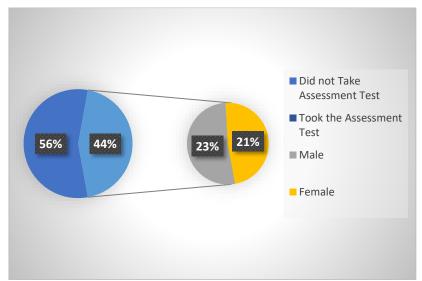


Figure 5. Weighted percent distribution of TVET graduates by whether or not they took assessment test. Philippines, 2018

Table 10. Weighted Distribution of TVET graduates as whether they took Career Profiling Examination/ Career Assessment Test, by Scholarship, by Sex, Philippines: 2018

Took Career Profilina Did not Take Career Profiling **Examination/Career Examination/Career** Total Assessment Test **Assessment Test Scholarship Female Female** Male Male Freq **%**a Freq %a Freq **%**a Freq **%**a %b Freq With Scholarship 39.43 29.41 **PESFA** 11,502 4,629 15.87 4,462 15.3 8,581 29,174 1.41 **STEP** 24,913 19.58 26,832 21.09 44,386 34.89 31,082 24.43 127,213 6.13 **TWSP** 91,073 21.67 91,866 21.86 117,304 27.91 120,090 28.57 420,333 20.26 Without 330,311 313,388 20.93 354,168 23.65 499,798 22.06 1,497,664 **Scholarship** 33.37 72.20 (Regular Program) 440,875 21.25 477,495 23.02 665,950 32.1 23.62 2,074,384 100.00 Total 490,064

Of the 918,370 who took the career assessment, more than half (63.96%) took, in particular, the National Career Assessment Exam (NCAE), while more than a quarter (29.35%) underwent the Youth Profiling for Starring Careers (YP4SC) assessment. Among those who took an assessment, nearly a quarter registered a TVET program which was actually not in line with the results of their career assessment, of which the larger portion was shared by those who took NCAE (34.44%), contradictory with previous year's record which was the YP4SC (Table 11). Compared in the last year's batch of graduates, the majority of the graduates in this batch were able to enroll training programs based on the results of their career assessment.

Table 11. Weighted Distribution of TVET graduates as whether the career assessment result is in line with the TVET program they enrolled in, by Career Assessment Tool, Philippines: 2018

Profiling/ Career Assessment Tool	In line	with the	Total			
,	Yes					No
	Freq	<b>%</b> ª	Freq	%	Freq	%b
YP4SC	245,537	89.65	28,343	10.35	273,880	29.82
NCAE	385,076	65.56	202,313	34.44	587,389	63.96
Others	55,281	96.81	1,820	3.19	57,101	6.22
Total	685,894	74.69	232,476	25.31	918,370	100.00

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

# 2. Competency Assessment and Certification

An enormous number of graduates in 2018 were under the With Training Regulations (WTR), as expected, which comprised about 73% of the population of graduates. Programs in WTR, taken mostly by female (56.09%). Alternatively, there were more male graduates (61.35%) in programs not registered with TESDA. There were also graduates under the programs with No Training Regulations (NTR), wherein more females were observed (Table 12).

Table 12. Weighted Distribution of TVET Graduates by Type of Program Provided, by Sex,

Philippines: 2018

		Sex									
Type of Program	Female		M	ale	Total						
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage					
WTR	851,763	56.09	666,842	43.91	1,518,606	73.21					
NTR	124,309	57.16	93,173	42.84	217,481	10.48					
Not registered program	130,753	38.65	207,544	61.35	338,297	16.31					
Total	1,106,825	53.36	967,559	46.64	2,074,384	100.00					

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Although TVET graduates were mandated to take competency assessment to ensure that they acquired the competencies required by a certain qualification, still TESDA was not successful in meeting the one hundred percent compliance from their graduates. Among the 2018 graduates, only near 75% took a competency assessment. Nonetheless, this is 10 percent and 25 percent higher than the estimates in 2017 and 2016, respectively. This increasing pattern could be a motivation for TESDA to continuously promote the significance of the said assessment among their graduates. Also, in contrast to the previous year, relatively more females (54.09%) than males took seriously the competency assessment (Table 13). Moreover, the overwhelming majority of WTR graduates per se considered taking the said test and many of them were female (Table 14). The same reasons for not taking the assessment have been raised by this batch of WTR graduates: they have no time (37.34%) to take the test due to a busy schedule in school or at work; they are not aware of its schedule (10.26%), financial constraints (10.92%), it is not mandatory (7.75%), among others (Table 15). TESDA must be aware of these reasons as some of these can be addressed by employing effective information dissemination. Also, although a considerable increase in the number of TVET

graduates had taken the competency assessment, still a much stronger strategy of information dissemination about the significance of undergoing such test is recommended.

For the past years, high passing rates were noted for WTR graduates and this continue until this year in which for every 100 takers, about 97 passed the exam. All sectors recorded a significantly high number of WTR passers, entailing that majority of WTR graduates gained the required competency in the program attended (Table 16).

Table 13. Weighted Distribution of TVET Graduates as Whether They Took Competency or Not

by Sex, Philippines: 2018

	Sex									
Took Competency	Female		M	ale	Total					
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage				
Yes	832,637	53.39	726,835	46.61	1,559,472	75.18				
No	149,880	50.39	147,551	49.61	297,431	14.34				
Not indicated	124,309	57.16	93,173	42.84	217,481	10.48				
Total	1,106,825	53.36	967,559	46.64	2,074,384	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 14. Weighted Distribution of TVET Graduates under WTR Who Took Competency by Sex,

Philippines: 2018

1 11111   1   1   1   1   1   1   1   1										
	Sex									
Took Competency	Female		M	ale	Total					
Competency	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage				
Yes	779,128	56.01	611,830	43.99	1,390,958	91.59				
No	72,635	56.9	55,012	43.1	127,647	8.41				
Total	851,763	56.09	666,842	43.91	1,518,606	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 15. Weighted Distribution of WTR Graduates By their Reasons for Not Taking Competency Assessment, Philippines: 2018

De grand for mat telling commetency grands	Fem	nale	Mo	ıle	Tot	al
Reasons for not taking competency assessment	Freq	%ª	Freq	%ª	Freq	%b
Assessment tools/test package not available	1,238	29.84	2,910	70.16	4,148	3.25
Assessment Officer/Assessor not available	2,262	94.45	133	5.55	2,395	1.88
No assessment officer/assessor in the area	594	19.66	2,428	80.34	3,022	2.37
Assessment center not available/not accessible	0	0	185	100	185	0.15
No assessment center in the area	960	75.32	315	24.68	1,275	1.00
Assessment not mandatory	7,753	78.41	2,135	21.59	9,888	7.75
Skills and knowledge learned not sufficient	1,150	71.53	458	28.47	1,608	1.26
No money/financial constraints	9,024	64.76	4,911	35.24	13,935	10.92
No time/working/schooling/abroad	23,022	48.3	24,638	51.7	47,660	37.34
Schedule not known	7,154	54.61	5,945	45.39	13,098	10.26
Others	19,480	64.01	10,954	35.99	30,434	23.84
Total	72,635	56.9	55,012	43.1	127,647	100.00

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 16. Certification Rates of TVET Graduates of WTR Programs, By Sector, Philippines: 2018

	Tools Assess		Ass	essmen	t Result	
Sector	Took Asses	ssment	Passe	d	Faile	ed
	Freq	<b>%</b> ª	Freq	%b	Freq	%b
Agriculture Forestry and Fisheries	69,038	4.96	67,916	98.37	1,122	1.63
Automotive and Land Transportation	133,061	9.57	130,213	97.86	2,848	2.14
Construction	78,916	5.67	77,020	97.6	1,896	2.40
Decorative Crafts	0	0	0	0	0	0.00
Electrical and Electronics	147,179	10.58	140,377	95.38	6,802	4.62
Entrepreneurship	0	0	0	0	0	0.00
Footwear and Leather Goods	0	0	0	0	0	0.00
Furniture and Fixtures	0	0	0	0	0	0.00
Garments	37,086	2.67	36,656	98.84	431	1.16
Heating, Ventilation, Aircondition	5,857	0.42	5,571	95.11	286	4.89
Human Health/Health Care	118,934	8.55	115,942	97.48	2,992	2.52
Information and Communication	31,265	2.25	29,253	93.56	2,012	6.44
Language	644	0.05	644	100	0	0.00
Maritime	11,555	0.83	11,555	100	0	0.00
Metals and Engineering	112,194	8.07	112,194	100	0	0.00
Processed Food and Beverages		0	0	0	0	0.00
Social, Community Development	124,528	8.95	114,664	92.08	9,864	7.92
TVET	17,075	1.23	15,484	90.68	1,591	9.32
Tourism (Hotel and Restaurant)	482,288	34.67	472,974	98.07	9,313	1.93
Visual Arts	19,094	1.37	18,301	95.85	792	4.15
Wholesale and Retail Trading	973	0.07	973	100	0	0.00
Others	1,272	0.09	1,272	100	0	0.00
TOTAL	1,390,958	100	1,351,009	97.13	39,949	2.87

<sup>&</sup>lt;sup>a</sup>Percentage over the total number of takers; <sup>b</sup>Percentage over the total number of takers per sector

Certification is awarded to passers of the competency assessment which include: National Certificate (NC) - given to those who have proven competence in all units of competency needed for a qualification; Certificate of Competency (COC) - awarded to those who have satisfactorily demonstrated competence on a particular or a cluster of units and National TVET Trainers Certificate (NTTC) - provided to Trainers of competency; Methodology Certificate (TMC) holders who have at least two years of experience in the industry, skilled and proficient in their field of interest. Among the 2018 TVET graduates, 1,513,495 - covering about 73% of the graduates were already given a certification. A significant large figure (79.91%) is noted for NC II awardees. This a little higher than an estimated 74.35% recorded in 2017. Nearly 6% were issued COC, NC1 and NC III, while very few received TM I. Many of the passers and recipient of certification were females, except in NC I in which males (77.68%) dominated females (Table 17). A vast majority (88.71%) of the scholars were already issued certification after graduation, wherein the estimates on PESFA, STEP, and TWSP were at par (Table 18). The years of 2017 and 2018 reflect the same pattern among certified scholar-graduates.

Table 17. Level of Certification of TVET Graduates by Sex, Philippines: 2018

		Sex									
Certification Level	Fe	male	٨	Nale	Т	Total					
Level	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>					
COC	53,237	56.12	41,621	43.88	94,858	6.27					
NC I	22,180	22.32	77,177	77.68	99,358	6.56					
NC II	669,972	55.47	537,760	44.53	1,207,732	79.80					
NC III	54,526	55.97	42,893	44.03	97,419	6.44					
NC IV	0	0	0	0	0	0.00					
TM1	8,803	62.31	5,325	37.69	14,128	0.93					
TM2	0	0	0	0	0	0.00					
Total	808,718	53.43	704,776	46.57	1,513,495	100.00					

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 18. Weighted Distribution of TVET Graduates by Certification, by Scholarship, Philippines: 2018

	Certification								
Scholarship Program	Certified		Not Certified		Not indicated		Total		
riogiani	Freq	<b>%</b> ª	Freq	<b>%</b> ª	Freq	<b>%</b> ª	Freq	%⁵	
PESFA	26,593	91.15	1,624	5.56	957	3.28	29,174	5.06	
STEP	114,522	90.02	2,660	2.09	10,031	7.89	127,213	22.06	
TWSP	370,468	88.14	13,270	3.16	36,595	8.71	420,333	72.88	
Total	511,583	88.71	17,554	3.04	47,583	8.25	576,720	100.00	

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

## 3. Labor Force Participation

Of the 2,074,384 TVET graduates in 2018, there was an estimated 1,460,919 who were in the labor force during the conduct of the survey. This provides a labor force participation rate (LFPR) of 70.43% – slightly lower than the estimated LFPR of 72.33% in 2017, but higher than the 2018 national estimate of 60.9% (Source: Philippine Statistics Authority). The estimated LFPR for 2018 TVET graduates suggests that, approximately, 7 in 10 graduates were either employed or unemployed during the conduct of the survey. Similar in the previous year, LFPR of male graduates (74.94%) outstripped females' (66.49%) (Table 19).

Table 19. Labor Force Participation Rate of TVET Graduates by Sex, Philippines: 2018

Sav.	Not in the Labor Force		In the Labor	r Force	Total Graduates		
Sex	Frequency	Percentage <sup>a</sup>	Frequency	LFPR <sup>b</sup>	Frequency	Percentage <sup>c</sup>	
Female	370,950	33.51	735,876	66.49	1,106,826	53.36	
Male	242,515	25.06	725,043	74.94	967,559	46.64	
Total	613,465	29.57	1,460,919	70.43	2,074,384	100.00	

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate;

<sup>&</sup>lt;sup>c</sup>Percentage over the total number of TVET graduates

Labor force participation rates across age groups ranged from about 53 to 86 percent. The most active were those aged 35 to 44 years with LFPR of 86.25%, indicating that approximately 9 in 10 graduates were either employed or unemployed at the time of the survey. Likewise, around 6 in 10 retiring citizens remained active in the labor force with a LFPR of 55.87%. Meanwhile, those at 15 to 24 age group posted lowest LFPR of 52.64% (Table 20 and Figure 6).

Consistently, TVET graduates with a bachelor degree and post-graduate studies posted high LFPR. The majority of these graduates with promising educational backgrounds are active in the labor force. Similarly, great LFPR were observed to those whose highest educational attainment were elementary graduate (86.99%), short-cycle tertiary education (86.36%), post-secondary non-tertiary education (85.25%), and secondary-education undergraduate (old curriculum) (82.01%). Perhaps these graduates were no longer attending school and already working or actively looking for work for their earnings. On the other hand, low LFPR were observed for those who were at their senior high school curriculum at the time of the survey – undergraduate (15.42%) and graduate (47.62%). These are in fact lower than what was estimated for those who were at junior high school curriculum (Table 21). This could be because senior high school students were still active in school during that time and just attended TESDA programs as part of their school requirements, while many of the junior high school students in the 2018 batch of graduates enrolled TESDA programs for employment reason.

Table 20. Labor Force Participation Rate of TVET Graduates, By Age Group, Philippines: 2018

A ma mraum	Not in the Labor Force		In the Labor	r Force	Total Graduates		
Age group	Frequency	Percentagea	Frequency	LFPR <sup>b</sup>	Frequency	Percentage <sup>c</sup>	
15 – 24	395,495	47.36	439,553	52.64	835,048	40.26	
25 – 34	105,939	17.6	496,130	82.4	602,070	29.02	
35 – 44	49,301	13.75	309,364	86.25	358,665	17.29	
45 – 54	34,088	18.21	153,078	81.79	187,166	9.02	
55 – 64	21,745	28.69	54,061	71.31	75,806	3.65	
65 and over	6,897	44.13	8,733	55.87	15,630	0.75	
Total	613,465	29.57	1,460,919	70.43	2,074,384	100.00	

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate;

<sup>&</sup>lt;sup>c</sup>Percentage over the total number of TVET graduates

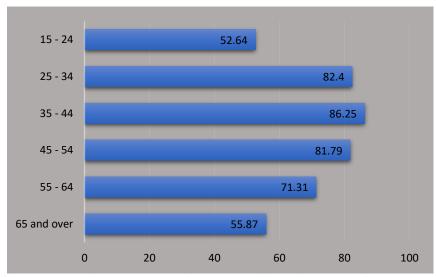


Figure 6. Estimated labor force participation rate of TVET graduates by age group. Philippines, 2018

Table 21. Labor Force Participation Rate of TVET Graduates, By Highest Grade Completed,

Philippines: 2018

Highest Educational Attainment	Not in th For	ie Labor ce	In the L Forc		Total G	raduates
3	Freq	%	Freq	LFPR <sup>b</sup>	Freq	%
No grade completed	0	0	259	0	259	0.01
Early childhood education	1,087	0	2,238	0	3,325	0.16
Primary education (elementary) undergraduate	5,577	47.23	6,231	52.77	11,808	0.57
Primary education (elementary) graduate	3,147	13.01	21,034	86.99	24,181	1.17
Secondary education undergraduate (old curriculum)	16,889	17.99	77,000	82.01	93,889	4.53
Secondary education graduate (old curriculum)	82,320	25.57	239,576	74.43	321,896	15.52
Lower secondary education (junior HS) undergraduate (K-12 curriculum)	6,264	45.35	7,547	54.65	13,811	0.67
Lower secondary education (junior HS) graduate	10,094	36.41	17,626	63.59	27,720	1.34
Upper secondary education (senior HS) undergraduate	56,258	84.58	10,258	15.42	66,516	3.21
Upper secondary education (senior HS) graduate	84,440	52.38	76,751	47.62	161,191	7.77
Post-secondary non-tertiary education	10,726	14.75	61,978	85.25	72,704	3.50
Short-cycle tertiary education	13,638	13.64	86,346	86.36	99,984	4.82
Bachelor level education undergraduate	220,571	47.37	245,056	52.63	465,627	22.45
Bachelor level education graduate	101,893	14.89	582,594	85.11	684,487	33.00
Master level education	333	1.35	24,348	98.65	24,681	1.19
Doctoral level education	230	9.98	2,077	90.02	2,307	0.11
Total	613,465	29.57	1,460,919	70.43	2,074,384	100.00

<sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate; <sup>c</sup>Percentage over the total number of TVET graduates

Many graduates across regions were actively participating in the labor force during the time of the survey with LFPRs at par with the country's rate. Among the regions, NCR brought the highest LFPR with 80.63% (ARMM reported the highest in 2017). Region IV-A came in second with 77.01%. Meanwhile, Region III posted the lowest LFPR with 59.21% - lesser than the recorded lowest LFPR of 60.387% (Region IX) in 2017 (Figure 7 and Table 22).

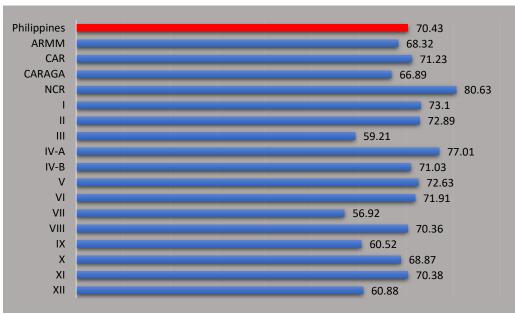


Figure 7. Estimated labor force participation rate of TVET graduates by region. Philippines, 2018

Table 22. Labor Force Participation Rate of TVET Graduates, by Region, Philippines: 2018

Table 22. Labor Force Famerpanon Raic of TVET Oracoures, by Region, Thimppines										
Pagion	Not in the	Labor Force	In the Labor	r Force	Total G	raduates				
Region	Frequency	Percentagea	Frequency	LFPR <sup>b</sup>	Frequency	Percentage <sup>c</sup>				
ARMM	4,832	31.68	10,424	68.32	15,256	0.74				
CAR	13,079	28.77	32,390	71.23	45,469	2.19				
CARAGA	26,890	33.11	54,315	66.89	81,205	3.91				
NCR	61,918	19.37	257,755	80.63	319,672	15.41				
I	29,861	26.9	81,164	73.1	111,025	5.35				
II	15,906	27.11	42,761	72.89	58,667	2.83				
III	89,784	40.79	130,308	59.21	220,092	10.61				
IV-A	72,300	22.99	242,210	77.01	314,510	15.16				
IV-B	20,468	28.97	50,190	71.03	70,658	3.41				
٧	19,490	27.37	51,719	72.63	71,209	3.43				
VI	51,829	28.09	132,654	71.91	184,483	8.89				
VII	44,106	43.08	58,268	56.92	102,374	4.94				
VIII	19,467	29.64	46,210	70.36	65,677	3.17				
IX	23,441	39.48	35,939	60.52	59,380	2.86				
Χ	36,729	31.13	81,246	68.87	117,975	5.69				
XI	28,835	29.62	68,522	70.38	97,357	4.69				
XII	54,530	39.12	84,845	60.88	139,375	6.72				
Total	613,465	29.57	1,460,919	70.43	2,074,384	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate;

<sup>°</sup>Percentage over the total number of TVET graduates

Generally, graduates of TVET were classified as either a completer of TESDA Technology Institutions (TTIs) or of non-TTIs. The TTIs are being managed by TESDA wherein trainings are provided directly to the clients in their schools and training centers all over the country. Non-TTIs, on the other hand, are operated by private institutions accredited by TESDA. A larger portion of graduates emanated unsurprisingly from non-TTIs, which constituted nearly 87% of the population of graduates. Since 2016, TTI graduates brought a somewhat higher LFPR than non-TTI which the LFPR this year were 72.29% and 70.14%, respectively (Table 23).

Looking at the TTI graduates across regions, majority were active in the labor force. The top three regions which exhibited a high share in the labor force were Region XI– Davao Region (85.38%), Cordillera Administrative Region (84.26%), and Region IV-A – CALABARZON (82.42%). Approximately, 8 in 10 graduates from these regions were engaged in the labor force (Table 24). In contrast, Region IX – Zamboanga Peninsula posted the lowest share with LFPR of 59.72%, indicating that for every 10 graduates six were estimated active in the labor force (Table 24). For non-TTIs, on the other hand, the highest share of LPFRs came from different set of regions. The top three most active include NCR (80.65%), Region IV-A (76.63%), and Region IV-B – MIMAROPA (75.52%). Conversely, the lowest share came from Region VII (Central Visayas) with LFPR of 54.59% (Table 25).

Great deviation in the LFPRs can be observed between TTI and non-TTI graduates from CAR, Regions III, IV-B, VII, X and XI, wherein higher estimated rates were seen among TTI graduates. A difference of about 16% can also be noted in Region IV-B in favor of those who came in non-TTIs (Figure 8). This observed distribution across regions is different from what has been examined in 2017.

Table 23. Labor Force Participation Rate of TVET Graduates, By Type of Provider, Philippines: 2018

Type of Provider	Not in the	Labor Force	In the Labor	r Force	Total Graduates			
type of Provider	Frequency	Percentage <sup>a</sup>	Frequency	LFPR <sup>b</sup>	Frequency	Percentage <sup>c</sup>		
TTI	76,428	27.71	199,388	72.29	275,816	13.30		
Non-TTI	537,037	29.86	1,261,531	70.14	1,798,568	86.70		
Total	613,465	29.57	1,460,919	70.43	2,074,384	100.00		

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate; <sup>c</sup>Percentage over the total number of TVET graduates

Table 24. Labor Force Participation Rate of TVET Graduates under TTI, by Region, Philippines: 2018

Dogion	Not in the	Labor Force	In the Labor	r Force	Total Graduates		
Region	Frequency	Percentagea	Frequency	LFPR <sup>b</sup>	Frequency	Percentage <sup>c</sup>	
ARMM	1,091	36.04	1,936	63.96	3,027	1.10	
CAR	1,432	15.74	7,666	84.26	9,098	3.30	
CARAGA	4,377	29.06	10,685	70.94	15,062	5.46	
NCR	2,348	19.86	9,474	80.14	11,822	4.29	
I	9,944	33	20,194	67	30,138	10.93	
II	3,625	29.16	8,806	8,806 <b>70.84</b> 12,431		4.51	
III	2,319	23.18	7,684	76.82	10,003	3.63	

Dogion	Not in the	Labor Force	In the Labor	r Force	Total G	raduates
Region	Frequency	Percentagea	Frequency	LFPR <sup>b</sup>	Frequency	Percentage <sup>c</sup>
IV-A	3,670	17.58	17,208	82.42	20,878	7.57
IV-B	8,173	40	12,260	60	20,433	7.41
٧	4,997	26.3	14,004	73.7	19,001	6.89
VI	9,448	35.75	16,982	64.25	26,430	9.58
VII	3,053	25.51	8,913	74.49	11,966	4.34
VIII	4,430	23.75	14,223	76.25	18,653	6.76
IX	8,527	40.28	12,641	59.72	21,168	7.67
X	4,824	18.33	21,500	81.67	26,324	9.54
XI	1,919	14.62	11,210	85.38	13,129	4.76
XII	2,250	35.99	4,003	64.01	6,253	2.27
Total	76,428	27.71	199,388	72.29	275,816	100.00

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate; <sup>c</sup>Percentage over the total number of TVET graduates

Table 25. Labor Force Participation Rate of TVET Graduates under Non-TTI, by Region, Philippines: 2018

rimppines		Labor Force	In the Labo	r Force	Total G	raduates
Region	1					ı
	Frequency	Percentage <sup>a</sup>	Frequency	LFPRb	Frequency	Percentage <sup>c</sup>
ARMM	3,742	30.6	8,487	69.4	12,229	0.68
CAR	11,647	32.02	24,724	67.98	36,371	2.02
CARAGA	22,513	34.04	43,630	65.96	66,143	3.68
NCR	59,570	19.35	248,281	80.65	307,850	17.12
I	19,917	24.62	60,970	75.38	80,887	4.50
	12,281	26.56	33,955	73.44	46,236	2.57
<b>=</b>	87,466	41.63	122,624	58.37	210,089	11.68
IV-A	68,629	23.37	225,003	76.63	293,632	16.33
IV-B	12,295	24.48	37,930	75.52	50,225	2.79
٧	14,493	27.76	37,715	72.24	52,208	2.90
VI	42,380	26.81	115,673	73.19	158,053	8.79
VII	41,053	45.41	49,355	54.59	90,408	5.03
VIII	15,037	31.98	31,987	68.02	47,024	2.61
IX	14,914	39.03	23,298	60.97	38,212	2.12
Х	31,905	34.81	59,746	65.19	91,651	5.10
XI	26,915	31.96	57,313	68.04	84,228	4.68
XII	52,280	39.27	80,842	60.73	133,122	7.40
Total	537,037	29.86	1,261,531	70.14	1,798,568	100.00

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate; <sup>c</sup>Percentage over the total number of TVET graduates

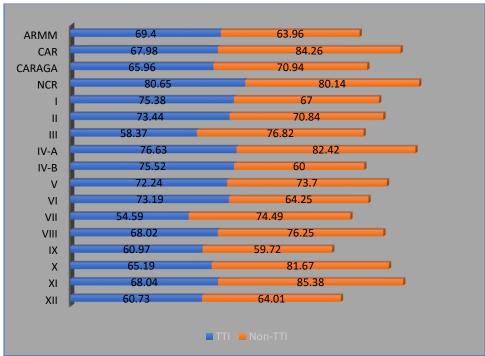


Figure 8. Estimated labor force participation rate of TTI and Non-TTI graduates by region. Philippines, 2018

Similar in the previous year, high LFPRs were noted for graduates from different training delivery modes. The dual training system (DTS), once more, resulted with the highest LFPR (100%) among its graduates, showing the high likelihood for the graduates under this program to be active in the labor force. This is followed by the apprenticeship programs, with LFPR of 88.8%. Moreover, it is estimated that 7 in 10 graduates of the learnership (74.24%), institution-based (72.57%), mobile training (71.78%) and community-based programs (65.61%) participated in the labor force during the conduct of the survey (Table 26 and Figure 9). For the past three consecutive years, DTS and enterprise-based programs, in spite of the low number of graduates, continually brought high LFPR among the graduates because of their acquaintance in the workplace.

Table 26. Labor Force Participation Rate of TVET Graduates, by Training Delivery Mode.

Philippines, 2018

Programs Delivery Made	Not in the Labor Force		In the Lab	or Force	Total Graduates		
Program Delivery Mode	Freq	Percentag ea	Freq	LFPR <sup>b</sup>	Freq	Percenta ge <sup>c</sup>	
Institution-based	354,896	27.43	938,906	72.57	1,293,802	62.37	
Mobile training program	12,294	28.22	31,272	71.78	43,565	2.10	
Enterprise-based programs	5,684	15.19	31,748	84.82	37,431	1.80	
Dual training system	0	0	1,335	100	1,335	0.06	
Apprenticeship	2,780	11.2	22,044	88.8	24,823	1.20	
Learnership	2,904	25.76	8,369	74.24	11,273	0.54	
Community-based	240,592	34.39	458,993	65.61	699,585	33.72	
Total	613,465	29.57	1,460,919	70.43	2,074,384	100.00	

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate; <sup>c</sup>Percentage over the total number of TVET graduates

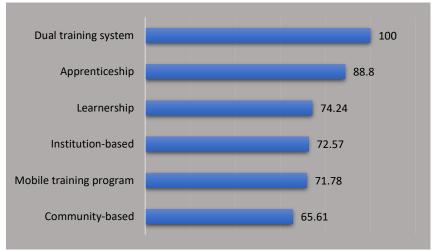


Figure 9. Estimated labor force participation rate of TVET graduates by training delivery mode. Philippines, 2018

Based on the survey conducted, TII graduates of the dual training system (DTS) and apprenticeship with estimated LFPRs of 100% reflected high chance of participation in the labor force. Nonetheless, almost majority under institution-based and mobile training programs were either working or looking for work at the time of the survey. Moreover, nearly 7 in 10 TII graduates of community-based programs were engaged in the labor force. However, no one among those who were interviewed graduates of learnership programs participated in the labor force (Table 27).

Non-TTI graduates of the dual training system were also predicted to have a great chance to be in the labor force with an estimated LFPR of 100%. Apprenticeship came in second with LFPR of 88.64%. High LFPRs were also registered in the other program modes such as institution-based (72.17%), mobile training program (71.93%), learnership (77.54%), and community-based programs (65.54%) (Table 28). As indicated, the estimated LFPR for TTI graduates is a little higher than that of non-TTI. Even so, both types of provider reflected the same pattern among graduates in terms of participation in the labor force across training delivery modes, except for learnership programs wherein no one from TTIs were recorded to be engaged in the labor force (Figure 10).

Table 27. Labor Force Participation Rate of TVET Graduates under TTI, by Training Delivery Mode, Philippines, 2018

Dua awawa Dalbuawa Manda	_	Not in the Labor Force		or Force	Total Graduates		
Program Delivery Mode	Freq	Percentag ea	Freq	LFPRb	Freq	Percentag e <sup>c</sup>	
Institution-based	47,487	25.1	141,669	74.90	189,156	68.58	
Mobile training program	1,805	29.13	4,390	70.87	6,195	2.25	
Enterprise-based programs	479	25.79	1,378	74.21	1,857	0.09	
Dual training system	0	0	1,017	100	1,017	0.37	
Apprenticeship	0	0	361	100	361	0.13	
Learnership	479	100	0	0	479	0.17	
Community-based	26,657 33.9		51,951	66.09	78,608	28.50	
Total	76,428	27.71	199,388	72.29	275,816	100.00	

<sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate; <sup>c</sup>Percentage over the total number of TVET graduates

Table 28. Labor Force Participation Rate of TVET Graduates UNDER Non-TTI, by Training Delivery Mode, Philippines, 2018

Dra grama Dalivani, Mada	Not in the	Labor Force	In the L Forc		Total Graduates		
Program Delivery Mode	Freq	Percentag ea	Freq	LFPR <sup>b</sup>	Freq	Percentag e <sup>c</sup>	
Institution-based	307,409	27.83	797,237	72.17	1,104,646	61.42	
Mobile training program	10,489	28.07	26,881	71.93	37,370	2.08	
Enterprise-based programs	5,205	14.63	30,370	85.37	35,574	1.71	
Dual training system	0	0	318	100	318	0.02	
Apprenticeship	2,780	11.36	21,683	88.64	24,462	1.36	
Learnership	2,425	22.46	8,369	77.54	10,794	0.6	
Community-based	213,935	34.45	407,042	65.55	620,977	34.53	
Total	537,037	29.86	1,261,531	70.14	1,798,568	100.00	

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Labor Force Participation Rate; <sup>c</sup>Percentage over the total number of TVET graduates

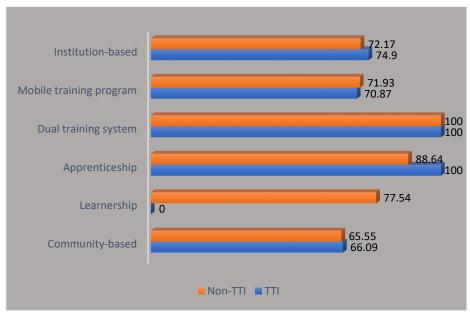


Figure 10. Estimated labor force participation rate of TTI and Non-TTI graduates by training delivery mode. Philippines, 2018

As revealed, labor force participation rate this year declined by about 3% as compared to that of last year. Knowing that, it could also be necessary to discern the reasons of graduates for not participating in the labor force since higher job opportunities among TVET clients is one of the goals of the institution. Based on the survey, it is estimated that more than half (56.50%) of the graduates – many were females, were still attending school at the time of the survey which explains their not being active in the labor force. Whereas, almost a quarter (24.44%), of which majority were females, did not look for work due to their household/family duties. Some were actually awaiting results of previous job applications, while a few reasoned that they were too young or too old already to be active in the labor force (Table 29).

Table 29. Reasons of TVET Graduates for Not Looking for Work, Philippines: 2018

			Sex	.ppooc		
Reasons	Femo	ıle	Male	;	Tot	al
	Freq	%	Freq	%	Freq	%
Tired	1,336	34.62	2,522	65.38	3,857	0.60
No work available	1,054	20.41	4,111	79.59	5,165	0.81
Awaiting results of previous application	21,050	50.15	20,926	49.85	41,976	6.57
Temporary illness/ disability	776	32.13	1,639	67.87	2,415	0.38
Bad weather	0	0	0	0	0	0.00
Waiting for rehire/ job recall	1,029	14.6	6,016	85.4	7,045	1.10
Too young/ old or retired	12,240	70.8	5,048	29.2	17,288	2.70
Permanent disability	0	0	258	100	258	0.04
Household/ family duties	130,812	83.74	25,400	16.26	156,212	24.44
Schooling	191,549	53.04	169,621	46.96	361,170	56.50
Others	22,043	50.32	21,760	49.68	43,803	6.85
Total	381,890	59.75	257,300	40.25	639,190	100.00

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

## 4. Employment

TESDA, as a government agency mandated to deliver policies, programs, directions and standards for a quality technical education and skills development among the Filipino, aspires for world-class competence workers and with work values. Through their TVET, TESDA guarantees that new and global competencies will be developed among their clients that would heighten their employability in their chosen field and thus improves their lives for the better. To oversee how useful their trainings are, it is necessary for the TESDA to keep track the employment status of its graduates after successfully attending their programs.

#### 4.1. Length of Job Search

With the improved trainings provided by TESDA, it is ensured that TVET graduates would be able to land a job within six to twelve months after completing a program – one measure for the employability of the graduates. It is deemed that the longer one is unemployed, the longer it will take for their graduates to be employed. Having said, it is important for the management to monitor if they are successful on this target, hence the length of job search of the 2018 graduates were noted as well.

An overwhelming majority (97.83%) of the 2018 graduates were able to find a job within six to less than a year, which was actually the target of TESDA among its TVET clients whose primary reason for attending a training is for employment purposes. In fact, a large portion of them (77.19%) landed a job in less than six months after completing a TVET program, a little more than half (54.08%) of which were female. Despite the vast number of graduates who were able to get a job within the span of less than a year, it is also imperative for the management to give attention to the graduates who took more than a year to get a work, and unlike in the previous years, many of which were male (58.22%) (Table 30 and Figure 11).

In particular, the graduates in 2018 hunted for a job in 3.42 months, with a variability of 4.42 months, before getting employed. This is nearly the same both for TTI and non-TTI graduates. The shortest time it took for a graduate to search for work was 0.25 months (7 to 8 days) after completing a program, same as what has been recorded in 2017. There was also a high coefficient of skewness for both types of providers (TTI and non-TTI), indicating that there were very few graduates who waited for a bit longer period before getting a job. Specifically, there were graduates from TTI who took almost 5 years (56 months) to get a work, a year longer than those from non-TTIs (48 months) (Table 31)

Table 30. Weighted distribution of TVET graduates according to the Length of Job Search

after the Training, Philippines: 2018

	Sex									
Length of Job Search	Fe	male	٨	Nale	Total					
	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>				
Less than 6 months	111,278	54.08	94,488	45.92	205,766	77.19				
6 months to 1 year	23,219	42.19	31,819	57.81	55,039	20.65				
More than 1 year	2,415	41.78	3,366	58.22	5,781	2.17				
Total	136,913	51.36	129,673	48.64	266,586	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

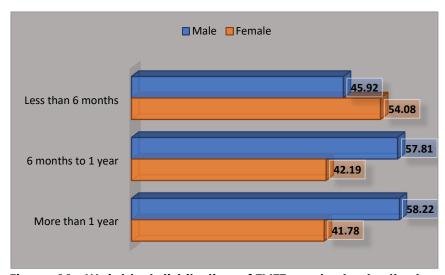


Figure 11. Weighted distribution of TVET graduates by the length of job search after the training. Philippines, 2018

Table 31. Summary statistics for Length of Job Search (in months) by Type of Provider and

Overall, Philippines: 2018

Statistics	Type of	Provider	Overall	
Sidistics	TTI	Non-TTI	Overdii	
Minimum	0.25	0.25	0.25	
Maximum	56.00	48.00	56.00	
Mean	3.96	3.42	3.42	
Median	2.00	2.00	2.00	
Standard deviation	5.92	4.15	4.42	
Skewness	4.16	3.68	3.97	

### 4.2. Employment Rate

About 8 in every 10 TVET graduates (84.15%) in 2018 was estimated actively working at the time of the survey. This is considerably higher than the 2017 estimate of 68.58%, which was recorded, on the other hand, as slightly lower than the estimated 71.87% in 2016. Moreover, the estimated employment rates for both sexes were almost similar, with a difference of 0.56 percent in favor female group (Table 32). This result is really different from what was recorded in the past, wherein male consistently produced higher employment rate than that of females. This may imply a significant improvement in the participation of women in the labor force and more employment opportunities for them.

Table 32. Estimated Employment Rate of TVET Graduates, By Sex, Philippines: 2018

Not in the		the	_			TVET Craduates				
Sex	Sex Labor Force		Not employed		Employed		Total		TVET Graduates	
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%
Female	370,950	33.51	114,609	15.57	621,267	84.43	735,876	66.49	1,106,826	53.36
Male	242,515	25.06	116,914	16.13	608,130	83.87	725,043	74.94	967,559	46.64
Total	613,465	29.57	231,523	15.85	1,229,396	84.15	1,460,919	70.43	2,074,384	100.00

<sup>&</sup>lt;sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

Majority of graduates across age groups who were active in the labor force had jobs during the conduct of the survey. The biggest share came from graduates aged 55 to 64 with an estimated employment rate of 96.04%, followed by those in their 45 to 54 years (92.48%). Moreover, the trend shows that as a graduate gets older, his/her chance in employment gets better, except when he/she is already in the retiring age. (Table 33).

Table 33. Estimated Employment Rate of TVET Graduates, By Age group, Philippines: 2018

	Not in th	Not in the Labor		In the Labor Force							
Age group	Force		Not employed		Employ	Employed		al	Total Graduates		
9.000	Freq	%	Freq	%	Freq	ERa	Freq	LFPR <sup>b</sup>	Freq	%	
15 – 24	395,495	47.36	108,286	24.64	331,267	75.36	439,553	52.64	835,048	40.26	
25 – 34	105,939	17.6	81,530	16.43	414,601	83.57	496,130	82.4	602,070	29.02	
35 – 44	49,301	13.75	26,555	8.58	282,809	91.42	309,364	86.25	358,665	17.29	
45 – 54	34,088	18.21	11,504	7.52	141,574	92.48	153,078	81.79	187,166	9.02	
55 – 64	21,745	28.69	2,141	3.96	51,920	96.04	54,061	71.31	75,806	3.65	
65 and over	6,897	44.13	1,506	17.25	7,226	82.75	8,733	55.87	15,630	0.75	
Total	613,465	29.57	231,523	15.85	1,229,396	84.15	1,460,919	70.43	2,074,384	100.00	

<sup>°</sup>ER – employment rate; °LFPR – labor force participation rate

Unsurprisingly, TVET clients with at least bachelor degree posted the highest employment rate (Bachelor level at 87.63%, Masters level at 94.61% and Doctoral level at 100%). The same pattern was recorded in 2017. Likewise, high employment rate can be observed for the rest of the graduates who had primary level, secondary (old and new curriculum), non-tertiary and tertiary level of education, except with those no did not attend school at all with an estimate of 31.27% (Table 34). Based on this, it is essential to deal with the factors that possibly causes these graduates who were active in the labor force but having a hard time to be employed.

Both graduates of TTIs and non-TTIs exhibited high employment rates that were on par to the national estimate of 84.15%. Moreover, non-TTIs posted slightly higher employment rate than TTIs with a percentage- difference of 0.76 (Table 35).

Table 34. Estimated Employment Rate of TVET Graduates, By Highest Educational Attainment, Philippines: 2018

able on Esimulou Employment Rule of the	Not in the				In the Lab				Todal Cand	
Highest Educational Attainment	Forc	е	Not em	ployed	Emplo	yed	Tota	al	Total Grad	uates
	Freq	%	Freq	%	Freq	<b>ER</b> ª	Freq	LFPR <sup>b</sup>	Freq	%
No grade completed	0	0.00	178	68.73	81	31.27	259	0.00	259	0.01
Early childhood education	1,087	32.69	398	17.78	1,839	82.17	2,238	0.00	3,325	0.16
Primary education (elementary) undergraduate	5,577	47.23	1,435	23.02	4,796	76.98	6,231	52.77	11,808	0.57
Primary education (elementary) graduate	3,147	13.01	3,945	18.76	17,089	81.24	21,034	86.99	24,181	1.17
Secondary education undergraduate (old curriculum)	16,889	17.99	10,708	13.91	66,292	86.09	77,000	82.01	93,889	4.53
Secondary education graduate (old curriculum)	82,320	25.57	42,224	17.62	197,352	82.38	239,576	74.43	321,896	15.52
Lower secondary education (junior HS) undergraduate (K-12 curriculum)	6,264	45.35	1,684	22.31	5,863	77.69	7,547	54.65	13,811	0.67
Lower secondary education (junior HS) graduate	10,094	36.41	5,762	32.69	11,864	67.31	17,626	63.59	27,720	1.34
Upper secondary education (senior HS) undergraduate	56,258	84.58	2,580	25.15	7,678	74.85	10,258	15.42	66,516	3.21
Upper secondary education (senior HS) graduate	84,440	52.38	21,674	28.24	55,078	71.76	76,751	47.62	161,191	7.77
Post-secondary non-tertiary education	10,726	14.75	9,802	15.82	52,176	84.18	61,978	85.25	72,704	3.50
Short-cycle tertiary education	13,638	13.64	17,304	20.04	69,041	79.96	86,346	86.36	99,984	4.82
Bachelor level education undergraduate	220,571	47.37	40,391	16.48	204,665	83.52	245,056	52.63	465,627	22.45
Bachelor level education graduate	101,893	14.89	721,256	12.38	510,468	87.62	582,594	85.11	684,487	33.00
Master level education	333	1.35	1,312	5.39	23,037	94.61	24,348	98.65	24,681	1.19
Doctoral level education	230	9.98	0	0.00	2,077	100.00	2,077	90.02	2,307	0.11
Total	613,465	29.57	231,523	15.85	1,229,396	84.15	1,460,919	70.43	2,074,384	100.0

<sup>&</sup>lt;sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

Table 35. Estimated Employment Rate of TVET Graduates, By Type of Provider, Philippines: 2018

	Notin the Lab	- Faras			In the Labo	or Force			Today Cray	dda.a
Type of Provider	Not in the Labo	or rorce	Not emp	loyed	Employ	/ed	Tota	ıl	Total Gra	avares
	Freq	%	Freq	%	Freq	ERa	Freq	LFPR <sup>b</sup>	Freq	%
TTI	76,428	27.71	32,903	16.5	166,485	83.5	199,388	72.29	275,816	13.30
Non-TTI	537,037	29.86	198,620	0	1,062,911	84.26	1,261,531	70.14	1,798,568	86.70
Total	613,465	29.57	231,523	15.85	1,229,396	84.15	1,460,919	70.43	2,074,384	100.00

<sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

Majority of the TVET graduates across regions in 2018 were actively working at the time of the survey with an employment rate ranging from 74 to 90 percent. The top estimates were recorded in Region IV-A (89.67%), Region XII (88.17%) and Region X (88.10%). In the previous survey, CAR, Region I and Region IV-B got the top three slots. Alternatively, Region VIII, Region IX, and ARMM placed the bottom three with estimates at 76.92%, 76.84%, and 73.57%, respectively (Table 36). This distribution is significantly different from what was seen in 2017 and in 2016, illustrating unpredictable patterns of employment rates across regions. Moreover, although ARMM once again situated in the lowest rank, significant increase can be noted from an estimate of 37.90% in 2017. Generally, improved employment rates across regions were observed this year compared to those of last year.

Table 36. Estimated Employment Rate of TVET Graduates, By Region, Philippines: 2018

	Notin the Lat	har Faraa			In the Lab	or Force	•		Todal Cras	d
Region	Not in the Lai	por rorce	Not emp	oloyed	Employ	/ed	Tota	I	Total Grad	auaies
	Freq	<b>%</b> ª	Freq	<b>%</b> ª	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%⁰
NCR	61,918	19.37	36,089	14.00	221,666	86.00	257,754	80.63	319,672	15.41
CAR	13,079	28.77	5,556	17.15	26,833	82.85	32,390	71.23	45,469	2.19
1	29,861	26.90	17,075	21.04	64,089	78.96	81,164	73.10	111,025	5.35
I	15,906	27.11	5,482	12.82	37,279	87.18	42,761	72.89	58,667	2.83
Ш	89,784	40.79	28,659	21.99	101,649	78.01	130,308	59.21	220,092	10.61
IV-A	72,300	22.99	25,017	10.33	217,193	89.67	242,210	77.01	314,510	15.16
IV-B	20,468	28.97	6,034	12.02	44,156	87.98	50,190	71.03	70,658	3.41
٧	19,490	27.37	8,714	16.85	43,004	83.15	51,719	72.63	71,209	3.43
VI	51,829	28.09	25,530	19.25	107,125	80.75	132,654	71.91	184,483	8.89

	Notin the La	har Faraa			In the Lab	or Force	9		Today Cum	dl.a.a
Region	Not in the La	por rorce	Not emp	oloyed	Employ	/ed	Tota	I	Total Gra	avaies
	Freq	<b>%</b> ª	Freq	<b>%</b> ª	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%b
VII	44,106	43.08	10,620	18.23	47,647	81.77	58,268	56.92	102,374	4.94
VIII	19,467	29.64	10,666	23.08	35,544	76.92	46,210	70.36	65,677	3.17
IX	23,441	39.48	8,323	23.16	27,616	76.84	35,939	60.52	59,380	2.86
X	36,729	31.13	9,666	11.90	71,580	88.10	81,246	68.87	117,975	5.69
XI	28,835	29.62	9,536	13.92	58,986	86.08	68,522	70.38	97,357	4.69
XII	54,530	39.12	10,040	11.83	74,805	88.17	84,845	60.88	139,375	6.72
CARAGA	26,890	33.11	11,759	21.65	42,556	78.35	54,315	66.89	81,205	3.91
ARMM	4,832	31.68	2,755	26.43	7,669	73.57	10,424	68.32	15,256	0.74
Philippines	613,465	29.57	231,523	15.85	1,229,396	84.15	1,460,919	70.43	2,074,384	100.00

<sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

Approximately 57 to 96 percent graduates of TTIs in 2018 across regions were employed at the time of the survey, wherein the registered lowest and highest rates came from ARMM and CARAGA, respectively. However, it was also in the latter region that the lowest employment rate under the non-TTI was noted at about 74%, while the highest rate came from Region II which was nearly 92%. In addition, many of the estimates from the different regions, both for TTIs and non-TTIs were at par on the national estimate of TTI (83.5%) and non-TTI (84.26%) (Tables 37 and 38). Furthermore, large variation in the estimates can be noted between providers in Region II and ARMM with a percent difference of 24.15 and 22.11 in favor of non-TTI. Whereas, it was in CARAGA that employment rate was considerably higher in TTI against non-TTI with a difference of almost 22 percent (Figure 12).

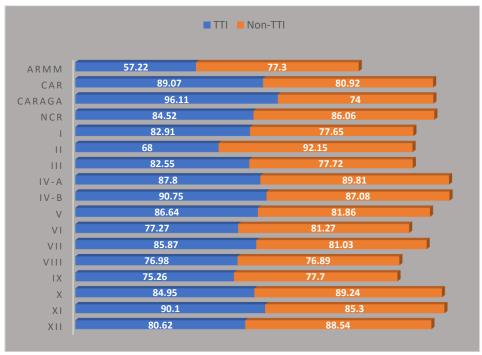


Figure 12. Estimated employment rate of TTI and Non-TTI graduates by region, Philippines, 2018

Table 37. Estimated Employment Rate of TVET Graduates under TTI, By Region, Philippines: 2018

	Nation Hand				In the Lab	or Force	9		Talad Cua	
Region	Not in the Lo	abor Force	Not em	ployed	Emplo	yed	Tota	al	Total Gro	iavaies
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%
ARMM	1,091	36.04	828	42.78	1,108	57.22	1,936	63.96	3,027	1.10
CAR	1,432	15.74	838	10.93	6,828	89.07	7,666	84.26	9,098	3.30
CARAGA	4,377	29.06	415	3.89	10,270	96.11	10,685	70.94	15,062	5.46
NCR	2,348	19.86	1,467	15.48	8,007	84.52	9,474	80.14	11,822	4.29
_	9,944	33	3,451	17.09	16,743	82.91	20,194	67	30,138	10.93
II	3,625	29.16	2,818	32	5,988	68	8,806	70.84	12,431	4.51
III	2,319	23.18	1,341	17.45	6,344	82.55	7,684	76.82	10,003	3.63
IV-A	3,670	17.58	2,099	12.2	15,109	87.8	17,208	82.42	20,878	7.57
IV-B	8,173	40	1,134	9.25	11,126	90.75	12,260	60	20,433	7.41
٧	4,997	26.3	1,871	13.36	12,132	86.64	14,004	73.7	19,001	6.89
VI	9,448	35.75	3,861	22.73	13,121	77.27	16,982	64.25	26,430	9.58
VII	3,053	25.51	1,259	14.13	7,654	85.87	8,913	74.49	11,966	4.34
VIII	4,430	23.75	3,274	23.02	10,950	76.98	14,223	76.25	18,653	6.76
IX	8,527	40.28	3,127	24.74	9,514	75.26	12,641	59.72	21,168	7.67
X	4,824	18.33	3,235	15.05	18,265	84.95	21,500	81.67	26,324	9.54
XI	1,919	14.62	1,110	9.9	10,100	90.1	11,210	85.38	13,129	4.76
XII	2,250	35.99	776	19.38	3,227	80.62	4,003	64.01	6,253	2.27
Total	76,428	27.71	32,903	16.5	166,485	83.5	199,388	72.29	275,816	100.00

<sup>&</sup>lt;sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

Table 38. Estimated Employment Rate of TVET Graduates under Non-TTI, By Region, Philippines: 2018

	Not in the	e Labor			In the Lab	or Force			Total Cum	ماسيا
Region	Ford	:e	Not emp	loyed	Employ	/ed	Toto	al	Total Grad	auates
	Freq	%	Freq	%	Freq	ERa	Freq	LFPRb	Freq	%
ARMM	3,742	30.6	1,927	22.7	6,561	77.3	8,487	69.4	12,229	0.68
CAR	11,647	32.02	4,718	19.08	20,006	80.92	24,724	67.98	36,371	2.02
CARAGA	22,513	34.04	11,344	26	32,286	74	43,630	65.96	66,143	3.68
NCR	59,570	19.35	34,622	13.94	213,659	86.06	248,280	80.65	307,850	17.12
i	19,917	24.62	13,624	22.35	47,346	77.65	60,970	75.38	80,887	4.50
II	12,281	26.56	2,664	7.85	31,291	92.15	33,955	73.44	46,236	2.57
III	87,466	41.63	27,318	22.28	95,305	77.72	122,623	58.37	210,089	11.68
IV-A	68,629	23.37	22,918	10.19	202,084	89.81	225,003	76.63	293,632	16.33
IV-B	12,295	24.48	4,900	12.92	33,030	87.08	37,930	75.52	50,225	2.79
V	14,493	27.76	6,843	18.14	30,872	81.86	37,715	72.24	52,208	2.90
VI	42,380	26.81	21,669	18.73	94,004	81.27	115,673	73.19	158,053	8.79
VII	41,053	45.41	9,361	18.97	39,993	81.03	49,355	54.59	90,408	5.03
VIII	15,037	31.98	7,393	23.11	24,594	76.89	31,987	68.02	47,024	2.61
IX	14,914	39.03	5,196	22.3	18,102	77.7	23,298	60.97	38,212	2.12
Х	31,905	34.81	6,431	10.76	53,315	89.24	59,746	65.19	91,651	5.10
XI	26,915	31.96	8,426	14.7	48,886	85.3	57,313	68.04	84,228	4.68
XII	52,280	39.27	9,264	11.46	71,578	88.54	80,842	60.73	133,122	7.40
Total	537,037	29.86	198,620	15.74	1,062,911	84.26	1,261,531	70.14	1,798,568	100.00

<sup>&</sup>lt;sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

About 8 in 10 TVET graduates from institution-based, mobile-training, and community-based programs were accounted to be actively working when the survey was conducted. Graduates of mobile training programs recorded the most number of employed, constituting 89.66% of those in the labor force. DTS, however, marked unsurprisingly low employment rate at 8.08%, which was significantly lower than those estimates generated in the previous surveys, wherein the said program tagged the highest rank (Table 39).

Table 39. Estimated Employment Rate of TVET Graduates, By Program Delivery Mode, Philippines: 2018

	Notice the La			In the Lat	or Forc	е	-	TVET Graduates		
Program Delivery Mode	Not in the La	por rorce	Not emp	oloyed	Employ	/ed	Tota	1	IVEI Grad	ivates
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%
Institution-based	354,896	27.43	152,678	16.26	786,228	83.74	938,906	72.57	1,293,802	62.37
Mobile training program	12,294	28.22	3,233	10.34	28,039	89.66	31,272	71.78	43,565	2.10
Enterprise-based	5,684	15.18	10,428	32.85	21,320	67.15	31,748	84.82	37,432	1.77
Dual training system	0	0.00	1,227	91.92	108	8.08	1,335	100.0	1,335	0.06
Apprenticeship	2,780	11.20	5,959	27.03	16,084	72.97	22,044	88.80	24,823	1.20
Learnership	2,904	25.76	3,242	38.73	5,128	61.27	8,369	74.24	11,273	0.54
Community-based	240,592	34.39	65,184	14.20	393,809	85.80	458,993	65.61	699,585	33.72
Total	613,465	29.57	231,523	15.85	1,229,396	84.15	1,460,919	70.43	2,074,384	100.00

<sup>&</sup>lt;sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

Generally, the number of graduates of institution-based, mobile-training, and community-based programs for both providers improved when compared with the last year's estimates. Overall, the differences between TTI and non-TTI among these programs were very small. Moreover, many of those graduates of enterprise-based such as apprenticeship and learnership came from non-TTIs – which could be attributed to the possibility that graduates here were actually employees who attended TESDA programs for skills enhancement. It is also important to note that only 10.61% of the population of DTS-TTI graduates who participated in the labor force were estimated employed at the time of the survey (Tables 40 and 41 and Figure 13). Estimates this year were impressive, but not for some training delivery modes, particularly in enterprise-based programs (mainly in TTI) and DTS.

Table 40. Estimated Employment Rate of TVET Graduates under TTI, by Training Delivery Mode, Philippines: 2018

	Not in th	e Labor						Tota	ıl	
Program Delivery Mode	For	ce	Not em	ployed	Emplo	yed	Toto	al	Gradu	ates
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Frequency	%
Institution-based	47,487	25.1	25,125	17.74	116,544	82.26	141,669	74.9	189,156	68.58
Mobile training program	1,805	29.13	618	14.08	3,772	85.92	4,390	70.87	6,195	2.25
Enterprise-based	479	25.8	1,114	80.88	263	19.12	1,378	74.2	1,857	0.67
Dual training system	0	0	909	89.39	108	10.61	1,017	100	1,017	0.37
Apprenticeship	0	0	205	56.91	156	43.09	361	100	361	0.13
Learnership	479	100	0	0	0	0	0	0	479	0.17
Community-based	26,657	33.91	6,045	11.64	45,906	88.36	51,951	66.09	78,608	28.50
Total	76,428	27.71	32,903	16.5	166,485	83.5	199,388	72.29	275,816	100.00

<sup>&</sup>lt;sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

Table 41. Estimated Employment Rate of TVET Graduates under Non-TTI, by Training Delivery Mode, Philippines: 2018

	Notice the close or	Not in the Labor Force			In the Labor Force						
Program Delivery Mode	Not in the Labor	rorce	Not emp	loyed	Employ	ed	Tota	I	Total Grad	uates	
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPRb	Frequency	%	
Institution-based	307,409	27.83	127,552	16	669,685	84	797,237	72.17	1,104,646	61.42	
Mobile training program	10,489	28.07	2,615	9.73	24,266	90.27	26,881	71.93	37,370	2.08	
Enterprise-based	5,204	14.63	9,314	30.67	21,056	69.33	30,370	85.37	35,575	1.94	
Dual training system	0	0	318	100	0	0	318	100	318	0.02	
Apprenticeship	2,780	11.36	5,754	26.54	15,929	73.46	21,683	88.64	24,462	1.36	
Learnership	2,425	22.46	3,242	38.73	5,128	61.27	8,369	77.54	10,794	0.60	
Community-based	213,935	34.45	59,139	14.53	347,904	85.47	407,042	65.55	620,977	34.53	
Total	537,037	29.86	198,620	15.74	1,062,911	84.26	1,261,531	70.14	1,798,568	100.00	

<sup>&</sup>lt;sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

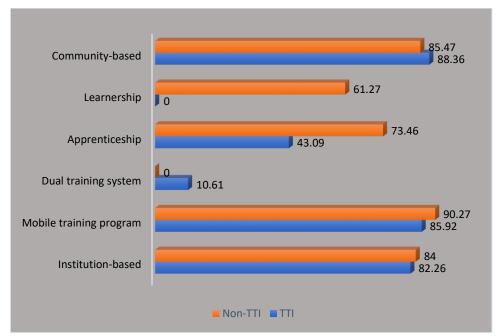


Figure 13. Estimated employment rate of TTI and Non-TTI graduates by training. delivery mode. Philippines, 2018

Overall, a great portion of graduates across the different sectors who were in the labor force had jobs at the time of the survey, except the utilities sector with only 47.85%. Also, almost the same as in the previous years, the top three sectors, with high employment rates, more than the national estimate, include Footwear (100%), Heating, Ventilation, Aircondition (100%), and Visual Arts (93.22%). It is also worth noting that the sector most enrolled by females and males – Tourism and Electrical and Electronics, respectively, produced high employment rate, in which 8 in 10 graduates were actively working when the survey was conducted, compared in 2017 in which 6 in 10 were estimated employed (Table 42). This perhaps shows that more job opportunities could have been offered to these sectors that were most popular with the clients.

Table 42. Estimated Employment Rate of TVET Graduates, By Sector, Philippines: 2018

		hay Fayaa			Total Graduates					
Sector	Not in the Lal	oor rorce	Not emp	loyed	Employ	⁄ed	Toto	ıl	Iotal Grad	auares
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFR <sup>b</sup>	Freq	%
Agriculture Forestry and Fisheries	35,453	33.14	8,178	11.43	63,344	88.57	71,521	66.86	106,974	5.16
Automotive and Land Transportation	33,903	18.62	22,055	14.88	126,136	85.12	148,191	81.38	182,094	8.78
Construction	21,666	21.13	19,226	23.77	61,668	76.23	80,894	78.87	102,561	4.94
Electrical and Electronics	69,520	33.35	24,159	17.39	114,795	82.61	138,954	66.65	208,474	10.05
Footwear	467	60.00	0	0.00	311	100.0	311	40.00	778	0.04
Garments	19,430	37.83	4,255	13.33	27,674	86.67	31,929	62.17	51,359	2.48
Heating, Ventilation, Aircondition	2,211	22.05	0	0.00	7,816	100.0	7,816	77.95	10,027	0.48
Human Health/Health Care	45,634	28.48	13,306	11.61	101,309	88.39	114,615	71.52	160,249	7.73
Information and Communication	17,542	24.42	8,936	16.46	45,368	83.54	54,304	75.58	71,846	3.46
Language	10,563	30.93	2,621	11.11	20,963	88.89	23,584	69.07	34,147	1.65
Maritime	4,373	36.89	844	11.28	6,637	88.72	7,481	63.11	11,854	0.57
Metals and Engineering	32,763	22.42	19,764	17.44	93,577	82.56	113,341	77.58	146,104	7.04
Social, Community Development	54,809	25.33	22,592	13.98	138,976	86.02	161,568	74.67	216,377	10.43
TVET	4,817	15.62	3,490	13.41	22,534	86.59	26,024	84.38	30,841	1.49
Tourism (Hotel and Restaurant)	233,040	35.29	75,104	17.57	352,237	82.43	427,341	64.71	660,381	31.84
Utilities	0	0.00	214	52.15	196	47.85	410	100.00	410	0.02
Visual Arts	5,995	27.71	1,060	6.78	14,576	93.22	15,636	72.29	21,631	1.04
Wholesale and Retail Trading	19,247	41.28	3,097	11.31	24,283	88.69	27,380	58.72	46,627	2.25
Others	2,032	17.44	2,623	27.27	6,996	72.73	9,619	82.56	11,652	0.56
Total	613,465	29.57	231,523	15.85	1,229,396	84.15	1,460,919	70.43	2,074,384	100.0

<sup>&</sup>lt;sup>a</sup>ER – employment rate; <sup>b</sup>LFPR – labor force participation rate

Furthermore, comparing the employment rate across sectors in 2016, 2017, and 2018, it can be observed that continuous progress in the employment rate is recorded in the sectors: (1) automotive and land transportation; (2) heating, ventilation, air condition; (3) human health/health care; (4) information and communication; (5) language; (6) social community development; and (7) wholesale and retail trading. Likewise, an improvement in the employment rate from a decline in 2017 (as compared with 2016) has been observed in the sectors: (1) agriculture, forestry, and fisheries; (2) construction; (3) garments; (4) TVET; and (5) Tourism. In general, a considerable increase in the employment rates is noted for all sectors defined in TESDA from 2016 to 2018, except for decorative, entrepreneurship, footwear, logistics, and processed food and beverage sectors since none of the 2018 graduates who were interviewed belong to these sectors (Table 43).

Table 43.Estimated Employment Rate of TVET Graduates, By Sector, Philippines: 2016. 2017, and 2018

Sector	2016	2017	2018
Agriculture Forestry and Fisheries	80	79.35	88.57
Automotive and Land Transportation	74	75.83	85.12
Construction	73	70	76.23
Decorative Crafts	100	94.46	0
Electrical and Electronics	71	65.89	82.61
Entrepreneurship	82	0	0
Footwear	0	97.24	100
Furniture and Fixtures	100	0	0
Garments	77	76.59	86.67
Heating, Ventilation, Airconditioning	72	87.23	100
Human Health/Health Care	68	71.35	88.39
Information and Communication	69	72.23	83.54
Language	79	70.47	88.89
Logistics	100	0	0
Maritime	73	73.28	88.72
Metals and Engineering	73	64.24	82.56
Processed Food and Beverages	70	58.62	0
Social, Community Development	72	77.81	86.02
TVET	96	83.51	86.59
Tourism (Hotel and Restaurant)	70	60.14	82.43
Utilities	0	0	47.85
Visual Arts	0	0	93.22
Wholesale and Retail Trading	54	67.73	88.69
Others	67	66.44	72.73

## 4.3. Employment Rate by Scholarship Programs

As shown earlier, only a little more than a quarter (27.80%) of 2018 TVET graduates were recipients of a scholarship. Among the scholars, about 86% were employed at the time of the survey, slightly higher than the estimated rate for those with no scholarship – regular program at 83.36% (Table 44).

Table 44. Employment Rate of TVET Graduates with and without Scholarship, Philippines: 2018

	Not in	the			In the Lat	or Force		<u> </u>	TVET Graduates		
Scholarship	Labor F	orce	Not emp	loyed	Employ	/ed	Tota	ıl			
	Freq.	%	Freq.	%	Freq.	ERa	Freq.	LFR <sup>b</sup>	Freq.	%	
With Scholarship	122,809	21.29	63,984	14.10	389,927	85.90	453,911	78.71	576,720	27.80	
No Scholarship	490,656	32.76	167,539	16.64	839,469	83.36	1,007,008	67.24	1,497,664	72.20	
Total	613,465	29.57	231,523	15.85	1,229,396	84.15	1,460,919	70.43	2,074,384	100.00	

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

It was presented earlier that a vast majority of the scholars in 2018 were under the TWSP program, which at the same time registered the highest labor force rate, at par to the other programs. All scholarship programs have been recorded to have high employment rates, with PESFA bagged the highest, wherein approximately 9 in 10 scholars were employed at the time of the survey. The said program also displayed the highest estimate in 2017 at 77.2% - considerably lower in the reported estimate in 2018 (Table 45).

For WTR graduates itself, high labor force and employment rates were observed across the different scholarship programs. It is estimated that 8 in every scholars were active in the labor force, from which approximately 9 in every 10 scholars were actively working, regardless of scholarship programs (Table 46).

Table 45. Estimated Employment Rate of TVET Graduates, By Type of Scholarship Program,

Philippines: 2018

• •	Not in the	e Labor			In the Lat	oor Forc	е		Total	
Scholarship Program	Ford		Not em	ployed	Emplo	yed	Toto	lc	Graduat Scholo	
	Freq	%	Freq	%	Freq.	<b>ER</b> a	Freq.	LFRb	Freq	%
PESFA	6,717	23.03	2,586	11.51	19,871	88.49	22,457	76.97	29,174	5.06
STEP	29,754	23.39	15,199	15.60	82,260	84.40	97,459	76.61	127,213	22.06
TWSP	86,337	20.54	46,199	13.83	287,797	86.17	333,996	79.46	420,333	72.88
Total	122,809	21.29	63,984	63,984 14.10		85.90	453,911	78.71	576,720	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Table 46. Estimated Employment Rate of WTR Graduates, By Type of Scholarship Program,

Philippines: 2018

	-				اما مطاحا	har Fara			Total	\A/TD
Scholarship Program	Not in th		No	-	In the La		e Toto	lc	Graduat Schola	es with
riogiani	Freq	%	Freq	employed Freq %		ERa	Freq	LFPRb	Freq.	%
PESFA	6,717	23.41	2,586	11.77	19,386	88.23	21,972	76.59	28,689	5.28
STEP	24,133	20.77	13,527	14.69	78,529	85.31	92,056	79.23	116,188	21.37
TWSP	81,905	20.54	44,699	14.1	272,217	85.9	316,916	79.46	398,821	73.35
Total	112,755	20.74	60,812	16.27	370,132	85.89	430,944	79.26	543,698	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Among the 2018 scholars, a little more female (86.27%) than males (85.84%) were employed. These are considerably higher than the reported estimates in 2017 scholars – males

(73.16%) and females (68.37%). Moreover, a large difference in the employment rates of STEP scholars was recorded between sexes, in which females (93.31%) surpassed males (75.08%). In contrast, under PESFA and TWSP programs, employment rates for male group were just somewhat higher than the female group (Tables 47 and 48 and Figure 14).

Table 47. Estimated Employment Rate of Male TVET Graduates, By Type of Scholarship

Programs, Philippines: 2018

	Not in	the			In the La	bor Ford	ce		Total Male TVET		
Scholarship Program	Labor F		No emplo		Emplo	yed	Tote	al	Gradual Scholo		
	Freq	%	Freq	%	Freq	<b>ER</b> ª	Freq	LFPR <sup>b</sup>	Freq.	%	
PESFA	1,776	13.45	1,162	10.16	10,272	89.84	11,434	86.56	13,209	4.67	
STEP	10,306	17.8	11,864	24.92	35,744	75.08	47,608	82.2	57,914	20.46	
TWSP	34,111	16.09	21,157	11.9	156,689	88.1	177,846	83.91	211,957	74.88	
Total	46,193	16.32	34,183	14.43	202,705	85.57	236,888	83.68	283,080	100.00	

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Table 48. Estimated Employment Rate of Female TVET Graduates, By Type of Scholarship

Programs, Philippines: 2018

	Not in	the			In the Lo	abor For	ce		Total Fe	emale
Scholarship Program	Labor F		No emplo		Emplo	yed	То	tal	TVET Gro with Sch	
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq.	%
PESFA	4,942	30.96	1,424	12.92	9,599	87.08	11,023	69.04	15,965	5.44
STEP	19,448	28.06	3,335	6.69	46,516	93.31	49,851	71.94	69,299	23.60
TWSP	52,227	25.06	25,042	16.04	131,108	83.96	156,150	74.94	208,376	70.96
Total	76,617	26.09	29,801	13.73	187,223	86.27	217,024	73.91	293,640	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

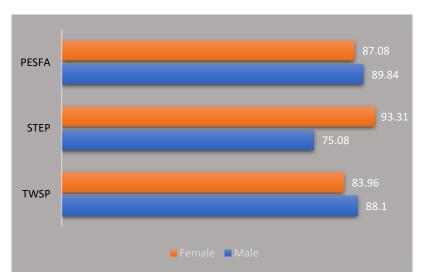


Figure 14. Estimated employment rate of scholar TVET graduates across the different scholarship programs, by sex.

Philippines, 2018

Consistent with the previous surveys, non-TTI group of scholar-graduates had a higher employment rate as compared to TTIs, although with a very small percent-difference of 0.76 Among the TTI graduates, scholars under PESFA and TWSP posted markedly higher

employment rates of 100 and 89.96 percent, respectively, compared with that of STEP at 75.23%. Alternatively, estimates across the scholarship programs in non-TTI were at par with each other, with PESFA at the top rank with an estimate of 88.48% (Tables 49 and 50 and Figure 15).

Table 49. Estimated Employment Rate of TVET Graduates under TTI, By Type of Scholarship

Program, Philippines: 2018

Scholarship Program	Not i Labor	n the Force	No emple		In the L	abor Ford		tal	Total TVET Graduates with Scholarship (TTI)		
l	Freq	%	Freq	employed Freq %		ERa	Freq	LFPR <sup>b</sup>	Freq	%	
PESFA	9	81.82	0	0	2	100	2	18.18	11	0.00	
STEP	6,585	25.5	4,767	24.77	14,475	75.23	19,242	74.5	25,827	9.36	
TWSP	4,274	14.99	2,435	10.04	21,810	89.96	24,245	85.01	28,519	10.34	
Total	76,428	27.71	32,903	16.5	166,485	83.5	199,388	72.29	275,816	100.00	

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Table 50. Estimated Employment Rate of TVET Graduates under Non-TTI, By Type of

Scholarship Program, Philippines: 2018

					In the Lab	or Forc	е		Total T	
Scholarship Program	Not in the Forc		Not emp	loyed	Employ	⁄ed	Toto	lk	Graduate Scholai (non-	rship
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%
PESFA	6,708	23	2,586	11.52	19,869	88.48	22,455	77	29,163	1.62
STEP	23,169	22.85	10,432	13.34	67,784	86.66	78,217	77.15	101,386	5.64
TWSP	82,064	20.94	43,764	14.13	265,986	85.87	309,750	79.06	391,814	21.78
Total	537,037	29.86	198,620	15.74	1,062,911	84.26	1,261,531	70.14	1,798,568	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

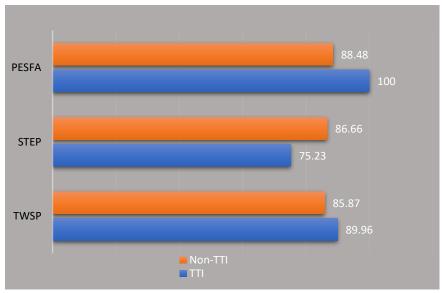


Figure 15. Estimated employment rate of scholar TVET graduates across the different scholarship programs, by type of provider. Philippines, 2018

It has been emphasized that TESDA is aiming to increment the number of its employed graduates, particularly for TWSP and PESFA grantees. Likewise, the TVET scholar-graduates are anticipated to be involved in wage-employment and self-employment sectors. Thus, it is deemed important to determine the employment status of the scholars, particularly the TWSP, to assess if TESDA is achieving its goal. The data would serve as basis for the continuous improvement of programs and policy concerning the scholars.

Majority of the TWSP scholars from different sectors (with sampled graduates) participated in the labor force, except those in wholesale and retail trading with an estimated labor force participation rate of only 17.02%. It is further estimated that among those in the labor force, 8 to 9 of the 10 TWSP scholars in the labor force were actively working when the survey was conducted. It can also be observed that among the sectors with reported graduates, Tourism tagged the lowest rate at 80.11, but at part to the estimates of other sectors. Meanwhile, Wholesale and Retail Trading (100%), and Heating, Ventilation, and Air conditioning (100%) consistently resulted in a higher chance of employment among its TWSP-scholar graduates (Table 51 and Figure 16).

Table 51. Employment Rate of Graduates Under TWSP by Sector, Philippines: 2018

	Not in	the			In the Lab	or Force			Total Cro	duates
Sector	Labor F	orce	Not emp	oloyed	Emplo	yed	Toto	al	Total Gro	laudies
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFR <sup>b</sup>	Freq	%
Agriculture Forestry and Fisheries	7,095	21.44	4,080	15.69	21,923	84.31	26,003	78.56	33,098	7.87
Automotive and Land Transportation	7,431	18.7	1,892	5.86	30,407	94.14	32,299	81.3	39,730	9.45
Construction	4,404	14.78	3,843	15.14	21,545	84.86	25,388	85.22	29,792	7.09
Decorative Crafts	0	0	0	0	0	0	0	0	0	0.00
Electrical and Electronics	7,694	22.8	3,826	14.68	22,231	85.32	26,057	77.2	33,751	8.03
Entrepreneurship	0	0	0	0	0	0	0	0	0	0.00
Footwear	0	0	0	0	0	0	0	0	0	0.00
Furniture and Fixtures	0	0	0	0	0	0	0	0	0	0.00
Garments	2,775	46.95	429	13.67	2,707	86.33	3,136	53.05	5,911	1.41
Heating, Ventilation, Aircondition	0	0	0	0	1,494	100	1,494	100	1,494	0.36
Human Health/Health Care	10,032	35.95	2,436	13.63	15,436	86.37	17,872	64.05	27,904	6.64
Information and Communication	1,839	7.1	2,113	8.79	21,934	91.21	24,047	92.9	25,885	6.16
Language	43	1.03	689	16.55	3,474	83.45	4,163	98.97	4,206	1.00
Logistics	0	0	0	0	0	0	0	0	0	0.00
Maritime	0	0	0	0	0	0	0	0	0	0.00
Metals and Engineering	8,627	18.74	3,377	9.03	34,029	90.97	37,406	81.26	46,032	10.95

	Not in	the			In the Lab	or Force	ı		Total Cra	udu alea
Sector	Labor F	orce	Not emp	loyed	Emplo	yed	Toto	al	Total Gro	addates
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFR <sup>b</sup>	Freq	%
Processed Food and Beverages	0	0	0	0	0	0	0	0	0	0.00
Social, Community Development	6,589	27.26	1,929	10.97	15,658	89.03	17,588	72.74	24,177	5.75
TVET	959	9.48	535	5.84	8,630	94.16	9,165	90.52	10,124	2.41
Tourism (Hotel and Restaurant)	27,047	20.56	20,780	19.89	83,707	80.11	104,487	79.44	131,534	31.29
Utilities	0	0	0	0	0	0	0	0	0	0.00
Visual Arts	1,041	19.23	270	6.17	4,105	93.83	4,374	80.77	5,416	1.29
Wholesale and Retail Trading	761	82.98	0	0	156	100	156	17.02	917	0.22
Others	0	0	0	0	363	100	363	100	363	0.09
Total	86,337	20.54	46,199	13.83	287,797	86.17	333,996	79.46	420,333	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

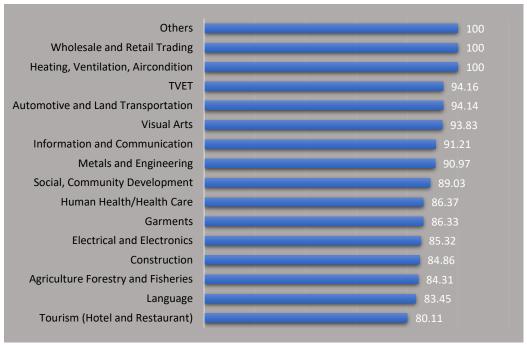


Figure 16. Estimated employment rate of TWSP-scholar TVET graduates across the different sectors. Philippines, 2018

## 4.4. Employment Rate of Certified WTR and TVET Graduates

It is a clear goal of TESDA to produce competitive graduates possessing the required knowledge, skills, attitudes, and values. One of the important credentials of the TVET graduates to ensure their competitiveness is for them to be a certified skilled workers through the Philippine TVET Competency Assessment and Certification System. Being a certified graduate will give them more opportunities to better jobs and higher earnings.

Overwhelmingly of the graduates who took a competency assessment were actively working at the time of the survey. About 84% of those with certification were employed.

Nonetheless, among the so few non-certified graduates, the majority were also in a job at 80.85% (Table 52).

WTR programs have national assessment, it is somehow expected that graduates take competency assessment, about 97% were already given certification, much higher than the overall estimate. Among the certified, about 84% were at work during the conduct of the survey. This is a bit higher than the reported employment rate (77.51%) posted by those who were not yet able to pass the competency assessment, hence no certification yet (Table 53).

Table 52. Estimated Employment Rate of TVET Graduates, By Certification, Philippines: 2018

	Not in th	e Labor			In the Lai	bor Force			Total TVET Gro	
Certification		Force Not e		Not employed		yed	Tota	ıl	who Took Competer Assessment	
	Freq %		Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%
Certified	415,602	27.46	172,274	15.69	925,619	84.31	1,097,892	72.54	1,513,495	97.05
Non-Certified	15,518	33.75	5,832	19.15	24,627	80.85	30,459	66.25	45,977	2.95
Total	431,120	27.65	178,105	15.78	950,246	84.22	1,128,351	72.35	1,559,472	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Table 53. Estimated Employment Rate of WTR Graduates with Competency assessment by Certification, Philippines: 2018

	Not in the	e Labor	-		In the Lat	oor Force			Total WTR Gra	
Certification	fication Force		Not emp	oloyed	Emplo	yed	Tota	ıl	who Took Com Assessme	-
	Freq %		Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%
Certified	350,604	25.95	160,922	16.09	839,483	83.91	1,000,405	74.05	1,351,010	97.13
Non-Certified	14,014	35.08	5,832	22.49	20,103	77.51	25,934	64.92	39,949	2.87
Total	364,619	26.21	166,754	16.25	859,586	83.75	1,026,339	73.79	1,390,958	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Analyzing further the characteristics of TVET graduates who have already received a certificate for passing a competency assessment, it can be observed that more male than female participated in the labor force. Nonetheless, both groups exhibited high employment rates at 83.85% - female and 84.78% - male (Table 53). Similarly, more male than female WTR graduates were in the labor force at the time of the survey, while both sexes' employment rates were high and on par (Table 55).

Table 54. Estimated Employment Rate of Certified TVET Graduates, By Sex, Philippines: 2018

	Not in	the			In the Lal	oor Forc	:e		Certified	ITVET
Sex	Labor F	orce	Not emp	loyed	Emplo	yed	Tota	I	Gradu	ates
	Freq	%	Freq	%	Freq.	<b>ER</b> a	Freq.	LFPR <sup>b</sup>	Freq	%
Female	253,599	31.36	89,649	16.15	465,471	83.85	555,120	68.64	808,718	53.43
Male	162,004	22.99	82,625	15.22	460,148	84.78	542,773	77.01	704,776	46.57
Total	415,602	27.46	172,274	15.69	925,619	84.31	1,097,892	72.54	1,513,495	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Table 55. Estimated Employment Rate of Certified WTR Graduates, By Sex, Philippines: 2018

	Not in	the			In the Lal	oor Forc	:e		Certified W	TR TVET
Sex	Labor F	orce	Not emp	Not employed		yed	Tota	I	Gradu	ates
	Freq.	%	Freq.	%	Freq.	<b>ER</b> a	Freq.	LFPR <sup>b</sup>	Freq	%
Female	222,180	29.37	85,689	16.04	448,578	83.96	534,266	70.63	756,446	55.99
Male	128,425	21.6	75,233	16.14	390,905	83.86	466,139	78.4	594,563	44.01
Total	350,605	25.95	160,922	16.09	839,483	83.91	1,000,405	74.05	1,351,010	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

There is also a small difference in the employment rates of those certified TVET graduates from two types of provider with 83.81% in TTI and 84.87% in non-TTI. Considering the WTR graduates alone, non-TTI (84.14%) again posted somewhat higher employment rate than TTI (82.49%) with a percent-difference of 1.65 (Tables 56 and 57).

Table 56. Estimated Employment Rate of Certified TVET Graduates under TTIs and Non-TTIs, Philippines: 2018

	Not in the	e Labor			In the Labo	r Force			Certified TVET Graduates	
Provider	Ford	:e	Not emp	loyed	Employ	ed	Toto	ıl		
	Freq. %		Freq.	%	Freq.	ER□	Freq.	LFPR <sup>b</sup>	Freq	%
TTI	51,766	25.63	25,063	16.69	125,118	83.31	150,181	74.37	201,947	13.34
Non-TTI	363,837	27.74	147,211	15.53	800,500	84.47	947,711	72.26	1,311,548	86.66
Total	415,602	27.46	172,274	15.69	925,619	84.31	1,097,892	72.54	1,513,495	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Table 57. Estimated Employment Rate of Certified WTR Graduates under TTIs and Non-TTIs, Philippines: 2018

	Not in th	ne Labor			In the Lab	or Force			Certified WTR	
Provide	For	ce	Not employed		Employed		Total		Graduates	
	Freq.	%	Freq.	%	Freq.	<b>ER</b> a	Freq.	LFPR <sup>b</sup>	Freq	%
TTI	48,313	25.9	24,199	17.51	114,028	82.49	138,227	74.1	186,540	13.81
Non-TTI	302,292	25.96	136,724	15.86	725,455	84.14	862,178	74.04	1,164,470	86.19
Total	350,604	25.95	160,922	16.09	839,483	83.91	1,000,405	74.05	1,351,009	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

The recorded employment rates among certified TVET graduates across regions range from 73.66 to 89.85 percent. Whereas, it is between 73.68 and 89.19 percent among the certified WTR graduates alone. In this survey, Region IV-A registered the highest employment rate, different to that of in 2017 in which CAR landed the highest employment rate for certified TVET and certified WTR graduates. Contrarily, ARMM, same as in 2017, placed at the bottom for TVET, in general, and for specific WTR certified graduates (Tables 58 and 59). Nevertheless, a considerable increase in the number of employed certified graduates in ARMM has been recorded this year, wherein 7 of the 10 were estimated to be employed, as compared in 2017 wherein about 4 in 10 of the TVET certified and about 6 in 10 of the WTR certified graduates were employed.

Table 58. Estimated Employment Rate of Certified TVET Graduates, By Region, Philippines: 2018

	Not in	the			In the La	bor Fore		<u> </u>	Certified	ITVET
Region	Labor F	Labor Force		Not employed		yed	Total		Graduates	
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%
NCR	44,874	18.95	27,358	14.25	164,580	85.75	191,938	17.48	236,812	15.65
CAR	8,539	28.10	3,483	15.94	18,367	84.06	21,850	1.99	30,389	2.01
I	25,179	29.78	13,523	22.77	45,860	77.23	59,382	5.41	84,561	5.59
II	11,685	33.26	4,588	19.57	18,860	80.43	23,448	2.14	35,133	2.32
III	37,890	28.85	17,107	18.31	76,329	81.69	93,435	8.51	131,326	8.68
IV-A	55,833	22.32	19,730	10.15	174,608	89.85	194,338	17.70	250,171	16.53
IV-B	16,066	26.60	6,034	13.61	38,310	86.39	44,343	4.04	60,409	3.99
V	12,466	23.47	7,191	17.69	33,465	82.31	40,656	3.70	53,122	3.51
VI	29,069	24.69	20,252	22.84	68,433	77.16	88,685	8.08	117,754	7.78
VII	32,414	42.01	5,897	13.18	38,850	86.82	44,746	4.08	77,160	5.10
VIII	17,250	28.82	9,606	22.55	32,991	77.45	42,597	3.88	59,848	3.95

	Not in the Labor Force				Certified TVET					
Region			Not employed		Employed		Total		Graduates	
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%
IX	15,957	38.10	6,405	24.70	19,524	75.30	25,929	2.36	41,886	2.77
X	28,773	29.86	8,196	12.12	59,403	87.88	67,599	6.16	96,372	6.37
ΧI	14,847	22.93	5,634	11.29	44,276	88.71	49,910	4.55	64,758	4.28
XII	44,772	39.65	8,479	12.44	59,668	87.56	68,147	6.21	112,919	7.46
CARAGA	16,497	33.14	6,788	20.40	26,489	79.60	33,277	3.03	49,773	3.29
ARMM	3,491	31.44	2,003	26.32	5,608	73.68	7,611	0.69	11,102	0.73
Philippines	415,602 27.46 1		172,274	15.69	925,619	84.31	1,097,892	100.00	1,513,495	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Table 59. Estimated Employment Rate of Certified WTR Graduates, By Region, Philippines: 2018

	Not in	the			In the La	bor Forc	е		Certified WTR		
Region	Labor F	orce	Not emp	oloyed	Emplo	yed	Tota	I	Gradu	ates	
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%	
ARMM	3,491	31.44	2,003	26.32	5,608	73.68	7,611	0.76	11,102	0.82	
CAR	7,678	27.57	3,237	16.05	16,932	83.95	20,168	2.02	27,846	2.06	
CARAGA	14,912	33.53	5,195	17.58	24,364	82.42	29,560	2.95	44,472	3.29	
NCR	38,140	17.72	27,358	15.44	149,779	84.56	177,137	17.71	215,278	15.93	
I	22,812	29.34	12,684	23.09	42,246	76.91	54,930	5.49	77,741	5.75	
II	10,915	32.6	4,588	20.33	17,983	79.67	22,572	2.26	33,487	2.48	
Ш	28,491	26.71	13,170	16.85	64,992	83.15	78,162	7.81	106,652	7.89	
IV-A	55,833	23.42	19,730	10.81	162,870	89.19	182,600	18.25	238,433	17.65	
IV-B	15,305	27.69	5,844	14.62	34,119	85.38	39,963	3.99	55,267	4.09	
V	11,492	23.24	7,015	18.48	30,938	81.52	37,952	3.79	49,445	3.66	
VI	22,193	22.74	16,652	22.09	58,729	77.91	75,382	7.54	97,575	7.22	
VII	14,389	25.12	5,574	13	37,317	87	42,891	4.29	57,279	4.24	
VIII	15,713	27.22	9,606	22.86	32,412	77.14	42,018	4.2	57,731	4.27	
IX	15,733	39.35	5,957	24.56	18,292	75.44	24,248	2.42	39,981	2.96	
Χ	26,455	31.46	8,196	14.22	49,452	85.78	57,648	5.76	84,102	6.23	

	Not in	the			Certified WTR Graduates					
Region	Labor Force		Not employed				Employed		Total	
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq	%
XI	13,406	21.72	5,634	11.66	42,683	88.34	48,317	4.83	61,723	4.57
XII	33,647	36.22	8,479	14.31	50,767	85.69	59,246	5.92	92,894	6.88
Philippines	350,604	25.95	160,922	16.09	839,483	83.91	1,000,405	100	1,351,010	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

An estimate of 990,368 TVET graduates who availed scholarship were already given a national certificate of competency, constituting about 75% of the total scholars. Around 8 in 10 certified TVET scholars were employed during the survey and PESFA scholars (77.05%) form the largest portion employed (Table 60).

In the case of scholars under the WTR programs, a large number were already awarded certificate of competency, of which 8 in 10 were working during the survey. PESFA scholars displayed a large share as well with an employment rate of 77.05% (Table 61).

Table 60. Estimated Employment Rate of Certified TVET Graduates, By Type of Scholarship Program, Philippines: 2018

	Not in	the			In the La	bor Force	)		Total Certified	
Type of Program	Labor Force		Not employed		Employed		Total		TVET Graduates with Scholarship	
	Freq	%	Freq	%	Freq	ER□	Freq	LFPR <sup>b</sup>	Freq	%
PESFA	6,292	23.66	2,310	11.38	17,991	88.62	20,301	76.34	26,593	1.76
STEP	25,949	22.66	13,109	14.80	75,464	85.20	88,574	77.34	114,522	7.57
TWSP	75,643	20.42	41,040	13.92	253,786	86.08	294,825	79.58	370,468	24.48
Regular Program	307,719	30.71	115,815	16.68	578,378	83.32	694,193	69.29	1,001,911	66.20
Total	415,602	27.46	172,273	15.69	925,619	84.31	1,097,892	72.54	1,513,495	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Table 61. Estimated Employment Rate of Certified WTR Graduates, By Type of Scholarship Program, Philippines: 2018

	Not in the	e Labor		In the Labor Force								
Type of Program	Force		Not employed		Employed		Total		WTR Graduates with Scholarship			
	Freq	%	Freq	%	Freq	<b>ER</b> a	Freq	LFPR <sup>b</sup>	Freq.	%		
PESFA	6,292	23.83	2,310	11.48	17,806	88.52	20,116	76.17	26,408	1.95		
STEP	22,837	21.22	12,245	14.44	72,553	85.56	84,799	78.78	107,635	7.97		
TWSP	74,378	20.36	41,040	14.1	249,959	85.9	290,999	79.64	365,377	27.04		
Regular Program	247,097	29.02	105,328	17.42	499,164	82.58	604,492	70.98	851,589	63.03		
Total	350,604	25.95	160,922	16.09	839,483	83.91	1,000,405	74.05	1,351,009	100.00		

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Furthermore, the employment rate of certified TVET graduates by different levels was at the same time estimated. Among the recorded levels, NCIII had the largest share at 91.22%, implying that 9 in 10 of the certified TVET graduates were working during the conduct of the survey. This is followed by the COC level with an estimate of about 87%. The lowest share (but still with considerably high rate) came from the NC 1 level at 82.65%, at par with NC II (83.61%) and TM 1 (84.95%) (Table 62). A similar pattern is observed for the certified WTR graduates per se. NC III also bagged the highest employment rate, followed again by COC level. Whereas, NC I had the lowest rate, but actually on par with the other estimates (Table 63).

Table 62. Estimated Employment Rate of TVET Graduates, By Level of Certification, Philippines: 2018

lovelef	Not in the				Total Graduates					
Level of	Labor Force		Not employed		Employed		Total		iolal Gladuales	
Certification	Freq	%	Freq	%	Freq	ER	Freq	LFR	Freq	%
COC	26,659	28.10	8,823	12.94	59,376	87.06	68,199	71.90	94,858	6.27
NC I	25,620	25.79	12,792	17.35	60,946	82.65	73,738	74.21	99,358	6.56
NC II	341,281	28.26	141,974	16.39	724,477	83.61	866,451	71.74	1,207,732	79.80
NC III	21,076	21.63	6,704	8.78	69,639	91.22	76,343	78.37	97,419	6.44
TM 1	967	6.84	1,981	15.05	11,181	84.95	13,161	93.16	14,128	0.93
Total	415,602	27.46	172,274	15.69	925,619	84.31	1,097,892	72.54	1,513,495	100.00

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

Table 63. Estimated Employment Rate of TVET Graduates under WTR, By Level of Certification,

Philippines: 2018

lovelef	Not in the				In the Lal	oor Forc	:e		Total Graduates		
Level of Certification	Labor Force		Not employed		Employed		Tota	l	iolal Gladuales		
Cermication	Freq	%	Freq	%	Freq	ER	Freq	LFR	Freq	%	
COC	17,593	22.9	7,041	11.89	52,189	88.11	59,230	77.1	76,823	5.69	
NC I	22,701	25.17	12,474	18.48	55,014	81.52	67,488	74.83	90,189	6.68	
NC II	290,461	26.93	133,023	16.88	655,232	83.12	788,255	73.07	1,078,717	79.85	
NC III	18,882	20.67	6,404	8.84	66,063	91.16	72,467	79.33	91,349	6.76	
TM 1	967	6.94	1,981	15.28	10,984	84.72	12,965	93.06	13,932	1.03	
Total	350,604	25.95	160,922	16.09	839,483	83.91	1,000,405	74.05	1,351,009	100.00	

<sup>&</sup>lt;sup>a</sup>Employment rate; <sup>b</sup>Labor Force Participation rate

## 4.5. Statistical Comparison of Employment Rates across Subgroups

The proportion of employed 2018 TVET graduates was estimated and further assessed across subgroups of some characteristics such as sex, region, educational attainment, types of providers, program delivery modes, sectors, scholarship programs, and certification leves. Reliability of the estimates produced was evaluated based on an estimate's coefficient of variation (CV). Estimates with CVs of at most 10% were considered reliable, while more than 10%, but at most 20% were acceptable. Furthermore, employment rates across the subgroups were statistically compared using a 95% confidence interval estimate.

As indicated, a little more of female than male graduates in 2018 were employed at the time of the survey, with a point-difference of 0.007 With CVs of less than 10%, estimates for both sexes are said to be reliable (Table 64). Moreover, based on the 95% confidence interval, the true proportions of female and male graduates who were employed are expected to be between 0.82 and 0.87, and 0.81 and 0.86, respectively. Moreover, the overlapping interval estimates between the sexes indicates that the difference in the employment rates between male and female graduates is not statistically significant (Figure 17). This result is consistent with the previous SETGs, in which association of employability of a TVET client with his/her sex has not been established.

Table 64. Estimate of the Employment Rate of TVET Graduates, By Sex, Philippines: 2018

Say	Proportion of	Standard	Coefficient of Variation (Estimate,	95% Confidence Interval		
Sex	Employed	Error	%)	Lower Limit	Upper Limit	
Female	0.844	0.01	1.38	0.82	0.87	
Male	0.837	0.01	1.46	0.81	0.86	

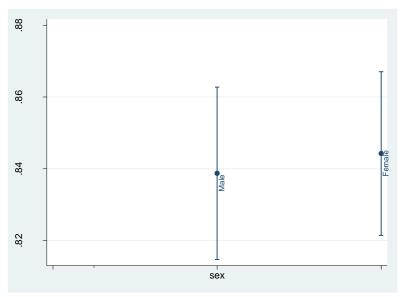


Figure 17. Confidence Interval Estimate of the Proportion of Employed TVET Graduates, By Sex. Philippines: 2018

Although ARMM once again posted the lowest estimated employment rate among the 17 regions in the country, an improvement on the employment rate in this region was realized that made it not significantly different from those regions with higher employment rate such as CAR, CARAGA, Regions I, III, V, VI, VII, VIII, and IX. Conversely, Region IV-A took the top position for having the largest employment rate, but not significantly different from those estimated in Regions II, IV-B, X, XI, XII, and NCR. These regions with much high employment rates were found significantly different from the other regions. Likewise, all regional estimates are found reliable (Table 65 and Figure 18).

Table 65. Estimate of the Employment Rate of TVET Graduates, By Region, Philippines: 2018

14510 00. 25	Proportion	Standard	Coefficient of		dence Interval
Region	of Employed	Error	Variation (Estimate, %)	Lower Limit	Upper Limit
ARMM	0.74	0.03	3.80	0.68	0.79
CAR	0.83	0.03	3.12	0.78	0.88
CARAGA	0.78	0.03	3.88	0.72	0.84
NCR	0.86	0.03	3.05	0.81	0.91
1	0.79	0.02	3.12	0.74	0.84
II	0.87	0.02	2.75	0.82	0.92
Ш	0.78	0.04	5.65	0.69	0.87
IV-A	0.90	0.02	2.52	0.85	0.94
IV-B	0.88	0.02	2.27	0.84	0.92
V	0.83	0.02	2.73	0.79	0.88
VI	0.81	0.03	3.49	0.75	0.86
VII	0.82	0.03	3.30	0.76	0.87
VIII	0.77	0.03	3.77	0.71	0.83
IX	0.77	0.03	4.06	0.71	0.83
Х	0.88	0.02	2.56	0.84	0.93
XI	0.86	0.02	2.77	0.81	0.91
XII	0.88	0.02	2.78	0.83	0.93

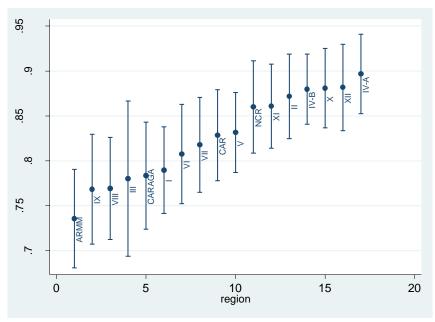


Figure 18. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Region. Philippines: 2018

Albeit non-TTI group of graduates was estimated to have a bit higher employment rate compared to that of TTI, the point difference of 0.01 was statistically tested to be not significant – as reflected by the overlap in the confidence interval estimates of the two types of provider. This shows no evidence to conclude that indeed there were more employed graduates from non-TTI than those from TTI. The coefficient of variation of estimates in TTI and non-TTI ensured estimates' reliability (Table 66 and Figure 19).

Table 66. Estimate of the Employment Rate of TVET Graduates, By Type of Provider,

Philippines: 2018

Type of	Proportion of	Standard	Coefficient of	95% Confidence Interval		
Provider	Employed Error		Variation (Estimate, %)	Lower Limit	Upper Limit	
TTI	0.83	0.02	1.80	0.81	0.86	
Non-TTI	0.84	0.01	1.13	0.82	0.86	

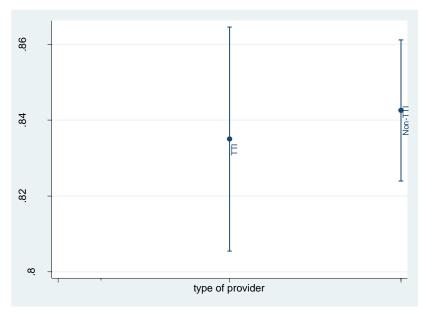


Figure 19. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Type of Provider. Philippines: 2018

Among the different scholarship programs, the largest share of employed TVET graduates was realized in PESFA. Even so, the overlap in the confidence interval estimates indicates no significant differences in the employment rates across the different scholarship programs, including the regular program (no scholarship). All the estimates for the different scholarship programs had coefficients of variation of less than 10%, signifying reliability of estimates (Table 67 and Figure 20).

Table 67. Estimate of the Employment Rate of TVET Graduates, By Type of Scholarship Program, Philippines: 2018

Scholarship Program	Proportion of	Standard	Coefficient of Variation	95% Confidence Interval		
	Employed	Error	(Estimate, %)	Lower Limit	Upper Limit	
PESFA	0.88	0.03	3.59	0.82	0.95	
STEP	0.84	0.02	2.63	0.80	0.89	
TWSP	0.86	0.02	1.76	0.83	0.89	
Regular Program (No Scholarship)	0.83	0.01	1.31	0.81	0.86	

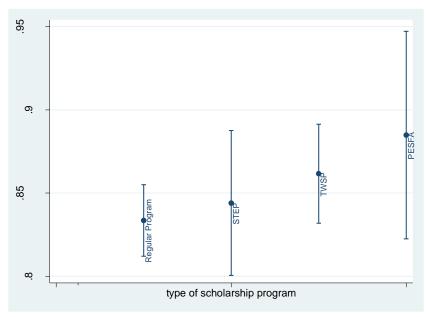


Figure 20. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Type of Scholarship Program. Philippines: 2018

In 2018, the largest estimated employment rate was accounted in the mobile training program. However, its confidence interval estimate when compared to those in other training delivery modes (except the dual training system), suggests no significant differences in the employment rates across the different training delivery modes. The dual training system (DTS), on the other hand, gave a significantly lowest share of the employment rate. But, as revealed by its coefficient of variation, the use of DTS estimate is risky due to a very small number of samples in this group. Nonetheless, learneship estimate is acceptable, while the rest of the estimates can be regarded as reliable. Moreover, estimates in institution-based and community-based can be considered as the most precise based on their narrower interval estimates as compared to the other estimates (Table 68 and Figure 21).

Table 68. Estimate of the Employment Rate of TVET Graduates, By Program Delivery Mode,

Philippines: 2018

Program Delivery Mode	Proportion of	Standard	Coefficient of Variation	95% Confidence Interval		
	Employed	Error	(Estimate, %)	Lower Limit	Upper Limit	
Institution-based	0.84	0.01	1.18	0.82	0.86	
Mobile training program	0.90	0.05	6.11	0.79	1.00	
Dual training system	0.08	0.09	105.53	0.0	0.25	
Apprenticeship	0.73	0.11	15.09	0.51	0.95	
Learnership	0.61	0.17	28.30	0.27	0.95	
Community-based	0.86	0.02	1.86	0.83	0.89	

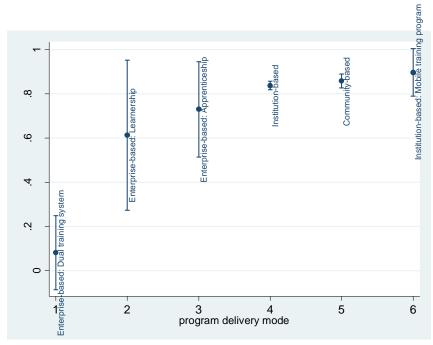


Figure 21. Confidence Interval Estimate of the Proportion of Employee TVET Graduates by Program Delivery Mode. Philippines: 2018

As reflected earlier, high employment rate can be observed in the different sectors in TESDA, except in Visual Arts in which less than half of the graduates were employed at the time of the survey. But then confidence interval estimates of the different sectors revealed no significant differences across the sectors. Moreover, it is essential for the users to recognize the high risk in using the Visual Arts estimate due to its large CV and wide interval estimate. Nevertheless, estimates of the other sectors can be considered as reliable based on their respective coefficients of variation of at most 10% (Table 69 and Figure 22).

Table 69. Estimate of the Employment Rate of TVET Graduates, By Sector, Philippines: 2018

Seeker	Proportion of	Standard	Coefficient		nfidence rval
Sector	Employed	Error	of Variation (Estimate, %)	Lower Limit	Upper Limit
Agriculture Forestry and Fisheries	0.89	0.03	3.39	0.83	0.94
Automotive and Land Transportation	0.85	0.02	2.60	0.81	0.89
Construction	0.76	0.04	5.29	0.68	0.84
Decorative Crafts	-	-	-	-	-
Electrical and Electronics	0.83	0.03	3.82	0.76	0.89
Footwear	1.00	-	-	-	-
Garments	0.87	0.06	6.91	0.75	0.98
Heating, Ventilation, Aircondition	1.00°	-	-	-	-
Human Health/Health Care	0.88	0.03	2.84	0.83	0.93
Information and Communication	0.84	0.04	5.33	0.75	0.92
Language	0.89	0.04	4.96	0.80	0.98
Maritime	0.89	0.07	7.54	0.76	1.00

Sector	Proportion of	Standard	Coefficient of Variation	_	nfidence rval
Seciol	Employed	Error	(Estimate, %)	Lower Limit	Upper Limit
Metals and Engineering	0.83	0.03	4.03	0.76	0.89
Processed Food and Beverages	-	-	-	-	-
Social, Community Development	0.86	0.03	3.27	0.81	0.92
TVET	0.87	0.05	5.68	0.77	0.96
Tourism (Hotel and Restaurant)	0.82	0.02	1.89	0.79	0.85
Utilities	0.89	0.05	5.22	0.80	0.98
Visual Arts	0.48	0.35	73.75	0.00	1.00
Wholesale and Retail Trading	0.93	0.04	4.38	0.85	1.00
Others	0.73	0.17	23.80	0.39	1.00

<sup>-</sup>no sampled respondents; aconstant values

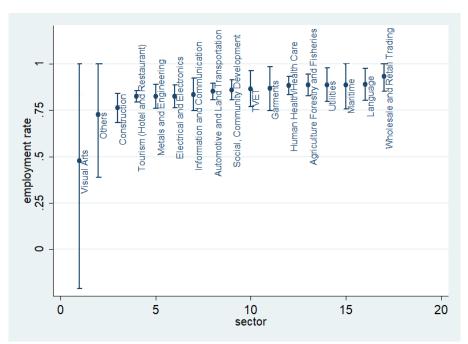


Figure 22. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Sector. Philippines: 2018

Employment rates between certified and non-certified graduates were compared showing a point difference of 0.03, in favor of the former group. The difference is found not significant as seen in their overlap interval estimates. The coefficients of variation of 1.13% and 7.69% for an estimated proportion of employed graduates for certified and non-certified groups, respectively suggest reliability of the estimates. It can be further noted that the estimate for certified group can be considered to be more precise as indicated by its smaller width of interval estimate as compared to that of non-certified (Table 70 and Figure 23).

Table 70. Estimate of the Employment Rate of TVET Graduates, By Certification, Philippines: 2018

Certification	Proportion of	Standard	Coefficient of Variation	95% Confidence Interval		
	Employed	Error	(Estimate, %)	Lower Limit	Upper Limit	
Certified	0.84	0.01	1.13	0.82	0.86	
Non- Certified	0.81	0.06	7.69	0.69	0.93	

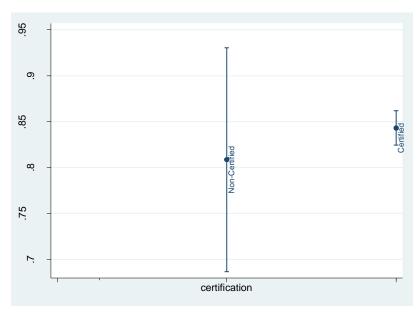


Figure 23. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Whether Certified or Not. Philippines: 2018

In addition, employment rates of certified graduates across different levels of certification were compared. Graduates who have already been awarded of NC III bagged the highest employment rate, but found not significantly different from the other levels based on their 95% confidence intervals. Estimates from the different levels are observed reliable – with all the CVs lower than 10%. Likewise, NC III exhibited the most precise estimate, having the smallest standard error and smallest width of interval estimate (Table 71 and Figure 24).

Table 71. Estimate of the Employment Rate of TVET Graduates, By Level of Certification, Philippines: 2018

Timppines. 2010												
Level of	Droportion.	Chandard Error	Coefficient of	95% Confidence Interval								
Certification	Proportion	Standard Error	Variation	Lower Limit	Upper Limit							
coc	0.87	0.03	3.01	0.82	0.92							
NC I	0.83	0.04	4.26	0.76	0.90							
NC II	0.84	0.01	1.35	0.81	0.86							
NC III	0.91	0.02	2.43	0.87	0.96							
TM 1	0.85	0.08	9.02	0.70	1.00							

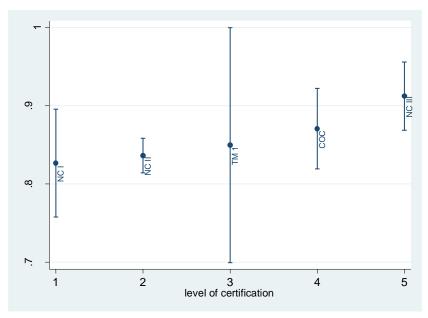


Figure 24. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Whether Certified or Not. Philippines: 2018

Similar in 2017 results, data generated among the 2018 graduates suggest no significant difference in the employment rates between sexes, between types of providers, among scholarship programs (and those with no scholarships as well), across sectors, between certified and non-certified graduates, and across certification levels, at 5% level of significance. In contrast, significant differences in the employment rates in some regions can be inferred. In particular, those regions with lower estimates were found significantly different from those regions with higher estimates. In addition, DTS program delivery mode exhibited the significantly lower employment rate as compared to other modes. However, this estimate cannot be considered as reliable.

#### 4.6. Characteristics of Employed TVET Graduates

It was estimated that out of the 1,460,919 graduates who actively participated in the labor force when the survey was done, 1 229 396 were recorded as employed, which gave an employment rate of 84.15% among the 2018 TVET graduates. To help describe the employability of the TVET graduates, further characterization of the employed graduates was done.

#### By Occupational Group

Services and sales made up the largest share (19.14%) of employed graduates in 2018. Professional group came in second, comprising 17.74% of the employed. More than half of the graduates in these occupational groups were female, with both groups having an estimated share of about 60 percent. Smaller groups were composed of elementary, armed forces, skilled agricultural, forestry and fishery, and plant and machine operators and assemblers occupational groups at 0.08, 3.19, and 4.49, and 6.42 percent. These occupational groups were mostly consisted of male graduates (Table 72 and Figure 25). This distribution of graduates based on their occupational groups is alike with those in the past surveys.

Table 72. Weighted distribution of employed TVET graduates by occupational group, by sex, Philippines: 2018

			So	ex		
Occupational Group	Fem	ale	Ма	le	Tota	lc
	Freq	<b>%</b> º	Freq	%°	Freq	%⁰
Armed forces occupations	811	8.2	9,082	91.8	9,894	0.80
Managers	96,145	62.29	58,198	37.71	154,344	12.55
Professionals	132,037	60.55	86,032	39.45	218,069	17.74
Technicians and associate professionals	102,700	58.83	71,883	41.17	174,583	14.20
Clerical support workers	76,262	60.87	49,016	39.13	125,278	10.19
Service and sales workers	141,865	60.27	93,502	39.73	235,366	19.14
Skilled agricultural, forestry and fishery workers	14,095	35.89	25,179	64.11	39,274	3.19
Craft and related trades workers	26,113	18.86	112,376	81.14	138,490	11.26
Plant and machine operators and assemblers	11,770	14.91	67,186	85.09	78,956	6.42
Elementary occupations	19,468	35.3	35,674	64.7	55,142	4.49
Total	621,267	50.53	608,130	49.47	1,229,396	100.00

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

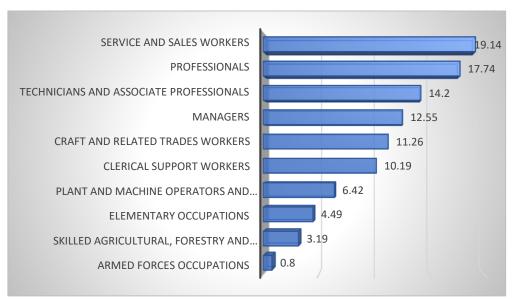


Figure 25. Weighted percent distribution of Employed TVET graduates by occupational group. Philippines, 2018

Further occupational characterization of employed graduates was done vis-à-vis training delivery modes. Based on the survey, institution-based programs had graduates working in all the considered occupational groups, with the services and sales having the most number. The same pattern can be observed in the community-based programs. Likewise, no employed graduates from mobile and enterprise-based (DTS, apprenticeship, and learnership) programs were classified under the armed forces and skilled agricultural, forestry and fishery. Many of the graduates of mobile programs were found working in the services and sales, and a number from enterprise-based programs were plant and machine operators and assemblers (Table 73).

Table 73. Weighted distribution of employed TVET graduates by occupational group, by training delivery mode, Philippines: 2018

			• •			Tre	aining Deli	very Mo	ode		•	-	•	
Occupational Group	Institution	-based	Mobile tr	•	Dual tro	•	Apprentic	ceship	Learne	ership	Comm bas	•	Toto	ıl
	Freq	%ª	Freq	<b>%</b> ª	Freq	<b>%</b> º	Freq	<b>%</b> °	Freq	<b>%</b> ª	Freq	%ª	Freq	%b
Armed forces occupations	7,667	77.49	0	0	0	0	0	0	0	0	2,227	22.51	9,894	0.80
Managers	87,940	56.98	4,583	2.97	0	0	2,338	1.51	0	0	59,482	38.54	154,344	12.55
Professionals	153,530	70.4	4,826	2.21	0	0	214	0.1	1,053	0.48	58,446	26.8	218,069	17.74
Technicians and associate professionals	103,228	59.13	3,825	2.19	0	0	3,589	2.06	1,052	0.6	62,889	36.02	174,583	14.20
Clerical support workers	84,972	67.83	2,582	2.06	0	0	584	0.47	189	0.15	36,951	29.5	125,278	10.19
Service and sales workers	143,076	60.79	7,102	3.02	0	0	2,122	0.9	631	0.27	82,437	35.02	235,366	19.14
Skilled agricultural, forestry and fishery workers	25,622	65.24	0	0	0	0	0	0	0	0	13,652	34.76	39,274	3.19
Craft and related trades workers	85,992	62.09	3,158	2.28	0	0	1,981	1.43	655	0.47	46,703	33.72	138,490	11.26
Plant and machine operators and assemblers	54,964	69.61	1,005	1.27	108	0.14	4,218	5.34	950	1.2	17,711	22.43	78,956	6.42
Elementary occupations	39,238	71.16	957	1.74	0	0	1,039	1.88	598	1.08	13,310	24.14	55,142	4.49
Total	786,228	63.95	28,039	2.28	108	0.01	16,084	1.31	5,128	0.42	393,809	32.03	1,229,396	100.00

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

#### **By Class of Workers**

Consistent from the past records, a vast majority of the working graduates can be classified as wage and salary workers with an estimate of around 75%. Also, a number of them were categorized as own account workers comprising near 23% of the employed graduates – higher than the 2017 estimate of around 16%. It can be noted as well that there were slightly more male wage and salary workers than female; six in ten of own account workers were female; and about 56% of the unpaid family workers were male (Figure 26 and Table 74). Moreover, looking the distribution of workers within the different training delivery modes, same pattern are reflected, wherein majority were wage and salary workers, a number were own account workers, and very few were unpaid family workers (Table 75).

Table 74. Weighted Distribution of Employed TVET Graduates by Class of Worker, by Sex,

Philippines: 2018

		Sex								
Class of worker	Fe	Female		Nale	Total					
	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>				
Wage and Salary Worker	442,742	48.16	476,620	51.84	919,362	74.78				
Own account workers	164,005	59.15	113,286	40.85	277,291	22.56				
Unpaid family work	14,520	44.34	18,224	55.66	32,744	2.66				
Total	621,267	50.53	608,130	49.47	1,229,396	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

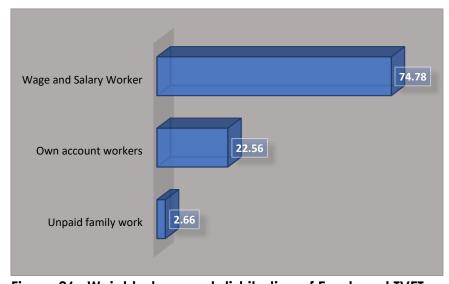


Figure 26. Weighted percent distribution of Employed TVET graduates by class of worker. Philippines, 2018

Table 75. Weighted Distribution of Employed TVET Graduates, by Class of Worker, by Training Delivery Mode, Philippines: 2018

		Training Delivery Mode												
Class of Worker	Instituti base		Mobile to progr	•	Dual tro	•	Apprent	riceship	Learne	rship	Comm bas	•	Toto	ıl
	Freq	%ª	Freq	%ª	Freq	%ª	Freq	%ª	Freq	<b>%</b> ª	Freq	%ª	Freq	% <sup>b</sup>
Wage and Salary Worker	611,768	77.8	18,420	65.7	108	100	14,116	87.8	4,914	95.8	270,036	68.6	919,362	74.78
Own account workers	151,605	19.3	6,590	23.5	0	0	1,969	12.2	214	4.2	116,914	29.7	277,291	22.56
Unpaid family work	22,855	2.9	3,029	10.8	0	0	0	0	0	0	6,859	1.7	32,744	2.66
Total	786,228	100	28,039	100	108	100	16,084	100	5,128	100	393,809	100	1,229,396	100

<sup>&</sup>lt;sup>a</sup>Percentage over the column total; <sup>b</sup>Percentage over the total number of TVET

## By Nature of Work

In contrast with the 2017 employed graduates wherein many had permanent jobs, a larger portion of 2018 employed graduates (38.42%) was engaged in a short-term or seasonal job. Although this is just a little higher than those who were already permanent in their job at 35.14%, it is essential to take note this result. On the other hand, the portion of graduates who worked for different employers on a day-to-day or week-to-week basis continue to decline from 8.62% in 2016, almost 2% in 2017 to only 1.32% in 2018 (Table 76 and Figure 27).

Table 76. Weighted distribution of employed TVET graduates, by nature of work, Philippines: 2018

Nature of Work	Employed TVET Graduates	% Share
Permanent job/business/unpaid family work	431,955	35.14
Short-term or seasonal job/business/unpaid family work	472,330	38.42
Worked different employers on a day-to-day or week-to-week basis	15,077	1.23
Not indicated	310,035	25.22
Total	1,229,396	100.00

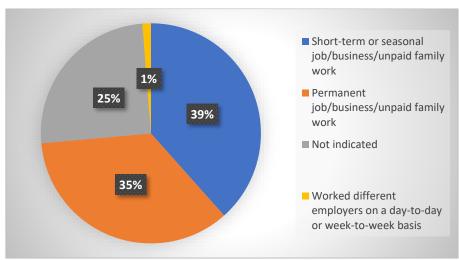


Figure 27. Weighted percent distribution of Employed TVET graduates by Nature of work. Philippines, 2018

#### By Location of Work

The prevailing majority (86.45%) of the employed graduates was working within their respective provinces. Majority of the females were working in their home provinces. Among those who were able to find a job outside their province (but still within their region), mostly (72.28%) were male (Table 77).

Table 77. Weighted distribution of employed TVET graduates, by location of work, Philippines: 2018

Sex							
Location of Work	Female		Male		Total		
	Freq	<b>%</b> ª	Freq %°		Freq	%b	
Within the province	568,541	53.50	494,234	46.50	1,062,774	86.45	
Outside the province but within the region	14,193	27.72	37,006	72.28	51,199	4.16	
Outside the region	36,592	32.59	75,688	67.41	11,2279	9.13	
Outside the country	1,941	61.75	1,202	38.25	3,144	0.26	
Total	621,267	50.53	608,130	49.47	1,229,396	100.00	

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

#### 4.7. Characteristics of Employed Certified TVET and WTR Graduates

This section further describes the characteristics of employed TVET and specifically WTR graduates vis-à-vis their certification status – certified versus non-certified. As reflected earlier, the overwhelming majority of the 2018 TVET graduates were already passers of a competency assessment and received a certification that guarantees competency standards expected in the workplace. Having a certification is essential because this confirms the productivity, quality and competitiveness of a TVET graduate as a middle-level workers.

About three-fourths of the employed certified TVET graduates were wage and salary workers – the target of TESDA for their graduates. There were a number of them who were classified as own account workers, and very few were engaged in unpaid family work. The

same distribution is seen for the employed non-certified TVET graduates (Table 78). Employed WTR graduates share similar results in the certified and non-certified groups (Table 79).

Table 78. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates, By

Class of Worker, Philippines: 2018

			Certification	n		
Class of Worker	Certified TVE	Graduates (	Non-Certified T	VET Graduates	Tot	al
	Freq	%	Freq	%ª	Freq	%b
Wage and Salary Worker	694,055	74.98a	19,301	78.37a	713,356	75.07
Own account workers	206,724	22.33	5,326	21.63	212,051	22.32
Unpaid family work	24,839	2.68	0	0	24,839	2.61
Total	925,619	97.41b	24,627	2.59b	950,246	100

<sup>&</sup>lt;sup>a</sup>Percentage over the column total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 79. Weighted Distribution of Employed Certified and Non-Certified WTR Graduates, By Class of Worker, Philippines: 2018

	Certification							
Class of Worker	Certified WTR	Certified WTR Graduates Non-Certified WTR Graduates						
	Freq	%	Freq	%	Freq	%b		
Wage and Salary Worker	631,073	75.17a	15,649	77.84a	646,722	75.24		
Own account workers	183,678	21.88	4,454	22.16	188,132	21.89		
Unpaid family work	24,732	2.95	0	0	24,732	2.88		
Total	839,483	97.66 <sup>b</sup>	20,103	2.34b	859,586	100		

<sup>&</sup>lt;sup>a</sup>Percentage over the colum total; <sup>b</sup>Percentage over the total number of TVET graduates

All the recorded occupational groups of the TVET graduates posted high number of employed graduates who were already passers and awardee of a competency certificate, in which the armed forces occupations bagged the highest share. Clerical support workers, in contrast, recorded the highest portion of graduates with no certification yet when the survey was conducted (Table 80). Similarly, for the WTR graduates per se, armed forces represented the largest share of certified workers and clerical support workers for non-certified (Table 81).

Table 80. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates, By Occupational Group, Philippines: 2018

	Certification								
Occupational Group	Certified TV	Certified TVET Graduates		Non-Certified TVET Graduates					
	Freq	<b>%</b> º	Freq	<b>%</b> ª	Freq	%b			
Armed forces occupations	8,227	100	0	0	8,227	0.87			
Managers	114,411	98.38	1,889	1.62	116,300	12.24			
Professionals	169,786	96.79	5,631	3.21	175,417	18.46			
Technicians and associate professionals	132,522	98.11	2,557	1.89	135,079	14.22			
Clerical support workers	91,450	95.84	3,973	4.16	95,422	10.04			
Service and sales workers	175,951	97.11	5,229	2.89	181,180	19.07			
Skilled agricultural, forestry and fishery workers	28,089	97.27	789	2.73	28,878	3.04			
Craft and related trades workers	103,689	98.88	1,170	1.12	104,858	11.03			
Plant and machine operators and assemblers	62,837	98.66	855	1.34	63,692	6.70			
Elementary occupations	38,657	93.85	2,535	6.15	41,192	4.33			
Total	925,619	97.41	24,627	2.59	950,246	100.00			

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 81. Weighted Distribution of Employed Certified and Non-Certified WTR Graduates, By Occupational Group, Philippines: 2018

		Certification								
Occupational Group	Certified W	TR Graduates	Non-Certified W	/TR Graduates	Total					
	Freq	<b>%</b> º	Freq	%°	Freq	%⁵				
Armed forces occupations	6,863	100	0	0	6,863	0.80				
Managers	102,667	98.19	1,889	1.81	104,556	12.16				
Professionals	158,466	96.68	5,437	3.32	163,904	19.07				
Technicians and associate professionals	124,150	97.98	2,557	2.02	126,708	14.74				
Clerical support workers	87,547	97.05	2,662	2.95	90,209	10.49				
Service and sales workers	157,179	97.09	4,717	2.91	161,896	18.83				
Skilled agricultural, forestry and fishery workers	24,633	96.9	789	3.1	25,423	2.96				
Craft and related trades workers	86,294	99.42	500	0.58	86,794	10.10				
Plant and machine operators and assemblers	55,682	98.49	855	1.51	56,537	6.58				
Elementary occupations	36,002	98.11	695	1.89	36,697	4.27				
Total	839,483	97.66	20,103	2.34	859,586	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduate

For both certified and non-certified employed graduates, many were engaged in short-term or seasonal jobs or businesses, making up the 39.14 and 46.04 percent of their respective population group. As an additional note, a small difference between permanent and short-term nature of work is observed among certified graduates. Whereas, noncertified graduates in a short-term job considerably outnumbered those with permanent jobs or businesses (Table 82). Similar results are reflected among the employed WTR graduates (Table 83).

Table 82. Comparison of Employed Certified and Non-Certified TVET Graduates, by Nature

of Work, Philippines: 2018

, p	Certification							
Nature of Work		ed TVET uates	Non-Certified TVET Graduates		Total			
	Freq	%	Freq	%	Freq	%b		
Permanent job/business/unpaid family work	317,728	34.33°	7,962	32.33a	325,690	34.27		
Short-term or seasonal job/business/unpaid family work	362,295	39.14	11,339	46.04	373,634	39.32		
Worked different employers on a day-to- day or week-to-week basis	14,032	1.52	0	0	14,032	1.48		
Not indicated	231,564	25.02	5,326	21.63	236,890	24.93		
Total	925,619	<b>97.41</b> b	24,627	2.59b	950,246	100		

<sup>&</sup>lt;sup>a</sup>Percentage over the colum total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 83. Comparison of Employed Certified and Non-Certified WTR Graduates, by Nature of Work, Philippines: 2018

	Certification							
Nature of Work	Certifie Grad	ed WTR vates	Non-Certified WTR Graduates		Total			
	Freq	%	Freq	%	Freq	% <sup>b</sup>		
Permanent job/business/unpaid family work	28,6968	34.18a	7,469	37.15a	294,437	34.25		
Short-term or seasonal job/business/unpaid family work	330,548	39.38	8,180	40.69	338,727	39.41		
Worked different employers on a day-to- day or week-to-week basis	13,557	1.61	0	0.00	13,557	1.58		
Not indicated	208,410	24.83	4,454	22.16	212,864	24.76		
Total	839,483	97.66b	20,103	2.34 <sup>b</sup>	859,586	100		

<sup>&</sup>lt;sup>a</sup>Percentage over the colum total; <sup>b</sup>Percentage over the total number of TVET graduates

Indeed, a TESDA national certificate ensures high-quality skills of workers. Since having certified workers is beneficial to the employers, it is of interest to know if they were encouraging their workers to take competency assessment and be certified. One way to inspire the workers to take the test is to offer them incentives. But then, the results show that many employed graduates opted to take an assessment even without incentives from employers. This somehow indicates that these graduates knew that it is actually them who would best benefit from being a certified worker whichever company they will work with (Table 84).

On the other side, among those who were offered incentives by their employers, which constituted 8.47% of the population of employed certified, many were promised for job security (26.65%) and offered a salary increase (26.62%). There were also some of them who were guaranteed for a salary increase, promotion and job security, all at the same time (Table 85).

Table 84. Incentives Given to Employed Certified Graduates, Philippines: 2018

Employer provide incentives	Frequency	Percentage
Yes	78,422	8.47
No	847,197	91.53
Total	925,619	100.00

Table 85. Types of Incentives Provided by Employer, Philippines: 2018

Types of Incentives	Frequency	Percentage
Salary increase	20,875	26.62
Promotion	2,746	3.50
Job security	20,901	26.65
Others	8,808	11.23
Salary increase, Promotion	5,546	7.07
Salary increase, Job security	4,423	5.64
Promotion, Job security	3,507	4.47
Job security, Others	648	0.83
Salary increase, Promotion, Job security	10,552	13.46
Salary increase, Job security, Others	300	0.38
Salary increase, Promotion, Job security, Others	117	0.15
Total	78,422	100.00

## 4.8. Employment Before and After the TVET Training

It is TESDA's goal to transform and improve the well-being of the poor and the Filipino workers in general for the better. As the agency in-charged, they play a vital role for the readiness of the skilled workers for better chance of employment.

Based on the survey, about 40% of the 2018 graduates had already jobs before attending a TVET program. There were about 23% who were unemployed before and were able to find a job after attending a program – which made the percentage of employed graduates to increase to 59.27%, and this increase is said to be significant with *p-value* of 0.0003 Also, there were some who got a promotion (1.53%) and were transferred (4.51%). Meanwhile, a large portion (30.3%) acquired new job after completing a TVET program. There were a considerable large portion (36.22%) of the unemployed before who were still unemployed after accomplishing a training program. In addition, a few (4.51%) were reported employed before, but for some reasons became unemployed after attending a program (Table 86).

Of the estimated 751,442 unemployed graduates before and after attending a program, a large share (41.51%) considered attending a program for skills enhancement, while about 18% did it for personal reasons or for their hobby. Some of these could be students or housewives which may explain for remaining unemployed. Nevertheless, many of these unemployed (about 18%) indeed enrolled TVET program for employment purposes (Table 87). This result shall be taken into consideration by the management in addressing issues on graduates' employability.

Table 86. Estimated Percentage of TVET Graduates who are employed before and after the

training, Philippines: 2018

Employment Status		Employment Status Before Training						
After Training	Employed		Unemploy the Labo	-	Total			
	Freq	<b>%</b> ª	Freq	%	Freq	%		
Unemployed	93,546	4.51	751,442	36.22	844,988	40.73		
Employed	753,923	36.34	475,473	22.92	1,229,396	59.27		
Employed: Promoted	31,780	1.53	-	Ī	-	ı		
Employed: Transferred	93,652	4.51	-	Ī	-	ı		
Employed: Acquired new job	628,491	30.3	-	-	-	-		
Total	847,469	40.85	1,226,915	59.15	2,074,384	100.00		

<sup>&</sup>lt;sup>a</sup>perdentage over the total number of TVET graduates

Table 87. Reasons for enrolling TESDA of those who were unemployed before and after

training, Philippines: 2018

Reason for Taking up the Program	Unemployed Graduates Before and After the Program		
	Freq	%	
For employment/to get job	206,180	27.44	
For promotion	1,930	0.26	
To increase in income	7,815	1.04	
For skills upgrading/enhancement	311,942	41.51	
TVET qualification is popular	3,553	0.47	
Personal use/interest/hobby	136,531	18.17	
Nothing to do	1,629	0.22	
Others	81,862	10.89	
Total	751,442	100.00	

Improving the level of prosperity and quality of living standards in an economy is one of those that TESDA is aiming for the Filipino workers. Income, among other factors such as health care, education, environmental factors, and the like, is important in determining one's economic welfare. This section characterizes the generating income of TESDA graduates before and after completing a TVET program to determine if there is somehow an improvement in the earnings of the graduates after their TESDA training.

Results show that majority of the employed graduates were earning below 30,000 pesos before attending a TVET program, wherein mostly were less than 10,000 pesos. Very few had monthly income of as much as 30,000 pesos. Moreover, no clear pattern can be noted between sexes. Nevertheless, slightly more females than males were low earners (below ₱10,000), while more males were recorded to have an income of between 30,000 and 59,999 pesos monthly (Table 88 and Figure 28).

Table 88. Weighted Distribution of TVET Graduates by Monthly Income before Training, by Sex,

Philippines: 2018

	Sex							
Income	Fem	ale	Ma	le	Total			
	Freq	%	Freq	<b>%</b> ª	Freq	%		
Below 10,000	229,107	56.54	176,081	43.46	405,189	47.81		
10,000 - 19,999	96,756	37.03	164,558	62.97	261,314	30.83		
20,000 - 29,999	52,412	56.39	40,534	43.61	92,946	10.97		
30,000 - 39,999	14,064	35.27	25,815	64.73	39,879	4.71		
40,000 - 49,999	6,457	43.08	8,530	56.92	14,986	1.77		
50,000 and over	12,126	51.5	11,420	48.5	23,546	2.78		
Not indicated	4,597	47.83	5,013	52.17	9,610	1.13		
Total	415,518	49.03	431,951	50.97	847,469	100.00		

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

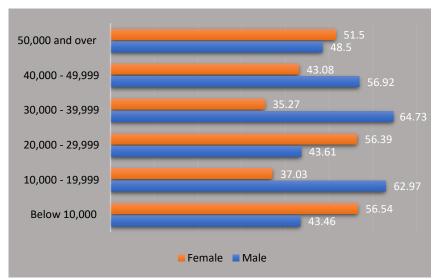


Figure 28. Weighted percent distribution of TVET graduates by monthly income before attending a program, by sex. Philippines, 2018

A similar distribution by income bracket can be observed among the graduates after they have completed a training program. Still, a greater proportion of the graduates were earning below 30,000 pesos. Many had an income of below 10,000 pesos, while so few were earning high. But somehow, the portion of low earners (below \$\mathbb{P}\$10,000) declined from 47.81% (before the training) to 43.63% (after the training). The portion of high earners, however, decreased as well. Moreover, comparison in the distribution of female and male graduates is similar to what has been observed before the training (Table 89 and Figure 29).

Table 89. Weighted Distribution of TVET Graduates by Current Monthly Income, by Sex, Philippines: 2018

	Sex								
Income	Female		Me	ale	Total				
	Freq	<b>%</b> ª	Freq	<b>%</b> º	Freq	%b			
Below 10,000	302,686	56.43	233,738	43.57	536,424	43.63			
10,000 - 19,999	179,571	41.66	251,508	58.34	431,079	35.06			
20,000 - 29,999	89,985	58.72	63,268	41.28	153,253	12.47			

	Sex								
Income	Female		M	Male		Total			
	Freq	<b>%</b> °	Freq	<b>%</b> °	Freq	%⁵			
30,000 - 39,999	15,076	36.59	26,129	63.41	41,205	3.35			
40,000 - 49,999	9,732	48.16	10,476	51.84	20,208	1.64			
50,000 and over	16,272	52.17	14,919	47.83	31,191	2.54			
Not indicated	7,943	49.54	8,092	50.46	16,035	1.30			
Total	621,267	50.53	608,130	49.47	1,229,396	100.00			

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

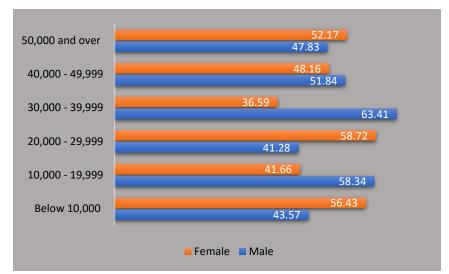


Figure 29. Weighted percent distribution of TVET graduates by monthly income at the time of the survey, by sex. Philippines, 2018

Statistical comparison was further made in the monthly income of employed graduates before and after the training. On the average, the graduates' current monthly income, estimated at 14,371.54 pesos, was significantly higher than the one estimated before they attended a training which was 13,643.46 pesos (p-value=0.0005). As a further matter, large deviation among the income before the training was apparent having a standard deviation of 15,772.30, with a range of 166 to 240,000 pesos. Meanwhile, current income deviates from the mean by 26,691.54, considerably higher than the variation in the income before. This is further described by its high coefficient of skewness of 24.90, which suggests that very few graduates were currently earning significantly high in their job or business (Table 90 and Figure 31).

Table 90. Summary statistics of monthly income before the training and at the time of the survey, Philippines: 2018

Statistics	Monthly Income (Pesos)			
Sidiistics	Before Training	Current		
Minimum	166.00	166.00		
Maximum	240,000.00	1,200,000.00		
Median	10,000.00	10,000.00		
Mean	13,643.46	14,371.54		
Standard deviation	15,772.30	26,691.58		
Skewness	5.77	24.90		



Figure 30. Boxplot of the Monthly Income of TVET graduates before training and at the time of the survey. Philippines: 2018

Males, on the average, were earning pretty higher than females, estimated at 14,371.54 and 13, 912.49 pesos, respectively. A generated *p-value* of 0.3333 makes the difference not significant at 5% level. To add, at least fifty percent of females had monthly income of 10,000 pesos or below, while it was 11,000 pesos among males. Great variations are also prominent in the graduates' income, ranging from 166 to 400,000 pesos for females, and 500 to 1,200,000 pesos for males. Both sexes exhibited positively skewed distribution, which is very much higher among males, implying that very few received high monthly income (Table 91 and Figure 31).

Table 91. Summary statistics of Current Monthly Income of Employed TVET graduates by Sex.

Philippines: 2018

Statistics	Se	Overall		
Sidiisiics	Female	Male	Overdii	
Minimum	166.00	500.00	166.00	
Maximum	400,000.00	1,200,000.00	1,200,000.00	
Median	10,000.00	11,000.00	10,000.00	
Mean	13,912.49	14,840.75	14,371.54	
Standard deviation	25,043.87	28,277.23	26,691.58	
Skewness	12.15	33.72	24.90	

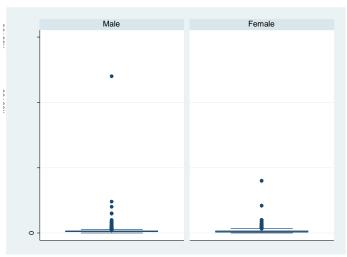


Figure 31. Boxplot of the Current Monthly Income of TVET graduates by Sex. Philippines: 2018

In the comparison of the monthly income of the graduates from the two types of providers during the survey was conducted, non-TTI bagged a higher one with 14, 591.46 pesos as to the 12,981.47 pesos of TTI. With a *p-value* of 0.0263, indeed such difference is statistically significant. Much variability was also observed in the income of non-TTI than TTI graduates with standard deviations of 28,359.12 and 11,426.69, respectively. This resulted in a large coefficient of skewness for both types of providers, especially for non-TTI at 23.99, suggesting that the observed maximum income of 1,200,000 pesos is an extreme one relative to the other recorded income (Table 92 and Figure 32).

Table 92. Summary statistics of Current Monthly Income of Employed TVET graduates by Type of Provider. Philippines: 2018

Statistics	Type of	Overall		
Statistics	TTI	Non-TTI	Overdii	
Minimum	500.00	166.00	166.00	
Maximum	150,000.00	1,200,000.00	1,200,000.00	
Median	10,000.00	10,000.00	10,000.00	
Mean	12,981.47	14,591.46	14,371.54	
Standard deviation	11,426.69	28,359.12	26,691.58	
Skewness	3.57	23.99	24.90	

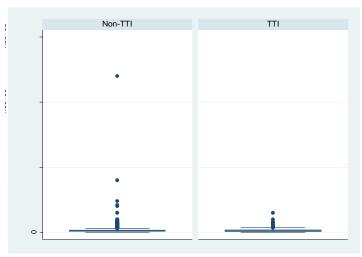


Figure 32. Boxplot of the Current Monthly Income of TVET Graduates by Type of Provider. Philippines: 2018

In 2018, NCR registered the highest mean monthly income of its graduates at 20.461.62 pesos, higher than the national estimate for TVET graduates. Region XI (Davao Region) came next with an estimate of 18.584.52 pesos, followed by CAR with monthly income of 15,565.99 pesos, on the average. The other regions recorded a mean monthly earnings of approximately between 11,000 and 13,000 pesos. Contrarily, Region X (Northern Mindanao), with a small difference with ARMM, registered the lowest mean income of 10,732.74 pesos, recording a lowest earning of 500 and the highest earning of 100,000 pesos. Large standard deviations observed across regions indicate the enormous disparity in the graduates' current income. The greatest coefficient of skewness (used for identification of extreme observations) was actually reported in Region XI, wherein the national maximum recorded monthly income of 1,200,000 pesos was documented. Generally, the distribution of income across regions is positively skewed, implying the presence of extremely high income among the graduates (Table 93 and Figure 33). With its p-value equal to 0.0002, it can be noted that at least one of the regions' graduates had a monthly income significantly different to other regions.

Table 93. Summary statistics of Current Monthly Income of Employed TVET graduates

by Region. Philippines: 2018

Region	Minimum	Maximum	Median	Mean	Standard deviation	Skewness
ARMM	1,000	50,000	8,000	10,950.66	8,403.14	1.59
CAR	1,000	200,000	10,000	15,565.99	21,616.31	5.86
CARAGA	1,000	240,000	9,000	13,148.30	21,391.71	9.13
NCR	650	400,000	14,000	20,461.62	38,602.59	8.70
I	1,000	75,000	9,600	12,920.94	11,281.91	2.08
II	800	60,000	9,000	13,004.13	12,575.66	2.13
III	900	60,000	9,600	12,475.16	9,347.35	1.78
IV-A	1,100	50,000	12,000	13,370.59	8,733.45	1.90
IV-B	200	80,000	10,000	12,773.55	10,626.13	2.85
V	500	150,000	9,000	12,783.78	16,375.56	5.73
VI	900	95,000	10,000	12,451.61	12,163.30	3.48
VII	1,000	84,000	9,500	12,701.60	10,816.04	3.46

Region	Minimum	Maximum	Median	Mean	Standard deviation	Skewness
VIII	200	90,000	9,000	12,267.18	12,628.94	3.15
IX	166	87,788	8,400	11,419.76	10,952.33	3.60
X	500	100,000	8,000	10,732.74	10,073.53	4.45
XI	1,000	1,200,000	10,000	18,584.52	82,683.58	13.53
XII	500	70,000	10,000	12,552.14	9,907.19	2.68
Philippines	166.00	1,200,000	10,000	14,371.54	26,691.58	24.90

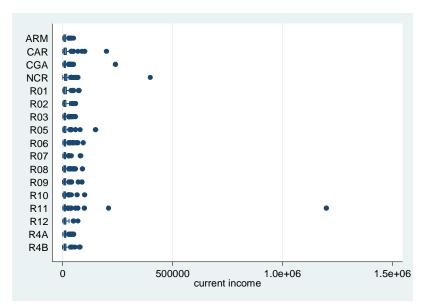


Figure 33. Boxplot of the Current Monthly Income of TVET graduates by Region. Philippines: 2018

TWSP scholars acquired the highest monthly income of 15,992.06 pesos. This could be because the highest income of 1,200,000 among the respondents came from this group, as supported by enormous variability of 38,228.77 pesos. This also led to a huge coefficient of skewness suggesting the presence of extreme high income among TWSP scholars. TWSP, moreover, exhibited noticeably higher mean income compared to the other two programs – PESFA ( $\ref{P}$  9,052.46) and STEP ( $\ref{P}$  9,781.59). Nonetheless, it is worth to add that the lowest recorded monthly income in PESFA ( $\ref{P}$  1,000) is appreciably greater than the reported in STEP ( $\ref{P}$  166) and TWSP ( $\ref{P}$  500). On the other hand, graduates with no scholarship registered and average of  $\ref{P}$  14,390.33 with a standard deviation of 22,956.38 pesos. Income among these graduates range from 200 to 400,000 pesos monthly. Significant differences in the mean monthly income of at least one of the subgroups can be noted as indicated by its small *p*-value of 0.0127. (Table 94 and Figure 34).

Table 94. Summary statistics of the Current Monthly Income of Employed TVET graduates by

Type of Scholarship, Philippines: 2018

Statistics	PESFA	STEP	TWSP	Regular Program (No Scholarship)	Overall
Minimum	1,000	166	500	200	166
Maximum	22,900	150,000	1,200,000	400,000	1,200,000
Median	9,000	8,000	12,000	10,000	1,0000
Mean	9,052.46	97,81.59	15,992.06	14,390.33	14,371.54
Standard deviation	47,42.26	103,88.21	38228.77	22,956.38	26,691.58
Skewness	0.66	6.82	28.21	12.30	24.90

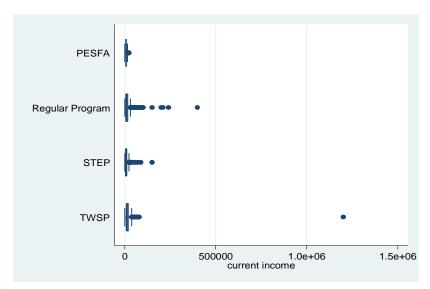


Figure 34. Boxplot of the Current Monthly Income of TVET graduates by Scholarship. Philippines: 2018

Monthly income of graduates from the different sectors was also described in this section. Consistently, since the 2016 survey, TVET recorded the highest monthly income, with an average of 30,676.04 for the 2018 graduates. However, large deviation among the reported income can also be observed with 130,860.70, due to the presence of extremely high income relative to the others, as indicated by its coefficient of skewness of 8.87 TVET is seconded by the Maritime sector with an estimated mean monthly income of 20,983.65 and with a standard deviation of 28,874.20 pesos. The rest of the sectors registered a monthly income of around 11,000 to 19,900, on the average, except for the Footwear sector which have a mean of 2,250 pesos monthly. The majority of the sectors exhibited positive skewed distribution, announcing the presence of extremely high income among the graduates. Furthermore, comparative analysis shows that at least one of the sectors had a significantly different mean monthly income as implied by its very small *p-value* (<0.0005) (Table 95 and Figure 35).

Table 95. Summary statistics of the Current Monthly Income of Employed TVET graduates by

Sector. Philippines: 2018

Sector Sector	Minimum	Maximum	Median	Mean	Std Dev	Skewness
Agriculture Forestry and Fisheries	500	150,000	10,000	14,061	14,871	4.39
Automotive and Land Transportation	1,000	200,000	10,200	14,406	13,149	6.00
Construction	2,000	80,000	10,000	14,826	12,833	2.49
Decorative Crafts	-	-	-	-	1	-
Electrical and Electronics	1,000	400,000	11,400	19,916	50,945	7.12
Footwear	2,000	2,500	2,250	2,250	354	0.00
Garments	166	72,000	8,000	11,452	11,349	1.94
Heating, Ventilation, Aircondition	3,000	50,000	14,000	16,369	12,543	1.95
Human Health/Health Care	200	70,000	8,000	11,574	11,350	2.88
Information and Communication	1,000	80,000	13,000	15,129	11,415	2.23
Language	3,000	40,000	13,000	13,102	6,509	0.81
Maritime	5,000	95,000	10,500	20,984	28,874	2.27
Metals and Engineering	500	50,000	12,000	12,977	7,551	1.51
Processed Food and Beverages	-	-	-	-	1	-
Social, Community Development	500	88,000	10,000	12,007	10,570	2.67
TVET	3,000	1,200,000	18,000	30,676	130,861	8.87
Tourism (Hotel and Restaurant)	200	240,000	10,000	13,687	14,028	5.60
Utilities	14,800	14,800	14,800	14,800		
Visual Arts	2,000	40,000	9,000	11,080	6,513	2.38
Wholesale and Retail Trading	900	210,000	10,000	16,446	27,647	5.82
Others	6,000	37,000	9,600	11,439	6,348	2.30

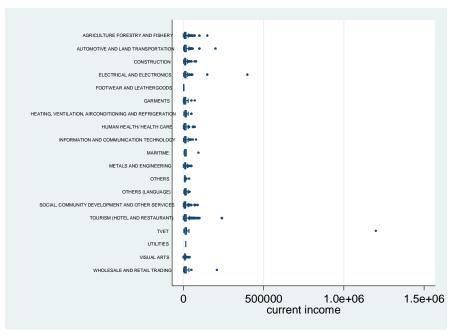


Figure 35. Boxplot of the Current Monthly Income of TVET graduates by Sector. Philippines:2018

#### 4.9. Skills Utilization

Through the TVET programs, the youth, workers, and the general public are offered quality trainings that would help them gain the required skills in the workplace. Workers who better use their skills tend to earn better, are more up on to adapt to the increasing changes in the nature of work, and are much satisfied with their job. Utilization of skills benefits the employers for having a more productive and innovative workforce. All the same, there were claims that a number of workers were not able to fully utilize their skills in the workplace. In light of this, determining the skills utilization of TVET graduates is also an essential basis for the management on how they can address the issue surroundings skills utilization.

The lion's share (approximately 93% to 98%) of the TVET graduates in 2018 across the different program delivery modes believed that they acquired the needed skills for their program after completing it. The distribution between sexes are very close, except for those under DTS. Male (74.60%) predominated female graduates of DTS who perceived that they have gained the skills expected in their programs (Table 96).

Table 96. Weighted Distribution of TVET Graduates Who Perceived that they Possess Skills After Completing a Program, By Sex and Program Delivery Mode, Philippines: 2018

	Sex								
Program Delivery Mode	Fema	Female		е	Total				
	Freq	<b>%</b> ª	Freq	<b>%</b> ª	Freq	%b			
Institution-based	694,029	49.81	699,323	50.19	1,393,352	97.39			
Mobile training program	18,803	51.08	18,005	48.92	36,808	93.81			
Dual training system	2,402	25.4	7,057	74.6	9,460	92.46			
Apprenticeship									
Learnership	20,141	48.85	21,091	51.15	41,233	99.52			
Community-based	399,202	57.47	295,480	42.53	694,682	96.00			
Total	1,134,578	52.15	1,040,956	47.85	2,175,534	96.90			

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of graduates per program delivery mode

Furthermore, when the graduates were grouped as to whether WTR or NTR, a bit more of the latter under the community-based and learnership (enterprise-based) programs (both dominated by females) perceived that they developed the skills needed in their program to be competent. Meanwhile, in the mobile training and apprenticeship programs, higher portion is apparent among WTR than NTR graduates – where males outnumbered females. Alternatively, almost the same portion of WTR and NTR graduates who signified their being skilled can be noted under DTS and institution-based programs. (Tables 97 and 98 and Figure 36).

Table 97. Weighted Distribution of WTR Graduates Who Perceived that they Possess Skills After Completing a Program, by Sex and Program Delivery Mode, Philippines: 2018

	Sex								
Program Delivery Mode	Female		Ma	le	Total				
	Freq	<b>%</b> ª	Freq	%	Freq	%b			
Institution-based	584,431	51.09	559,396	48.91	1,143,827	97.09			
Mobile training program	14,008	35.79	25,128	64.21	39,136	97.77			
Dual training system	432	42.45	585	57.55	1,017	100.00			

	Sex								
Program Delivery Mode	Female		Ма	le	Total				
	Freq	<b>%</b> ª	Freq	<b>%</b> ª	Freq	%⁰			
Apprenticeship	5,250	43.3	6,875	56.7	12,125	100.00			
Learnership	1,683	49.32	1,729	50.68	3,412	94.15			
Community-based	215,139	80.81	51,074	19.19	266,213	93.85			
Total	820,943	56.01	644,787	43.99	1,465,729	96.52			

Table 98. Weighted Distribution of NTR Graduates Who Perceived that they Possess Skills After Completing a Program, By Sex and Program Delivery Mode, Philippines: 2018

	Sex								
Program Delivery Mode	Female		Mo	ıle	Total				
	Freq	%	Freq	%	Freq	%⁰			
Institution-based	26,698	34.73	50,169	65.27	76,867	97.87			
Mobile training program	1,430	59.61	969	40.39	2,399	88.78			
Dual training system	0	0	318	100	318	100.00			
Apprenticeship	2,094	18.18	9,423	81.82	11,517	94.62			
Learnership	3,556	53.09	3,142	46.91	6,699	100.00			
Community-based	85,227 74.51		29,151	25.49	114,378	97.72			
Total	119,006	56.09	93,173	43.91	212,178	97.56			

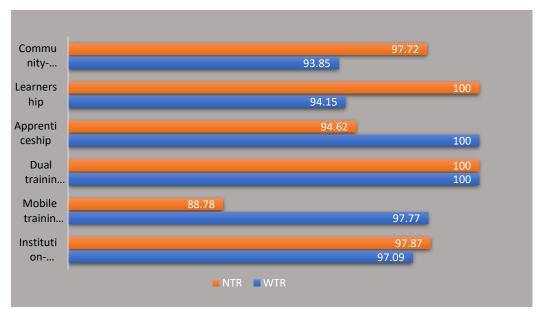


Figure 36. Weighted percentage distribution of employed WTR and NTR graduates by the usefulness of the program. Philippines: 2018

Comparable to 2016 and 2017 results, 2018 graduates were likewise able to obtain their job by walk-in applications (37.55%) and referrals from friends and relatives (23.62%). Some were employed thru internet job posting (4.91%) and some were recruited or absorbed by the employers (5%). A few got employed via Public Employment Service Office (PESO) (0.22%) and from the newspaper advertisement (0.11%), while no one of the respondents mentioned about the blue desk. In addition, a number (28.6%) were able to find a job by other means (Table 99).

Table 99. Means for Getting the present job of TVET Graduates by Sex, Philippines: 2018

	Sex									
Acquirement of Job	Fe	male	N	\ale	T	Total				
	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>				
Blue Desk	0	0	0	0	0	0.00				
Public Employment Service Office (PESO)	1,753	66.1	899	33.9	2,652	0.22				
Internet Job Posting	31,590	52.29	28,819	47.71	60,408	4.91				
Newspaper Advertisements	0	0	1,297	100	1,297	0.11				
Referral from friends/relatives	148,483	51.14	141,875	48.86	290,357	23.62				
Walk-in application	212,680	46.07	248,927	53.93	461,607	37.55				
Absorbed/Recruited by the employer	9,358	27.01	25,295	72.99	34,653	5.0				
Others	201,843	57.4	149,813	42.6	351,656	28.60				
Total	621,267	50.53	608,130	49.47	1,229,396	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Less than half (47.66%) of the employed graduates signified their satisfaction regarding the usefulness of the skills that they acquired from the TVET training in their work – many were males (55.44%). However, a considerable portion of them (about 29%) found their trainings to be of no use in their current work, of which around 56% were females. This is something that the management has to consider in building policy concordance between employment and skills, among others (Table 100).

The same pattern can be seen in the two types of provider. Not much expressed their delight on the usefulness of the completed trainings, and again many from both types of provider were males. Meanwhile, a little less than a quarter from TTI (24.96%) and from non-TTI (22.96%) indicated their dissatisfaction on the trainings attended as they found it no use at all – wherein majority from the TTI (57.56%) were males, while from the non-TTI (58.47%) were females. (Tables 101 and 102 and Figure 37).

Table 100. Skills Utilization of Employed TVET Graduates, Philippines: 2018

61.11		Se		Total			
Skills Utilization	Fe	male	N	\ale	Ioidi		
Ollinzarion	Frequency	Percentage <sup>a</sup>	Frequency Percentagea		Frequency	Percentage <sup>b</sup>	
Very useful	261,100	44.56	324,799	55.44	585,899	47.66	
Some use	199,835	55.84	158,041	44.16	357,877	29.11	
No use at all	160,332	56.13	125,289	43.87	285,621	23.23	
Total	621,267	50.53	608,130	49.47	1,229,396	100.00	

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 101. Skills Utilization of Employed TVET Graduates under TTI, Philippines: 2018

<b>A1 ***</b>		Se	Total				
Skills Utilization	Fe	male	N	<b>Nale</b>	Total		
Ullization	Frequency	Percentage <sup>a</sup>	Frequency Percentagea		Frequency	Percentage <sup>b</sup>	
Very useful	36,452	45.44	43,767	54.56	80,218	48.18	
Some use	20,969	46.9	23,737	53.1	44,706	26.85	
No use at all	17,640	42.44	23,921	57.56	41,561	24.96	
Total	75,061	45.09	91,425	54.91	166,485	100.00	

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

Table 102. Skills Utilization of Employed TVET Graduates under Non-TTI, Philippines: 2018

		Se		-4-1			
Skills Utilization	Fe	male	٨	Nale	Total		
	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>a</sup>	Frequency	Percentage <sup>b</sup>	
Very useful	224,648	44.42	281,033	55.58	505,681	47.58	
Some use	178,866	57.11	134,305	42.89	313,171	29.46	
No use at all	142,692	58.47	101,367	41.53	244,060	22.96	
Total	546,206	51.39	516,705	48.61	1,062,911	100.00	

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates



Figure 37. Weighted percentage distribution of employed graduates by the usefulness of the program, by type of providers, Philippines: 2018

Experts say that the perceived skill utilization was found as one of those that influence the job-related intuitive well-being. However, this is usually disregarded in the planning of work overhaul. TESDA indeed recognized the importance of better using skills, thus this survey. The results of this survey may serve as basis in order to improve the job satisfaction of the TVET graduates and to maximize the employer and individual performance.

As stated earlier, a reasonable number of 2018 graduates felt that they were not able to utilize in their job the skills they learned from training in TESDA. Having said, it is therefore indisputable that that there were some skills gained by employed graduates that end up either getting under-utilized or not beneficial at all in current work demands. The mass of the

graduates (about 82%) who were not satisfied of the skills acquired were those whose current occupation (at the time of the survey) was entirely different with the training completed, of which about 54% were females. Whereas, some of them mentioned that the skills they acquired were not needed in their actual work (Table 103).

Table 103. Reasons of TVET Graduates for considering his/her Skills Acquired is No Use At All

by Sex Philippines: 2018

	Sex									
Reason	Fen	nale	Mo	ale	То	tal				
	Freq	Percent <sup>a</sup>	Freq	Percent <sup>a</sup>	Freq	Percentb				
Skills acquired from training/course not needed in actual work	28,698	64.7	15,660	35.3	44,358	15.53				
Occupation is entirely different with training/course completed	127,663	54.37	107,148	45.63	234,811	82.21				
Others	3,971	61.54	2,481	38.46	6,452	2.26				
Total	160,332	56.13	125,289	43.87	285,621	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the row total; <sup>b</sup>Percentage over the total number of TVET graduates

#### 5. Satisfaction Level of TVET Graduates

Graduate satisfaction impacts not only how much one had been happy and contented during their training in TESDA, but also how well they performed. Their performance, relationships with their trainers, attendance and employability once they are completed are all, to a certain degree, reliant on how much they were satisfied and how engaged they were in their programs. As such, graduate satisfaction is deemed an essential basis for the refining of TESDA training programs to have higher chances of employability among its graduates.

This section presents the satisfaction level of the graduates regarding several aspects related to their enrollment in TESDA. The overwhelming majority of the 2018 TESDA graduates expressed gratitude towards attending TVET program. A considerably large portion of them experienced no difficulty in processing the requirements for entry, while very few (0.06%) signified their disappointment. When asked about the training methodologies implemented, more than half of them rated their program as excellent (60.02%), while many rated their satisfaction as very good and good. But then there were some (0.04%) who were upset on the methodologies used. About 90% (combination of excellent and very good ratings) had a satisfying feedback on the tools and equipment used during their trainings. Meanwhile, only 0.30% felt that much better tools and equipment should have used. Almost half of the graduates found the learning materials excellent, whereas very small portion (0.70%) believed that the materials must need improvement. The learning materials received the highest poor rating satisfaction among the several components. Similarly, the great majority (excellent -57.67% and very good – 37.56%) were happy with the training activities executed, with the training facilities rated by many as either very good (37.38%) or even excellent (55.44%). Trainers as being expert in their field got the most excellent rating from the graduates, suggesting positive feedback towards them. Nonetheless, albeit few, there were graduates who were not satisfied the way their trainers delivered the teaching. The large majority of the graduates also found the duration of the training reasonable for them to gain the skills needed

in their program. Given all the components that contribute in learning, the target is for the graduates to acquire the knowledge, skills and attitudes necessary in the workplace. When asked about this, many of the graduates believed that they gained the required level of knowledge, skills and attitude expected of them. This component, however, garnered the least percentage of excellent rating (46.82%). Moreover, the assessment methods considered by the program have been just fair according to the majority of the graduates, though so few (0.12%) found it not sensible (Table 104 and Figure 38).

Overall, about 60% of the graduates had an excellent experience with the TVET program attended, wherein female to male distribution is nearly 1:1. A large portion (38.85%) rated their program as very good, of which female (58.93%) slightly outnumbered males. Whereas, the minority (0.03%) of them found their trainings disappointing (Table 105). Despite the large number of graduates who indicated their satisfaction in their training programs, it would still be essential to address the concerns of those who were not satisfied. After all, the goal is to offer the best training that would augment the competency of the graduates.

Table 104. Weighted distribution of TVET graduates by satisfaction level per element. Philippines: 2018

able to it treigined dishibution of traingladed by sansidentiaves per element. Thinppines: 2010									
Excellent		Very G	ood	Goo	d	Fai	r	Poor	
Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1,158,290	55.84	802,674	38.69	106,343	5.13	5,736	0.28	1,341	0.06
1,245,080	60.02	744,455	35.89	78,972	3.81	5,049	0.24	827	0.04
1,106,536	53.34	773,540	37.29	162,207	7.82	25,883	1.25	6,219	0.30
1,060,863	51.14	798,211	38.48	168,125	8.1	31,576	1.52	15,609	0.75
1,196,375	57.67	779,202	37.56	90,175	4.35	7,206	0.35	1,427	0.07
1,150,127	55.44	775,305	37.38	127,848	6.16	18,951	0.91	2,153	0.10
1,416,568	68.29	593,249	28.6	58,922	2.84	4,016	0.19	1,628	0.08
1,052,856	50.76	846,135	40.79	146,243	7.05	27,386	1.32	1,764	0.09
971,243	46.82	967,761	46.65	129,193	6.23	5,292	0.26	895	0.04
928,434	59.54	575,095	36.88	51,562	3.31	2,492	0.16	1,889	0.12
	Freq 1,158,290 1,245,080 1,106,536 1,060,863 1,196,375 1,150,127 1,416,568 1,052,856 971,243	Excellent           Freq         %           1,158,290         55.84           1,245,080         60.02           1,106,536         53.34           1,060,863         51.14           1,196,375         57.67           1,150,127         55.44           1,416,568         68.29           1,052,856         50.76           971,243         46.82	Excellent         Very G           Freq         %         Freq           1,158,290         55.84         802,674           1,245,080         60.02         744,455           1,106,536         53.34         773,540           1,060,863         51.14         798,211           1,196,375         57.67         779,202           1,150,127         55.44         775,305           1,416,568         68.29         593,249           1,052,856         50.76         846,135           971,243         46.82         967,761	Excellent         Very Good           Freq         %         Freq         %           1,158,290         55.84         802,674         38.69           1,245,080         60.02         744,455         35.89           1,106,536         53.34         773,540         37.29           1,060,863         51.14         798,211         38.48           1,196,375         57.67         779,202         37.56           1,150,127         55.44         775,305         37.38           1,416,568         68.29         593,249         28.6           1,052,856         50.76         846,135         40.79           971,243         46.82         967,761         46.65	Excellent         Very Good         Good           Freq         %         Freq         %         Freq           1,158,290         55.84         802,674         38.69         106,343           1,245,080         60.02         744,455         35.89         78,972           1,106,536         53.34         773,540         37.29         162,207           1,060,863         51.14         798,211         38.48         168,125           1,196,375         57.67         779,202         37.56         90,175           1,150,127         55.44         775,305         37.38         127,848           1,416,568         68.29         593,249         28.6         58,922           1,052,856         50.76         846,135         40.79         146,243           971,243         46.82         967,761         46.65         129,193	Excellent         Very Good         Good           Freq         %         Freq         %         Freq         %           1,158,290         55.84         802,674         38.69         106,343         5.13           1,245,080         60.02         744,455         35.89         78,972         3.81           1,106,536         53.34         773,540         37.29         162,207         7.82           1,060,863         51.14         798,211         38.48         168,125         8.1           1,196,375         57.67         779,202         37.56         90,175         4.35           1,150,127         55.44         775,305         37.38         127,848         6.16           1,416,568         68.29         593,249         28.6         58,922         2.84           1,052,856         50.76         846,135         40.79         146,243         7.05           971,243         46.82         967,761         46.65         129,193         6.23	Excellent         Very Good         Good         Fai           Freq         %         Freq         %         Freq         %         Freq           1,158,290         55.84         802,674         38.69         106,343         5.13         5,736           1,245,080         60.02         744,455         35.89         78,972         3.81         5,049           1,106,536         53.34         773,540         37.29         162,207         7.82         25,883           1,060,863         51.14         798,211         38.48         168,125         8.1         31,576           1,196,375         57.67         779,202         37.56         90,175         4.35         7,206           1,150,127         55.44         775,305         37.38         127,848         6.16         18,951           1,416,568         68.29         593,249         28.6         58,922         2.84         4,016           1,052,856         50.76         846,135         40.79         146,243         7.05         27,386           971,243         46.82         967,761         46.65         129,193         6.23         5,292	Excellent         Very Good         Good         Fair           Freq         %         Freq         %         Freq         %         Freq         %           1,158,290         55.84         802,674         38.69         106,343         5.13         5,736         0.28           1,245,080         60.02         744,455         35.89         78,972         3.81         5,049         0.24           1,106,536         53.34         773,540         37.29         162,207         7.82         25,883         1.25           1,060,863         51.14         798,211         38.48         168,125         8.1         31,576         1.52           1,196,375         57.67         779,202         37.56         90,175         4.35         7,206         0.35           1,150,127         55.44         775,305         37.38         127,848         6.16         18,951         0.91           1,416,568         68.29         593,249         28.6         58,922         2.84         4,016         0.19           1,052,856         50.76         846,135         40.79         146,243         7.05         27,386         1.32           971	Excellent         Very Good         Good         Fair         Pool           Freq         %         Preq         %         2.2         2.8         8.2         <

<sup>&</sup>lt;sup>a</sup>Percentage over the total number of TVET graduates



Figure 38. Weighted percentage distribution of employed graduates by satisfaction level per element. Philippines: 2018

Table 105. Overall Satisfaction level of TVET Graduates with the Program attended By Sex,

Philippines: 2018

· · · · · · · · · · · · · · · · · · ·		Sex								
Satisfaction	Fen	nale	M	ale	Total					
level	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage				
Excellent	608,703	49.77	614,330	50.23	1,223,034	58.96				
Very Good	474,893	58.93	330,989	41.07	805,881	38.85				
Good	21,250	49.9	21,336	50.1	42,587	2.05				
Fair	1,767	75.12	585	24.88	2,352	0.11				
Poor	212	39.98	318	60.02	531	0.03				
Total	1,106,825	53.36	967,559	46.64	2,074,384	100.00				

<sup>&</sup>lt;sup>a</sup>Percentage over the total number of TVET graduates

# 6. Determinants of TVET Employability

Knowing the factors associated with and may influence the employability of TVET graduates may help the management to target those groups of graduates who were having significantly lower employment rate. While every TVET program continues to upgrade, it is also essential to plan for effective skills utilization.

#### 6.1. Factors Associated with Employability

Among the several factors considered in the analysis, those that were found significantly associated with the employability of a TVET graduate, at the 10% level of significance, include: (1) educational attainment, (2) reason for taking up TVET program, (3) program delivery mode, (4) registered TVET program, (5) availment of the scholarship program, (6) took career assessment test, (7) region, (8) sector, and (9) age group. In particular, the aforementioned factors were weakly associated with whether a graduate is either employed or unemployed (Table 106). Factors found consistently associated with employability of graduates since 2016 have been educational attainment, age group, region of a graduate, and availing of a scholarship program.

Table 106. Measure of Association TVET graduates' employability with some Factors

Factor	Rao-Scott Test statistic	p- value*	Cramer' s V
Type of Provider	0.1838	0.6682	0.0049
Educational Attainment	11.3335	0.0786	0.0387
Reason for Taking up the Program	67.4461	<.0001	0.0944
Program Delivery Mode	14.6465	0.0120	0.0440
Type of TVET Program Registration	8.9690	0.0113	0.0344
Availment of Scholarship Program	9.0990	0.0026	0.0347
Scholarship Program	4.1111	0.2497	0.0233
Compentency Assessment	0.3999	0.5271	0.0073
Results of Competency Assessment	0.3502	0.5540	0.0068
Level of Certification	6.6632	0.1548	0.0297
Perception whether the graduates possess skills after completing the program	1.1358	0.2865	0.0123
Satisfaction: Trainee Entry Requirements	3.2390	0.1102	0.0418
Satisfaction: Training Methodologies	1.2971	0.8620	0.0131
Satisfaction: Tools and Equipment	3.4710	0.4820	0.0214
Satisfaction: Learning Materials	2.2726	0.6858	0.0173
Satisfaction: Training Activities	2.7037	0.6090	0.0189
Satisfaction: Training Facilities/ Work Area	4.1024	0.3923	0.0233
Satisfaction: Knowledge/ Expertise of Trainer	1.7077	0.7890	0.0150
Satisfaction: Duration of Training	2.9679	0.5630	0.0198
Satisfaction: Level of KSA Attained After Training	4.8535	0.3030	0.0253
Satisfaction: Assessment Methods	0.8486	0.9320	0.0106
Overall Satisfaction of Training Attended	1.5981	0.8090	0.0145
Took Career Profiling Examination/Career Assessment Test	56.4879	<.0001	0.0864
Enrolled in line with the Profiling/ Career Assessment results	0.0014	0.9699	0.0004
Region	46.1047	<.0001	0.0781
Sector	45.2467	<.0001	0.0773
Age group	74.3446	<.0001	0.0991
Sex	0.1062	0.7446	0.0037

<sup>\*</sup>significant at p-value ≤ 0.10

To demonstrate further the association between those significant factors and whether a graduate is employed or unemployed, employment rates among subsectors were presented in Tables 39 to 47. Graduates who were at a post-secondary non-tertiary, short-cycle tertiary education bachelor level, and post-graduate level incline towards employment. Low employment rates were observed to those no grade completed - this could be because many in the workplace were requiring high school graduates; junior high school - maybe because many were still attending school); and senior graduate - perhaps many were still pursuing tertiary education (Figure 39). The region was also found a significant factor, indicating that there were regions wherein graduates have a high likelihood of employment like CAR, NCR, Region II, IV-A, IV-B, X, XI, and XII (Figure 40). It can be observed that as a graduate gets older, his/her chance of getting a work increases, but decreases when one reaches the retiring age. Although employment rate is weakly associated with age group, this

factor got the highest correlation coefficient, implying that among the factors this has somehow the most discriminating attribute (Figure 41).

The association of employability with the program delivery mode is also apparent given the low employment rate in DTS relative to the other modes (Figure 42). Employment status of graduates was weakly described by the program sector. A significant association was found due to the large difference in the employment rate of one sector, such as the Utilities sector (with the smallest employment rate), when compared to the other sectors, especially those with high employment rates (Figure 43). Employability of a graduate was also weakly associated with reason for taking up a TVET program. Although more employed graduates were observed regardless of their reason or purpose, a considerably low employment rate was noted for those whose reasons were just for nothing (Figure 44).

The type of program registered (WTR, NTR, and Not Registered Programs) was also found a significant factor. The weighted distribution shows that those from not registered programs were likely to be employed, but it does not mean that those from WTR and NTR were likely to be unemployed, as shown by the high employment rates that were observed as well in the two latter programs (Figure 45). Availment of scholarship weakly explained the employability of a graduate. Similarly, although higher employment rate is realized for those with a scholarship, it does not imply that those with no scholarship have the tendency to be unemployed as high employment rate in the latter was also generated (Figure 46). Moreover, employability was weakly related to whether a graduate took a career assessment test or not. Those who did not take a career assessment test had a higher employment rate, yet it does not imply low chance of employability among those who took the test (Figure 47).

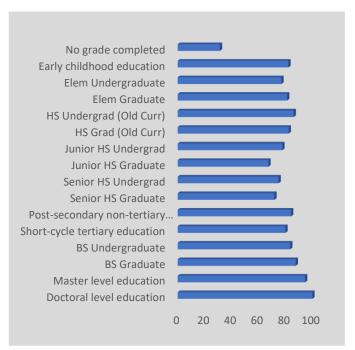


Figure 39. Weighted distribution of Employed TVET graduates by Educational Attainment. Philippines:2018

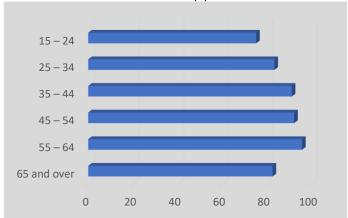
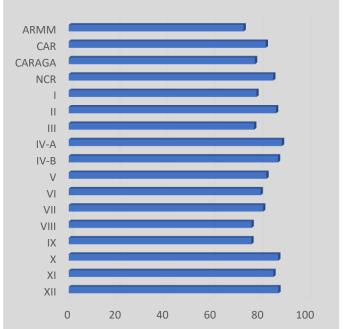


Figure 41. Weighted distribution of Employed TVET graduates by Age Group. Philippines:2018



**Figure 40**. Weighted distribution of **Employed** TVET graduates by **Region**. Philippines:2018



**Figure 42.** Weighted distribution of **Employed** TVET graduates by **Program Delivery Mode**. Philippines:2018

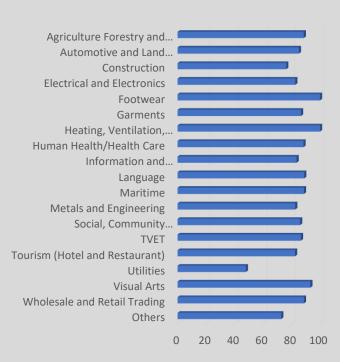


Figure 43. Weighted distribution of Employed
TVET graduates by Sector
Philippines:2018



For employment/to get job

For promotion

Nothing to do

To increase in income

For skills

upgrading/enhancement

TVET qualification is popular

(many are enrolling)

Personal use/interest/hobby

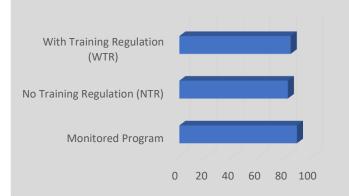
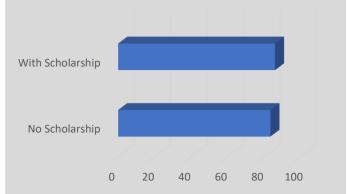


Figure 45. Weighted distribution of Employed
TVET graduates by Type of Program
Registered. Philippines:2018



**Figure 46.** Weighted distribution of **Employed** TVET graduates by **Availment of Scholarship** . Philippines:2018

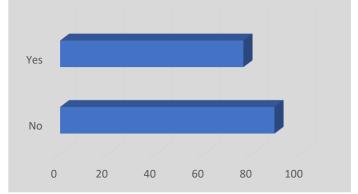


Figure 47. Weighted distribution of Employed TVET graduates by Whether the Graduate Took a Career Assessment or Not. Philippines:2018

#### 6.2. Logistic Model for the Employability

Factors that were found significantly associated with the employability of a graduate were further subjected to logistic analysis to identify significant determinants of employability. Based on the results, age group, region, educational attainment, the main reason for taking up a program, program delivery mode, type of program registered, and availment of scholarship may influence the employability of a graduate.

Graduates aged 15 to 24 years tagged the lowest employment rate since many in this age group were still attending school. The older group of graduates is more likely to be active in work than this age group. Specifically, a graduate aged 25 to 34, 35 to 44, 45 to 54, 55 to 64, and 65 years and over are more likely to be employed than those aged 15 to 24 years by 1.547, 3.043, 3.5527, 7.102, and 1.536 times. The likelihood gets larger as a graduate gets older, except when one is already in retiring age.

A graduate from Cagayan Valley, CALABARZON, Central Visayas, Northern Mindanao, Davao Region, SOCCKSARGEN, and MIMAROPA is 1.003, 1.547, 1.002, 1.196, 1.121, 1.297, and 1.193 times, respectively, more likely to be engaged in employment than a graduate from NCR. In contrast, the odds of a graduate to be employed is estimated to lower by 18.7%, 29.7%, 16%, 18.2%, 29.8%, 35.9%, 54.5%, 2.4%, and 30.7% if one is from Ilocos Region, Central Luzon, Bicol Region, Western Visayas, Eastern Visayas, Zamboanga Peninsula, ARMM, CAR, and CARAGA respectively, compared to those from NCR. Higher reduction in the odds of being employed can be noted for those inhabitant of ARMM, Zamboanga Peninsula, Central Luzon, CARAGA, and Eastern Visayas. The first three regions were consistently found which registered lower employment rates compared to NCR.

Considering the educational attainment, a graduate who have reached at least high school level were found to be more likely to be employed than those at the primary level. In particular, secondary (old curriculum), junior and senior high (K-12 curriculum), post-secondary non-tertiary, bachelor degree, and post-graduate is 1.981, 1.502, 1.566, 2.2, and 5.19 times more probable to be employed than a primary level graduate. Those who had post-degree exhibited the highest employment rate.

The reason for taking a TVET program was also a significant determinant of a graduate employability. There is a higher chance to be employed by 1.197, 2.38, 1.805, 3.917, and 1.369 times for a graduate who entered and completed a TVET program because he/she was targeting for a promotion, aiming for a higher income, wanted to upgrade skills, because TVET qualification is popular, and just for personal use, respectively, than a graduate who was aiming to find a job after attending a TVET program. The results could be due to a possibility that some graduates who had those significant reasons were already employed before attending a program. On the other hand, there is a great reduction of 92% in the odds to be employed for a graduate who took a TVET program for no specific reason. The low employment rate for this group of graduates is understandable since these graduates did take a program not because they want to find a job.

High employment rate was also recorded to the graduates from mobile training programs that made them more likely to be employed than the institution-based graduates by 1.568 times. Contrarily, a reduction of 9.1% and 17.9% in the odds to be employed can be realized in the community-based and apprenticeship programs, respectively than those graduates of institution-based. Likewise, a much larger reduction in the odds of employment was generated for graduates of learnership (57.4%) and DTS (97.6%) than institution-based graduates.

Moreover, a graduate of a not registered program was estimated to be 1.578 times more likely to be employed than those who were from WTR programs. Whereas, there is a lesser chance of employment for those who were from NTR, with an odds ratio of 0.985:1. It can be described further that a graduate who was not a recipient of any TESDA scholarship has a reduction of only 1.3% in the odds of employment compared to those with scholarships (Table 107).

Based on model assessment done, the fitted model was said to be significant based on the very small p-value associated with the likelihood-ratio chi-square goodness-of-fit test, score and Wald's tests. The Hosmer and Lemeshow's goodness-of-fit test also signifies that the estimated model fits the data well, indicated by its p-value of 0.1364 (>0.05) (Table 108). Furthermore, the Receiver Operating Characteristic (ROC) showed that the model covered around 70% of the area under the curve (Figure 48). This indicates the fairness in the accuracy of the test, hence add to the goodness of the fitted model.

Table 107. Estimated coefficients, odds ratio, and p-values of the fitted Logistic regression model.

Factor	Estimate	Odds Ratio	p-value*		
Age Group <sup>a</sup>					
25 – 34	0.436	1.547	0.004		
35 – 44	1.113	3.043	<.0001		
45 – 54	1.268	3.553	<.0001		
55 – 64	1.960	7.102	<.0001		
65 and over	0.429	1.536	0.644		
Region <sup>b</sup>					
llocos Region	-0.207	0.813	<.0001		
Cagayan Valley	0.003	1.003	<.0001		
Central Luzon	-0.353	0.703	<.0001		
CALABARZON	0.436	1.547	<.0001		
Bicol Region	-0.174	0.840	<.0001		
Western Visayas	-0.201	0.818	<.0001		
Central Visayas	0.002	1.002	<.0001		
Eastern Visayas	-0.354	0.702	<.0001		
Zamboanga Peninsula	-0.444	0.641	<.0001		
Northern Mindanao	0.179	1.196	<.0001		
Davao Region	0.114	1.121	<.0001		
SOCCSKSARGEN	0.260	1.297	<.0001		
MIMAROPA	0.176	1.193	<.0001		
ARMM	-0.788	0.455	<.0001		
CAR	-0.024	0.976	<.0001		
CARAGA	-0.366	0.693	<.0001		
Educational Attainment <sup>c</sup>					
Secondary (old curriculum)	0.684	1.981	<.0001		
Junior and Senior High School	0.407	1.502	0.012		
Post-Secondary Non-tertiary	0.448	1.566	<.0001		
Bachelor degree	0.788	2.200	<.0001		
Post-graduate degree	1.647	5.190	<.0001		

Factor	Estimate	Odds Ratio	p-value*		
Main Reason for Taking the Program <sup>d</sup>					
For promotion	0.678	1.970	<.0001		
To increase in income	0.867	2.380	<.0001		
For skills upgrading/enhancement	0.590	1.805	<.0001		
TVET qualification is popular	1.365	3.917	<.0001		
Personal use/interest/hobby	0.314	1.369	0.1607		
Nothing to do	-2.521	0.080	<.0001		
Program delivery mode <sup>e</sup>					
Mobile training program	0.450	1.568	<.0001		
Dual training system	-3.726	0.024	<.0001		
Apprenticeship	-0.198	0.821	<.0001		
Learnership	-0.853	0.426	<.0001		
Community-based	-0.095	0.909	<.0001		
TVET program registration <sup>f</sup>					
No Training Regulation (NTR)	-0.015	0.985	<.0001		
Community-based Program	0.456	1.578	<.0001		
Availment of scholarship program <sup>9</sup>					
No	-0.145	0.865	<.0001		

REFERENCE GROUP: °15-24 years old; bNCR; °Primary education; dFor employment; eInstitution-based; fWTR; gYes \*significant at p-value ≤ 0.05

Table 108. Model Assessment

Measures of Fit	Test Statistic	p-value
Likelihood Ratio	110903.926	<.0001
Score	109526.241	<.0001
Wald	93649.1048	<.0001
Hosmer and Lemeshow	12.3456	0.1364

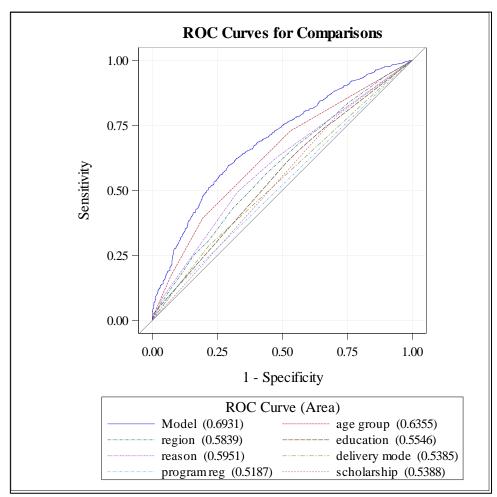


Figure 48. ROC curve of the fitted model for employability of TVET graduates

#### **Conclusion and Recommendations:**

1. Similar to the result of the 2018 SETG, this survey round once again disclosed that majority of TVET clients have a bachelor level education and their reason for engaging in TVET programs is for skills enhancement. This indicates the increasing number of individuals either working or those who are looking for work to take TVET programs. Given this, TESDA has to consider in the development of training programs, formulation of policies, allocation of scholarship programs, and other initiatives; the characteristics of its clients.

Further, the results can also be associated to the available access to TVET programs through the K-12 program, which includes TVL track under the Senior Highschool. This calls for TESDA continuous support to the operationalization of quality TVET in the TVL track programs of the Department of Education, as this provides another venue for the Filipinos access to TVET programs.

- 2. TVET graduates who are holder of National NC III obtained high employment rate compared to those holders of NC I and NC II, while the difference is not that significant, it is worth to consider in terms of the type of TVET clients as well as the requirement of industries for higher level qualifications.
- 3. TVET certification remains not to be significant to the employment of TVET graduates locally. The result also reflected that there are few employers offering incentives among certified workers. The following are recommended to be undertaken to make the NC a valuable tool for the employment of the TVET graduates:
  - 3.1 TESDA has to evaluate its existing partnership with the industries and determine how it can be further enhanced to make them more involved in the development and implementation of TVET programs including the conduct of the assessment and certification.
  - 3.2 Strengthen TESDA's organizational capacity and capability in the establishment and implementation of partnership to industry as this will provide venue in the promotion and recognition of the TESDA National Certificate (NCs).

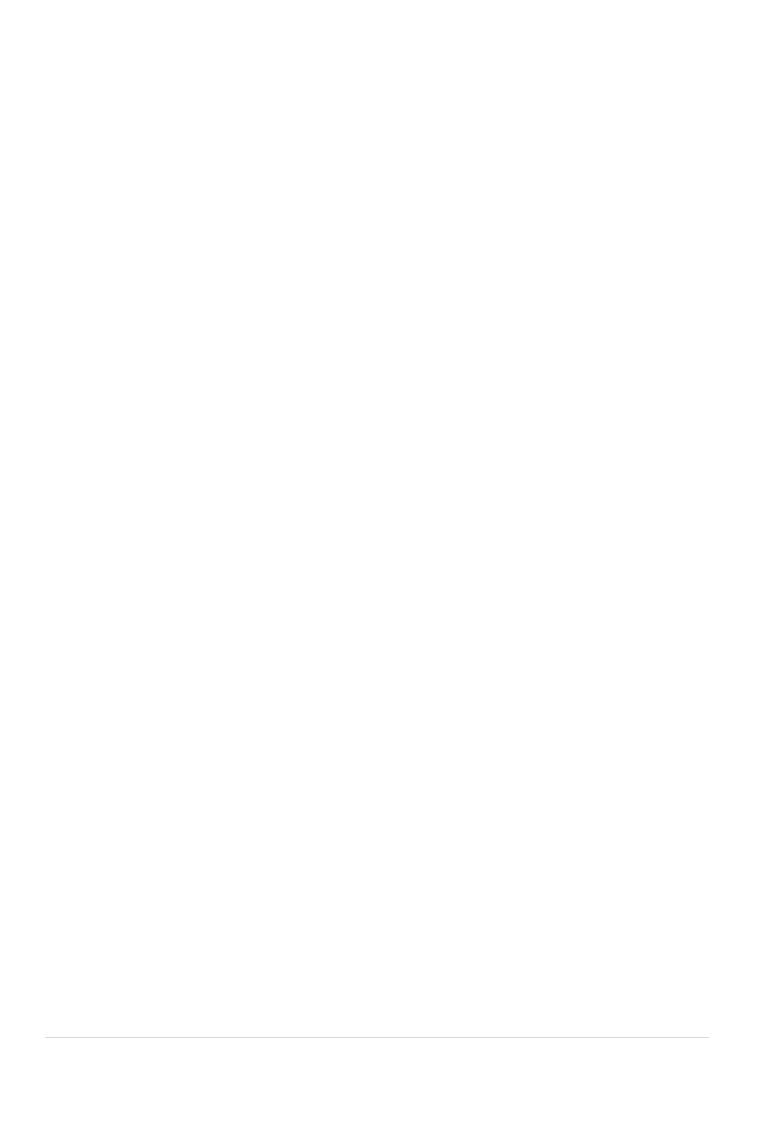
The Partnership and Linkages Office (PLO), as the office in-charge in the Enterprise-Based Training (EBT) and facilitate the Recognized Industry Boards (RIBs), must intensify the promotion and advocacy of the TVET programs including the TVET assessment and certification system. Likewise, the Qualification and Standards Office (QSO) must ensure the participation of the industries in the development of the Training Regulation to make them more involved in the development of the programs and establish the sense of ownership among the industries. Further, the Planning Office has to expand its consultation to various industry associations to expand the industries that will support and lobby skill needs for prioritization of the TESDA Board.

3.3 At the regional/provincial level, TESDA has to maximize its Regional and Provincial TESD Committees to get information on how to ensure the value of the National Certificate (NC). This should be included in the policy agenda of the R/PTESDCs. Similar initiative can be undertaken by the TESDA Technology Institutions (TTIs) through the School Advisory Council. From these groups, TESDA should be able to get vital inputs on how to increase the value of NC and determine strategies that are acceptable to the industries.

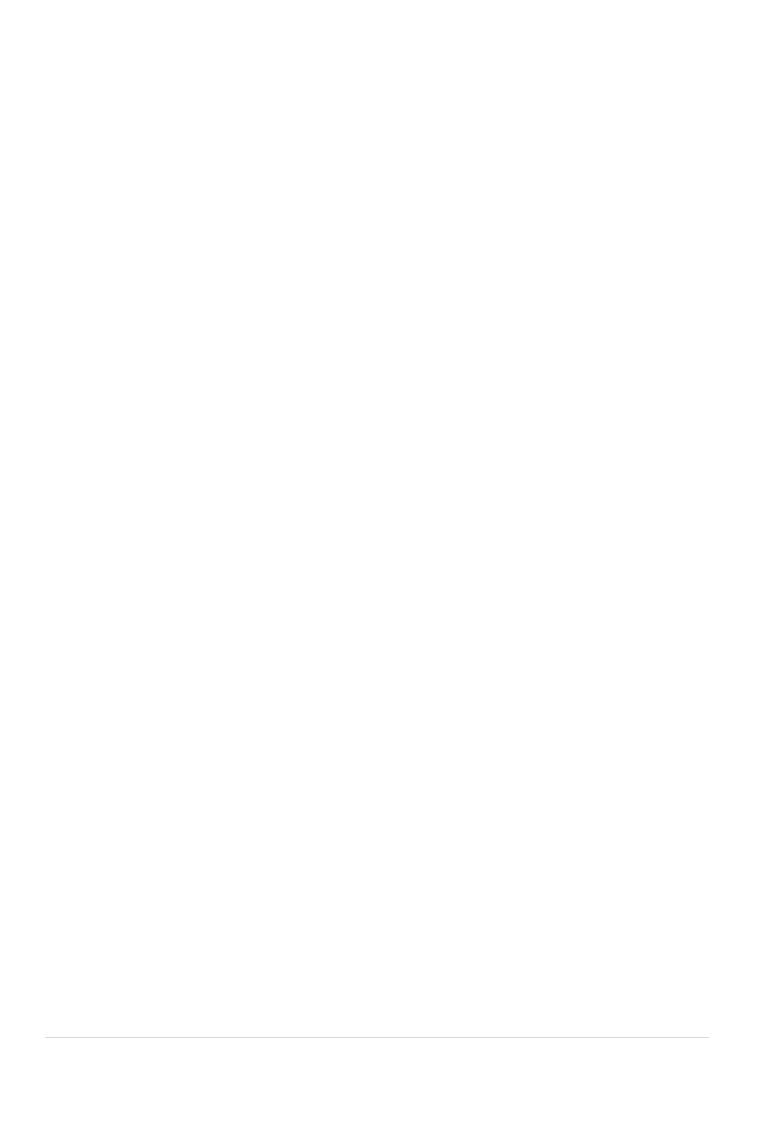
- 3.4 TESDA should create opportunities for discussion with industries to determine the reasons why there is low valuation to the National Certificate. This can be started through the Recognized Industry Boards (RIBs) and industry partners with existing agreements with TESDA.
- 3.5 The accreditation/recognition of industry certification is another area that TESDA should explore to make the sector/industry more involved in the certification of middle skilled workers. While there are already recognized industry certification, the agency has to study expanding this through its Certification Office. TESDA should plan and develop a strategy framework in establishing a Trades Regulations Office (TRO) together with industry. This will also be helpful for the implementation of the Tulong Trabaho Law, specifically on new and emerging skills.
- 3.6 TESDA may also propose/advocate legislative measures that will put premium to the TESDA certification in order to encourage companies to hire TESDA certified workers.
- 3.7 The Ladderized Education Law must be operationalized in order to put into motion the essence and purpose of the Philippine Qualification Framework (PQF). Likewise, the pilot testing on the credit transfer must be conducted in order to gather experiences and lessons learned that will be used as platforms for eventual recognition of the Philippine Credit Transfer System (PCTS). (Source: Recognition of the TESDA National Certificate, TVET Brief Issue No. 2, s. 2020).
- 4. While the programs with Training Regulations have corresponding National Assessment, it is still evident that not all of graduates of WTR programs took the national assessment. A lot of factors can influence this, however, again TESDA has to look into the value of the National Certificate both to local and overseas employers. The assessment and certification process should be advocated continuously among TVET graduates and workers as this determines the competence of an individual.
- 5. For this survey round, it is significant to note that among the training venues, Mobile Training program obtained the highest employment rate, while the Enterprise-Based Training got the lowest employment rate. As the agency is strengthening its enterprise-based training, this result is something that should be given serious attention. The Partnership and Linkage Office is suggested to conduct a separate evaluation on the implementation of the EBT program, which will consider all relevant components in the conducting EBT programs. In that way, TESDA can determine what are the specific gaps and the areas that needs to be improved.
- 6. There are a little less than a quarter indicated that they were not able to utilize the training programs they have attended. This scenario can be attributed to different factors, however, some of the components that should be considered are the following:
  - Availability of evidence-based Labor Market Information prior to the implementation or registration of any TVET programs. TVET providers must be equipped with such information, like on programs that are in demand but with limited number of workers and those that are in-demand but with sufficient number of graduates vis-à-vis the target number of workers of the industry.
  - Responsiveness of the standards/curriculum in the requirements of the industries wherein they will be given flexibility to easily address the changing requirements of their industry. The initiative of the agency in developing the supermarket of

competencies can be one of the possible means of addressing the fast-changing requirements in the competencies of workers.

- Job facilitation mechanisms of the agency should be designed in such a way that it adopts current trends in bridging graduates to employment. It is good to note that the agency has already established platform, specifically the 911 TESDA, this is one of good example that can help TVET graduates. However, TESDA can still look for other strategies/mechanisms to give more options for its graduates in searching for work.
- 7. In terms of training delivery, it is worth to consider that while the number is not that significant, however, there are training components that were rated as poor. All components obtained poor rating but the learning materials got the highest share or almost 1%. It is suggested that the National Institute for TESD should develop concrete guidelines on the development of learning materials to ensure the quality of the materials being developed by the TVET providers.



# **ANNEXES**





## REPUBLIC OF THE PHILIPPINES PHILIPPINE STATISTICS AUTHORITY

Reference No.19SS02-190

08 October 2019

#### Ms. MARISSA G. LEGASPI

Executive Director, Planning Office
Technical Education and Skills Development Authority (TESDA)
East Service Road, SLEX
Fort Bonifacio, Taguig City

SUBJECT: Statistical Survey Review and Clearance System (SSRCS) - 2019 Study on the

**Employment of TVET Graduates** 

Dear Executive Director Legaspi:

This refers to your request for the clearance of the 2019 Study on the Employment of TVET Graduates. We acknowledge with thanks receipt of the following documents which were used as basis for our evaluation:

Title of Document	Format Received	Date Received
Accomplished SSRCS Form 1	Hard Copy	25 Sept 2019
Letter dated 24 September 2019	Hard Copy	25 Sept 2019
2019 SETG Proposed Methodology	Hard Copy	25 Sept 2019
2019 SETG Questionnaire	Hard Copy	25 Sept 2019
2019 SETG Manual/Guidelines	Hard Copy	25 Sept 2019
2019 SETG Revised Questionnaire	Hard Copy	25 Sept 2019
2018 SETG SSRCS Form 4	Hard Copy	25 Sept 2019
2019 SETG Tables to be Generated	Hard Copy	25 Sept 2019
2018 SETG Full Report	Hard Copy	25 Sept 2019
2019 SETG Infographic	Hard Copy	25 Sept 2019
	Accomplished SSRCS Form 1 Letter dated 24 September 2019 2019 SETG Proposed Methodology 2019 SETG Questionnaire 2019 SETG Manual/Guidelines 2019 SETG Revised Questionnaire 2018 SETG SSRCS Form 4 2019 SETG Tables to be Generated 2018 SETG Full Report	Accomplished SSRCS Form 1 Letter dated 24 September 2019 2019 SETG Proposed Methodology 2019 SETG Questionnaire 2019 SETG Manual/Guidelines 2019 SETG Revised Questionnaire 2018 SETG SSRCS Form 4 2019 SETG Tables to be Generated 2018 SETG Full Report  Received Hard Copy

Please find in the attached SSRCS Form 3 the clearance number and expiration date which should be printed or stamped on the upper right corner of the first pages of the final questionnaires.

Thank you for your cooperation and support in our endeavor to improve the quality of surveys conducted by government agencies.

Very truly yours,

CLAIRE DENNIS S. MAPA, Ph.D.

Undersecretary

National Statistician and Civil Registrar General

CJAPARSBICCVIJAHG



Management System ISO 9001:2015



PSA Complex, East Avenue, Diliman, Quezon City, Philippines 1101 Telephone: (632) 938-5267 www.psa.gov.ph

Reference No.19SS02-190
SUBJECT: Statistical Survey Review and Clearance System (SSRCS) – 2019 Study on the

Employment of TVET Graduates DATE: 08 October 2019

Ti	tle c	of statistical survey 2019 Study on the Empl	oyment of TVET Graduates
Pr	opo	onent agency Technical Education and Skills Development Authority (TESDA)	Conducting agency TESDA
1	i)	CLEARANCE GRANTED, subject to the   ☐ All information enclosed in the box/es  right corner of the first page of the sta  (a) Questionnaire Title: 2019 Study on the	below must be printed or stamped on the upper tistical survey form.
		PSA Approval No. TESDA-1954	Expires on 30 September 2020
	ii)		tions and the printed forms/questionnaires with suses and Technical Coordination Office – ays upon receipt of this form.
	iii)	<ul> <li>changes made prior to the expiration</li> <li>Submit the accomplished SSRCS For</li> </ul>	hall be subject to review should there be any
2		DISAPPROVED, for the following reason	ns:
3		CLEARANCE IS PUT ON-HOLD, for the	following reason/s:
4	$\boxtimes$	REMARKS	
		Questionnaire Design/Forms Cont	ent
		<ol> <li>It is recommended to provide an instruct box, shade the box, check the number, ex</li> </ol>	on on how to fill out the questionnaire (e.g., tick the encircle the answer, put an "X").
		2. On Type of Interview, kindly add the opti	on "□ Social Media".
		to use the 2017 Philippine Standar processing/tabulation of responses. The capture the specific grade/year level de	ment before the TVET program), it is recommended d Classification of Education (PSCEd) in the TESDA may also choose to expand the codes to pending on the purpose of the question. The 2017 ps://psa.gov.ph/classification/psced/. For reference, the suggested codes.
			etency Assessment and Certification), kindly revise Fitle" to "TVET Program Attended/Qualification Title

Reference No.19SS02-190

SUBJECT: Statistical Survey Review and Clearance System (SSRCS) - 2019 Study on the

**Employment of TVET Graduates** 

DATE: 08 October 2019

 On Item B.10 (Taken a career profiling examination), it is suggested to revise the question as "Have you taken a career profiling examination/career assessment test?".

6. On Item B.11 (Level of satisfaction), please revise the instruction as follows: Please put a check (✓) corresponding to your level of satisfaction for with the TVET program you attended/completed in terms of the following:

#### Other Comments

- 1. Kindly update the timetable of activities provided in SSRCS Form 1 to reflect the actual schedule of activities from data collection until the release of the results.
- 2. It is recommended to include the following in the SETG Manual:
  - a. Foreword from the head of agencies involved
  - b. Table of Contents
  - c. List of Appendices, List of Figures, List of Illustrations, List of Abbreviations, Acronyms and Glossary
- 3. It is recommended to conduct a pre-test of data collection using social media to complement telephone interview and email surveys. Otherwise, the actual experience of TESDA during data collection should be documented so that this practice can be shared to other PSS member agencies that aspire to conduct surveys using social media as mode of data collection.
- 4. In the approval of PSA Board No. 07, series of 2019 (Approving the Designation of Statistical Activities of the Commission on Higher Education and the Technical Education and Skills Development Authority) last 16 May 2019, we would like to commend the initiative and effort of TESDA for the designation of your statistical activities that will generate data on Technical-Vocational Education and Training (TVET) Statistics.
- 5. In compliance with the Data Privacy Act of 2012 (Republic Act No. 10173), kindly ensure that individual personal information collected from the survey is secured and protected. Necessary data security measures such as, but not limited to, data encryption, data anonymity, and other data protection methods should be employed to prevent unintended disclosure and data theft.
- 6. The PSA would like to thank and commend the TESDA for taking heed of the necessary process with regard to the survey review and clearance of the 2019 Study on the Employment of TVET Graduates. Consequently, as the said survey is mandated to be conducted annually by virtue of Rule 14 Section 10(c) of Republic Act 7796, it is recommended that the proponent agency undergo SSRCS at least 45 days before the scheduled field operations for the future conduct of the survey.

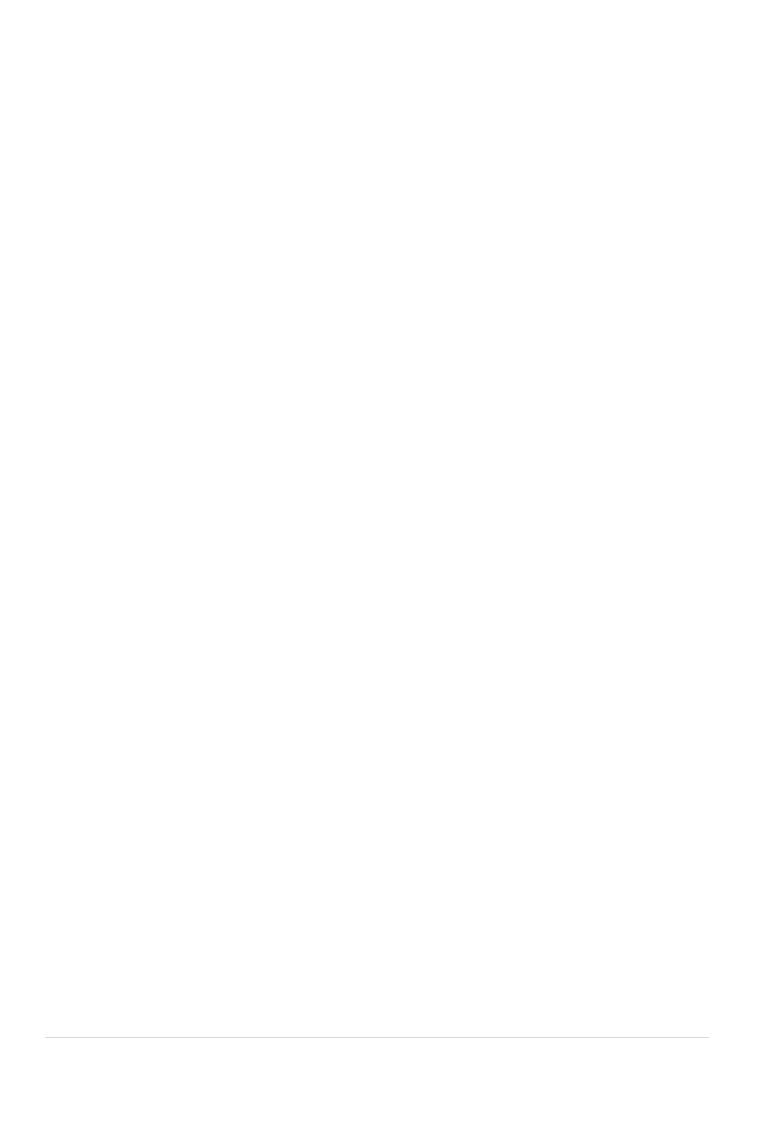
**REVIEWING OFFICIAL** 

RECOMMENDING OFFICIAL

CHERILYN C. VALDEZ

Supervising Statistical Specialist Statistical Standards Division 08 October 2019 PATRICIA ANNE R. SAN BUENAVENTURA (Chief Statistical Specialist)

> Caretaker Standards Service 08 October 2019



## 2019 Study on the Employment of TVET Graduates

## Proposed Methodology

#### Sampling Design

The target population in this study is the set of all 2018 TVET graduates of regular programs and scholarship programs. The list of graduates from the MIS 03-02 submitted to the Central Office by the regional/provincial offices will serve as the sampling frame wherein the sample of graduates will be selected.

For the 2019 national TVET survey, the country's regions will be considered as domains of the study. In each region, graduates will be randomly selected using stratified random sampling with type of provider (TTI and Non-TTI), sex (Male and Female) and type of program (TWSP, STEP, PESFA, and regular program) as stratification variables using proportional allocation.

The number of graduates to be selected was determined per region employing the formula for sample size determination given as:

$$n_o = \left(\frac{Z_{\alpha/2}PQ}{d}\right)^2$$

where P is the proportion of employed TVET graduates, Q is computed as 1-P, d is the margin of error and Z is the standard normal variate based on a level of significance ( $\alpha$ ). Hence, with a 95% level of confidence, margin of error of 5%, and proportion of 0.6858 (based on the 2018 TVET study), a sample size of 369 graduates was computed per region.

The determined sample size was adjusted per region using:

$$n = \frac{n_o}{1 + \frac{n_o}{N}}$$

with *N* defined as the total number of graduates per region. Moreover, the final target number of sample graduates was determined by considering a design effect of 1.0 and nonresponse of 10%. The target sample size per region was proportionally allocated among the 16 strata formed in the study. With all these considerations, the actual number of graduates to be randomly selected per stratum across the 17 regions is given in Table 1, yielding a total samples of 6,376 TVET graduates.

Table 1. Number of samples of graduates by type of provider, sex and program per region.

Pagian/Drograms	Non-	TTI	TTI		Total	
Region/Programs	Female	Male	Female	Male	iotai	
NCR						
TWSP	42	35	2	2	81	
STEP	16	9	1	1	27	
PESFA	1	1	0	1	3	
Regular Program	171	84	8	4	267	
Total	230	129	11	8	378	
CAR						
TWSP	23	17	2	5	47	
STEP	9	5	1	3	18	
PESFA	2	2	0	0	4	
Regular Program	143	97	17	49	306	
Total	177	121	20	57	375	
Region I						
TWSP	32	33	1	3	69	
STEP	5	8	3	2	18	
PESFA	2	2	0	0	4	
Regular Program	89	101	58	36	284	
Total	128	144	62	41	375	
Region II						
TWSP	32	35	3	5	75	
STEP	3	3	2	2	10	
PESFA	5	4	0	0	9	
Regular Program	123	89	32	38	282	
Total	163	131	37	45	376	
Region III						

Region/Programs	Non-	ГТІ	TTI		Total
Negion, Frograms	Female	Male	Female	Male	Total
TWSP	40	41	1	3	85
STEP	9	5	1	1	16
PESFA	2	2	0	0	4
Regular Program	144	113	4	9	270
Total	195	161	6	13	375
Region IV-A					
TWSP	32	33	2	3	70
STEP	9	6	3	2	20
PESFA	1	1	1	0	3
Regular Program	120	145	10	9	284
Total	162	185	16	14	377
Region IV-B					
TWSP	44	50	5	6	105
STEP	8	10	3	2	23
PESFA	4	3	0	0	7
Regular Program	69	76	47	47	239
Total	125	139	55	55	374
Region V					
TWSP	49	37	5	5	96
STEP	19	17	8	9	53
PESFA	10	6	0	1	17
Regular Program	87	49	35	39	210
Total	165	109	48	54	376
Region VI					
TWSP	37	33	3	5	78
STEP	14	13	1	5	33

Region/Programs	Non-	ГТІ	TTI	TI Total	
negion/Frograms	Female	Male	Female	Male	Iotai
PESFA	4	3	0	0	7
Regular Program	125	90	18	24	257
Total	180	139	22	34	375
Region VII					
TWSP	46	40	2	2	90
STEP	13	10	4	2	29
PESFA	7	5	0	0	12
Regular Program	119	89	16	20	244
Total	185	144	22	24	375
Region VIII					
TWSP	35	30	6	9	80
PESFA	12	8	0	0	20
STEP	5	5	6	5	21
Regular Program	92	79	43	38	252
Total	144	122	55	52	373
Region IX					
TWSP	33	27	3	6	69
STEP	12	7	4	6	29
PESFA	7	7	0	0	14
Regular Program	77	70	51	64	262
Total	129	111	58	76	374
Region X					
TWSP	36	43	4	6	89
STEP	9	12	6	10	37
PESFA	3	3	1	0	7
Regular Program	105	79	33	26	243
Total	153	137	44	42	376

Region/Programs	Non-	TTI	TTI		Total	
negion, i rogiumo	Female	Male	Female	Male	Total	
Pagion VI						
Region XI						
TWSP	47	38	4	4	93	
STEP	17	14	3	3	37	
PESFA	4	3	0	1	8	
Regular Program	115	85	20	19	239	
Total	183	140	27	27	377	
Region XII						
TWSP	19	23	1	2	45	
STEP	4	3	1	1	9	
PESFA	3	3	0	0	6	
Regular Program	152	149	6	9	316	
Total	178	178	8	12	376	
Caraga						
TWSP	14	18	2	2	36	
STEP	2	4	3	4	13	
PESFA	3	3	0	0	6	
Regular Program	136	123	26	34	319	
Total	155	148	31	40	374	
ARMM						
TWSP	49	75	8	8	140	
STEP	27	19	14	13	73	
PESFA	13	7	0	1	21	
Regular Program	63	41	16	16	136	
Total	152	142	38	38	370	
	l	ı	Over	all Total	6,376	

The survey will be done through the use of a computer-aided telephone interview (CATI) or self-administered questionnaire using a structured questionnaire. The individual TVET graduate is the unit of enumeration for the survey in which strict verification of the identity of selected graduates will be implemented.

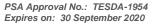
## Estimation and Data Analyses

TVET graduates will be characterized by constructing weighted percentage distributions and by computing appropriate numerical descriptive measures. Proportion of employed TVET graduates, P, will be estimated in the k<sup>th</sup> region, where k is from 1 to 17, using:

$$\hat{P}_k = rac{\sum\limits_{i=1}^{L}\sum\limits_{j=1}^{n_i}W_{ij}Y_{ij}}{\sum\limits_{i=1}^{L}\sum\limits_{j=1}^{n_i}W_{ij}}$$

where  $Y_{ij}$  is equal to 1 if the  $f^{th}$  graduate from the  $f^{th}$  stratum is employed, and 0 otherwise,  $W_{ij}$  is the survey weight computed for the  $f^{th}$  graduate in the  $f^{th}$  stratum, in which  $\sum_{i=1}^{L}\sum_{j=1}^{n_i}W_{ij}$  is equal to  $N_k$  for the  $k^{th}$  region, and L is the number of strata which is equal to 16.

Likewise, characterization of employed graduates will be done based on the different factors considered in the study. Correlation analysis will be performed to determine factors associated with the employability of the graduates. Furthermore, logistic regression will be considered to identify determinants of the employability of TVET graduates.





## 2019 Study on the Employment of Technical Vocational Education and Training (TVET) Graduates

Technical Education and Skills Development Authority

Hello! Good morning/afternoon. This is (your name). I am working as a survey enumerator for TESDA. We are currently conducting the 2019 Study on the Employment of TVET Graduates and would like to solicit your time to answer some questions. Ou are randomly chosen from all TVET Graduates in 2018. As such , in formation regarding your employment and skills utilization will be useful in gauging the relevance and effectiveness of the TVET programs last year. Rest assured that all answers shall be held

STRICTLY CONFIDENTIAL. Shall we proceed		ums iust yeur. R	test assured that all allsw	PSGC Code
		Region:		
Case ID:		Province:		
Name		District (for NCR o	only):	
Name: ( family name )	( first name )		( middle name )	
o be accomplished by Enumerator)	,		,	
and time interview started: V	f response alid valid Dropped-Out Training is On-going not a graduate of CY 20	018	Type of interview: Phone Email Social media Contact information Phone:	
3rd: / /	cannot be reached/ma		Email:	
time:	deceased	Ke a contact	Social media:	
		and of the one		
Instructions: Please answer the qu	estions below. Encircle o	code of the ans	swer as applicable.	
PART A: GRADUATE'S PROFII	.E	P	SGC Code	
A 1 Ago:				
A.1 Age:		L	Province Municipality / City	Barangay
A.2 Present Address:				
	No./ Street/Subdivision		Barangay	
A.3 Sex:				
<ol> <li>Male</li> <li>Female</li> </ol>	Municipality		Province	
A.4 Marital Status:  1. Single 2. Married 3. Widowe 4. Divorced A.5 Highest educational attainment	d 6. Annulled	8. (	Common-law/Live-in Unknown	resnondent was
sampled.	sejore attending the TVL	<u>r program, qu</u>	idinfication where the i	espondent was
<ol> <li>No grade completed</li> <li>Early Childhood Education</li> <li>Primary Education (Elementar</li> <li>Primary Education (Elementar</li> <li>Lower Secondary Education (Juncold curriculum)</li> <li>Lower Secondary Education (Juncold Complete)</li> </ol>	y) Graduate unior HS) Undergraduate unior HS) Undergraduate unior HS) Graduate	9. Upper 10. Post-s 11. Short- 12. Bache 13. Bache 14. Maste 15. Doctor	Secondary Education (Signaduate Secondary Education (Signaduate econdary Non-tertiary Education for Level Education Graduate r Level Education ral Level Education	Sr. HS) Graduate Education 1 dergraduate
A.6 Please indicate main reason for	taking up the program <i>(p</i>	lease select one	answer only)	
<ol> <li>For employment/to get job</li> <li>For promotion</li> <li>To increase in income</li> <li>For skills upgrading/enhance</li> </ol>	6. P 7. N	VET qualification Personal use/in Nothing to do Others, please s	·	enrolling)
for PRED-PO use, please do not fill-up				
Accounted by	Checked by:		Data encoded:	

date

date

date

## PART B: TRAINING, COMPETENCY ASSESSMENT AND CERTIFICATION

PAR	ART B: Training, Competency Assessement and Certification						
B.1	TVET Program Attended/Qualification Title in 2018 where	e graduat	e was sampled:				
B.2	Date started (mm/dd/yyyy):	Date cor	npleted (mm/dd/yyyy)	)			
B.3	Program Delivery Mode  1. Institution–based  A. Institution-based (please proceed to <b>B.3.1</b> )  B. Mobile training program  C. Dual Training System	C	nterprise-based . Apprenticeship . Learnership	3. Community-based			
E	B.3.1 Did the training have an internship or On-the-Job Tr	aining (OJ	T) at enterprise?				
B.4	1. Yes 2. No  Name of Training Institution where training was attended	d:					
B.5	Type of TVET Program registration  1. With Training Regulation (WTR)  2. No Training Regulation (WTR)	ining Regi	ulation (NTR) 3	3. Community-based Program			
B.6	, , , , , , , , , , , , , , , , , , , ,	olease pro	ceed to <b>B.7</b> )				
	<ul> <li>B.6.1 What type of scholarship program?</li> <li>1. Training for Work Scholarship Program</li> <li>2. Special Training for Work (STEP)</li> <li>3. Private Education Special Fund Asssist</li> <li>4. Others, specify:</li> </ul>	ance (PES	·				
B.7	Did you take the Competency Assessment?  1. <b>Yes</b> (please proceed to <b>B.7.1</b> )						
	<ul><li>B.7.1 Did you pass the competency assessment?</li><li>1. Yes (please proceed to B.7.2)</li></ul>		2. <b>No</b> (please procee	ed to <b>B.8</b> )			
	B.7.2 What is the level of certification?  1. Certificate of Competency (CoC)  2. National Certificate I (NC I)  3. National Certificate II (NC II)  3. National Certificate III (NC III)  (please proceed to <b>B.9</b> )		<ol> <li>National Certificate</li> <li>Trainers Methodol</li> <li>Trainers Methodol</li> </ol>	ogy 1 (TM 1)			
	2. <b>No</b> (please proceed to <b>B.8</b> )						
B.8	Please indicate main reason for not taking competency a	ıssessmen	t?				
	<ol> <li>Assessment tools/test package not available</li> <li>Assessment officer/assessor not available</li> <li>No Assessment officer/assessor in the area</li> <li>Assessment center not available/not accessible</li> <li>No Assessment center in the area</li> <li>Assessment not mandatory</li> </ol>	8. 9. 10.	Skills and knowledge r No money/financial co No time/working/scho Schedule not known Others, specify	onstraints			
B.9	After completing the training program, do you think you  1. Yes  2. No, please state the reason:		·				

2. National Career Assessment Examination	SC) on (NCAE)	ool?							
<ol> <li>National Career Assessment Examination</li> <li>Others:         <ul> <li>B.10.1.2 Is the TVET program that you</li> </ul> </li> <li>Yes 2. No</li> </ol>	on (NCAE)								
L. Yes 2. No	ou have enrolled		<ol> <li>Youth Profiling for Starring Career (YP4SC)</li> <li>National Career Assessment Examination (NCAE)</li> <li>Others:</li> </ol>						
L. Yes 2. No		l in line with t	he result of t	he profiling to	ol?				
				, 3					
lease put a check (✓) corresponding	to your leve	al of caticfa	ction with	the TVFT n	ogram vou				
ttended/completed in terms of the following		ei Oi Satisia	CLIOII WILII	tile IVET pi	ografii you				
, ,									
Indicator	Very Satisfied (5)	Satisfied (4)	Neutral (3)	Unsatisfied (2)	Very Unsatisfied (1)				
Trainee entry requirements									
Training methodologies									
Tools and equipment									
Learning materials									
Training activities									
Training facilities/work area									
Knowledge/expertise of trainer									
Duration of training									
Level of knowledge, skills, attitude attained after training									
Assessment methods									
		ded/complete	ed?						
Do you have any suggestion(s) that can imp	prove the progra	im?:		<del></del>					
					_				
					_				
	Trainee entry requirements  Training methodologies  Tools and equipment  Learning materials  Training activities  Training facilities/work area  Knowledge/expertise of trainer  Duration of training  Level of knowledge, skills, attitude attained after training  Assessment methods  Overall, are you satisfied with the TVET pro	Trainee entry requirements  Training methodologies  Tools and equipment  Learning materials  Training activities  Training facilities/work area  Knowledge/expertise of trainer  Duration of training  Level of knowledge, skills, attitude attained after training  Assessment methods  Overall, are you satisfied with the TVET program you attended to the state of the state	Trainee entry requirements  Training methodologies  Tools and equipment  Learning materials  Training activities  Training facilities/work area  Knowledge/expertise of trainer  Duration of training  Level of knowledge, skills, attitude attained after training  Assessment methods  Overall, are you satisfied with the TVET program you attended/complete	Trainee entry requirements  Training methodologies  Tools and equipment  Learning materials  Training activities  Training facilities/work area  Knowledge/expertise of trainer  Duration of training  Level of knowledge, skills, attitude attained after training  Assessment methods  Overall, are you satisfied with the TVET program you attended/completed?  1. Yes  2. No (please indicate reason why)	Trainee entry requirements  Training methodologies  Tools and equipment  Learning materials  Training activities  Training facilities/work area  Knowledge/expertise of trainer  Duration of training  Level of knowledge, skills, attitude attained after training  Assessment methods  Diverall, are you satisfied with the TVET program you attended/completed?  1. Yes  2. No (please indicate reason why)				

PART C: EMPLOYMENT STATUS OF GRADUATE BEFORE TRAINING	
C. Were you employed within one week before enrolling in this course?	
C.1 Yes, please specify	
C.1.1 occupational title :	PSOC Code
C.1.2 monthly gross income : ₱	
C.1.3 Whom do you work for? (please select one answer only)	
Worked for private household;     We dead for private patch like a set.	
<ul><li>Worked for private establishment;</li><li>Worked for government/government corporation;</li></ul>	
4. Worked with pay on own family-operated farm or business;	
<ol><li>Self-employed without paid employee;</li></ol>	
<ol><li>Employer in own family-operated farm or business;</li></ol>	
7. Worked without pay on own family-operated farm or business	
(please proceed to D.1)	alling in this course?
C.2 <b>No</b> , did you look for work or try to establish a business within one week before enr	olling in this course?
C.2.1 <b>Yes</b> (please proceed to <b>C.3</b> )  C.2.2 <b>No</b> , what is the primary reason for not looking for work? (please select of the primary reason for not looking for work?	ana anguar antul
1. Tired	one unswer omy)
2. No work available	
3. Awaiting results of previous application	
4. Temporary illness/disability	
5. Bad weather	
6. Waiting for rehire/job recall	
<ul><li>7. Too young/old or retired</li><li>8. Permanent disability</li></ul>	
9. Household/family duties	
10. Schooling	
11. others, pls. specify	
(please ask <b>C.3</b> )	
C.3 Were you available and willing to take up work in paid or self-employment within t	he past week and/or would be
available and willing to take up work within two weeks before enrolling in this cour	se?
1. Yes 2. No	
(please proceed to <b>D.2</b> )	
PART D: EMPLOYMENT STATUS OF GRADUATE AFTER TRAINING	
D.1. If employed before training	
D.1.1 Did you retain your job after the training?	
D.1.1 Yes	
D.1.1.1 Promoted? 1. Yes 2. No	
D.1.1.2 Occupational title:	PSOC Code
D.1.1.3 Monthly gross income : ₱	
(please proceed to D.4 )	
D.1.2 <b>No</b>	
D.1.2.1 Transferred to another company/workplace?  1. Yes  2. No	
D.1.2.2 Occupational title:	PSOC Code
D.1.2.3 Monthly gross income : \(\Phi\)	
D.2. If not employed before training	
D.2.1 Did you get a job after the training?	
1 Yes	
D.2.1.1 Occupational title:	PSOC Code
D.2.1.2 Monthly gross income : ₱ (please proceed to D.2.2 )	
2 No (please proceed to D.4 )	

	D 2 2 11	our long did it take you to get your ish /smaleum out ofter complete	na tha sa	urcal	
		ow long did it take you to get your job/employment after completi 2.2.1 please indicate number of months	ng the co	urser	
		2.2.2 if less than one month, indicate number of weeks			
D.4		xperience a requirement of the employer before being employed?			
<b>.</b> .	1. Ye				
D.5	1. Ye	ation a requirement of the employer before being employed? s 2. No 3. I don't know			
PAR1	Γ E. EMP	LOYMENT STATUS OF GRADUATE AT THE TIME OF THE SURV	/EY		
		PSG	C Code		
E. W	/ere you e	mployed within a week of this interview?			
E.1	Yes, pleas	se specify	Province	Municipality / City Barangay	
	-	Complete Name of Company:			
		Complete Address:			
	L.1.2	(No./ Street)	(Barangay	·)	
		( Municipality/City)	( Province,	)	
			[	DC00 0-4-	
	E.1.3	Occupational title:	-	PSOC Code	
	F 1 /	Since when? (Date of start of this employment):			
	L.1.4	(mm/yyyy)	_		
	E.1.5	Current monthly gross income: ₱	_		
		(include estimated value of goods or non-cash received)			
	F 1 6	Number of hours worked in the past week:			
	2.1.0	( disregard this item, E.1.6, if the respondent has yet to report for		art a husiness )	
		(		,	
E.2	No, (ple	ase proceed to <b>E.14</b> )			
E.3	How did v	ou get your present job? (please select one answer only)			
	-	Blue Desk Platform (BDP)			
		Public Employment Service Office (PESO)			
		Internet job posting			
	5.	Newspaper advertisements			
	6.	Referral from friends/relatives			
	7.	Walk-in application			
	8.	Others, please specify			
	0.	Citicis, pieuse specify		-	
E.4 \	What type	of industry/business are you engaged in?			
(p)	lease specit	y, e.g. iron works, garments, semicon, construction, trading, etc.)			
17-					
	E.4.1	What is the major product or type of service of your company/bus	iness?		
				PSIC Code	_
_	la )	ease specify, example: rice, corn, steep pipes or tubes, plastic pipes, etc. )	L		
E. 5	Whom do	you work for? (please select one answer only)			
	1.	Works for private household;			
	2.	Works for private establishment;			
	3.	Works for government/government corporation;			
	4.	Works with pay on own family-operated farm or business;			
	5.	Self-employed without paid employee;			
	6.	Employer in own family-operated farm or business;			
	7.	Works without pay on own family-operated farm or business			
	(For	those who answered, 5, 6 or 7, please proceed to E.8 )			

E.6	What is the nature of your employment? <i>(please se</i>	elect one a	answer only)
	<ol> <li>permanent job/permanent business/perma</li> <li>short-term or seasonal job/business/unpaid</li> <li>worked for different employers/clients on d</li> </ol>	nent unpa I family wo	aid family work ork
E.7	Are the terms of your employment covered by a core.7.1. <b>Yes</b> 1. written 2. verbal E.7.2. <b>No</b>	ntract?	
E.8	Does your employer pay for your contribution to th	e followin	g ( please encircle the appropriate box ):
	1. GSIS/SSS	Yes	No
	2. Pag-IBIG	Yes	No
	3. PhilHealth	Yes	No
E.10	Does your employer provide incentives to National  1 Yes  E.6.1.1 What are the incentives? (pleas  1. Salary increase  2. Promotion  3. Job Security  4. Others, please specify  2 No  Is the training/course you completed (in B.1) relate  1. very much related or  2. somewhat relevant  How useful are your skills acquired from the traini  E.11.1. Very useful (when often or directly used  E.11.2. Some use (when seldom or sometimes  E.11.3.1. skills acquired from training  E.11.3.2. occupation is entirely differ	ed or relevent related on the join the join the join the join the join mg/course	vant to your current job/business?  a. not related or relevant  r job/business?  b)  ne job)
	E.11.3.2. other reason, (please specif	fy)	
E.12	<ol> <li>Where is the company/business located? (please s</li> <li>within the province</li> <li>outside the province but within the region</li> <li>outside the region, please specify province</li> <li>outside the country, please specify country</li> </ol>		
E.13	Other than your current occupation in <b>E.1</b> , do you or to have new job with longer hours?	ı still want	t additional hours in your present job or additional job
	1. Yes, please state the reason		
	2. <b>No</b>		
	( end of interview for the emplo	yed TVE1	T graduate-respondent )

( E.14 to	be answe	ered by the respondent whose response in E	.2 is NO )
Did you	look for	work or try to establish a business within	n a week of this interview ?
E.14.1	Yes (pi	roceed to <b>E.15)</b>	
E.14.2	No. w	hat is the primary reason for not looking for	WOrk? (please select one answer only)
	1.	Tired	,
	2.	No work available	
	3.	Awaiting results of previous application	
	4.	Temporary illness/disability	
	5.	Bad weather	
	6.	Waiting for rehire/job recall	
	7.	- 7 - 8,	
	8.	Permanent disability	
	9.	Household/family duties	
	10.	3	
	11.	others, pls. specify	
	( ple	ase ask <b>E.15</b> )	
	and willi	le and willing to take up work in paid or selfing to take up work within two weeks after t  2. <b>No</b>	
available	and willi	ng to take up work within two weeks after t	employment within the past week and/or would be his interview?
available	e and willi	ng to take up work within two weeks after t	his interview?
available	e and willi	ing to take up work within two weeks after t  2. <b>No</b>	his interview?  VET graduate-respondent )
available	e and willi	ng to take up work within two weeks after t  2. No  ( end of interview for the unemployed T	his interview?  VET graduate-respondent )
available	e and willi	ng to take up work within two weeks after t  2. No  (end of interview for the unemployed T  you for your support and full co	VET graduate-respondent)  operation to our undertaking.
available	e and willi	ng to take up work within two weeks after t  2. No  (end of interview for the unemployed T  you for your support and full co  signature of enumerator	VET graduate-respondent)  operation to our undertaking.





