

# 2014

## EMPLOYERS' SATISFACTION SURVEY



ISO 9001 : 2008 Certified



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## List of Acronyms

COC	-	Certificate of Competency
CSC	-	Civil Service Commission
ESS	-	Employer Satisfaction Survey
FGD	-	Focused Group Discussion
KII	-	Key Informant interview
LGU	-	Local Government Unit
MOA	-	Memorandum of Agreement
NATCAC	-	National TVET Competency Assessment and Certification
NC	-	National Certificate
NSCB	-	National Statistics Coordination Board
PDI	-	People Dynamics, Incorporated
PRED	-	Policy Research and Evaluation Division
PQF	-	Philippine Quality Framework
PTQCS	-	The Philippine TVET Qualification and Certification System
TESDA	-	Technical Education and Skills Development Authority
TOR	-	Terms of Reference
TVET	-	Technical Vocational Education and Training
TWSP	-	Training for Work Scholarship Program

## National Certification Levels

### Levels of Certification

#### Level

- NC I **National Certificate I (NC I)** - is issued to individuals who can perform routine and predictable tasks; has little judgment and works under supervision.
- NC II **National Certificate II (NC II)** - is issued to individuals who can perform prescribed range of functions involving known routines and procedures; has limited choice and complexity of functions and has little accountability.
- NC III **National Certificate III (NC III)** - is issued to individuals who can perform wide range skills; works with complexity and choices; contributes to problem solving and work processes and shows responsibility for self and others.
- NC IV **National Certificate IV (NC IV)** - is issued to individuals who can perform a wide range of applications; have responsibilities that are complex and non-routine; provides some leadership and guidance of others and performs evaluation and analysis of work practices and the development of new criteria and procedures



## Terminology

<b>Term</b>	<b>Definition</b>
Certificate of Competency	A certificate that is issued to individuals who have satisfactorily demonstrated competence on a particular or cluster of units of competency.
Competency	A combination of knowledge, skills and attitudes associated with high performance on jobs; sometimes includes self-image, social motives, traits, thought patterns, mindsets and ways of thinking, feeling and acting; these are characteristics that individuals have and use in appropriate, consistent ways in order to achieve desired performance (Definition from CSC).
Skilled worker	A person who has acquired the full educational/training qualifications required to perform a recognized trade, craft or other occupations.
Skills	Specialized abilities needed to carry out certain physical operations or activities associated with successful job performance; may be cognitive in nature such as analysis, synthesis and evaluation.
TESDA - certified skilled workers	Those who have passed the TESDA assessment and has been awarded with a National Certificate (NC) or Certificate of Competency (COC).

## EXECUTIVE SUMMARY

The 2014 Employers' Satisfaction Survey (ESS) serves as one of the monitoring and feedback mechanisms to generate inputs and comments from the industry. The study provides employers' perspective on the performance of employed TVET graduates, TVET provision, certification, and other TVET-related areas. The 2014 ESS covered a total of 204 public and private establishments that have been employing TVET graduates for the last three (five) years: 2008 - 2013.

### **General Profile of Establishments**

#### **❖ 2011 ESS**

- Thirty-two percent (32.02%) of respondent establishments are relatively new or 1-10 years in operation.
- Majority or 80.1% of the establishments are private establishments. These private establishments are mostly single-proprietorship (38.8%) and stock corporations (21.8%).
- By industry classification, more than half of the establishments belonged to services.
- More than 78% of the establishments belonged to micro, small and medium enterprises (MSME).

#### **❖ 2014 ESS**

- Thirty four percent (34.30%) of respondent establishments are relatively new or 1-10 years in operation.
- Majority or 91.18% of the establishments are private establishments. These private establishments are mostly stock corporation (47.55%) and single proprietorship (20.59%).
- By industry classification, more than half of the establishments belonged to services.
- More than 72% of the establishments belonged to micro, small and medium enterprises (MSME).

### **Incentives for TESDA Certified Workers**

#### **❖ 2011 ESS**

Almost half or 48.3 % of the establishments indicated that they provide incentives to their certified workers. Incentives were in the form of salary increases. The rest of the establishments provided other forms of incentives: job security (40.2%), job promotion (34.2%), allowances, further training and profit sharing in the company (17.4%).

The majority of the establishments that provide incentives to their TESDA certified workers are in the following sectors: Agriculture, Forestry & Fishing (80.0%); Education (70.8%); Construction (69.6%); Other Service Activities (66.7%); Human Health and Social Work Activities (61.54%); and Manufacturing (61.3%).

#### **❖ 2014 ESS**

About 39.7 % of the establishments indicated that they provide incentives to their certified workers. Incentives were in the form of salary increases (19.75%). The rest of the establishments provided other forms of incentives: job security (11.11%) and job promotion (8.64%).

The majority of the establishments that provide incentives to their TESDA certified workers are in the following sectors: Technical Vocational Education Training (TVET) (88.9%); Agriculture, Hunting and Fishery (75%); and Financial Intermediation (66.7%)

### **Training Provision to Skilled Workers**

#### **❖ 2011 ESS**

Thirty percent (29.7%) of the respondent establishments gave TVET related training programs to their skilled workers. Bulk of the training programs (57.4%) provided by the establishments were on basic skills training programs. Only 9.5% of the establishments provided upgrading skills training program.

Establishments in the field of education and training provide trainors training programs. Establishments in the Accommodation and Food Service Activities provide training program on customer service for their skilled workers to improve customer relation and provide quality service to customers. Some establishments provide staff development training and values training to their workers.

#### ❖ 2014 ESS

About forty seven percent (46.6%) of the respondent establishments gave TVET related training programs to their skilled workers. Twenty seven percent (27.34%) of the training programs provided by the establishments were on basic skills training programs; followed by customer service training and upgrading skills training with an equal percentage of 15.92%. The respondents also gave their skilled workers other trainings such as values training (15.57%), staff development training (13.84%) and trainers training (9.34%)

Establishments in the field of tourism, construction, and wholesale & retail trading provided basic skills training program and customer service for their skilled workers to enhance their skills and improve customer relation and provide quality service to customers. Some establishments provided staff development training, trainer training and values training to their workers.

### **Occupations that Require Certification**

#### ❖ 2011 ESS

The most common occupations that require certification are the following: Computer Technician; Housekeeping Attendant; Electrician; Cook; Welder; Automotive Servicing Mechanic; Driver; Food and Beverage Service Worker; Plumber; Data Encoder; RAC technician; Heavy Equipment Operator; Carpenter; and Computer Programmer. The certification level required is NC II.

#### ❖ 2014 ESS

The most common occupations that require certification are the following: Cookery; Administrative Works; Automotive (Technician, Mechanic and Servicing); CNC Lathe Operator; Computer Technician; Bartender; Accounting Works; Cashier; Computer Hardware Servicing and Carpentry. The certification level that is required for this occupation is NC II.

## **In-Demand Skilled Workers for 2016**

### **❖ 2011 ESS**

The respondent establishments that indicated the need for workers for their operations in 2012 mentioned the following in demand occupations : Mason, Welder, Plumber, Electrician, Carpenter ,Computer Service Technician, Consumer Electronics Service Technician, Auto Mechanic, Food and Beverage Service Worker, Heavy Equipment Operator, Security Guard, Housekeeper, Driver, Beauty Care, Hairstylist, and Rigger.

### **❖ 2014 ESS**

According to employer respondents, there will still be a demand for TVET workers in the future. In 2016, the highest demand will be in the production/manufacturing (i.e. technicians, operators, factory workers, ect.), welders, pipe fitters, cookery, and electricians, driver, massage therapist, heavy equipment operator, tile setter and scaffolders.

## **Overall Level of Satisfaction on Work and Performance of TVET Graduates**

### **❖ 2011 ESS**

In general, the study revealed encouraging results in relation to the satisfaction on work performance of TVET graduates. A big majority of the establishments (86.1%) indicated that they are either “very satisfied” (43.3%) or “somewhat satisfied“(42.8%) with the work and performance of the TVET graduates.

A high degree of satisfaction wherein 90.0% or more of the establishments are at least “somewhat satisfied” can be observed in the following industry sectors: a) Electricity, Gas, Steam and Air Conditioning Supply; b) Water Supply, Sewerage, Waste Management and Remediation Activities; c) Construction; d) Transportation and Storage; Real Estate Activities; and e) Professional, Scientific and Technical Activities.

### **❖ 2014 ESS**

The study reveals that employers were "satisfied" with the work and performance of their skilled workers with an overall mean rating of 4.13. None of the employer respondents expressed dissatisfaction over their skilled workers.

A high degree of satisfaction are in the fields of tourism, agriculture, hunting and forestry, financial intermediation, visual arts, information and technology, other community social and personal service activities, automotive and land transportation

### **Employers' Degree of Satisfaction on Hired TVET Graduates**

Results showed that more than 92.0% of the TVET graduates possessed the theoretical and practical knowledge in performing their tasks and responsibilities, and were highly trainable for the skills needed for the job and have positive work attitudes. The order of the degree of satisfaction for each characteristic arranged from highest to lowest are as follows:

#### **❖ 2011 ESS**

- Possess technical Skills and knowledge needed for the job --- 95.7%
- Listens attentively to instructions and follows order as instructed --- 94.8%
- Easily adopts to work environment --- 94.7%
- Adapts to the existing technology relevant to the enterprise --- 94.7%
- Works well in a group to achieve a goal --- 94.4%
- Capable of communicating in speech and writing --- 94.2%
- The Ability to learn new skills and knowledge on the job --- 93.9%
- Understand and speaks the language in which business is conducted --- 93.8%
- Ability to solve work related problems --- 93.7%
- Observes protocols in reporting using standard operating procedures --- 93.5%
- Enthusiastic in learning skills the latest advancement related to the job --- 93.4%
- Produces outputs on time while working with little supervision --- 92.8%
- Ability to handle stress and pressure on the job --- 92.8%
- Accepts other jobs other than specified on the job description --- 92.5%
- Obtain and convey workplace information --- 92.5%

## ❖ 2014 ESS

Results reveal that TVET graduates are highly trainable on the skills needed for the job with a mean rating of 3.85 or a verbal interpretation of "very satisfactory". However, TVET graduates got a very low rating on the theoretical and practical knowledge in delivering task and responsibilities but still this has an equivalent interpretation of "very satisfactory". The order of the degree of satisfaction for each characteristic arranged from highest to lowest are as follows:

- Has the ability to learn new skills and knowledge on the job -- 3.93
- Possesses technical skills and knowledge needed for the job -- 3.90
- Works well in a group to achieve a goal -- 3.90
- Adapts to the existing technology relevant to the enterprise -- 3.86
- Is enthusiastic in learning skills or the latest advancement/s related to the job - 3.86
- Easily adopts to work environment -- 3.85
- Listens attentively to instructions and follows orders as instructed -- 3.84
- Obtains and conveys workplace information -- 3.78
- Produces outputs on time while working with little supervision -- 3.78
- Has the ability to handle stress and pressures on the job -- 3.72
- Accepts other jobs other than specified on the job description - 3.70
- Observes protocols in reporting using standard operating procedures - 3.68
- Has the Ability to solve work related problems - - 3.68
- Understands and speaks the language in which business is conducted -- 3.61
- Capable of communicating in speech and writing -- 3.42

## **Conclusion and Recommendations**

Obtaining regular satisfaction surveys from stakeholders and industry partners of TESDA ensures that a regular monitoring and evaluation mechanism is in place for the continuous improvement of the programs of this Authority. As such, employer feedback is a necessary mechanism that steers TVET policy makers and educators in developing well-grounded TVET strategies and programs that in the end does not only benefit employers but more so the workers, the industry, and the country.

The following were the significant findings of the study:

1. The general profile of the participating industries were:
  - a. Thirty four percent (34.30%) of respondent establishments are relatively new or 1-10 years in operation.
  - b. Majority or 91.18% of the establishments are private establishments. These private establishments are mostly stock corporation (47.55%) and single proprietorship (20.59%).
  - c. By industry classification, majority of the establishments belong to Tourism (Hotel and Restaurant) with 9.3%. It was followed by Wholesale and Retail Trading (8.8%) and Construction (8.3%).
  - d. More than 72% of the establishments belonged to micro, small and medium enterprises (MSME).
2. Employers were "satisfied" with the work and performance of their techvoc workers with a mean rating of 4.13.
3. There is significant difference between the employers' level of satisfaction in terms of the work and performance of a TESDA certified skilled workers vis a vis Non-TESDA certified skilled workers. This also implies that employers were more satisfied with or preferred the work and performance of TESDA certified skilled workers compared to Non-TESDA certified workers.
4. There is significant difference between the employers' level of satisfaction in terms of the geographical location of their techvoc workers i.e. the employers' are more satisfied with workers from within the province of their establishments compared to workers outside the province of their establishments.
5. There is a competency gap between the current level competency of the TVET graduates and the desired competency of the establishments across all competencies.
6. Forty percent (40%) of the employers' provide incentives to TESDA certified workers. This simply means that employers' valued their TESDA certified workers as an asset to their company.



Based on the findings indicated above, the following recommendations are presented to make TVET relevant to the needs of the industry.

1. Strengthen the existing TESDA-industry consultations in improving TVET, particularly in enhancing consultations at the provincial and regional levels
2. Strengthen the data-base and that the regional/provincial offices of TESDA must strengthen the monitoring of firms/industries that utilize TVET graduates
3. Strengthened the linkages and partnerships with various entities (such as LGU's, DOLE, PESO, SEIPE, IBPAP, PMAP, and ECOP) to address concerns of skills training, particularly in advancing the certification program of TESDA.
4. Conduct the following researches in order to generate information and policy recommendations to further enhance the quality of TVET and enhance employer satisfaction on the performance of TVET graduates.
  - 4.1 Employee Satisfaction Survey as an additional component of the ESS.
  - 4.2 Actual assessment on the work and performance of employed TVET graduates accompanied with third party reports.
5. With globalization, ASEAN integration and the mobility of human capital, the need to prepare our workers for the 21<sup>st</sup> century becomes important as we compete for talents in the global and regional arena.
6. The desire of companies to find the right workers who possess the skills and competencies for a particular job is now more pronounced than ever before. The training program offerings therefore should be responsive in addressing these needs.
7. Partnerships with LGUs is necessary in order to address their concerns on providing skills of their workers and advancing the certification program of TESDA
8. Regular review and update of the curriculum of TVET training programs to emphasize the technical skills, the ability to handle tools, machines and equipment, and productivity and accountability.
9. Existing initiatives such as TESDA scholarships and incentives to the workers and supporting existing training programs provided by the firms should be continued and enhanced.
10. Continuous upgrade, review, and enhancement of the curriculum in order to meet the changing demands of the times will be important.

# 2014 EMPLOYER SATISFACTION SURVEY (ESS)

## FINAL REPORT

### 1. Background and Objectives

#### 1.1 Background

TESDA is mandated by law to provide relevant, accessible, high quality and efficient technical education and skills development in support of the development of high quality Filipino middle-level manpower responsive to and in accordance with Philippine development goals and priorities.

Obtaining regular satisfaction surveys from stakeholders and industry partners of TESDA ensures that a regular monitoring and evaluation mechanism is in place for the continuous improvement of the Authority. As such, employer feedback is a necessary mechanism that steers TVET policy makers and educators in developing well-grounded TVET strategies and programs that in the end not only benefit the employers but more so the workers, the industry, and the country. The conduct of employer satisfaction surveys takes cognizance of the role of various stakeholders in expressing their issues and concerns in TVET policies and strategies. Employer feedback also contributes to the fulfilment of TESDA's vision that focuses on improving lives of the Filipino workforce by upgrading their skills and competencies as well as work values.

#### *Section 2, RA 7796 TESDA Act*

*"The State shall encourage the active participation of various concerned sectors, particularly, private enterprises, being direct participants in and immediate beneficiaries of a trained and skilled workforce providing technical education and skills development"*

Tracer and impact studies are part of the biennial monitoring and evaluation mechanisms of the Policy Research and Evaluation Division (PRED) -Planning Office of TESDA as part of its continuing efforts to assess Technical Vocational Education and Training (TVET) performance. Results of these studies were basically aimed to establish sound basis for reviewing and developing TVET and TESDA policies and strategies. The ultimate goal is to strengthen the country's TVET programs, recognizing its vital contribution to the nation's economic development.

In 2008, an employer satisfaction survey was conducted as a pilot study that involved only selected employers of graduates of the Training for Work Scholarship Program (TWSP) of TESDA.

Another ESS followed in 2011 that provided a more comprehensive assessment of how well the TVET graduates performed and met the competency requirements of the industry. The study also aimed to find out how employers valued the TESDA certification program, TVET certification concerns, as well as on the status of the demand and supply of TVET workers (TESDA certified or not) for the various industries

PRED-Planning office undertook the 2014 ESS, which is the third in the series since 2008 and is founded on Section 2 of RA 7796 or the TESDA Act as its legal basis. This survey underscored the important role of the private sector, particularly private enterprises in the advancement of the country's technical education and skills development opportunities. It sought to generate data in keeping abreast with the needs of industries both locally and abroad, and in efficiently planning for strategic decisions in order to be responsive to identified industry needs. Data collection and analyses was outsourced to a research institution (People Dynamics, Inc. or PDI ) for the 2014 ESS.

This report presents the key findings of the 2014 Employer Satisfaction Survey (ESS). The collection of primary data commenced in November 2014 and continued until February 2015 and covered the sampled public and private establishments in the country which employed TVET graduates.

## **1.2 Objectives**

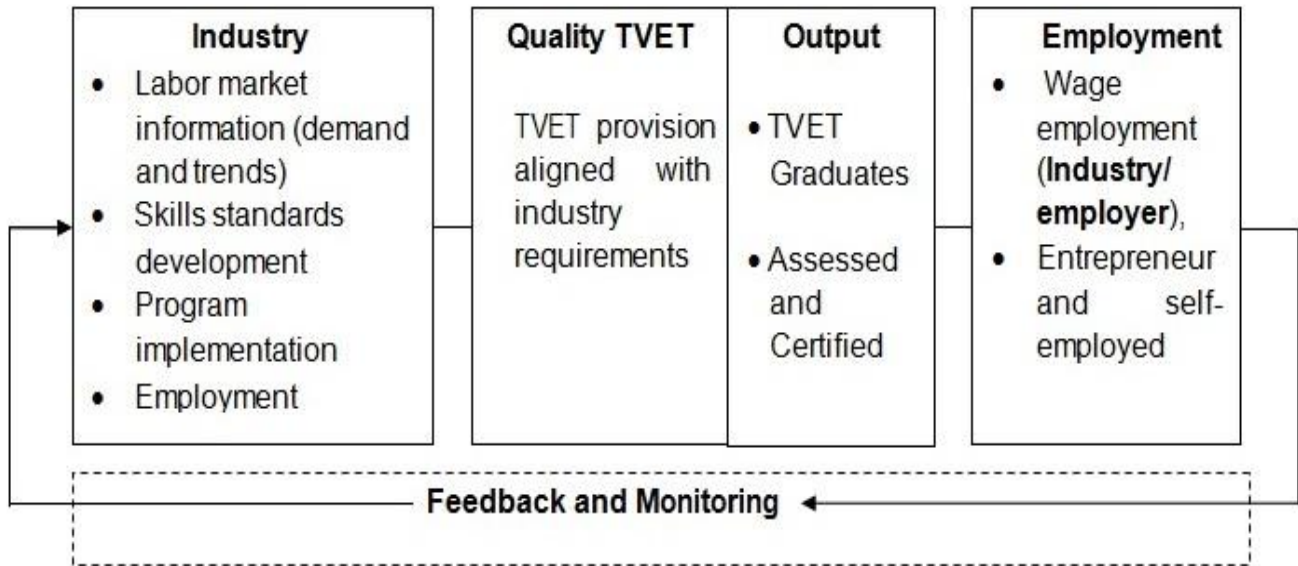
The main goal of this study was to evaluate the levels of satisfaction of the employers on the competencies and performance of TVET graduates in the workplace. Specifically, the objectives of the survey were:

1. To provide general information on industry/firm profile;
2. To determine the level of satisfaction of employers on graduates' job competencies vis-a-vis standards and actual requirements in the work place;
3. Identify gaps between the competencies of employed graduates with those of industry requirements.; and
4. To gauge employers' acceptance of the assessment and certification program of TESDA.

## 2. Analytical Framework

The 2014 ESS study adopted the PRED Analytical Framework, which is illustrated in Figure 1.

**Figure 1: ESS Analytical Framework**



Being the third in the series of ESS being conducted by PRED, the adoption of the same analytical framework for both the 2011 and 2014 ESS allows alignment and comparison of findings.

The ESS analytical framework has three major components – Industry, TVET, and Employment. The industry sets or influences the directions of TVET programs and policies. The quality of TVET programs and initiatives by large determines the quality of its outputs, who are the skilled workers that enter the labor market. Consequently, quality of skilled workers will determine their employability and if employed, the quality of their work performance will impact the industry they are in. As such, employer feedback is a necessary mechanism that steers TVET policy makers and educators in developing well-grounded TVET policies and programs that in the end does not only benefit employers but more so the workers.

As part of TESDA's quality assurance process, training regulations are promulgated that consist of the competency standards, training standards and assessment and certification arrangements. Feedback on such programs obtained from employer satisfaction surveys help provide the basis for the development and refinement of curriculum and instructional materials and competency assessment packages for competency-based technical education and skills development.

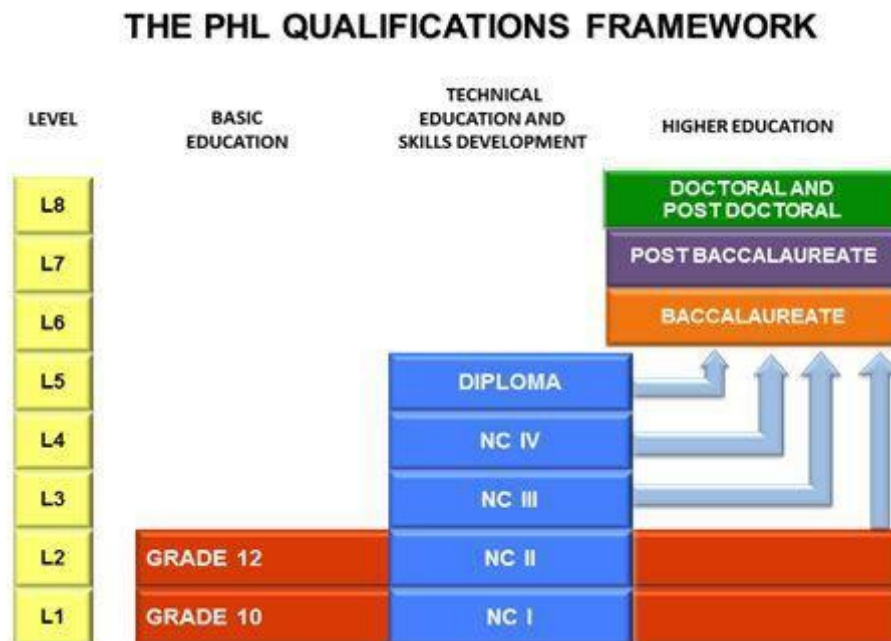
In 2012, the Philippines developed a Philippine Qualifications Framework (PQF) to foster innovation and responsiveness in the whole education and training system. The PQF is a practicable system of credit transfers and allows seamless transitions between and among basic education, technical education and skills development and higher education.

The development of the Philippine Qualifications Framework requires taking into consideration of a number of stakeholder inputs in order to generate the desired outputs. Consistent with the need to obtain feedback, the PQF utilized extensive consultations and advocacy with stakeholders towards its successful implementation of the PQF in the country.

The coverage of the PQF includes institutions, training, specialization, skills/competencies, work experience and lifelong learning.

There are eight levels in the PQF, starting with Level 1 which focuses on manual, concrete, or practical skills up to Level 8 which corresponds to doctoral and postdoctoral programs. The full description of the whole framework can be found in The Philippine Qualification Framework illustrated below.

**Figure 2: The Philippine Qualifications Framework**



(Scheme extracted from TESDA publication: The Philippine Qualification Framework - TESDA Policy Brief 2012).

### **3. Methodology and Limitations of the Study**

This chapter presents the research method used, population, sample size and sampling technique, instrumentation, data gathering procedures and statistical treatment of data. The limitations of the study are also explained.

#### **3.1 Methodology<sup>1</sup>**

The research employed descriptive quantitative methodologies to address the various research questions such as the employer demographics including industry classification; the employer level of satisfaction regarding the work and performance of techvoc employees; the level of knowledge, skills and attitudes (KSA) of TVET workers; the employers' acceptance of the assessment and certification programs of TESDA; the future demand for TVET graduates; and the TVET-related training provided by employers for its skilled workers.

According to Sevilla (2003) the descriptive method is designed to gather information about the present existing conditions in order to determine the nature of a situation as it exists at the time of the study. Calmorin (2003) likewise mentioned that this approach is appropriate whenever the objects of any class vary among themselves and one is interested in knowing the extent to which different conditions were obtained among these objects.

The approach used is the case study research method (Yin, 2004). Therefore, the study had three (3) major components as a system for triangulation of data. Data were gathered largely via email. (Refer to Attachment 2 and Section 3.1.2 for the brief description):

1. Online Survey
2. Validation (Conduct of KII and FGD)
3. Consolidation (Methodological Triangulation of data)

##### **3.1.1. Population and Sampling**

The target population of this study were public and private establishments that hired or employed technical vocational (TECHVOC) or TVET graduates who graduated within the past five years. The PRED-Planning Office provided a list of 2,424 establishments as potential employer respondents that could be included for the online survey.

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<sup>1</sup> Methodology proposal was approved by PRED.

Based on the accuracy of the information provided, PDI filtered the PRED list which yielded a total sampling frame of 519 establishments (these are firms which could be located, or have either a valid email, telephone or geographical address). An online survey was sent to this study population group and was followed up with a telephone interview when needed. Simple probability random sampling was utilized yielding a sample size of n=204 employer respondents. The sample size represents 39.3% of the target population with a margin of error of 7 percent.

### **3.1.2. Research Process**

#### **A. Preparatory Activities**

##### **1) Approval of the Research Tools**

The Consultant team presented the draft of the research tools to PRED-Planning office Team for evaluation and approval. (Attachment 4 – Research Tools). Revisions were incorporated by PDI based on discussions with PRED-Planning Office. TESDA provided introduction and endorsement letters for the survey

##### **2) Finalizing the List of Employers**

PDI and PRED agreed on: 1) the list of companies/organizations that will be included as respondents; and 2) the sampling frame and sample size of the study. The initial challenge encountered was the incomplete employer information. Majority of the employers in the list did not have email addresses and telephone numbers. To resolve this concern, PRED-Planning Office coordinated with the Regional Offices, in consonance with the Terms of Reference (TOR) of the project. After examining and refining the list of respondents, the final list of employers totaled 519.

##### **3) Identifying areas for KII and FGD**

PDI identified the areas for the FGD and KII. In consideration of the project budget, it was agreed by PRED and PDI to purposively choose the areas for the FGD and the KII. The Project Team based its recommendation of possible areas on the number of possible respondents. Areas with the most possible potential participants were chosen. The areas chosen were Davao City (Region 11), Cebu (Region 7), and Laguna (Region 4a).

## B. Conduct of the Online Survey and Data Analysis Launching of the Online Survey

- 1) The approved questionnaire (Attachment 3) was uploaded using an open-sourced survey system (Attachment 13 – Lime Survey). The research employed descriptive quantitative methodology to evaluate the level of satisfaction of the employers on the competencies and performance of TVET graduates in the workplace. It will also determine the employers acceptance of the assessment and certification programs of TESDA.
  
- 2) Initially, the PRED-Planning Office pilot tested the survey. After a few more revisions to the survey, PDI was given the go-signal to proceed with the online survey. The online survey was then launched and 519 establishments from the PRED list/database were initially invited to answer. Respondents received the link for the online survey through email. For incorrect email addresses encountered, PDI staff would call the employers' office/s to verify the email address. In case the employers could not be contacted through telephone numbers indicated in the database, PDI staff browsed the internet and telephone directories, and call up the Regional Office for assistance in verifying the telephone numbers. Additional locating strategies were employed such as using the internet or telephone directories or consulting with the PESO office of the locality. PDI created a call support team to follow up employers and encourage or prompt respondents to answer the survey. In some cases, a telephone facilitated survey was conducted. Moreover, the team also visited some employers to personally deliver the survey sheets and to discuss with them the value of the survey. With approval of the PRED-Planning Office, PDI also added employers, coming from its company database, as respondents. Finally, PDI deployed enumerators to further beef up the survey. All these strategies were employed to encourage survey response. A total of 204 employers answered the survey (various modes) - Sixty-four (64) were part of the PRED-Planning Office database and 140 were returns from the PDI employer database. The survey was answered by representatives of employers. Attachment 5 (Respondent Demographic Profile) shows the profile of employers or their representatives who answered the survey.



- 3) Selection of participants (companies/organizations) for the FGD and KII

Also contingent to the finalization of the areas was the availability of respondents. PRED-Policy Office facilitated the schedules of the FGD and KII through TESDA Regional Offices of Davao City and Cebu City. These Regional Offices contacted prospective participants for the FGD and KII and gave the PRED-Planning Office the go-signal and exact schedules. PRED directly coordinated with PDI the schedules of the FGD and KII, particularly in Davao and Cebu.

Additionally, an FGD was conducted in Luzon in the Carmel Ray Industrial Park in Carmona. This was participated by establishments who are active members of Human Resource Management Association of Canlubang (HRMAC) from the industrial zone.

- 4) Approval by TESDA Planning Office (through the Focal Person) of the Final list of companies/organizations for the FGD and KII

The selection of FGD participants were left to the discretion of the regions depending on the availability of the respondents.

#### C. Conduct of KII and FGD

The conduct of the FGD was facilitated by Regional Offices in Cebu City (Regional 7) and Davao City (Region 11). Four groups were assembled for FGD: Employers, Provincial Directors, Trainers, and Trainees. Interviews were conducted with the following: 2 employers, 1 Regional Director, and 1 Trainer. A representative of PRED observed during the FGD and KII in Cebu City and Davao City. The FGDs and KIIs were conducted in the Regional Offices. (See Attachment 4 for the tool).

### **3.2 Limitations of the Study**

The results of this survey basically provides a snapshot of the perception of employers about their skilled workers which is also reflected on their perception of the levels of competency skills of TVET graduates. Such data will provide sound basis for the direction of future policy and training strategies.

In the conduct of this survey, the researcher did not use competency assessment instruments, equipment, nor tools to observe the work performance and competency of the employee. However, the results came from the expert opinion/perception of the respondents (employers, HR supervisors, or representatives of employers) which is derived from their actual experience of interacting with the skilled workers in the performance of their jobs.

The Philippine TVET Qualification and Certification System (PTQCS) is a qualification system ensuring recognition of attained competences as defined for middle-level occupations. It was established as a unified TVET qualification framework for competency assessment and prior learning recognition. To receive a recognized qualification, students are tested through observation, oral questioning, written tests, third party reports, and portfolio and work projects. It must be noted that the actual testing and observation of competencies is outside the scope of the ESS and falls within the PTQCS.

The Competency Assessment and Certification System, a major pillar in TESDA's authority role, is among the essential quality assurance mechanisms in TVET. It ensures that TVET graduates and skilled workers have the necessary competence to perform the tasks consistent with the required standards in the workplace. It involves the process of gathering evidence to prove possession of competencies according to industry standards. Future research projects could be undertaken as an additional component of an employer satisfaction survey. In addition to looking at employer perception, such study could serve as another feedback vehicle which will help ensure and validate that TVET graduates and skilled workers have the necessary competence to perform the tasks consistent with the required standards in the workplace, thus leading to further employer satisfaction.

## 4. Results of the Study

This chapter presents the results of the study in six parts: (a) general profile of the employer respondents; (b) TVET training programs provided by employers; (c) employers' level of satisfaction on graduates' job competencies vis-à-vis standards and actual requirements in the workplace; (d) characteristics of technical vocational workers; (e) gaps between the competencies of employer graduates with that of industry requirement; and (f) employers' acceptance of the assessment and certification programs of TESDA and (g) future demand for TVET graduates.

From an initial list of 2,424 public and private establishments that have been employing TVET graduates for the last five (5) years (2008-2013), the 2014 Employers' Satisfaction Survey (ESS) had a sampling frame of 519 establishments and a sampling size of 204 employers.

### 4.1 General Profile of Respondents

- The majority (59.8% or 122 firms) were establishments that had been in operation from 11 years upwards (Table 1)

Table 1. Distribution of Establishments by Number of Years in Operation

No. of Years in Operation	Number of Employers	%
1 - 10 years	70	34.3
11 - 20 years	47	23.0
21 - 30 years	30	14.7
More than 30 years	45	22.1
Not Indicated <sup>2</sup>	12	5.9
<b>Total</b>	<b>204</b>	<b>100.0</b>

- Thirty-four percent (34.3% or 70 firms) are relatively new or 1-10 years in operation. Thirty-seven percent (37.7% or 77 firms) are stable, between 11 to 30 years in operation while twenty-two percent (22.1% or 45 firms) are mature companies having been in business for more than 30 years.
- By position, the majority of respondents were executives (54.9 percent or 112 firms); by education attainment, the majority of respondents were college graduates

<sup>2</sup> All "Not indicated" data in Results and Discussion means that the respondent did not respond to the particular survey question.

(61.76% or 126 firms); by gender, the majority of the respondents were females (67.6% 138 firms - Attachments 5a, 5b, and 5c and Figures 3, 4, & 5).

- The majority (91.18% or 186 firms) were private establishments; of this number, 47.55% (or 97 firms) were stock corporations; twenty-one percent (20.59% or 42 firms) were single proprietorships and nine percent (9.31% or 19 firms) were non-profits. (Table 2)

Table 2. Distribution of Establishments by Type of Legal Organization

	Number of Establishments	%
<b>A. Government</b>	<b>13</b>	<b>6.37</b>
1. National	5	2.45
2. Provincial/Local	6	2.94
3. Government Owned and Controlled Corporation	1	0.49
4. Others	1	0.49
<b>B. Private</b>	<b>186</b>	<b>91.18</b>
1. Single Proprietorship	42	20.59
2. Partnership	11	5.39
3. Stock Corporation	97	47.55
4. Non-Stock, Non-Profit Corporation	16	7.84
5. Cooperative	3	1.47
6. Others	17	8.33
<b>C. Not Indicated</b>	<b>5</b>	<b>2.45</b>
<b>Total</b>	<b>204</b>	<b>100.0</b>

There were a total of 40, 108 workers that were hired by these establishments. Of this number, twenty-seven percent (27.05% or 10,849 workers) were TESDA-certified workers (Table 3).

- The top Industries that hired skilled workers were (Table 3):
  - Tourism (Hotel and Restaurant) (9.3% or 19 firms)
  - Wholesale and Retail Trading (8.8% or 18 firms)
  - Construction (8.3% or 17 firms)
  - Information and Communication Technology (7.4% or 15 firms)
  - Processed Food and Beverages (7.4% or 15 firms)
  - Automotive and Land Transportation (6.4% or 8 firms)

- By industry classification, the above industries represented more than ninety-seven (97%) of the establishments.
- The top three industries that hired the largest number of skilled and TESDA-certified workers came from the construction (11,320 skilled workers), the electronics (7,914 skilled workers) and the processed food and beverages (6,607 workers) This totalled more than a quarter of a million workers (25,841) out of which one-fourth (or 25%) were TESDA certified skilled workers (Table 3).
- Other industries that hired more than 1,000 skilled workers came from the Agriculture, Hunting and Forestry industry (2,031 workers); Automotive and Land Transportation (1,002 workers); Metals and Engineering (1,473 workers); and Utilities industry (electricity, gas and water - 2,222 workers (Table 3).
- Companies that employed more than 1000 skilled workers required less than half (or 28.09%) of their workforce to be TESDA-certified skilled workers. This represented about a third of a million (32,569 workers) out of which 9,148 workers were certified. (Table 3).
- The proportion of certified skilled workers varied from industry to industry for those that hired 1000 skilled workers. For example, in the Metals and Engineering industry, more than half of the workers were TESDA-certified, while those coming from the Processed Food and Beverage industry had only three percent (3.10%) of their skilled workers possessing TESDA-certified workers) (Table 3.).
- Employer respondents covered a wide range of establishments in terms of size and reported annual gross income:
  - The majority (52.9% or 108 establishments) hired more than 100 employees, mostly hiring 100 to 499 employees (Table 4)
  - Seven (7) employer respondents reported that they hired more than 5,000 workers.
  - Less than half (38.7% )or 27 companies that responded reported an annual gross income of less than 100M but it was noted that 24.5% did not indicate their annual gross income (Table 5)
  - Nine percent (8.8%) of 18 of the companies reported their annual gross income is in the Ph. 1 billion of more bracket.

Table 3. Distribution of Establishments by Industry Classification

Industry Classification of Employer	No. Employers	%	No. of Employed Skilled Workers	No. of Certified Skilled Workers
1. Agriculture, Hunting and Forestry	8	3.9	2,031	597
2. Automotive and Land Transportation	13	6.4	1,002	300
3. Construction	17	8.3	11,320	4,894
4. Decorative Crafts	0	0.0	0	0
5. Electronics	8	3.9	7,914	1,308
6. Financial Intermediation	3	1.5	301	102
7. Fishery	0	0.0	0	0
8. Footwear and Leather Goods	0	0.0	0	0
9. Furniture and Fixtures	1	0.5	170	25
10. Garments	1	0.5	600	300
11. Health and Social Work	4	2.0	45	13
12. Heating, Ventilation, Air-conditioning and Refrigeration	2	1.0	12	11
13. Information and Communication Technology	15	7.4	438	31
14. Maritime	2	1.0	200	100
15. Metals and Engineering	8	3.9	1,473	845
16. Other Community Social and Personal Service Activities	6	2.9	223	54
17. Processed Food & Beverages	15	7.4	6,607	205
18. Public Administration and Defense	2	1.0	48	43
19. Pyrotechnics	0	0.0	0	0
20. Technical Vocational Education Training (TVET)	9	4.4	305	82
21. Tourism (Hotel and Restaurant)	19	9.3	998	236
22. Utilities (electricity, gas and water)	2	1.0	2,222	999
23. Visual Arts	2	1.0	400	3
24. Wholesale and Retail Trading	18	8.8	581	123
25. Others	42	20.6	3,213	575
26. Not Indicated	7	3.4	5	3
<b>Total</b>	<b>204</b>	<b>100.0</b>	<b>40,108</b>	<b>10,849</b>

Table 4. Distribution of Establishments by Number of Employees

Number of Employees	Number of Employers	%
Less than 10	27	13.2
10 to 49	38	18.6
50 to 99	24	11.8
100 to 499	58	28.4
500 to 999	15	7.4
1,000 to 4999	28	13.7
5,001 and More	7	3.4
Not Indicated	7	3.4
<b>Total</b>	<b>204</b>	<b>100.0</b>

Table 5. Distribution of Establishments by Annual Gross Income

Annual Gross Income	Number of Employers	%
Less than Php100M	79	38.7
Php101 - Php300 M	29	14.2
Php301 - Php500 M	14	6.9
Php501 - Php700M	2	1.0
Php701 - 999M	12	5.9
1B and More	18	8.8
Not Applicable	34	16.7
Not Indicated	16	7.8
<b>Total</b>	<b>204</b>	<b>100.0</b>

- Majority (96.6%) of the employers indicated to have hired both skilled and certified skilled workers (Table 6). Moreover, the data revealed that:
  - Companies that employed more than 1000 workers employed the most number of skilled workers (30,674 workers), but less than half (8,961 workers) are TESDA certified
  - Majority (80%) of skilled workers of the 38 employer respondents, with a total workforce ranging 10 to 49, were certified. In particular, of the total 425 indicated number of skilled workers hired, 354 workers were certified.

- Of the 204 employer respondents, 166 employers indicated that less than half of their skilled workers are certified, which ranged from 20% to 40% of the company's total skilled workforce.

Table 6. Distribution of Establishment by Total Number of Workforce, Number of Skilled and Number of Certified Workers

Total Number of Workforce	No of Employers	Percentage Distribution of Employers	No. of Skilled Workers	No. of Certified Skilled Workers
Less than 10	27	13.2	149	56
10 to 49	38	18.6	425	354
50 to 99	24	11.8	580	168
100 to 499	58	28.4	5,418	1,211
500 to 999	15	7.4	2,559	396
1,000 to 4999	28	13.7	16,808	5,082
5,001 and More	7	3.4	13,866	3,879
Not Indicated	7	3.4	4	2
<b>Total</b>	<b>204</b>	<b>100.0</b>	<b>39,809</b>	<b>11,148</b>

#### 4.2 TVET Training Programs Provided by Employers for Skilled Workers

About forty-seven percent (46.6%) of the establishments provided on-the-job TVET training to its employees who were certified skilled workers (Table 7).

This was confirmed by the company representative in Region 11, saying that their company provided an in-house training for skilled workers. The training focused on the technical aspects of the job as well as the output quality requirements of the company so the workers learn what is known as the “*Company A*” Way. It also included work company policies applicable to their jobs/offices as well as work ethics and attitudes, values expected from them.

Another company representative from Region 7 observed that skilled workers, while indeed were observed to be competent, most often they did not know how to use the latest gadgets (particularly electronic and digital gadgets) used in the workplace (particularly pertained to workers in the construction industry). To address this concern, the company included in its regular procedure the training of its newly hired TVET graduates on how to use digital and electronic work devices, tools or other equipment used in the industry relevant to the workers’ expected tasks.



During the FGDs, some employers expressed their observation that TVET graduates were able to achieve the learning goals of the in-house skills training programs (“they learn easily”) vis-a-vis with those who have not undergone formal skills training or have not obtained certification. This is consistent with the survey results showing that employers considered TVET graduate employees highly trainable on the skills needed for the job (Table 15)

All employers in the FGD throughout Luzon, Visayan and Mindanao expressed agreement on the need for training that would emphasize work ethics and attitudes even though in general, they rated their skilled workers “very satisfactory” in work attitude.

Table 7. Distribution of Establishments That Provide TVET- Related Training to Skilled Workers

Response	Frequency	Percent
1. Training was provided	95	46.6
2. No training was provided	44	21.6
3. Not indicated	65	31.9
<b>Total</b>	<b>204</b>	<b>100.0</b>

Employers were more inclined to provide Basic Skills Training Program, Customer Service Training, and Staff Development programs to skilled workers (Table 8). Refer to attachment 13 for the detailed frequencies of in-house training programs for skilled workers by industry classification.

Table 8. Distribution of In-House Training Programs for Skilled Workers by Employers

Trainings	Frequency	Percent
1. Basic Skills Training Program	79	27.34
2. Customer Service Training	46	15.92
3. Staff Development	40	13.84
4. Trainors Training	27	9.34
5. Upgrading Skills training	46	15.92
6. Values training	45	15.57
7. Others	6	2.08
<b>Total</b>	<b>289</b>	<b>100.00</b>

### 4.3 Employer Satisfaction

Table 9 shows the mean ratings for overall satisfaction specified by employers per industry classification. None of the respondents expressed dissatisfaction. Seven (7) of the 21 industries gave “very satisfied” ratings for its skilled employees. (Refer to Attachments 6 – 10 for the detailed frequencies of employer satisfaction ratings.)

Table 9. Employers’ Overall Level of Satisfaction

Industry classification	Mean	Interpretation
1. Agriculture, Hunting and Forestry	4.75	Very Satisfied
2. Automotive and Land Transportation	4.23	Very Satisfied
3. Construction	3.93	Satisfied
4. Electronics	4.13	Satisfied
5. Financial Intermediation	4.50	Very Satisfied
6. Furniture and Fixtures	4.00	Satisfied
7. Garments	4.00	Satisfied
8. Health and Social Work Activities	4.00	Satisfied
9. Heating, Ventilation, Air-conditioning and Refrigeration	4.00	Satisfied
10. Information and Communication Technology	4.44	Very Satisfied
11. Maritime	4.00	Satisfied
12. Metals and Engineering	4.00	Satisfied
13. Other Community Social and Personal Service Activities	4.40	Very Satisfied
14. Processed Food & Beverages	4.03	Satisfied
15. Public Administration and Defense	3.93	Satisfied
16. Technical Vocational Education Training (TVET)	4.00	Satisfied
17. Tourism (Hotel and Restaurant)	4.88	Very Satisfied
18. Utilities (electricity, gas and water)	4.18	Satisfied
19. Visual Arts	4.50	Very Satisfied
20. Wholesale and Retail Trading	3.00	Neither Satisfied nor Dissatisfied
21. Others	4.00	Satisfied
<b>Weighted Average</b>	<b>4.13</b>	<b>Satisfied</b>

**Legend:** 4.21 - 5.00 - Very Satisfied; 3.41 - 4.20 - Satisfied, 2.61 - 3.40 - Neither Satisfied nor Dissatisfied; 1.81 - 2.60 - Dissatisfied; 1.00 - 1.80 - Very Dissatisfied.

Overall, employers were similarly satisfied with performance of skilled workers, whether TESDA certified or not, as reflected by the same general satisfaction rating of “satisfied” for both groups (Table 10). However, it was noted that more employers (10 industry groups) were “very satisfied” with the performance of TESDA certified workers compared to employers of only 5 industry groups that were “very satisfied” with non-certified workers. In these particular companies, it meant that TESDA certified workers were perceived to be better employees in terms of skills and

job performance. Attachments 7 and 8 show the detailed frequencies of employers' ratings for certified and non-TESDA certified workers.

Table 10. Employers' Satisfaction Level between a TESDA-Certified Vs. Non- TESDA-Certified Skilled Worker

Industry classification	TESDA Certified Skilled Workers		Non- TESDA Certified Skilled Workers	
	Mean Ratings	Interpretation	Mean Ratings	Interpretation
1. Agriculture, Hunting and Forestry	4.88	Very Satisfied	3.63	Satisfied
2. Automotive and Land Transportation	4.31	Very Satisfied	3.85	Satisfied
3. Construction	3.60	Satisfied	3.47	Satisfied
4. Electronics	4.25	Very Satisfied	3.87	Satisfied
5. Financial Intermediation	4.00	Satisfied	4.50	Very Satisfied
6. Furniture and Fixtures	4.00	Satisfied	2.00	Dissatisfied
7. Garments	4.00	Satisfied	3.00	Neither Satisfied nor Dissatisfied
8. Health and Social Work Activities	4.50	Very Satisfied	4.00	Satisfied
9. Heating, Ventilation, Air-conditioning and Refrigeration	4.00	Satisfied	4.00	Satisfied
10. Information and Communication Technology	4.22	Very Satisfied	4.11	Satisfied
11. Maritime	5.00	Very Satisfied	4.00	Satisfied
12. Metals and Engineering	3.83	Satisfied	3.33	Neither Satisfied nor Dissatisfied
13. Other Community Social and Personal Service Activities	4.25	Very Satisfied	3.75	Satisfied
14. Processed Food & Beverages	4.09	Satisfied	4.00	Satisfied
15. Public Administration and Defense	4.00	Satisfied	4.50	Very Satisfied
16. Technical Vocational Education Training (TVET)	5.00	Very Satisfied	4.25	Very Satisfied
17. Tourism (Hotel and Restaurant)	4.35	Very Satisfied	4.00	Satisfied
18. Utilities (electricity, gas and water)	4.50	Very Satisfied	4.50	Very Satisfied
19. Visual Arts	3.00	Neither Satisfied nor Dissatisfied	5.00	Very Satisfied
20. Wholesale and Retail Trading	4.07	Satisfied	4.07	Satisfied
21. Others	4.04	Satisfied	3.92	Satisfied
<b>Weighted Average</b>	<b>4.19</b>	<b>Satisfied</b>	<b>3.89</b>	<b>Satisfied</b>

**Legend:** 4.21 - 5.00 - Very Satisfied; 3.41 - 4.20 - Satisfied, 2.61 - 3.40 - Neither Satisfied nor Dissatisfied; 1.81 - 2.60 - Dissatisfied; 1.00 - 1.80 - Very Dissatisfied.

Table 10a. Test Of Significant Difference on Employers' Satisfaction between a TESDA Certified and Non- TESDA Certified Skilled Worker

Type of Skilled Workers	Mean	T-Value	P – Value	Decision	Remarks
TESDA Certified Skilled Workers	4.19	5.167	0.000	Reject Ho	Significant
Non- TESDA Certified Skilled Workers	3.89				

While mean ratings do show satisfaction ratings for both certified and not certified, Table 10a showed that there was significant difference between the employers' level of satisfaction in terms of the work and performance of a TESDA certified skilled workers vis a vis Non- TESDA certified skilled workers. It also implied that employers were more satisfied with or preferred the work and performance of TESDA certified skilled workers compared to Non- TESDA certified workers. This may connote that in the hiring process, TESDA certified skilled workers will be preferred.

As shown in Table 11, employers were “satisfied” with skilled workers whether the skilled worker was from within the province of the workplace or outside the province. This could mean that the quality of workers is not related to the workers' geographical location. Frequencies of responses are detailed on Attachment 9 and 10.

However, during the FGDs, employers put across various views with respect to the hiring process of skilled workers. Some employers based in cities or economically progressive areas were more inclined to hire skilled workers from the outside their city because workers from other provinces or areas were perceived to be more hard working. Employers also recounted that they encountered less work attitude problems. However, hiring workers within the locality could be advantageous to the workers because of logically reduced living costs and transportation expenses.

Table 11. Employers' Satisfaction with workers originating from within the province of the establishment/company vs. workers originating from outside the province

Industry classification	Graduated Locally		Coming from other Province	
	Mean Ratings	Interpretation	Mean Ratings	Interpretation
1. Agriculture, Hunting and Forestry	4.88	Very Satisfied	3.63	Satisfied
2. Automotive and Land Transportation	4.31	Very Satisfied	3.85	Satisfied
3. Construction	3.60	Satisfied	3.47	Satisfied
4. Electronics	4.25	Very Satisfied	3.87	Satisfied
5. Financial Intermediation	4.00	Satisfied	4.50	Very Satisfied
6. Furniture and Fixtures	4.00	Satisfied	2.00	Dissatisfied
7. Garments	4.00	Satisfied	3.00	Neither Satisfied nor Dissatisfied
8. Health and Social Work Activities	4.00	Satisfied	3.67	Satisfied
9. Heating, Ventilation, Air-conditioning and Refrigeration	4.00	Satisfied	4.00	Satisfied
10. Information and Communication Technology	4.22	Very Satisfied	4.11	Satisfied
11. Maritime	5.00	Very Satisfied	4.00	Satisfied
12. Metals and Engineering	3.83	Satisfied	3.33	Neither Satisfied nor Dissatisfied
13. Other Community Social and Personal Service Activities	4.20	Satisfied	3.80	Satisfied
14. Processed Food & Beverages	4.00	Satisfied	3.92	Satisfied
15. Public Administration and Defense	4.00	Satisfied	4.50	Very Satisfied
16. Technical Vocational Education Training (TVET)	5.00	Very Satisfied	4.25	Very Satisfied
17. Tourism (Hotel and Restaurant)	4.35	Very Satisfied	4.00	Satisfied
18. Utilities (electricity, gas and water)	4.50	Very Satisfied	4.50	Very Satisfied
19. Visual Arts	3.00	Neither Satisfied nor Dissatisfied	5.00	Very Satisfied
20. Wholesale and Retail Trading	4.07	Satisfied	4.07	Satisfied
21. Others	4.04	Satisfied	3.93	Satisfied
<b>Weighted Average</b>	<b>4.15</b>	<b>Satisfied</b>	<b>3.88</b>	<b>Satisfied</b>

**Legend:** 4.21 - 5.00 - Very Satisfied; 3.41 - 4.20 - Satisfied, 2.61 - 3.40 - Neither Satisfied nor Dissatisfied; 1.81 - 2.60 - Dissatisfied; 1.00 - 1.80 - Very Dissatisfied.

Table 11a. Test of Significant Difference on Employers' Satisfaction with workers originating from within the Province of the establishment/ company vs. workers originating from outside the province

Type of Skilled Workers	Mean	T-Value	P – Value	Decision	Remarks
Workers within the province of the Establishment	4.15	4.258	0.000	Reject Ho	Significant
Workers outside the province of the Establishment	3.88				

While the mean ratings do not reveal any difference between the performance satisfaction of employers in terms of the address or geographical location of skilled workers, Table 11a shows that employers were statistically significantly more satisfied with workers from within the province of their establishment compared to their workers outside the province of their establishments. This may imply that geographical considerations could be part of the future hiring process and that employers could be more inclined to hire skilled workers within the province of the establishment.

Table 12 shows the comparison of the overall levels of satisfaction employers with TVET graduates employed in their companies for the 2011 ESS Vis a Vis the 2014 ESS. It shows that overall, a higher percentage of employers in 2011 indicated “very satisfied” compared to the data gathered for the 2014 ESS (43.3% in 2011 and 22.1% in 2014). However, in the 2014 ESS, there was an increase in the proportion of employers that indicated “satisfied” - 42.8% in 2011 and 49.5% in 2014.

Table 12: Comparison of 2011 and 2014 Employers' Overall Level of Satisfaction with the Work and Performance of Techvoc-Graduates

Level of Satisfaction	2011 ESS		2014 ESS	
	No. of Employers	%	No. of Employers	%
5 - Very Satisfied	165	43.3	45	22.1
4 - Satisfied	163	42.8	101	49.5
3 - Neither Satisfied nor Dissatisfied	19	5.0	15	7.4
2 - Dissatisfied	1	0.3	0	0.0
1 - Very Dissatisfied	1	0.3	1	0.5
No Response	32	8.4	42	20.6
<b>Total</b>	<b>381</b>	<b>100.0</b>	<b>204</b>	<b>100.0</b>

#### 4.4 TVET Graduates: Characteristics and Competencies

Using the rates 1 to 5 (5 as the highest) employers rated their TVET graduate employees in the aspects of:

- Theoretical and practical knowledge in delivering tasks and responsibilities
- Trainability on the skills needed for the job
- Work attitude such as teamwork, confidence, and self-motivation, etc.

In all these characteristics, employers rated the workers on the job “very satisfactory” (Table 13). Detailed frequencies and mean ratings are presented in Attachment 11a, 11b and 11c. This somehow validates the positive overall satisfaction of employers with their skilled workers. More so, even with some issues encountered with skilled workers, company representatives revealed during discussions that TVET graduates were considered to be:

- “maasahan”
- not hard headed compared to graduates of 4-year courses
- technically skilled
- hardworking

Table 13. Employers' Ratings: Characteristics of TVET Graduate Employees

Characteristics	Excellent		Very Satisfactory		Satisfactory		Poor		Very Poor		Not Indicated		Total Number of Employers	
	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%
<b>a. Theoretical and Practical Knowledge in Delivering Tasks and Responsibilities</b>														
1. Possesses technical skills and knowledge needed for the job	32	15.7	72	35.3	43	21.1	2	1.0	0	0.0	55	27.0	204	100.0
2. Understands and speaks the language in which business is conducted	16	7.8	65	31.9	61	29.9	6	2.9	0	0.0	56	27.5	204	100.0
3. Capable of communicating in speech and writing	12	5.9	53	26.0	69	33.8	15	7.4	0	0.0	55	27.0	204	100.0
4. Observes protocols in reporting using standard operating procedures	19	9.3	69	33.8	54	26.5	6	2.9	0	0.0	56	27.5	204	100.0
5. Has the Ability to solve work related problems	19	9.3	68	33.3	57	27.9	5	2.5	0	0.0	55	27.0	204	100.0
<b>b. Trainability on the Skills Needed for the Job</b>														
6. Listens attentively to instructions and follows orders as instructed	28	13.7	69	33.8	50	24.5	1	.5	0	0.0	56	27.5	204	100.0
7. Has the ability to learn new skills and knowledge on the job	30	14.7	80	39.2	38	18.6	1	.5	0	0.0	55	27.0	204	100.0
8. Obtains and conveys workplace information	27	13.2	63	30.9	55	27.0	2	1.0	0	0.0	57	27.9	204	100.0
9. Adapts to the existing technology relevant to the enterprise	28	13.7	76	37.3	41	20.1	4	2.0	0	0.0	55	27.0	204	100.0
10. Is enthusiastic in learning skills or the latest advancement/s related to the job	30	14.7	71	34.8	45	22.1	3	1.5	0	0.0	55	27.0	204	100.0
<b>c. Work attitude such as team work, confidence, self-motivation, etc.</b>														
11. Works well in a group to achieve a goal	25	12.3	84	41.2	40	19.6	0	0.0	0	0.0	55	27.0	204	100.0
12. Produces outputs on time while working with little supervision	18	8.8	81	39.7	49	24.0	1	.5	0	0.0	55	27.0	204	100.0
13. Easily adopts to work environment	23	11.3	80	39.5	46	22.5	0	0.0	0	0.0	55	27.0	204	100.0
14. Has the ability to handle stress and pressures on the job	22	10.8	69	33.8	53	26.0	5	2.5	0	0.0	55	27.0	204	100.0
15. Accepts other jobs other than specified on the job description	23	11.3	65	31.9	55	27.0	6	2.9	0	0.0	55	27.0	204	100.0



It was also noted that employer rating for “Capable of communicating in speech and writing” was “satisfactory”. However, employers unanimously voiced out during the FGDs and KIIs that the more common weakness observed among TVET graduates was communication skills. It was not clear whether communication skills referred to English proficiency or being able to express themselves in any language or situation in relation to the workplace. Provincial Directors and Trainors however hinted this question– “should communication skills be attributed to TVET training?” Further validation would be needed to look into communication skills of TVET graduates because for some local industries such as hotels and tourism, employers considered communication skills a significant competency gap that has indirect impact on the workers’ and companies’ level of service quality and consequently on business. For industries abroad with high demand for Filipino TVET graduates (i.e. construction, Information Technology, Automotive, electronics, etc.) communication skills is a crucial competency not just for the job but on their survival abroad.

The survey also attempted to determine whether TVET graduates possess the 21<sup>st</sup> century skills by letting employers rate their workers’ competencies (1 to 5; 5 being the highest or excellent), results of which are in Table 14 (see attachment 13 for the detailed frequencies by industry classification). To get a picture of possible competency gaps, employers also indicated the desired level of competence required by their company or industry. Realizing the impact of innovations and development in the industry sector, employers also sized up the level of importance of a skill to the worker’s job for the coming 3 to 5 years (Table 15).

In all indicated 21<sup>st</sup> century skills, employers believed that their workers are from average to above average. With the desired level of skills rated “above average”, this implied that the current level of skills of TVET graduates is at par with the employers’ desired level. This contributed to the expressed general satisfaction of employers on the performance of skilled workers. But how relevant or important will these skills be, 3 to 5 years from now? Employers believed that these skills will still be functional, relevant or important.

Table 14. Employers' Ratings: Gaps in the Perceived and Desired Level of Competencies of TVET Graduates on the job

Competencies	Perceived Current Level of Competence		Desired Level of Competence	
	Mean Ratings	Interpretations	Mean Ratings	Interpretations
1. Creativity and Innovation	3.41	Above Average	3.92	Above Average
2. Critical Thinking and Problem Solving	3.36	Average	3.90	Above Average
3. Oral Communication Skills	3.23	Average	3.70	Above Average
4. Written Communication Skills	3.09	Average	3.70	Above Average
5. Leadership and Responsibility	3.28	Average	3.85	Above Average
6. Flexibility and Adaptability	3.57	Above Average	3.94	Above Average
7. Initiative and Self-Direction	3.45	Above Average	3.95	Above Average
8. Social and Cross Cultural Skills	3.47	Above Average	3.77	Above Average
9. Productivity and Accountability	3.50	Above Average	3.97	Above Average
10. Information Literacy	3.33	Average	3.75	Above Average
11. Media Literacy	3.20	Average	3.61	Above Average
12. ICT Literacy	3.23	Average	3.72	Above Average
13. Ability to handle tools, machines and equipment	3.68	Above Average	4.05	Above Average
14. Business Intelligence	3.20	Average	3.69	Above Average
15. Technical Skills	3.76	Above Average	4.06	Above Average
<b>Weighted Average</b>	<b>3.38</b>	<b>Average</b>	<b>3.84</b>	<b>Above Average</b>

**Legend:** 4.21 - 5.00 - Excellent; 3.41 - 4.20 - Above Average, 2.61 - 3.40 - Average; 1.81 - 2.60 - Below Average; 1.00 - 1.80 - Well Below Average.

Table 14a. Test of Significant Difference between Employers' Perceived and Desired Level of Competencies of TVET Graduates

Competencies	T-Value	P – Value	Decision	Remarks
1. Creativity and Innovation	7.248	0.000	Reject Ho	Significant
2. Critical Thinking and Problem Solving	7.794	0.000	Reject Ho	Significant
3. Oral Communication Skills	7.151	0.00	Reject Ho	Significant
4. Written Communication Skills	7.868	0.000	Reject Ho	Significant
5. Leadership and Responsibility	8.279	0.000	Reject Ho	Significant
6. Flexibility and Adaptability	5.439	0.000	Reject Ho	Significant
7. Initiative and Self-Direction	7.289	0.000	Reject Ho	Significant
8. Social and Cross Cultural Skills	4.333	0.000	Reject Ho	Significant
9. Productivity and Accountability	5.932	0.000	Reject Ho	Significant
10. Information Literacy	5.261	0.000	Reject Ho	Significant
11. Media Literacy	5.784	0.000	Reject Ho	Significant
12. ICT Literacy	6.029	0.000	Reject Ho	Significant
13. Ability to handle tools, machines and equipment	6.143	0.000	Reject Ho	Significant
14. Business Intelligence	6.348	0.000	Reject Ho	Significant
15. Technical Skills	5.207	0.000	Reject Ho	Significant

Table 14a shows that there is a competency gap between the current level competency of the TVET graduates and the desired competency of the establishment across all competencies since the computed probability value across all competencies are less than 0.05.

Table 15. Employers' Ratings: Level of Importance of the Skills to the Job 3 to 5 Years from now

Competencies	Mean Ratings	Interpretations
1. Creativity and Innovation	4.41	Very Important
2. Critical Thinking and Problem Solving	4.43	Very Important
3. Oral Communication Skills	4.36	Very Important
4. Written Communication Skills	4.28	Very Important
5. Leadership and Responsibility	4.43	Very Important
6. Flexibility and Adaptability	4.47	Very Important
7. Initiative and Self-Direction	4.47	Very Important
8. Social and Cross Cultural Skills	4.32	Very Important
9. Productivity and Accountability	4.49	Very Important
10. Information Literacy	4.27	Very Important
11. Media Literacy	4.19	Important
12. ICT Literacy	4.23	Very Important
13. Ability to handle tools, machines and equipment	4.52	Very Important
14. Business Intelligence	4.27	Very Important
15. Technical Skills	4.51	Very Important
<b>Weighted Mean</b>	<b>4.38</b>	<b>Very Important</b>

**Legend:** 4.21 - 5.00 - Very Important; 3.41 - 4.20 - Important, 2.61 - 3.40 - Neither Important nor Unimportant; 1.81 - 2.60 - Less Important; 1.00 - 1.80 - Least Important.

#### 4.5 Employers' Acceptance of the Assessment and Certification Program of TESDA

Based on data summarized in Table 16, more employers' provided incentives to TESDA Certified workers than those who did not. This connoted that employers' valued TESDA certified workers as an asset to the company. As such, they provided incentives to TESDA certified employees to motivate them to remain in the company.

Company representatives during the FGDs and KII however explained that there was no particular policy that directly indicated incentives for TESDA certified workers. Incentives have been based on the performance or output of the skilled worker. However, they agreed that TESDA certified workers may have had an edge over those who are not certified.

It was further noted that in the hiring process, some companies considered TESDA Certified as more qualified (noting that if there is a point system, TESDA certified applicants had more points) and had an edge over other non-TESDA Certified applicants. For some companies, the minimum requirement in hiring skilled workers was NCII TESDA certification.

On the other hand, for some employers TESDA certification had no bearing on the hiring process. Initially, applicants were chosen based on their performance on written and skills examinations/tests. With this company practice, it implied that even at the hiring stage no incentive was accorded to TESDA certified applicants. In their experience, graduates of 4-year courses, although not TESDA certified, sometimes performed better in both the written and skills tests and thus, had an edge over applicants who were TVET graduates and TESDA certified. However, TESDA certified applicants performed well in the skills tests compared to non-certified TVET graduates.

Table 16. Number of Employers' that provide Incentives to TESDA-Certified Workers

<b>Provides Incentives to TESDA Certified Workers</b>	<b>Number of Employers</b>	<b>%</b>
1. Yes	81	39.7
2. No	67	32.8
3. Not indicated	56	27.5
<b>Total</b>	<b>204</b>	<b>100.0</b>

For companies that provided incentives to skilled workers, salary increase, promotion, and job security were among the usual incentives given (Table 16a). Salary increase seemed to be the more common form of incentive. Promotion is another form of incentive and this would usually also lead to increase in salary. Only employers belonging to the three (3) industry sectors indicated that they did not provide incentives to TESDA Certified skilled employees (Table 17):

- Furniture's and fixtures
- Utilities (electricity, gas, and water)
- Visual Arts

Table 16a. Forms of Incentives given to TESDA-Certified Skilled Workers

Form of Incentive	Number of Employers	%
1. Allowance	1	1.23
2. Bonus	2	2.47
3. Cash Incentive	5	6.17
4. Food and Gift Check	1	1.23
5. Free Meals/ Freebies	1	1.23
6. Honorarium	1	1.23
7. Job Security	9	11.11
8. Job Security and Providing premium to salary	1	1.23
9. Job Security, Rewards and Recognition	1	1.23
10. Promotion	7	8.64
11. Promotion and Allowance	1	1.23
12. Promotion and Job Security	4	4.94
13. Salary Increase	16	19.75
14. Salary Increase and Loyalty Awards	1	1.23
15. Salary Increase and Job Security	6	7.41
16. Salary Increase and Promotion	5	6.17
17. Salary Increase, Promotion and Job Security	13	16.05
18. Salary Increase, Promotion, Bonus and Gifts	1	1.23
19. Salary Increase, Promotion, Job Security and Bonus	2	2.47
20. Salary Increase, Promotion, Job Security and Cash Incentive	2	2.47
21. Training	1	1.23
<b>Total</b>	<b>81</b>	<b>100.00</b>

Table 16b. Number of Employers that provide Incentives to TESDA-Certified Workers by Industry Classification

Industry classification		8. Do you provide incentives to techvoc graduates or skilled workers with TESDA certification?			Total
		Yes	No	Response	
1. Agriculture, Hunting and Forestry	Frequency	6	1	1	8
	Percent	75.0	12.5	12.5	100.0
2. Automotive and Land Transportation	Frequency	5	5	3	13
	Percent	38.5	38.5	23.1	100.0
3. Construction	Frequency	8	6	3	17
	Percent	47.1	35.3	17.6	100.0
4. Electronics	Frequency	4	4	0	8
	Percent	50.0	50.0	.0	100.0
5. Financial Intermediation	Frequency	2	0	1	3
	Percent	66.7	.0	33.3	100.0
6. Furniture and Fixtures	Frequency	0	1	0	1
	Percent	.0	100.0	.0	100.0
7. Garments	Frequency	1	0	0	1
	Percent	100.0	.0	.0	100.0
8. Health and Social Work Activities	Frequency	1	2	1	4
	Percent	25.0	50.0	25.0	100.0
9. Heating, Ventilation, Air-conditioning and Refrigeration	Frequency	1	1	0	2
	Percent	50.0	50.0	.0	100.0
10. Information and Communication Technology	Frequency	4	4	7	15
	Percent	26.7	26.7	46.7	100.0
11. Maritime	Frequency	1	0	1	2
	Percent	50.0	.0	50.0	100.0
12. Metals and Engineering	Frequency	3	3	2	8
	Percent	37.5	37.5	25.0	100.0
13. Other Community Social and Personal Service Activities	Frequency	2	3	1	6
	Percent	33.3	50.0	16.7	100.0
14. Processed Food & Beverages	Frequency	5	8	2	15
	Percent	33.3	53.3	13.3	100.0
15. Public Administration and Defense	Frequency	1	0	1	2
	Percent	50.0	.0	50.0	100.0

Table 16b. Number of Employers that provide Incentives to TESDA-Certified Workers by Industry Classification (Cont.)

Industry classification		8. Do you provide incentives to techvoc graduates or skilled workers with TESDA certification?			Total
		Yes	No	Response	
16. Technical Vocational Education Training (TVET)	Frequency	8	0	1	9
	Percent	88.9	.0	11.1	100.0
17. Tourism (Hotel and Restaurant)	Frequency	8	9	2	19
	Percent	42.1	47.4	10.5	100.0
18. Utilities (electricity, gas and water)	Frequency	0	1	1	2
	Percent	.0	50.0	50.0	100.0
19. Visual Arts	Frequency	0	1	1	2
	Percent	.0	50.0	50.0	100.0
20. Wholesale and Retail Trading	Frequency	9	6	3	18
	Percent	50.0	33.3	16.7	100.0
21. Others	Frequency	11	12	18	41
	Percent	26.8	29.3	43.9	100.0
22. No Response	Frequency	1	0	6	7
	Percent	14.3	.0	85.7	100.0
<b>Total</b>	<b>Frequency</b>	<b>81</b>	<b>67</b>	<b>55</b>	<b>203</b>
	<b>Percent</b>	<b>39.9</b>	<b>33.0</b>	<b>27.1</b>	<b>100.0</b>

Providing incentives to TESDA certified workers whether at the hiring stage or on the job is indicative of employers' belief and acceptance of the certification process and the value of the certification. Based on data shown in Tables 16 to 18, it can be said that employers accept the assessment and certification program of TESDA.

Although this study showed that employers were similarly satisfied with both non-TESDA certified and TESDA certified workers, it also showed that there is still a demand and/or preference for TESDA certified workers for various occupations with at least COC Certificates. Similarly, employers expressed preference for technical vocational graduates with certification over college graduates or college graduates with TESDA certification for occupations requiring skilled workers.

Employers' perception of TESDA reflected their belief and acceptance of the role of TESDA in developing skilled manpower for various industries through its assessment and certification policies and processes. When asked what comes to their mind when they hear about TESDA trained or certified – the top 5 responses were: skilled, hardworking, competent, technical, and trained. Attachment 15 shows the



complete list of adjectives. Employers also indicated that they believe that TESDA had been providing an adequate supply of graduates for the industries and who are equipped with appropriate skills for the job they had been trained for. Moreover, employers affirmed that TESDA had been providing assistance to the industries and workers in the form of training, scholarships and in upgrading the skills of workers on the job.

Table 16c. Forms of Incentives given to TESDA Certified-Skilled Workers by Industry Classification

Industry Classification	Salary Increase	Promotion	Job Security	Allowance
1. Agriculture, Hunting and Forestry	1	1	1	
2. Automotive and Land Transportation				
3. Construction	6		1	
4. Electronics			1	
5. Financial Intermediation				
6. Furniture and Fixtures				
7. Garments				
8. Health and Social Work Activities				
9. Heating, Ventilation, Air-conditioning and Refrigeration	1			
10. Human Health and Social Work Activities				
11. Information and Communication Technology	1			
12. Maritime			1	
13. Metals and Engineering				
14. Other Community Social and Personal Service Activities				
15. Processed Food & Beverages		2	1	
16. Public Administration and Defense				
17. Technical Vocational Education Training (TVET)			1	
18. Tourism (Hotel and Restaurant)	2	1	1	
19. Utilities (electricity, gas and water)				
20. Visual Arts				
21. Wholesale and Retail Trading	4			1
22. Others	1	3	2	
<b>Total</b>	<b>16</b>	<b>7</b>	<b>9</b>	<b>1</b>

Table 16c. Forms of Incentives given to TESDA Certified-Skilled Workers by Industry Classification (Cont.)

Industry Classification	Bonus	Cash Incentive	Food and Gift Check	Free Meals/ Freebies
1. Agriculture, Hunting and Forestry				
2. Automotive and Land Transportation		2		
3. Construction				
4. Electronics	1			
5. Financial Intermediation		1		
6. Furniture and Fixtures				
7. Garments		1		
8. Health and Social Work Activities				
9. Heating, Ventilation, Air-conditioning and Refrigeration				
10. Human Health and Social Work Activities				
11. Information and Communication Technology	1	1		
12. Maritime				
13. Metals and Engineering				
14. Other Community Social and Personal Service Activities				
15. Processed Food & Beverages				
16. Public Administration and Defense				
17. Technical Vocational Education Training (TVET)				
18. Tourism (Hotel and Restaurant)			1	1
19. Utilities (electricity, gas and water)				
20. Visual Arts				
21. Wholesale and Retail Trading				
22. Others				
<b>Total</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>1</b>

Table 16c. Forms of Incentives given to TESDA Certified-Skilled Workers by Industry Classification (Cont.)

Industry Classification	Honorarium	Job Security and Premium Salary	Job Security, Rewards and Recognition	Promotion and Allowance
1. Agriculture, Hunting and Forestry				
2. Automotive and Land Transportation				
3. Construction				
4. Electronics				
5. Financial Intermediation				
6. Furniture and Fixtures				
7. Garments				
8. Health and Social Work Activities				
9. Heating, Ventilation, Air-conditioning and Refrigeration				
10. Human Health and Social Work Activities				
11. Information and Communication Technology	1			
12. Maritime				
13. Metals and Engineering				
14. Other Community Social and Personal Service Activities				
15. Processed Food & Beverages				
16. Public Administration and Defense				
17. Technical Vocational Education Training (TVET)				
18. Tourism (Hotel and Restaurant)				
19. Utilities (electricity, gas and water)				
20. Visual Arts				
21. Wholesale and Retail Trading				
22. Others		1	1	1
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

Table 16c. Forms of Incentives given to TESDA Certified-Skilled Workers by Industry Classification (Cont.)

Industry Classification	Promotion and Job Security	Salary Increase and Loyalty Awards	Salary Increase and Job Security	Salary Increase and Promotion
1. Agriculture, Hunting and Forestry	2			
2. Automotive and Land Transportation				
3. Construction				
4. Electronics				
5. Financial Intermediation			1	
6. Furniture and Fixtures				
7. Garments				
8. Health and Social Work Activities				
9. Heating, Ventilation, Air-conditioning and Refrigeration				
10. Human Health and Social Work Activities				
11. Information and Communication Technology				
12. Maritime				
13. Metals and Engineering			2	
14. Other Community Social and Personal Service Activities			1	1
15. Processed Food & Beverages				1
16. Public Administration and Defense		1		
17. Technical Vocational Education Training (TVET)	2		2	
18. Tourism (Hotel and Restaurant)				
19. Utilities (electricity, gas and water)				
20. Visual Arts				
21. Wholesale and Retail Trading				1
22. Others				2
<b>Total</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>5</b>

Table 16c. Forms of Incentives given to TESDA Certified-Skilled Workers by Industry Classification (Cont.)

Industry Classification	Salary Increase, Promotion and Job Security	Salary Increase, Promotion, Bonus and Gifts	Salary Increase, Promotion, Job Security and Bonus
1. Agriculture, Hunting and Forestry			
2. Automotive and Land Transportation	2		
3. Construction	1		
4. Electronics	1		1
5. Financial Intermediation			
6. Furniture and Fixtures			
7. Garments			
8. Health and Social Work Activities	1		
9. Heating, Ventilation, Air-conditioning and Refrigeration			
10. Human Health and Social Work Activities			
11. Information and Communication Technology			
12. Maritime			
13. Metals and Engineering	1		
14. Other Community Social and Personal Service Activities			
15. Processed Food & Beverages	1		
16. Public Administration and Defense			
17. Technical Vocational Education Training (TVET)	3		
18. Tourism (Hotel and Restaurant)		1	
19. Utilities (electricity, gas and water)			
20. Visual Arts			
21. Wholesale and Retail Trading	3		
22. Others			1
<b>Total</b>	<b>13</b>	<b>1</b>	<b>2</b>

Table 16c. Forms of Incentives given to TESDA Certified-Skilled Workers by Industry Classification (Cont.)

Industry Classification	Salary Increase, Promotion, Job Security and Cash Incentive	Training	Grand Total
1. Agriculture, Hunting and Forestry	1		6
2. Automotive and Land Transportation	1		5
3. Construction			8
4. Electronics			4
5. Financial Intermediation			2
6. Furniture and Fixtures			0
7. Garments			1
8. Health and Social Work Activities			1
9. Heating, Ventilation, Air-conditioning and Refrigeration			1
10. Human Health and Social Work Activities			0
11. Information and Communication Technology			4
12. Maritime			1
13. Metals and Engineering			3
14. Other Community Social and Personal Service Activities			2
15. Processed Food & Beverages			5
16. Public Administration and Defense			1
17. Technical Vocational Education Training (TVET)			8
18. Tourism (Hotel and Restaurant)		1	8
19. Utilities (electricity, gas and water)			0
20. Visual Arts			0
21. Wholesale and Retail Trading			9
22. Others			12
<b>Total</b>	<b>2</b>	<b>1</b>	<b>81</b>

## 4.6 Future Demand for TVET Graduates

According to employers, there will still be a demand for TVET graduates in the future. They listed down their needs for 2016 (Table 19). For this particular set of employers, the highest demand will be for production/manufacturing skilled workers (i.e. technicians, operators, factory workers, etc.), welders, pipe fitters, cookery skilled workers, and electricians. Most employers source and hire TVET graduates from TESDA Schools, Don Bosco Technical Institute, STI, and AMA Computer Learning Center. See attachment 16 for the top 29 schools.

Skilled workers in areas of Production topped the list of projected workers in demand for 2016 (Table 17). This was possibly driven by the perceived uptrend of construction activities nationwide. It should be strongly noted that the need for IT workers for 2016 is the least, possibly implying that there is already enough supply or too many IT workers. These observations must be seriously considered in TVET plans as well as scholarship offerings.

Table 17: Workers in Demand in 2015 by Occupation

Occupations		Workers Needed
1.	Production(Technician, Operator, Helper, Worker)	980
2.	Welder	746
3.	Pipe Fitter	405
4.	Cookery	334
5.	Electrician	316
6.	Driver	232
7.	Massage Therapist	223
8.	Heavy Equipment Operator	205
9.	Tile setter	205
10.	Scaffolders	200
11.	Bartender	159
12.	Service Crew	153
13.	Sewing(Machine Operator and Mechanic)	120
14.	Technician	116
15.	Housekeeping Personnel	105
16.	Beautician	101
17.	Machine Operator	101
18.	Animator	100
19.	Junior Technician	100
20.	Carpentry	90
21.	Teachers with TM Holder Certificates	87
22.	Automotive (Electrician, Mechanic and Technician)	68
23.	Teachers/Trainors/Instructors	68

Table 17: Workers in Demand in 2015 by Occupation (Cont.)

Occupations		Workers Needed
24.	Front Officer	60
25.	Sales Associates and Executive	55
26.	Forklift Operator	53
27.	Dining Staff	52
28.	Encoder	51
29.	Design Technician	50
30.	Host/Hostesses	50
31.	Pipe Welders	50
32.	Sushi Maker	50
33.	Operators	50
34.	Rigger	45
35.	Refrigerator and Aircon Technician	44
36.	Computer(Engineers, System Servicing and Technician)	42
37.	Cashier and Saleslady	37
38.	Lineman	34
39.	Receptionist and Office Staff	31
40.	Accounting Assistant	29
41.	Assembly Technician	29
42.	Web Developers	28
43.	Engineers	22
44.	Customer Service Associates	20
45.	Farm Aides	20
46.	Food Processes	20
47.	Process(Technician and Engineers)	20
48.	Restaurant Manager	20
49.	Testers	20
50.	Tractor head drivers	20
51.	CNC(Machine Operator, Milling and Programming)	18
52.	Mechanical (Technician and Engineer)	18
53.	Painter	17
54.	Sander	17
55.	HVAC	15
56.	Motorcycle Mechanic	15
57.	Veneer Operator	15
58.	Maintenance( Leadman and Technician)	12
59.	Boiler Maker	10
60.	Foundry Worker	10
61.	Japanese Bilingual-Account Manager	10
62.	Job Controller	10
63.	63. Kitchen Helper	10
64.	Masonry	10



Table 17: Workers in Demand in 2015 by Occupation (Cont.)

Occupations		Workers Needed
65.	Motorcycle Spare Parts Custodian	10
66.	Roving Technician	10
67.	Travel and Tours	10
68.	Technical (Marketing Support and Analyst)	10
69.	Forming Operator	8
70.	Baker	6
71.	Graphic Designers	6
72.	Analyst	5
73.	Confectioner	5
74.	Building Electrician	4
75.	Laborer	4
76.	Project manager	4
77.	Die cut operator	4
78.	Offset Operator	4
79.	Electro mechanics	3
80.	Hydrogen Sulfide Response Technicians	3
81.	Industrial Technician	3
82.	Machine Assembler	3
83.	Material Handler	3
84.	Plumbing	3
85.	Sterilizer Assist	3
86.	Acquaculturist	2
87.	Agriculturist	2
88.	Blade Sharpeners	2
89.	Customer Brokers	2
90.	Event Organizer	2
91.	Field Specialist	2
92.	Garments	2
93.	Generator Set Technician	2
94.	Lathe Machine Operator	2
95.	Messenger	2
96.	QC Engineer and staff	2
97.	Draftsman	1
98.	Facilities Technician	1
99.	IT staff	1
<b>Total Workers Needed</b>		<b>6,539</b>

Table 18. Employers' Preferred Educational Attainment for Techvoc Workers

Response	Frequency
1. College Graduate	55
2. College Graduate with TESDA Certification	81
3. College Undergraduate	36
4. Technical Vocational Graduate with Certification	107
5. Technical Vocational Graduate without Certification	21
6. Technical Vocational Undergraduate	15
7. High School Graduate	10
8. High School Undergraduate	3

Table 18 reveals that employers preferred TechVoc graduates with TESDA certification over college graduates with certification as skilled workers. Workers with TESDA certification prevailed to be the preferred qualification over non-certified workers. This implied that there is a continuing, if not increasing, demand for TESDA certified workers and the TechVoc programs will still continue to be relevant in developing skilled workers to be required by industries. (Refer to attachment 14 for the detailed frequencies of employers preferred educational attainment by industry classification).

Table 19. Certification Levels Required by Employers per Occupational Group

Occupation	National Level of Certificates					Total
	COC	NC IV	NC III	NC II	NC I	
1. Accounting (Staff and Supervisor)	3	1	2	2	1	9
2. Administrative staff	6	5	5	5	6	27
3. Agriculture Crop production	0	0	0	0	1	1
4. Animal Production	0	0	1	0	0	1
5. Animation	1	0	0	1	0	2
6. Aquaculture	0	0	1	0	0	1
7. Architect	1	0	0	0	0	1
8. Area(Manager and Supervisor)	0	2	0	0	0	2
9. Assembly Technician	1	0	0	0	0	1
10. Assessor	1	1	1	1	0	4

Table 19 indicates that there will be a need for workers in various occupations who are TESDA certified from NCI to COC. However, majority of the need would be for COC certification. This feedback will have impact on TESDA's policy response in terms of scholarship programs and priority areas in 2015 upwards. Occupations that require the NCII level TESDA certification in their establishments were identified as: Computer technician, housekeeping attendant, electrician, cook, welder, automotive servicing mechanic, driver, food and beverage service worker, plumber, data encoder, RAC technician, heavy equipment operator.

Table 19. Certification Levels Required by Employers per Occupational Group (Cont.)

Occupation	National Level of Certificates					Total
	COC	NC IV	NC III	NC II	NC I	
11. Assistant	0	1	1	1	0	3
12. Assistant Store Manager	0	0	1	0	1	2
13. Assistant Welder	0	0	0	0	1	1
14. Audit (supervisor and staff)	1	1	1	1	1	5
15. AUTOCAD Operator	2	1	2	1	1	7
16. Automotive(Technician, Mechanic and Servicing)	4	3	3	6	3	19
17. Barista	0	1	1	2	1	5
18. Bartender	2	0	1	6	2	11
19. Beauty Care	2	1	1	1	1	6
20. Blade Sharpeners	1	0	0	0	0	1
21. Boiler Maker	2	2	0	1	1	6
22. Bookkeeper	0	1	2	2	0	5
23. Boom Truck Operator	1	0	0	0	0	1
24. BP Technician	0	0	0	1	0	1
25. Bread & Pastry Production	1	0	2	1	1	5
26. Building Electrician	2	1	1	0	0	4
27. Call Center Agent	1	0	0	0	0	1
28. Care Giving Instructors	0	0	0	1	0	1
29. Carpentry	2	1	2	2	1	8
30. Cashier	4	1	2	2	0	9
31. CHS NC II	0	0	0	1	0	1
32. Clerk	0	0	0	0	1	1
33. CNC Lathe Machine Operator	5	3	3	3	3	17
34. Computer Engineering	0	1	1	0	0	2
35. Computer Hardware Servicing	3	3	0	3	0	9
36. Computer programming	0	0	1	0	0	1
37. Computer system servicing	0	0	0	1	0	1
38. Computer Technician	3	3	3	3	3	15
39. Confectioner	0	0	0	0	1	1
40. Cook	11	3	7	9	5	35
41. Decorator	1	0	0	0	0	1
42. Designer	1	1	1	1	1	5
43. Die Cut Operator	1	2	0	1	0	4

Table 19. Certification Levels Required by Employers per Occupational Group (Cont.)

Occupation	National Level of Certificates					Total
	COC	NC IV	NC III	NC II	NC I	
44. Dining Attendant	0	0	0	1	1	2
45. Dining Manager	0	1	0	0	0	1
46. Dining Supervisor	0	0	1	0	0	1
47. Draftsman	1	1	1	1	1	5
48. Driver	5	4	5	8	4	26
49. Electrical Installation & Maintenance	1	1	0	2	0	4
50. Electrician	13	9	8	18	9	57
51. Encoder	4	2	1	3	1	11
52. Engineer	3	1	1	0	0	5
53. Equipment Technician	1	1	1	1	0	4
54. Event Organizer	0	0	1	0	0	1
55. Excavator Operator	1	0	0	0	0	1
56. Fabricator	0	0	0	1	0	1
57. Facilities Technician	1	1	1	1	0	4
58. Faculty	2	1	1	1	1	6
59. Faculty Assistant	0	1	1	1	1	4
60. Farm Aide	0	0	0	1	1	2
61. Farm Secretary	0	0	1	0	0	1
62. Farm Supervisor	0	1	0	0	0	1
63. FBS Trainer	0	0	0	1	0	1
64. Field workers	0	0	0	0	1	1
65. Fish/food Processing	0	0	1	0	0	1
66. Food and Beverage Manager	0	1	0	0	0	1
67. Food and Beverage Services	0	0	0	2	0	2
68. Foreman	0	3	4	4	0	11
69. Forklift Operator	4	1	2	2	2	11
70. Forming operator	0	1	0	0	0	1
71. Garments	0	0	0	1	0	1
72. General Machinist	1	1	1	1	1	5
73. General Manager	0	1	0	0	0	1
74. GJ Technician	0	0	0	1	0	1
75. Gluing helper	0	0	1	0	0	1
76. Gluing Operator	1	0	0	0	0	1
77. Graphic Artist	0	0	0	0	1	1
78. GTAW welder	0	1	1	1	1	4
79. Guest Relation Agent	0	0	0	1	0	1
80. Hydrogen Sulfide Response Technicians	0	0	0	1	0	1

Table 19. Certification Levels Required by Employers per Occupational Group (Cont.)

Occupation	National Level of Certificates					Total
	COC	NC IV	NC III	NC II	NC I	
81. Head chef	0	1	1	1	1	4
82. Heavy Equipment Operator	2	1	1	2	2	8
83. Helper	1	1	1	1	2	6
84. Horticulture	0	0	1	0	0	1
85. Host/ Hostess	1	0	0	1	1	3
86. Hot Press Operator	1	0	0	0	0	1
87. Housekeeping	2	1	1	5	0	9
88. HR (manager, staff and Trainor)	1	0	0	2	0	3
89. HVAC	0	0	0	1	0	1
90. ICT	1	0	1	1	0	3
91. Industrial Technician	1	0	0	0	0	1
92. Ink mixer	0	0	1	0	0	1
93. Inspector	0	0	0	0	1	1
94. Inventory assistant	1	1	1	1	1	5
95. IT (Staff and Trainor)	1	3	1	2	1	8
96. Job controller	1	1	1	1	0	4
97. Junior Mechanic	1	0	0	0	1	2
98. Kitchen helper	2	1	0	1	1	5
99. Kitchen manager	1	1	1	0	0	3
100. Lay out Artist and Visual Artist	1	0	0	0	0	1
101. Lineman	0	0	0	1	0	1
102. Machine engineer	0	0	1	0	0	1
103. Machine Operator	9	4	3	3	6	25
104. Machinist	0	1	1	3	2	7
105. Maintenance Technician	2	4	1	0	0	7
106. Marketing	1	0	0	0	0	1
107. Masonry	2	1	1	1	1	6
108. Massage Therapist	1	0	0	1	1	3
109. Master Technician	0	1	2	2	0	5
110. Mechanic	9	3	3	4	3	22
111. Mechanical Technician/Millwright	0	2	1	1	0	4
112. Motorcycle Spare Parts Custodian	1	0	0	0	0	1
113. Offset operator	1	0	0	0	0	1
114. Packer	1	1	1	1	1	5
115. Pharmacist	0	1	0	0	0	1
116. Pipe Welder	0	1	1	1	0	3
117. Pipefitting	2	3	2	2	1	10

Table 19. Certification Levels Required by Employers per Occupational Group (Cont.)

Occupation	National Level of Certificates					Total
	COC	NC IV	NC III	NC II	NC I	
118. Plate maker	0	0	0	0	1	1
119. Plotter operator	0	0	0	0	1	1
120. Plumbing	1	0	0	3	0	4
121. Post Press operator	1	0	0	0	0	1
122. Printing helper	0	0	1	0	0	1
123. Printing operator	1	0	0	0	0	1
124. Process Technician	1	2	1	1	1	6
125. Production operator	2	1	0	0	1	4
126. Production Supervisor	0	1	0	0	0	1
127. Production Team Leader	0	0	1	0	0	1
128. Programmer	3	2	2	2	1	10
129. Project Manager	0	1	0	0	0	1
130. Purchaser	1	0	2	0	0	3
131. Quality Control Officer	1	1	1	1	1	5
132. Receptionist	1	2	0	1	1	5
133. Ref and Aircon Technician	5	2	1	2	2	12
134. Restaurant (Manager/Supervisor)	2	0	1	2	1	6
135. Retail Operation	1	0	0	0	0	1
136. Rigger	1	0	0	1	0	2
137. Room Attendant	0	0	0	1	0	1
138. Rule bender operator	0	0	0	0	1	1
139. Safety Officer	1	0	0	0	0	1
140. Sales (Analyst, Representative, Coordinator)	2	3	1	2	2	10
141. Scaffolders	1	0	0	1	0	2
142. Secretary	2	2	3	1	2	10
143. Service Crew	5	1	1	7	3	17
144. Sewing Machine Operator	1	1	0	2	1	5
145. Shop Keeper	0	0	0	0	1	1
146. SMAW welder	1	2	1	3	2	9
147. Soldering	1	0	0	0	0	1
148. Sorter	0	0	1	0	0	1
149. Stamping operator	0	1	0	0	0	1
150. Supervisor	0	1	1	1	0	3
151. Sushi maker	1	1	2	2	3	9
152. Teacher (Tech-Voc Courses)	1	1	1	2	1	6

Table 19. Certification Levels Required by Employers per Occupational Group (Cont.)

Occupation	National Level of Certificates					Total
	COC	NC IV	NC III	NC II	NC I	
153. Team leader	1	0	0	0	0	1
154. Technical Assistant	6	0	0	0	0	6
155. Technician	6	9	9	11	9	44
156. Tender mechanic	1	0	0	0	0	1
157. Tile Setter	0	0	0	0	1	1
158. Tour Guide	1	0	1	0	0	2
159. Trainor (Automotive Servicing)	0	0	0	1	0	1
160. Trainor (CHS)	0	0	0	1	0	1
161. Trainor (Computer)	1	1	0	0	0	2
162. Trainor/Instructor	2	6	1	1	1	11
163. Warehouse man	2	3	2	2	2	11
164. Warranty Processor	1	1	0	0	2	4
165. Web Developer	1	1	1	0	0	3
166. Welder	11	6	4	7	3	31
<b>Total</b>	<b>218</b>	<b>157</b>	<b>146</b>	<b>210</b>	<b>131</b>	<b>862</b>

Based on the responses gathered in this survey, the top five difficulties encountered by employers in hiring skilled workers were (Table 20):

1. Lack of required skills for the job
2. Limited applicants
3. Lack of work experience
4. Lack of training
5. No TESDA certificate

Table 20: Difficulties Encountered by Employers' when hiring Tech-Voc Graduates

Difficulties Encountered in Hiring Tech-Voc Graduates	Frequency	Percent
1. Lack of required skills for the job	22	12.4
2. Limited applicants	19	10.7
3. Lack of work Experience	18	10.1
4. Lack of training	14	7.9
5. No TESDA certificates	14	7.9
6. Lack of qualified applicant	10	5.6
7. Attitude	5	2.8
8. High salary expectation	5	2.8
9. Mismatch between qualifications of graduates and our requirements	5	2.8
10. Mostly of the hired personnel will just stay for a shorter terms due to employment abroad	4	2.2
11. Not qualified	4	2.2
1. Only few are licensed	4	2.2
2. Technical skills	4	2.2
3. Character	3	1.7
4. Education	3	1.7
5. No permanent trainer	3	1.7
6. Availability of NTTC and TM	2	1.1
7. Commitment to stay in the company	2	1.1
8. Failed in actual exam	2	1.1
9. Lack of leadership skills	2	1.1
10. Lack of Passport	2	1.1
11. Lack of skills related to the job	2	1.1
12. Lack of technical experience	2	1.1
13. Not interested to assign in manila and / or provincial projects	2	1.1
14. Physical requirements	2	1.1
15. Poor in communication	2	1.1



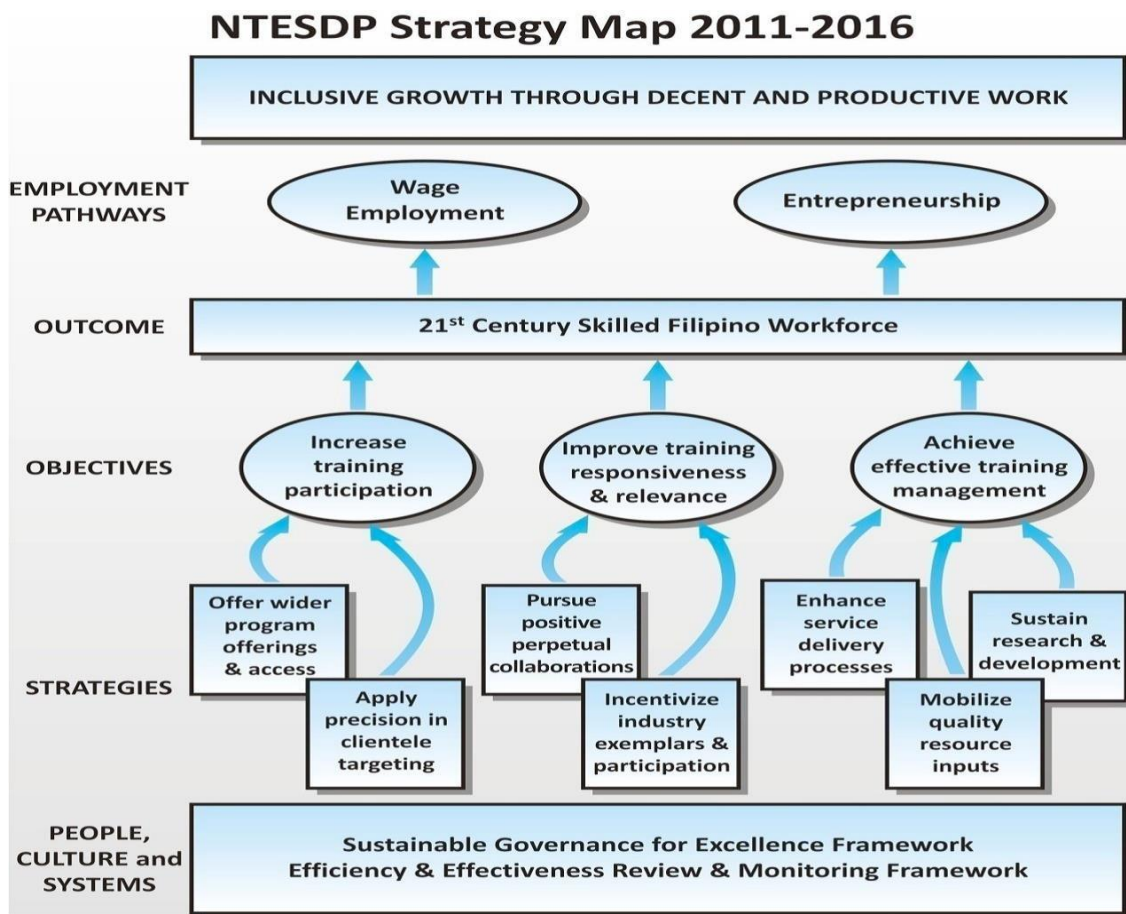
Table 22: Difficulties Encountered by Employers when hiring Tech-Voc Grad (Cont.)

Difficulties Encountered in Hiring Tech-Voc Graduates	Frequency	Percent
16. Availability	1	0.6
17. Can't pass with our quality	1	0.6
18. Credential and skills job matching	1	0.6
19. Did not pass with our written exam	1	0.6
20. Discontinuance of application due to no budget in securing pre-employment requirements	1	0.6
21. Even though they are trained by TESDA, they lack the required skills. Trained therapist do not want to be employed full time or leave their towns or provinces.	1	0.6
22. Job hopping	1	0.6
23. Just for the ghost month	1	0.6
24. Knowledge in PLC	1	0.6
25. Lack of Personality	1	0.6
26. Maturity	1	0.6
27. No POS experience	1	0.6
28. No referrals from TESDA	1	0.6
29. Not familiar with Pharmaceutical machines	1	0.6
30. Not interested to assign in manila and / or provincial projects	1	0.6
31. Not proper training	1	0.6
32. Only few are qualified for the industry	1	0.6
33. Over age applicants	1	0.6
34. Pleasing personality	1	0.6
35. Work attitude	1	0.6
36. Work environment and priorities	1	0.6
<b>Total</b>	<b>178</b>	<b>100.0</b>

## 5. Conclusion and Recommendations

### 5.1 Strategy Map 2011-2016

The National Technical Education and Skills Development Plan 2011-2016 (NTESDP) sets out a course of action for all relevant TVET stakeholders. The NTESDP is anchored on the Philippine Development Plan 2011 -2016 and the Labour and Employment Plan 2011 – 2016, which both seek to promote inclusive growth in the Philippines. The NTESDP focuses on building a national system of ensuring quality TVET programmes. The NTESDP is the third cycle plan, the two previous TVET strategies being - the 1st cycle NTESDP (1999-2004) and the 2nd cycle NTESDP (2005-2009). The strategies, objectives and the desired outcome of the current NTESDP are depicted in the graphic below:



As the strategy map illustrates, the outcome is to produce 21<sup>st</sup> century skilled Filipino workforce. The strategies to achieve this is to offer wider programs and offerings and access; pursue positive perpetual collaborations; enhance service deliver processes; and sustain research and development. The objectives are: to increase training participation, to improve training responsiveness and relevance, and to achieve effective training management.

## **5.2 Monitoring and Feedback Mechanism**

At the bottom of the strategy map is to provide for a sustainable governance for excellence framework. This will require an efficient and effective review and monitoring mechanism.

Obtaining regular satisfaction surveys from stakeholders and industry partners of TESDA ensures that a regular monitoring and evaluation mechanism is in place for the continuous improvement of the programs of this Authority. As such, employer feedback is a necessary mechanism that steers TVET policy makers and educators in developing well-grounded TVET strategies and programs that in the end does not only benefit employers but more so the workers, the industry, and the country.

The following were the significant findings of the study:

1. The general profile of the participating industries were:
  - a. Thirty four percent (34.30%) of respondent establishments are relatively new or 1-10 years in operation.
  - b. Majority or 91.18% of the establishments are private establishments. These private establishments are mostly stock corporation (47.55%) and single proprietorship (20.59%).
  - c. By industry classification, majority of the establishments belong to Tourism (Hotel and Restaurant) with a percentage value of 9.3. Then it was followed by Wholesale and Retail Trading (8.8%) and Construction (8.3%).
  - d. More than 72% of the establishments belonged to micro, small and medium enterprises (MSME).
2. Employers were "satisfied" with the work and performance of their techvoc workers with a mean rating of 4.13.
3. There is significant difference between the employers' level of satisfaction in terms of the work and performance of a TESDA certified skilled workers vis a vis Non-TESDA certified skilled workers. This also implies that employers were more satisfied with or preferred the work and performance of TESDA certified skilled workers compared to Non-TESDA certified workers.

4. There is significant difference between the employers' level of satisfaction in terms of the geographical location of their techvoc workers i.e. the employers' are more satisfied with workers from within the province of their establishments compared to workers outside the province of their establishments.
5. There is a competency gap between the current level competency of the TVET graduates and the desired competency of the establishments across all competencies.
6. Majority or 39.7% of the employers' provide incentives to TESDA certified workers. This simply means that employers' valued their TESDA certified workers as an asset to their company.

### **5.3 The 2014 ESS Survey**

Overall, the 2014 ESS findings showed that companies were satisfied with the competencies and performance of TVET graduates in the work place. Companies recognize the importance of their skilled workers thus, they provide training programs and give them incentives. Employers also indicated that there will be a greater demand for skilled workers in the future.

### **5.4 Some Recommendations**

As mentioned in previous ESS reports, there is the need to strengthen the existing TESDA-industry partnerships in improving TVET, particularly in enhancing consultations at the provincial and regional levels. As illustrated in the strategy map, one of the directions will be to "pursue positive perpetual collaborations'.

One of the concerns expressed on the administrative aspect of further ESS studies was to strengthen the data-base and that the regional/provincial offices of TESDA must strengthen the monitoring of firms/industries that utilize TVET graduates. This will require the regular updating and to ensure the completeness of information, such as employer name and address. A good database will strengthen linkages since it will strengthen the ability of TESDA to reach out to their private partners to ensure a responsive TVET program.

With globalization, ASEAN integration and the mobility of human capital, the need to prepare our workers for the 21<sup>st</sup> century becomes important as we compete for talents in the global and regional arena. The work landscape is changing, and it is important that the needed skills and required competencies of our changing times must be addressed. The desire of companies to find the right workers who possess the skills and competencies for a particular job is now more pronounced than ever before. The training program offerings therefore should be responsive in addressing these needs.

Strengthened linkages and partnerships with various entities become all the more necessary. Partnerships with LGUs is necessary in order to address their concerns on providing skills of their workers and advancing the certification program of TESDA. Similarly partnerships with DOLE, PESO and linkages with industry and academe associations also becomes imperative. Linkages with associations such as SEIPE, IBPAP, PMAP, and ECOP are important to address industry needs, but also to exchange information about stakeholders. Furthermore, such associations could help augment the database of employers for TESDA.

The regular review and update of curriculum of TVET training programs to emphasize the ability to handle tools, machines and equipment, technical skills and productivity and accountability will be growing in importance for our 21<sup>st</sup> century Filipino workers/employers to become competitive.

Existing initiatives such as TESDA scholarships and incentives to the workers and supporting existing training programs provided by the firms should be continued and enhanced.

A limitation cited in this study pertained to the assessment of workforce competencies on the basis of employer perception. While it has been acknowledged that such data were obtained from the expert opinion of the respondents (the majority were executives/owners of the establishments), the need to conduct further research to actually focus on doing actual workforce assessments surfaced during the stakeholder consultation within the different departments of TESDA. It was expressed that this could augment the ESS. A scheme mentioned was through actual observation, oral questioning, written tests, third party reports, and portfolio and work projects. While this would require allocating a budget for the purpose, the information generated could provide valuable information to build quality into the TVET system and enhance employer satisfaction and worker well-being.

Continuous upgrade, review, and enhancement of the curriculum in order to meet the changing demands of the times will be important. For example, the Competency Assessment and Certification System, a major pillar in TESDA's authority role, is among the essential quality assurance mechanisms in TVET. It ensures that TVET graduates and skilled workers have the necessary competence to perform the tasks consistent with the required standards in the workplace. It involves the process of gathering evidence to prove possession of competencies according to industry standards. Future research projects on employee satisfaction survey could be undertaken as an additional component of an employer satisfaction survey. In addition to looking at employer perception, such study could serve as another feedback vehicle which will help ensure and validate that TVET graduates and skilled workers have the necessary competence to perform the tasks consistent with the required standards in the workplace, thus leading to further employer satisfaction.

## **Attachment 1**

### **Summary of 2008 and 2011 Employer Satisfaction Surveys**

Tracer and impact studies are part of the biennial monitoring and evaluation mechanisms of the PRED-Planning Office of TESDA as part of its continuing efforts to assess Technical Vocational Education and Training (TVET) performance. Results of these studies were basically aimed to establish sound basis for reviewing and developing TVET and TESDA policies and strategies. The ultimate goal is to strengthen the country's TVET programs, recognizing its vital contribution to the nation's economic development.

In 2008, an employer satisfaction survey was conducted as a pilot study that involved only selected employers of graduates of the Training for Work Scholarship Program (TWSP) of TESDA.

Another ESS followed in 2011 that provided a more comprehensive assessment of how well the TVET graduates performed and met the competency requirements of the industry. The study also aimed to find out how employers valued the TESDA certification program, TVET certification concerns, as well as on the status of the demand and supply of TVET workers (TESDA certified or not) for the various industries. 381 establishment respondents were covered by the 2011 survey. 28% of these establishments reported that skilled workers comprise 76% to 100% of their workforce. Establishments (48.3 % of respondents) from the Agriculture, Forestry, and Fishing cluster, Education, Construction, Service sector, Human Health and Social Work cluster, and the manufacturing sector indicated to have provided incentives in form of the following: higher salaries, job security, job promotion, allowances, further training and profit sharing. Less than half of the establishments provided TVET related training programs to skilled workers.

The 2011 survey also revealed that TVET graduates employed by 92% of the establishments were perceived to possess theoretical and practical knowledge in performing the tasks and responsibilities, were considered to be highly trainable for the skills needed for the job, and were observed to have positive work attitudes. As such 86.1% connoted satisfaction with the work performance of TVET graduates.

Results indicated a continuous in-demand for skilled workers with 86.9% of establishments declaring intent to hire TVET graduates although it was noted that this was less than the demand for skilled workers projected by the 2008 ESS.

On TVET provisions of TESDA to industry partners, respondent responses implied that TESDA provided adequate supply of TVET graduates, provided appropriate skills to graduates, and provided assistance on trainer's training, scholarships, and upgrading of skills of workers.

Moreover, the 2011 ESS yielded the following recommendations:

1. To continuously strengthen the existing TESDA-industry consultations in improving TVET, in particular - to enhance consultations at the provincial and regional levels;
2. To strengthen close coordination and partnership with the LGU in order to address their concerns on providing skills of their workers and advancing the certification program of TESDA;
3. For TESDA to continuously implement the free assessment program or the synchronized National TVET Competency Assessment and Certification (NATCAC), in particular – striving to bringing free assessment program on areas with no assessment centers/venues and maintaining the high level of integrity in the assessment and certification program of TESDA;
4. That a similar approach like the Mobile Training Program be considered in the delivery of the assessment program of TESDA;
5. That TESDA should pursue, advocate and support enterprise-based training;
6. To review and update the curriculum of TVET training programs to give emphasis on the development of the communication skills of the graduates both in verbal and written, as well as the enhancement of work values;
7. That in the absence of skills upgrading by some firms and to support the existing training programs provided by the firms, incentives and support to the skilled workers should be made available and accessible to them such as the provision of Scholarship vouchers; and
8. On the concern on the administrative aspect of further ESS studies, it was further recommended that the regional/provincial offices of TESDA must strengthen the monitoring of firms/industries that utilize TVET graduates. In addition, they should ensure the completeness of information on the employers name and address to improve the coverage of the study.

## **Attachment 2**

### **Administration of the Survey**

The smooth conduct of the study and timeliness of the deliverables were contingent on the following:

1. The date of approval of the Survey Tool;
2. The availability of the respondents for the KIIs and FGDs;
3. Unforeseen natural events such as typhoons and other weather disturbances which will affect the schedule of KIIs and FGDs; and
4. The full and timely support of the assigned Focal person of the Planning Office and regional offices of TESDA, which included the need for swift feedback response time for both PDI and TESDA.

In addition to these, as the project progressed, the Team found that the following proved significantly crucial to the smooth conduct of the survey:

1. The TESDA employer database; and
2. The contact information of TESDA Regional Offices

The TESDA employer database included pertinent contact information such as mailing and email addresses, contact numbers, web and other social media addresses/accounts, and name of president and contact persons. The email address was the basic information needed in conducting the online survey and telephone numbers were necessary for establishing initial contact and follow up calls.

The roles of the Regional Offices were, to:

1. Complete the list of establishments employing TVET graduates; and
2. Provide assistance to the consulting firm in the conduct of the survey.

As such, it was essential that the Consultant Team and TESDA Planning Office maintained close contact and coordination with the Regional Offices as with the PRED-Planning Office at the Central Office.



## Attachment 3

### Instrument: Survey Questionnaire

# EMPLOYER SATISFACTION SURVEY

Good day! Thank you for employing graduates of Technical Vocational programs. Please answer the 2014 Employer Satisfaction Survey for the continuous improvement of TESDA's curriculum and services. This survey seeks to determine the employer satisfaction. It also aims to gauge employer's acceptance of the assessments and certification programs of TESDA.

This should only take 10 minutes of your time. This survey is strictly confidential and your details will not be revealed, only aggregate information will be reported. Thank you for your participation.

#### Company Representative

Your Name:

Your Position/Designation:

- Staff and Equivalent
- Specialist and Equivalent
- Officer/Manager and Equivalent
- Executive/President
- Others

*If others please specify: \_\_\_\_\_*

Your Highest Educational Attainment:

- Post Graduate
- Post Undergraduate
- College Graduate
- College Undergraduate
- Technical/Vocational Graduate

Gender:  Male  Female

#### Respondent's Contact Information:

a. Email Address:

b. Mobile Number:

c. Landline Number:

Company Name:

#### Company Contact Information:

a. Company Address:

b. Email Address:

c. Landline Number:

d. Mobile Number:

Year the Company was established:

Type / Legal organization of your company in 2014:

<input type="checkbox"/> A. Government	<input type="checkbox"/> B. Private
<input type="radio"/> National	<input type="radio"/> Single Proprietorship
<input type="radio"/> Provincial/Local	<input type="radio"/> Partnership
<input type="radio"/> Government Owned and Controlled Corporation	<input type="radio"/> Stock Corporation
<input type="radio"/> Others, please. specify: _____	<input type="radio"/> Non-Stock, Non-Profit Corporation
	<input type="radio"/> Cooperative
	<input type="radio"/> Others, please specify: _____

Industry classification of your company:

Please Choose....

- Agriculture, Hunting and Forestry
- Automotive and Land Transportation
- Construction
- Decorative Crafts
- Electronics
- Financial Intermediation
- Fishery
- Footwear & Leather goods
- Furniture and Fixtures
- Garments
- Health and Social Work
- Heating, Ventilation, Air-conditioning and Refrigeration
- Information and Communication Technology
- Maritime
- Metals and Engineering
- Other Community Social and Personal Service Activities
- Processed Food & Beverages
- Public Administration and Defense
- Pyrotechnics
- Tourism (Hotel and Restaurant)
- Technical Vocational Education Training (TVET)
- Utilities (electricity, gas and water)
- Visual Arts
- Wholesale and Retail Trading
- Others, please specify:  
\_\_\_\_\_

Size of your company in terms of annual gross income as of 2014:

Please Choose...

- Less than Php100M
- Php101 - Php300 M
- Php301 - Php500 M
- Php501 - Php700M
- Php701 - 999M
- 1B and More
- Not Applicable

Total **number of employees/workforce** in your company as of 2014 *(Please include all types of employees whether regular permanent, job order and contractual)*:

Please Choose....

- Less than 10
- 10 to 49
- 50 to 99
- 100 to 499
- 500 to 999
- 1,000 to 4999
- 5,001 and more

Total **number of skilled workers** in your company as of 2014 *(Please include all types of employees whether regular permanent, job order and contractual)*: *(A skilled worker is a person who has acquired the full educational/training qualifications required to perform a recognized trade, craft or other occupations. Example: Computer Professionals and Electricians)*.

Total number of **skilled workers in your company who are TESDA Certified** as of 2014 *(Please include all types of employees whether regular permanent, job order and contractual)*: *(A TESDA - certified skilled workers are those who have passed the TESDA assessment and has been awarded with a TESDA National Certificate (NC). The certification under TESDA are: NC I, NC II, NC III, NC IV and COC (Certificate of Competency)*.

### Employer's Satisfaction Survey Questionnaire

1. Overall employer's satisfaction of recent (5 years or less) technical vocational (techvoc) graduates

a. Overall level of satisfaction with the work and performance of techvoc employees.

Please Choose....

- 5 - Very Satisfied
- 4 - Satisfied
- 3 - Neither Satisfied nor Dissatisfied
- 2 - Dissatisfied
- 1 - Very Dissatisfied

2. General employer satisfaction rating of recent (5 years or less) graduates with TESDA or non-TESDA certified training.

a. How satisfied are you with the work and performance of TESDA - certified techvoc employees?

Please Choose...

- 5 - Very Satisfied
- 4 - Satisfied
- 3 - Neither Satisfied nor Dissatisfied
- 2 - Dissatisfied
- 1 - Very Dissatisfied

b. How satisfied are you with the work and performance of non - TESDA - certified techvoc employees?

Please Choose....

- 5 - Very Satisfied
- 4 - Satisfied
- 3 - Neither Satisfied nor Dissatisfied
- 2 - Dissatisfied
- 1 - Very Dissatisfied

3. General employer satisfaction of recent (5 years or less) techvoc graduates

a. How satisfied are you with the work and performance of your techvoc employees who graduated locally?

Please Choose...

- 5 - Very Satisfied
- 4 - Satisfied
- 3 - Neither Satisfied nor Dissatisfied
- 2 - Dissatisfied
- 1 - Very Dissatisfied

b. How satisfied are you with the work and performance of your techvoc employees who graduated from other provinces.

Please Choose...

- 5 - Very Satisfied
- 4 - Satisfied
- 3 - Neither Satisfied nor Dissatisfied
- 2 - Dissatisfied
- 1 - Very Dissatisfied

c. From what schools did you get most of your hired technical vocational workers in the PAST (5 years or less) recruitment activities. (Please list the top 5 schools and indicate province/city)

1.
2.
3.
4.
5.

4. Please list down the skilled occupations that will be needed by your company in 2015

Occupation	Number of Workers Required	In the past, what difficulties have you encountered in hiring?
1.		
2.		
3.		
4.		
5.		

5. What is your preferred educational attainment for **your techvoc workers?**

- College Graduate
- College Graduate with TESDA Certification
- College Undergraduate
- Technical Vocational Graduate with Certification
- Technical Vocational Graduate without Certification
- Technical Vocational Undergraduate
- High School Graduate
- High School Undergraduate

6. Rate the work and performance of techvoc graduates in your company.

Instructions: Please indicate your rating by putting a check mark (✓) below the number that best describe your opinion. The numerical rating of 5 to 1 has the corresponding verbal interpretations as follows:

Rating	→	Interpretations
5	→	Excellent
4	→	Very Satisfactory
3	→	Satisfactory
2	→	Poor
1	→	Very Poor

<b>CHARACTERISTICS of TECHVOC Workers</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>A. Theoretical and Practical Knowledge in Delivering Tasks and Responsibilities</b>					
1. Possesses technical skills and knowledge needed for the job					
2. Understands and speaks the language in which business is conducted					
3. Capable of communicating in speech and writing					
4. Observes protocols in reporting using standard operating procedures					
5. Has the Ability to solve work related problems					
<b>B. Trainability on the Skills Needed for the Job</b>					
6. Listens attentively to instructions and follows orders as instructed					
7. Has the ability to learn new skills and knowledge on the job					
8. Obtains and conveys workplace information					
9. Adapts to the existing technology relevant to the enterprise					
10. Is enthusiastic in learning skills or the latest advancement/s related to the job					
<b>C. Work attitude such as teamwork, confidence, self-motivation, etc.</b>					
11. Works well in a group to achieve a goal					
12. Produces outputs on time while working with little supervision					
13. Easily adopts to work environment					
14. Has the ability to handle stress and pressures on the job					
15. Accepts other jobs other than specified on the job description					

7. Please rate the competencies of your employed techvoc graduates in terms of creativity and innovation, critical thinking and problem solving etc. at current level of competence, desired level of competence, and level of importance to one's job in the next 3 - 5 years.

Please put a check mark (√) in the box of your answer and kindly use the rating scheme below:

Rate	Interpretations		
	Current Level of Competence	Desired Level of Competence	Level of Importance to One's Job in the Next 3 - 5 Years
5	Excellent	Excellent	Very Important
4	Above Average	Above Average	Important
3	Average	Average	Neither Important nor Unimportant
2	Below Average	Below Average	Less Important
1	Needs Improvement	Well Below Average	Least Important
NA	Not Applicable	Not Applicable	Not Applicable

Competency	Current Level of Competence					Desired Level of Competence					Level of Importance to One's Job in the Next 3 - 5 Years					NA	
	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1		
a. Creativity and Innovation																	
b. Critical thinking and Problem Solving																	
c. Oral Communication Skills																	
d. Written Communication Skills																	
e. Leadership and Responsibility																	
f. Flexibility and Adaptability																	
g. Initiative and Self-Direction																	
h. Social and Cross Cultural Skills																	
i. Productivity and Accountability																	
j. Information Literacy																	
k. Media Literacy																	
l. ICT Literacy (Information, Communications and Technology)																	
m. Ability to handle tools, machines and equipment																	
n. Business Intelligence																	
o. Technical Skills																	

8. Do you provide incentives to techvoc graduates or skilled workers with TESDA certification?

A. YES

B. NO

If yes, what incentive/s do you provide? (You may check more than 1 answer)

Check any that apply...

- Salary Increase
- Promotion
- Job Security
- Others, please specify:  
\_\_\_\_\_

9. When you hear the acronym TESDA – what are the first 3 adjectives that comes to your mind about TESDA graduates?

1.

2.

3.

10. Please indicate whether you strongly agree, agree, strongly disagree or disagree with the following statements below:

Rating	—————→	Interpretations
4	—————→	Strongly Agree
3	—————→	Agree
2	—————→	Disagree
1	—————→	Strongly Disagree

CHARACTERISTICS	1	2	3	4
1. TESDA provides our company an adequate supply of graduates				
2. TESDA provides appropriate skills to their graduates				
3. TESDA provides assistance in the form of trainers training				
4. TESDA provides assistance in the form of scholarship				
5. TESDA provides assistance in the form of upgrading the skills of workers				

11. Please identify the occupations in your company that require TESDA certification and indicate the level of certification by putting a check mark in the box of your answer.

**Certificate of Competency (COC)** - is issued to individuals who have satisfactorily demonstrated competence on a particular or cluster of units of competency.

**National Certificate I (NC I)** - is issued to individuals who can performs routine and predictable tasks; has little judgment and works under supervision.

**National Certificate II (NC II)** - is issued to individuals who can performs prescribed range of functions involving known routines and procedures; has limited choice and complexity of functions and has little accountability.

**National Certificate III (NC III)** - is issued to individuals who can performs wide range skills; works with complexity and choices; contributes to problem solving and work processes and shows responsibility for self and others.

**National Certificate IV (NC IV)** - is issued to individuals who can performs a wide range of applications; have responsibilities that are complex and non-routine; provides some leadership and guidance of others and performs evaluation and analysis of work practices and the development of new criteria and procedures

Position Title	Preferred Level of Certification				
	COC	NC I	NC II	NC III	NC IV
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

12. TVET related training programs provided by the company to skilled workers, as of 2014:

Training was provided     No training was provided

Please identify the training programs that your company provided to your skilled workers in 2013 and 2014 by putting a check mark beside the training programs enumerated below.

**Training Programs**

- 1. Basic Skills Training Program
- 2. Customer Service Training
- 3. Staff Development
- 4. Trainers Training
- 5. Upgrading Skills Training
- 6. Values Training
- 7. Others, please specify:

\_\_\_\_\_



## Attachment 4

### Instrument: FGD and KII Questionnaire

#### Target Respondents

1. KII – Head of HR, Head of Training, Head of Quality Control, Direct Supervisors of skilled workers
2. FGD - Any combination of the above

#### Target Length of Interview

40 min to 1 hour

#### Questions

1. What experiences have you encountered in hiring the required TVET graduates?

Follow up questions:

- a. Description of process of hiring
- b. How they source out TVET graduates
- c. Is it difficult to look for TVET graduates

2. Once hired, are you satisfied with their job performance? Why? Or Why not?

Follow up questions:

- a. How do workers' competency gaps affect your company?
- b. What are your suggestions on how TVET training and policies can be improved in order to ensure that they will be competent (have the necessary skills)?

3. What does your company do to further develop the skills of your TVET graduate employees?

4. What comes to your mind when you hear about TESDA? Why?

5. What are your suggestions in order to improve the TESDA certification process to ensure that TVET workers are indeed competent and will meet needs of their employers or companies?

Follow up question: How can TESDA better provide the needs of your workforce in your industry?

## Attachment 5a

### Respondents Demographic Profile by Position Level

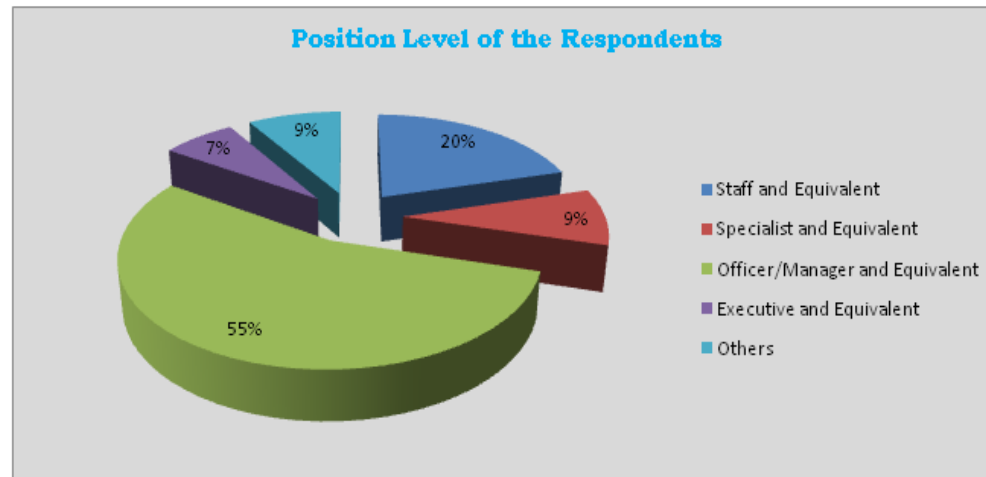


Figure 3

Position	Frequency	Percent
1. Staff and Equivalent	42	20.6
2. Specialist and Equivalent	18	8.8
3. Officer/Manager and Equivalent	112	54.9
4. Executive and Equivalent	14	6.9
5. Others	18	8.8
<b>Total</b>	<b>204</b>	<b>100.0</b>

## Attachment 5b

### Respondents Demographic Profile by Educational Attainment

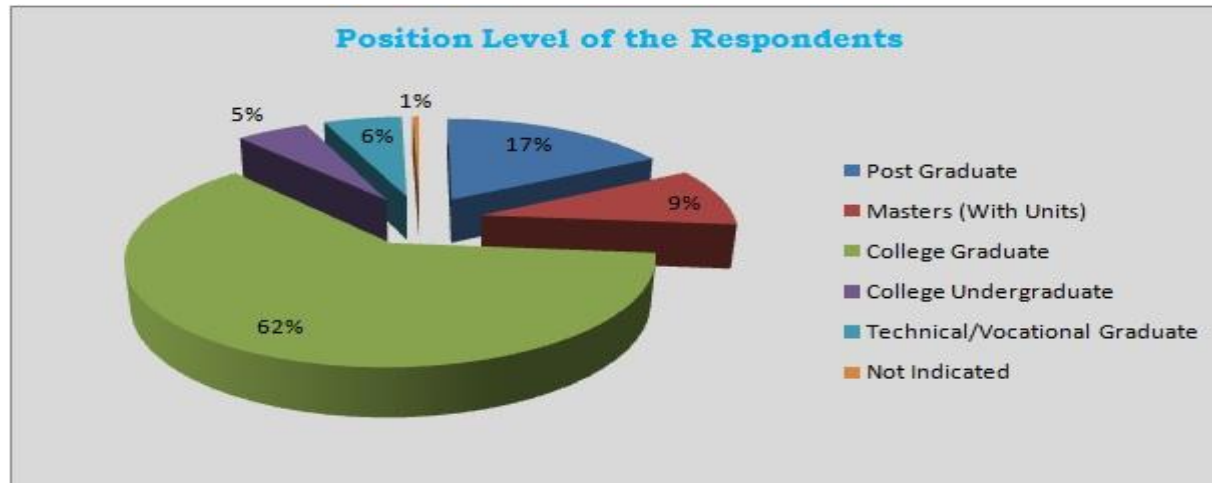


Figure 4

Educational Attainment	Frequency	Percent
1. Post Graduate	35	17.16
2. Masters (With Units)	19	9.31
3. College Graduate	126	61.76
4. College Undergraduate	11	5.39
5. Technical/Vocational Graduate	12	5.88
6. Not Indicated	1	0.49
<b>Total</b>	<b>204</b>	<b>100.0</b>

## Attachment 5c

### Respondents Demographic Profile by Gender

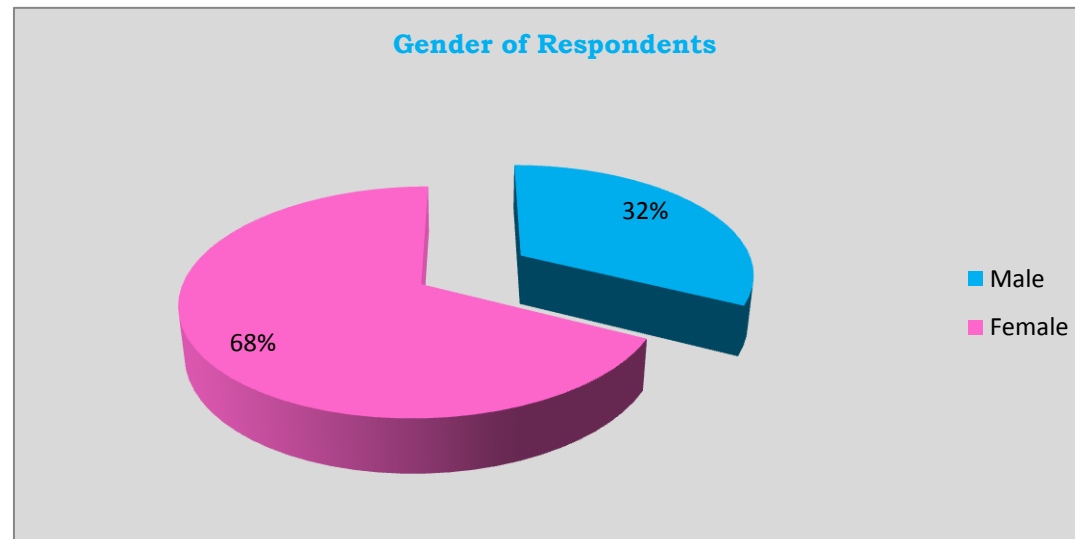


Figure 5

Gender	Frequency	Percent
1. Male	66	32.4
2. Female	138	67.6
<b>Total</b>	<b>204</b>	<b>100.0</b>

## Attachment 6

### Employers' Overall Level of Satisfaction with the Work and Performance of *Tech-Voc Employees* by Industry classification

Industry Classification	Very Satisfied		Satisfied		Neither Satisfied nor Dissatisfied		Dissatisfied		Very Dissatisfied		Not Indicated		Total Number of Employers	
	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%
1. Agriculture, Hunting and Forestry	6	75.0	2	25.0									8	100.0
2. Automotive and Land Transportation	4	30.8	8	61.5	1	7.7							13	100.0
3. Construction	2	11.8	10	58.8	3	17.6					2	11.8	17	100.0
4. Decorative Crafts														
5. Electronics	1	12.5	7	87.5									8	100.0
6. Financial Intermediation	1	33.3	1	33.3							1	33.3	3	100.0
7. Fishery														
8. Footwear and Leather Goods														
9. Furniture and Fixtures			1	100.0									1	100.0
10. Garments			1	100.0									1	100.0
11. Health and Social Work Activities	1	25.0	1	25.0	1	25.0					1	25.0	4	100.0
12. Heating, Ventilation, Air-conditioning and Refrigeration			2	100.0									2	100.0
13. Information and Communication Technology	4	26.7	5	33.3							6	40.0	15	100.0
14. Maritime			1	50.0							1	50.0	2	100.0
15. Metals and Engineering	1	12.5	3	37.5	1	12.5					3	37.5	8	100.0
16. Other Community Social and Personal Service Activities	2	33.3	3	50.0							1	16.7	6	100.0
17. Processed Food & Beverages	1	6.7	11	73.3	2	13.3					1	6.7	15	100.0
18. Public Administration and Defense		0.0	2	100.0									2	100.0
19. Pyrotechnics														
20. Technical Vocational Education Training (TVET)	7	77.8	1	11.1							1	11.1	9	100.0
21. Tourism (Hotel and Restaurant)	4	21.1	12	63.2	1	5.3					2	10.5	19	100.0
22. Utilities (electricity, gas and water)	1	50.0	1	50.0							0.0		2	100.0
23. Visual Arts				0.0	1	50.0					1	50.0	2	100.0
24. Wholesale and Retail Trading	3	16.7	9	50.0	3	16.7					3	16.7	18	100.0
25. Others	6	14.3	20	47.6	2	4.8			1	2.4	13	31.0	42	100.0
26. Not Indicated	1	14.3									6	85.7	7	100.0

## Attachment 7

### Employers' Satisfaction with the Work and Performance of *TESDA Certified Skilled Workers* by Industry Classification

Industry Classification	Very Satisfied		Satisfied		Neither Satisfied nor Dissatisfied		Dissatisfied		Very Dissatisfied		Not Indicated		Total Number of Employers	
	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%
1. Agriculture, Hunting and Forestry	7	87.5	1	12.5									8	100.0
2. Automotive and Land Transportation	5	38.5	7	53.8	1	7.7							13	100.0
3. Construction	1	5.9	8	47.1	5	29.4	1	5.9			2	11.8	17	100.0
4. Decorative Crafts														
5. Electronics	2	25.0	6	75.0									8	100.0
6. Financial Intermediation	1	33.3			1	33.3					1	33.3	3	100.0
7. Fishery														
8. Footwear and Leather Goods														
9. Furniture and Fixtures			1	100.0									1	100.0
10. Garments			1	100.0									1	100.0
11. Health and Social Work Activities	1	25.0	1	25.0	1	25.0					1	25.0	4	100.0
12. Heating, Ventilation, Air-conditioning and Refrigeration			2	100.0									2	100.0
13. Information and Communication Technology	3	20.0	5	33.3	1	6.7					6	40.0	15	100.0
14. Maritime	1	50.0									1	50.0	2	100.0
15. Metals and Engineering	1	12.5	4	50.0			1	12.5			2	25.0	8	100.0
16. Other Community Social and Personal Service Activities	2	33.3	2	33.3	1	16.7					1	16.7	6	100.0
17. Processed Food & Beverages	1	6.7	11	73.3	1	6.7					2	13.3	15	100.0
18. Public Administration and Defense			2	100.0									2	100.0
19. Pyrotechnics														
20. Technical Vocational Education Training (TVET)	8	88.9									1	11.1	9	100.0
21. Tourism (Hotel and Restaurant)	6	31.6	11	57.9							2	10.5	19	100.0
22. Utilities (electricity, gas and water)	1	50.0	1	50.0									2	100.0
23. Visual Arts					1	50.0					1	50.0	2	100.0
24. Wholesale and Retail Trading	3	16.7	10	55.6	2	11.1					3	16.7	18	100.0
25. Others	7	16.7	17	40.5	3	7.1			1	2.4	14	33.3	42	100.0
26. Not Indicated	1	14.3									6	85.7	7	100.0

## Attachment 8

### Employers' Satisfaction with the Work and Performance of Non-TESDA Certified Skilled Workers by Industry Classification

Industry Classification	Very Satisfied		Satisfied		Neither Satisfied nor Dissatisfied		Dissatisfied		Very Dissatisfied		Not Indicated		Total Number of Employers	
	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%
1. Agriculture, Hunting and Forestry	2	25.0	1	12.5	5	62.5							8	100.0
2. Automotive and Land Transportation	1	7.7	9	69.2	3	23.1							13	100.0
3. Construction			9	52.9	4	23.5	2	11.8			2	11.8	17	100.0
4. Decorative Crafts														
5. Electronics			7	87.5	1	12.5							8	100.0
6. Financial Intermediation	1	33.3	1	33.3							1	33.3	3	100.0
7. Fishery														
8. Footwear and Leather Goods														
9. Furniture and Fixtures							1	100.0					1	100.0
10. Garments					1	100.0							1	100.0
11. Health and Social Work Activities			2	50.0	1	25.0					1	25.0	4	100.0
12. Heating, Ventilation, Air-conditioning and Refrigeration			2	100.0									2	100.0
13. Information and Communication Technology	1	6.7	8	53.3							6	40.0	15	100.0
14. Maritime			1	50.0							1	50.0	2	100.0
15. Metals and Engineering	1	12.5	2	25.0	1	12.5	2	25.0			2	25.0	8	100.0
16. Other Community Social and Personal Service Activities			4	66.7	1	16.7					1	16.7	6	100.0
17. Processed Food & Beverages			12	80.0	1	6.7					2	13.3	15	100.0
18. Public Administration and Defense	1	50.0	1	50.0									2	100.0
19. Pyrotechnics														
20. Technical Vocational Education Training (TVET)	3	33.3	4	44.4	1	11.1					1	11.1	9	100.0
21. Tourism (Hotel and Restaurant)	3	15.8	11	57.9	3	15.8					2	10.5	19	100.0
22. Utilities (electricity, gas and water)	1	50.0	1	50.0									2	100.0
23. Visual Arts	1	50.0									1	50.0	2	100.0
24. Wholesale and Retail Trading	3	16.7	10	55.6	2	11.1					3	16.7	18	100.0
25. Others	4	9.5	19	45.2	4	9.5	1	2.4			14	33.3	42	100.0
26. Not Indicated			1	14.3							6	85.7	7	100.0

## Attachment 9

### Employers' Satisfaction with the Work and Performance of Skilled Workers within the province of the Employers by industry classification

Industry Classification	Very Satisfied		Satisfied		Neither Satisfied nor Dissatisfied		Dissatisfied		Very Dissatisfied		Not Indicated		Total Number of Employers	
	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%
1. Agriculture, Hunting and Forestry	5	62.5	2	25.0	1	12.5							8	100.0
2. Automotive and Land Transportation	3	23.1	7	53.8	2	15.4					1	7.7	13	100.0
3. Construction			10	58.8	4	23.5	1	5.9			2	11.8	17	100.0
4. Decorative Crafts														
5. Electronics			8	100.0									8	100.0
6. Financial Intermediation	1	33.3	1	33.3							1	33.3	3	100.0
7. Fishery														
8. Footwear and Leather Goods														
9. Furniture and Fixtures			1	100.0									1	100.0
10. Garments	1	100.0											1	100.0
11. Health and Social Work Activities			2	50.0	1	25.0					1	25.0	4	100.0
12. Heating, Ventilation, Air-conditioning and Refrigeration			2	100.0									2	100.0
13. Information and Communication Technology	2	13.3	6	40.0	1	6.7					6	40.0	15	100.0
14. Maritime	1	50.0									1	50.0	2	100.0
15. Metals and Engineering	2	25.0	2	25.0	1	12.5	1	12.5			2	25.0	8	100.0
16. Other Community Social and Personal Service Activities	1	16.7	4	66.7		0.0					1	16.7	6	100.0
17. Processed Food & Beverages	1	6.7	10	66.7	2	13.3					2	13.3	15	100.0
18. Public Administration and Defense	1	50.0	1	50.0									2	100.0
19. Pyrotechnics														
20. Technical Vocational Education Training (TVET)	7	77.8	1	11.1							1	11.1	9	100.0
21. Tourism (Hotel and Restaurant)	5	26.3	12	63.2							2	10.5	19	100.0
22. Utilities (electricity, gas and water)	1	50.0	1	50.0									2	100.0
23. Visual Arts					1	50.0					1	50.0	2	100.0
24. Wholesale and Retail Trading	4	22.2	10	55.6	1	5.6					3	16.7	18	100.0
25. 25. Others	6	14.3	17	40.5	4	9.5	1	2.4			14	33.3	42	100.0
26. 26. Not Indicated			1	14.3							6	85.7	7	100.0



## Attachment 10

### Employers' Satisfaction with the Work and Performance of Skilled Workers outside the province of the Employers by industry classification

Industry Classification	Very Satisfied		Satisfied		Neither Satisfied nor Dissatisfied		Dissatisfied		Very Dissatisfied		Not Indicated		Total Number of Employers	
	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%
1. Agriculture, Hunting and Forestry	2	25.0	4	50.0	2	25.0							8	100.0
2. Automotive and Land Transportation	2	15.4	9	69.2	1	7.7					1	7.7	13	100.0
3. Construction			9	52.9	5	29.4	1	5.9			2	11.8	17	100.0
4. Decorative Crafts														
5. Electronics	1	12.5	6	75.0							1	12.5	8	100.0
6. Financial Intermediation	1	33.3	0				1	33.3			1	33.3	3	100.0
7. Fishery														
8. Footwear and Leather Goods														
9. Furniture and Fixtures			0				1	100.0					1	100.0
10. Garments			1	100.0									1	100.0
11. Health and Social Work Activities			2	50.0	1	25.0					1	25.0	4	100.0
12. Heating, Ventilation, Air-conditioning and Refrigeration			2	100.0									2	100.0
13. Information and Communication Technology			7	46.7	2	13.3					6	40.0	15	100.0
14. Maritime			1	50.0							1	50.0	2	100.0
15. Metals and Engineering	2	25.0	2	25.0	1	12.5	1	12.5			2	25.0	8	100.0
16. Other Community Social and Personal Service Activities	1	16.7	3	50.0	1	16.7					1	16.7	6	100.0
17. Processed Food & Beverages			11	73.3	2	13.3					2	13.3	15	100.0
18. Public Administration and Defense			1	50.0							1	50.0	2	100.0
19. Pyrotechnics														
20. Technical Vocational Education Training (TVET)	5	55.6	3	33.3							1	11.1	9	100.0
21. Tourism (Hotel and Restaurant)	4	21.1	11	57.9							4	21.1	19	100.0
22. Utilities (electricity, gas and water)			1	50.0	1	50.0							2	100.0
23. Visual Arts			0		1	50.0					1	50.0	2	100.0
24. Wholesale and Retail Trading	2	11.1	8	44.4	5	27.8					3	16.7	18	100.0
25. Others	5	11.9	16	38.1	6	14.3	1	2.4			14	33.3	42	100.0
26. 26. Not Indicated			1	14.3							6	85.7	7	100.0

## Attachment 11a

### Comparison of 2011 and 2014 Employer Ratings on Characteristics of TVET Graduate Employees

Characteristics	Excellent				Very Satisfactory				Satisfactory			
	2011 ESS		2014 ESS		2011 ESS		2014 ESS		2011 ESS		2014 ESS	
	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%
1. Possesses technical skills and knowledge needed for the job	133	19.2	32	15.7	279	40.2	72	35.3	252	36.3	43	21.1
2. Understands and speaks the language in which business is conducted	113	16.3	16	7.8	279	40.2	65	31.9	259	37.3	61	29.9
3. Capable of communicating in speech and writing	111	16.0	12	5.9	242	34.9	53	26.0	301	43.4	69	33.8
4. Observes protocols in reporting using standard operating procedures	133	19.2	19	9.3	287	41.4	69	33.8	229	33.0	54	26.5
5. Has the Ability to solve work related problems	122	17.6	19	9.3	276	39.8	68	33.3	252	36.3	57	27.9
6. Listens attentively to instructions and follows orders as instructed	146	21.0	28	13.7	290	41.8	69	33.8	222	32.0	50	24.5
7. Has the ability to learn new skills and knowledge on the job	154	22.2	30	14.7	292	42.1	80	39.2	206	29.7	38	18.6
8. Obtains and conveys workplace information	123	17.7	27	13.2	268	38.6	63	30.9	251	36.2	55	27.0
9. Adapts to the existing technology relevant to the enterprise	143	20.6	28	13.7	283	40.8	76	37.3	231	33.3	41	20.1
10. Is enthusiastic in learning skills or the latest advancement/s related to the job	160	23.1	30	14.7	285	41.1	71	34.8	203	29.3	45	22.1
11. Works well in a group to achieve a goal	165	23.8	25	12.3	287	41.4	84	41.2	203	29.3	40	19.6
12. Produces outputs on time while working with little supervision	152	21.9	18	8.8	274	39.5	81	39.7	218	31.4	49	24.0
13. Easily adopts to work environment	153	22.0	23	11.3	288	41.5	80	39.5	216	31.1	46	22.5
14. Has the ability to handle stress and pressures on the job	128	18.4	22	10.8	277	39.9	69	33.8	239	34.4	53	26.0
15. Accepts other jobs other than specified on the job description	147	21.2	23	11.3	282	40.6	65	31.9	213	30.7	55	27.0

## Attachment 11b

### Comparison of 2011 and 2014 Employer Ratings on Characteristics of TVET Graduate Employees

Characteristics	Poor				Very Poor				Not Indicated				Total	
	2011 ESS		2014 ESS		2011 ESS		2014 ESS		2011 ESS		2014 ESS		2011	2014
	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%	No. of Employers	%		
1. Possesses technical skills and knowledge needed for the job	16	2.3	2	1.0	1	0.1	0	0.0	13	1.8	55	27.0	694	20
2. Understands and speaks the language in which business is conducted	31	4.5	6	2.9			0	0.0	12	1.7	56	27.5	694	20
3. Capable of communicating in speech and writing	26	3.7	15	7.4	2	0.3	0	0.0	12	1.7	55	27.0	694	20
4. Observes protocols in reporting using standard operating procedures	26	3.7	6	2.9	2	0.3	0	0.0	17	2.4	56	27.5	694	20
5. Has the Ability to solve work related problems	29	4.2	5	2.5	1	0.1	0	0.0	14	2.0	55	27.0	694	20
6. Listens attentively to instructions and follows orders as instructed	17	2.4	1	.5	1	0.1	0	0.0	18	2.6	56	27.5	694	20
7. Has the ability to learn new skills and knowledge on the job	26	3.7	1	.5			0	0.0	16	2.3	55	27.0	694	20
8. Obtains and conveys workplace information	33	4.8	2	1.0	1	0.1	0	0.0	18	2.6	57	27.9	694	20
9. Adapts to the existing technology relevant to the enterprise	22	3.2	4	2.0	4	0.6	0	0.0	11	1.6	55	27.0	694	20
10. Is enthusiastic in learning skills or the latest advancement/s related to the job	27	3.9	3	1.5	1	0.1	0	0.0	18	2.6	55	27.0	694	20
11. Works well in a group to achieve a goal	17	2.4	0	0.0	2	0.3	0	0.0	20	2.9	55	27.0	694	20
12. Produces outputs on time while working with little supervision	35	5.0	1	.5		0.0	0	0.0	15	2.2	55	27.0	694	20
13. Easily adopts to work environment	22	3.2	0	0.0		0.0	0	0.0	15	2.2	55	27.0	694	20
14. Has the ability to handle stress and pressures on the job	29	4.2	5	2.5	2	0.3	0	0.0	19	2.7	55	27.0	694	20
15. Accepts other jobs other than specified on the job description	26	3.7	6	2.9	3	0.4	0	0.0	23	3.4	55	27.0	694	20

## Attachment 11c

### Characteristics Index of TVET Graduate Employees (Mean Ratings)

<i><b>Theoretical and Practical Knowledge in Delivering Tasks and Responsibilities</b></i>	<b>Mean Ratings</b>	<b>Interpretations</b>
1. Possesses technical skills and knowledge needed for the job	3.90	Very Satisfactory
2. Understands and speaks the language in which business is conducted	3.61	Very Satisfactory
3. Capable of communicating in speech and writing	3.42	Very Satisfactory
4. Observes protocols in reporting using standard operating procedures	3.68	Very Satisfactory
5. Has the Ability to solve work related problems	3.68	Very Satisfactory
<b>Overall Mean</b>	<b>3.66</b>	<b>Very Satisfactory</b>

<i><b>Trainability on the Skills Needed for the Job</b></i>		
6. Listens attentively to instructions and follows orders as instructed	3.84	Very Satisfactory
7. Has the ability to learn new skills and knowledge on the job	3.93	Very Satisfactory
8. Obtains and conveys workplace information	3.78	Very Satisfactory
9. Adapts to the existing technology relevant to the enterprise	3.86	Very Satisfactory
10. Is enthusiastic in learning skills or the latest advancement/s related to the job	3.86	Very Satisfactory
<b>Overall Mean</b>	<b>3.85</b>	<b>Very Satisfactory</b>

<i><b>Work attitude such as team work, confidence, self motivation, ect.</b></i>	<b>Mean Ratings</b>	<b>Interpretations</b>
11. Works well in a group to achieve a goal	3.9	Very Satisfactory
12. Produces outputs on time while working with little supervision	3.78	Very Satisfactory
13. Easily adopts to work environment]	3.85	Very Satisfactory
14. Has the ability to handle stress and pressures on the job]	3.72	Very Satisfactory
15. Accepts other jobs other than specified on the job description]	3.7	Very Satisfactory
<b>Overall Mean</b>	<b>3.79</b>	<b>Very Satisfactory</b>

## Attachment 12a

### Provision of Incentives by Industry Classification

Industry Classification	Basic Skills Training Program		Customer Service Training		Staff Development		Trainers Training	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
1. Agriculture, Hunting and Forestry	4	5.1	2	4.3	3	7.5	3	11.1
2. Automotive and Land Transportation	3	3.8	3	6.5	1	2.5	1	3.7
3. Construction	8	10.1	3	6.5	2	5.0	1	3.7
4. Electronics	6	7.6	2	4.3	1	2.5	2	7.4
5. Financial Intermediation	0	0.0	0	0.0	1	2.5	0	0.0
6. Furniture and Fixtures	0	0.0	0	0.0	0	0.0	0	0.0
7. Garments	0	0.0	0	0.0	0	0.0	0	0.0
8. Health and Social Work Activities	1	1.3	2	4.3	2	5.0	0	0.0
9. Heating, Ventilation, Air-conditioning and Refrigeration	2	2.5	1	2.2	0	0.0	0	0.0
10. Information and Communication Technology	5	6.3	3	6.5	3	7.5	2	7.4
11. Maritime	1	1.3	1	2.2	1	2.5	0	0.0
12. Metals and Engineering	2	2.5	2	4.3	2	5.0	1	3.7
13. Other Community Social and Personal Service Activities	2	2.5	3	6.5	1	2.5	0	0.0
14. Processed Food & Beverages	7	8.9	2	4.3	3	7.5	2	7.4
15. Public Administration and Defense	0	0.0	0	0.0	0	0.0	0	0.0
16. Technical Vocational Education Training (TVET)	5	6.3	2	4.3	5	12.5	4	14.8
17. Tourism (Hotel and Restaurant)	13	16.5	9	19.6	6	15.0	4	14.8
18. Utilities (electricity, gas and water)	1	1.3	1	2.2	1	2.5	1	3.7
19. Visual Arts	0	0.0	0	0.0	0	0.0	0	0.0
20. Wholesale and Retail Trading	9	11.4	6	13.0	5	12.5	3	11.1
21. Others	10	12.7	4	8.7	3	7.5	3	11.1
<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>46</b>	<b>100.0</b>	<b>40</b>	<b>100.0</b>	<b>27</b>	<b>100.0</b>

## Attachment 12b

### Provision of Incentives by Industry Classification

	Upgrading Skills Training		Values Training		Others		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
1. Agriculture, Hunting and Forestry	4	8.7	2	4.4	1	16.7	19	6.6
2. Automotive and Land Transportation	1	2.2	3	6.7	2	33.3	14	4.8
3. Construction	5	10.9	3	6.7	0	0.0	22	7.6
4. Electronics	3	6.5	2	4.4	0	0.0	16	5.5
5. Financial Intermediation	1	2.2	0	0.0	0	0.0	2	0.7
6. Furniture and Fixtures	0	0.0	0	0.0	0	0.0	0	0.0
7. Garments	0	0.0	0	0.0	0	0.0	0	0.0
8. Health and Social Work Activities	0	0.0	2	4.4	0	0.0	7	2.4
9. Heating, Ventilation, Air-conditioning and Refrigeration	0	0.0	0	0.0	0	0.0	3	1.0
10. Information and Communication Technology	2	4.3	2	4.4	0	0.0	17	5.9
11. Maritime	1	2.2	1	2.2	0	0.0	5	1.7
12. Metals and Engineering	3	6.5	2	4.4	0	0.0	12	4.2
13. Other Community Social and Personal Service Activities	2	4.3	3	6.7	0	0.0	11	3.8
14. Processed Food & Beverages	4	8.7	3	6.7	0	0.0	21	7.3
15. Public Administration and Defense	0	0.0	0	0.0	0	0.0	0	0.0
16. Technical Vocational Education Training (TVET)	5	10.9	3	6.7	0	0.0	24	8.3
17. Tourism (Hotel and Restaurant)	4	8.7	7	15.6	1	16.7	44	15.2
18. Utilities (electricity, gas and water)	1	2.2	1	2.2	0	0.0	6	2.1
19. Visual Arts	0	0.0	0	0.0	0	0.0	0	0.0
20. Wholesale and Retail Trading	4	8.7	5	11.1	1	16.7	33	11.4
21. Others	6	13.0	6	13.3	1	16.7	33	11.4
<b>Total</b>	<b>46</b>	<b>100.0</b>	<b>45</b>	<b>100.0</b>	<b>6</b>	<b>100.0</b>	<b>289</b>	<b>100.0</b>

## Attachment 13a

### Employer Ratings: Gaps in the Perceived and Desired Level of Competencies of TVET Graduates on the job by Industry Classification

Competencies	Creativity and Innovation				Critical Thinking and Problem Solving			
	Perceived		Desired		Perceived		Desired	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
1. Agriculture, Hunting and Forestry	3.86	Above Average	4.33	Excellent	3.86	Above Average	3.83	Above Average
2. Automotive and Land Transportation	3.30	Average	3.89	Above Average	3.30	Average	3.89	Above Average
3. Construction	3.31	Average	3.54	Above Average	3.57	Above Average	3.64	Above Average
4. Electronics	3.13	Average	4.38	Excellent	3.29	Average	4.43	Excellent
5. Financial Intermediation	4.00	Above Average	4.00	Above Average	3.50	Above Average	4.00	Above Average
6. Furniture and Fixtures	4.00	Above Average	4.00	Above Average	4.00	Above Average	4.00	Above Average
7. Garments	3.00	Average	4.00	Above Average	3.00	Average	4.00	Above Average
8. Health and Social Work Activities	3.00	Average	3.67	Above Average	3.00	Average	3.67	Above Average
9. Heating, Ventilation, Air-conditioning and Refrigeration	3.00	Average	3.00	Average	3.00	Average	3.00	Average
10. Information and Communication Technology	3.88	Above Average	4.13	Above Average	3.88	Above Average	4.13	Above Average
11. Maritime	3.00	Average	3.00	Average	3.00	Average	3.00	Average
12. Metals and Engineering	2.67	Average	3.83	Above Average	2.83	Average	4.00	Above Average
13. Other Community Social and Personal Service Activities	3.80	Above Average	4.00	Above Average	3.50	Above Average	3.80	Above Average
14. Processed Food & Beverages	3.15	Average	3.54	Above Average	2.92	Average	3.46	Above Average
15. Public Administration and Defense	4.00	Above Average	4.00	Above Average	4.00	Above Average	4.00	Above Average
16. Technical Vocational Education Training (TVET)	4.13	Above Average	4.25	Excellent	4.13	Above Average	4.25	Excellent
17. Tourism (Hotel and Restaurant)	3.35	Average	4.18	Above Average	3.35	Average	4.18	Above Average
18. Utilities (electricity, gas and water)	2.00	Below Average	5.00	Excellent	3.00	Average	5.00	Excellent
19. Visual Arts	N.I.	-	3.00	Average	N.I.	-	N.I.	-
20. Wholesale and Retail Trading	3.67	Above Average	3.93	Above Average	3.47	Above Average	4.20	Above Average
21. Others	3.43	Above Average	3.83	Above Average	3.17	Average	3.83	Above Average

**Legend:** 4.21 - 5.00 - Excellent; 3.41 - 4.20 - Above Average, 2.61 - 3.40 - Average; 1.81 - 2.60 - Below Average; 1.00 - 1.80 - Well Below Average.

## Attachment 13b

### Employer Ratings: Gaps in the Perceived and Desired Level of Competencies of TVET Graduates on the job by Industry Classification

Competencies	Oral Communication Skills				Written Communication Skills			
	Perceived		Desired		Perceived		Desired	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
1. Agriculture, Hunting and Forestry	3.43	Above Average	4.33	Excellent	3.29	Average	4.00	Above Average
2. Automotive and Land Transportation	2.90	Average	3.67	Above Average	2.90	Average	3.67	Above Average
3. Construction	3.43	Above Average	3.43	Above Average	3.36	Average	3.43	Above Average
4. Electronics	3.38	Average	4.13	Above Average	2.88	Average	4.13	Above Average
5. Financial Intermediation	3.00	Average	4.00	Above Average	3.00	Average	4.00	Above Average
6. Furniture and Fixtures	4.00	Above Average	4.00	Above Average	4.00	Above Average	4.00	Above Average
7. Garments	3.00	Average	3.00	Average	3.00	Average	3.00	Average
8. Health and Social Work Activities	2.67	Average	3.33	Average	2.67	Average	3.33	Average
9. Heating, Ventilation, Air-conditioning and Refrigeration	2.50	Below Average	3.00	Average	3.00	Average	3.00	Average
10. Information and Communication Technology	3.62	Above Average	3.62	Above Average	3.50	Above Average	3.75	Above Average
11. Maritime	4.00	Above Average	3.00	Average	3.00	Average	3.00	Average
12. Metals and Engineering	2.50	Below Average	3.00	Average	2.50	Below Average	3.17	Average
13. Other Community Social and Personal Service Activities	3.40	Average	3.40	Average	2.80	Average	3.20	Average
14. Processed Food & Beverages	2.77	Average	3.31	Average	2.92	Average	3.38	Average
15. Public Administration and Defense	4.00	Above Average	4.00	Above Average	3.00	Average	4.00	Above Average
16. Technical Vocational Education Training (TVET)	4.00	Above Average	4.25	Excellent	3.88	Above Average	4.25	Excellent
17. Tourism (Hotel and Restaurant)	3.29	Average	4.06	Above Average	2.94	Average	4.06	Above Average
18. Utilities (electricity, gas and water)	3.00	Average	4.00	Above Average	3.00	Average	4.00	Above Average
19. Visual Arts	N.I.	-	3.00	Average	N.I.	-	3.00	Average
20. Wholesale and Retail Trading	3.47	Above Average	3.93	Above Average	3.40	Average	3.87	Above Average
21. Others	3.17	Average	3.61	Above Average	3.04	Average	3.64	Above Average

**Legend:** 4.21 - 5.00 - Excellent; 3.41 - 4.20 - Above Average, 2.61 - 3.40 - Average; 1.81 - 2.60 - Below Average; 1.00 - 1.80 - Well Below Average.



### Attachment 13c

#### Employer Ratings: Gaps in the Perceived and Desired Level of Competencies of TVET Graduates on the job by Industry Classification

Competencies	Leadership and Responsibility				Flexibility and Adaptability			
	Perceived		Desired		Perceived		Desired	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
1. Agriculture, Hunting and Forestry	3.71	Above Average	4.17	Above Average	4.14	Above Average	3.83	Above Average
2. Automotive and Land Transportation	2.90	Average	4.00	Above Average	3.50	Above Average	4.22	Excellent
3. Construction	3.57	Above Average	3.79	Above Average	3.64	Above Average	3.64	Above Average
4. Electronics	3.13	Average	4.13	Above Average	3.50	Above Average	4.50	Excellent
5. Financial Intermediation	3.50	Above Average	3.50	Above Average	4.00	Above Average	4.00	Above Average
6. Furniture and Fixtures	4.00	Above Average	4.00	Above Average	4.00	Above Average	4.00	Above Average
7. Garments	3.00	Average	3.00	Average	3.00	Average	3.00	Average
8. Health and Social Work Activities	2.67	Average	3.67	Above Average	3.00	Average	3.67	Above Average
9. Heating, Ventilation, Air-conditioning and Refrigeration	2.50	Below Average	3.00	Average	3.00	Average	3.00	Average
10. Information and Communication Technology	3.88	Above Average	3.75	Above Average	4.13	Above Average	3.88	Above Average
11. Maritime	3.00	Average	3.00	Average	3.00	Average	4.00	Above Average
12. Metals and Engineering	2.33	Below Average	3.17	Average	3.67	Above Average	3.67	Above Average
13. Other Community Social and Personal Service Activities	3.60	Above Average	3.80	Above Average	3.60	Above Average	3.40	Average
14. Processed Food & Beverages	2.77	Average	3.46	Above Average	3.23	Average	3.42	Above Average
15. Public Administration and Defense	3.00	Average	5.00	Excellent	4.00	Above Average	5.00	Excellent
16. Technical Vocational Education Training (TVET)	4.13	Above Average	4.25	Excellent	4.13	Above Average	4.38	Excellent
17. Tourism (Hotel and Restaurant)	3.35	Average	4.24	Excellent	3.41	Above Average	4.24	Excellent
18. Utilities (electricity, gas and water)	3.00	Average	5.00	Excellent	2.00	Below Average	5.00	Excellent
19. Visual Arts	N.I.	-	N.I.	-	N.I.	-	3.00	Average
20. Wholesale and Retail Trading	3.60	Above Average	4.07	Above Average	3.73	Above Average	4.20	Above Average
21. Others	3.17	Average	3.83	Above Average	3.57	Above Average	3.96	Above Average

**Legend:** 4.21 - 5.00 - Excellent; 3.41 - 4.20 - Above Average, 2.61 - 3.40 - Average; 1.81 - 2.60 - Below Average; 1.00 - 1.80 - Well Below Average.

## Attachment 13d

### Employer Ratings: Gaps in the Perceived and Desired Level of Competencies of TVET Graduates on the job by Industry Classification

Competencies	Initiative and Self-Direction				Social and Cross Cultural Skills			
	Perceived		Desired		Perceived		Desired	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
1. Agriculture, Hunting and Forestry	4.00	Above Average	4.17	Above Average	3.86	Above Average	3.50	Above Average
2. Automotive and Land Transportation	3.40	Average	4.11	Above Average	3.30	Average	3.78	Above Average
3. Construction	3.50	Above Average	3.64	Above Average	3.57	Above Average	3.64	Above Average
4. Electronics	3.50	Above Average	4.38	Excellent	3.25	Average	4.13	Above Average
5. Financial Intermediation	3.50	Above Average	4.00	Above Average	4.00	Above Average	3.50	Above Average
6. Furniture and Fixtures	4.00	Above Average	4.00	Above Average	4.00	Above Average	4.00	Above Average
7. Garments	3.00	Average	4.00	Above Average	3.00	Average	4.00	Above Average
8. Health and Social Work Activities	3.00	Average	3.67	Above Average	3.00	Average	3.67	Above Average
9. Heating, Ventilation, Air-conditioning and Refrigeration	3.00	Average	3.00	Average	3.00	Average	3.00	Average
10. Information and Communication Technology	4.00	Above Average	4.13	Above Average	3.88	Above Average	3.75	Above Average
11. Maritime	3.00	Average	3.00	Average	4.00	Above Average	4.00	Above Average
12. Metals and Engineering	3.00	Average	3.67	Above Average	3.50	Above Average	3.17	Average
13. Other Community Social and Personal Service Activities	3.80	Above Average	3.40	Average	3.80	Above Average	3.60	Above Average
14. Processed Food & Beverages	3.00	Average	3.54	Above Average	3.23	Average	3.38	Average
15. Public Administration and Defense	5.00	Excellent	5.00	Excellent	4.00	Above Average	5.00	Excellent
16. Technical Vocational Education Training (TVET)	4.25	Excellent	4.38	Excellent	4.13	Above Average	4.25	Excellent
17. Tourism (Hotel and Restaurant)	3.29	Average	4.12	Above Average	3.24	Average	4.12	Above Average
18. Utilities (electricity, gas and water)	3.00	Average	5.00	Excellent	2.00	Below Average	4.00	Above Average
19. Visual Arts	N.I.	-	3.00	Average	N.I.	-	3.00	Average
20. Wholesale and Retail Trading	3.60	Above Average	4.20	Above Average	3.80	Above Average	4.00	Above Average
21. Others	3.35	Average	3.91	Above Average	3.30	Average	3.74	Above Average

**Legend:** 4.21 - 5.00 - Excellent; 3.41 - 4.20 - Above Average, 2.61 - 3.40 - Average; 1.81 - 2.60 - Below Average; 1.00 - 1.80 - Well Below Average.

## Attachment 13e

### Employer Ratings: Gaps in the Perceived and Desired Level of Competencies of TVET Graduates on the job by Industry Classification

Competencies	Productivity and Accountability				Information Literacy			
	Perceived		Desired		Perceived		Desired	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
1. Agriculture, Hunting and Forestry	4.14	Above Average	3.83	Above Average	4.14	Above Average	3.33	Average
2. Automotive and Land Transportation	3.70	Above Average	4.22	Excellent	3.30	Average	3.78	Above Average
3. Construction	3.43	Above Average	3.79	Above Average	3.36	Average	3.36	Average
4. Electronics	3.50	Above Average	4.38	Excellent	3.38	Average	4.00	Above Average
5. Financial Intermediation	3.00	Average	4.00	Above Average	3.50	Above Average	4.00	Above Average
6. Furniture and Fixtures	4.00	Above Average	4.00	Above Average	4.00	Above Average	4.00	Above Average
7. Garments	3.00	Average	4.00	Above Average	3.00	Average	3.00	Average
8. Health and Social Work Activities	3.00	Average	3.67	Above Average	3.00	Average	3.33	Average
9. Heating, Ventilation, Air-conditioning and Refrigeration	3.00	Average	3.00	Average	3.00	Average	3.00	Average
10. Information and Communication Technology	3.88	Above Average	4.13	Above Average	3.88	Above Average	3.88	Above Average
11. Maritime	3.00	Average	3.00	Average	3.00	Average	3.00	Average
12. Metals and Engineering	3.17	Average	3.83	Above Average	3.17	Average	3.50	Above Average
13. Other Community Social and Personal Service Activities	3.40	Average	3.40	Average	3.20	Average	3.40	Average
14. Processed Food & Beverages	2.92	Average	3.38	Average	2.62	Average	3.31	Average
15. Public Administration and Defense	4.00	Above Average	5.00	Excellent	5.00	Excellent	5.00	Excellent
16. Technical Vocational Education Training (TVET)	4.25	Excellent	4.38	Excellent	4.00	Above Average	4.25	Excellent
17. Tourism (Hotel and Restaurant)	3.24	Average	4.29	Excellent	3.24	Average	4.06	Above Average
18. Utilities (electricity, gas and water)	4.00	Above Average	5.00	Excellent	3.00	Average	5.00	Excellent
19. Visual Arts	N.I.	-	3.00	Average	N.I.	-	3.00	Average
20. Wholesale and Retail Trading	4.00	Above Average	4.13	Above Average	3.47	Above Average	4.07	Above Average
21. Others	3.43	Above Average	4.00	Above Average	3.30	Average	3.83	Above Average

**Legend:** 4.21 - 5.00 - Excellent; 3.41 - 4.20 - Above Average, 2.61 - 3.40 - Average; 1.81 - 2.60 - Below Average; 1.00 - 1.80 - Well Below Average.

## Attachment 13f

### Employer Ratings: Gaps in the Perceived and Desired Level of Competencies of TVET Graduates on the job by Industry Classification

Competencies	Media Literacy				ICT Literacy			
	Perceived		Desired		Perceived		Desired	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
1. Agriculture, Hunting and Forestry	3.67	Above Average	3.20	Average	3.71	Above Average	3.33	
2. Automotive and Land Transportation	3.20	Average	3.67	Above Average	3.10	Average	3.78	
3. Construction	3.21	Average	3.43	Above Average	3.14	Average	3.64	
4. Electronics	3.13	Average	3.88	Above Average	3.00	Average	3.75	
5. Financial Intermediation	3.50	Above Average	4.00	Above Average	3.50	Above Average	4.00	
6. Furniture and Fixtures	4.00	Above Average	4.00	Above Average	4.00	Above Average	4.00	
7. Garments	3.00	Average	3.00	Average	2.00	Below Average	2.00	
8. Health and Social Work Activities	3.00	Average	3.33	Average	3.00	Average	3.67	
9. Heating, Ventilation, Air-conditioning and Refrigeration	3.00	Average	3.00	Average	3.00	Average	3.00	
10. Information and Communication Technology	3.62	Above Average	3.75	Above Average	3.62	Above Average	4.13	
11. Maritime	3.00	Average	3.00	Average	2.00	Below Average	3.00	
12. Metals and Engineering	3.33	Average	3.50	Above Average	3.17	Average	3.00	
13. Other Community Social and Personal Service Activities	3.00	Average	3.40	Average	3.20	Average	3.60	
14. Processed Food & Beverages	2.62	Average	2.77	Average	2.69	Average	3.00	
15. Public Administration and Defense	4.00	Above Average	5.00	Excellent	3.00	Average	5.00	
16. Technical Vocational Education Training (TVET)	4.00	Above Average	4.13	Above Average	4.00	Above Average	4.13	
17. Tourism (Hotel and Restaurant)	3.18	Average	4.06	Above Average	2.94	Average	4.00	
18. Utilities (electricity, gas and water)	2.00	Below Average	4.00	Above Average	3.00	Average	5.00	
19. Visual Arts	N.I.	Excellent	3.00	Average	N.I.	Excellent	3.00	
20. Wholesale and Retail Trading	3.27	Average	3.67	Above Average	3.80	Above Average	4.00	
21. Others	3.22	Average	3.74	Above Average	3.30	Average	3.87	

**Legend:** 4.21 - 5.00 - Excellent; 3.41 - 4.20 - Above Average, 2.61 - 3.40 - Average; 1.81 - 2.60 - Below Average; 1.00 - 1.80 - Well Below Average.

## Attachment 13g

### Employer Ratings: Gaps in the Perceived and Desired Level of Competencies of TVET Graduates on the job by Industry Classification

Competencies	Ability to handle tools, machines and equipments				Business Intelligence			
	Perceived		Desired		Perceived		Desired	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
1. Agriculture, Hunting and Forestry	4.71	Excellent	4.17	Above Average	3.50	Above Average	3.60	Above Average
2. Automotive and Land Transportation	3.80	Above Average	4.56	Excellent	3.40	Average	3.78	Above Average
3. Construction	3.43	Above Average	3.71	Above Average	3.43	Above Average	3.50	Above Average
4. Electronics	3.75	Above Average	4.63	Excellent	2.87	Average	3.88	Above Average
5. Financial Intermediation	3.50	Above Average	4.00	Above Average	3.50	Above Average	3.50	Above Average
6. Furniture and Fixtures	4.00	Above Average	4.00	Above Average	4.00	Above Average	4.00	Above Average
7. Garments	3.00	Average	4.00	Above Average	2.00	Below Average	2.00	Below Average
8. Health and Social Work Activities	3.33	Average	3.67	Above Average	2.67	Average	3.33	Average
9. Heating, Ventilation, Air-conditioning and Refrigeration	3.00	Average	3.00	Average	3.00	Average	3.00	Average
10. Information and Communication Technology	4.00	Above Average	4.13	Above Average	3.88	Above Average	3.75	Above Average
11. Maritime	4.00	Above Average	4.00	Above Average	3.00	Average	3.00	Average
12. Metals and Engineering	3.83	Above Average	4.17	Above Average	2.33	Below Average	3.17	Average
13. Other Community Social and Personal Service Activities	4.00	Above Average	3.60	Above Average	3.40	Average	3.60	Above Average
14. Processed Food & Beverages	3.38	Average	3.54	Above Average	2.85	Average	3.00	Average
15. Public Administration and Defense	3.00	Average	5.00	Excellent	5.00	Excellent	5.00	Excellent
16. Technical Vocational Education Training (TVET)	4.13	Above Average	4.25	Excellent	4.00	Above Average	4.13	Above Average
17. Tourism (Hotel and Restaurant)	3.35	Average	4.12	Above Average	3.12	Average	4.18	Above Average
18. Utilities (electricity, gas and water)	4.00	Above Average	5.00	Excellent	2.00	Below Average	4.00	Above Average
19. Visual Arts	N.I.	-	3.00	Average	N.I.	-	3.00	Average
20. Wholesale and Retail Trading	3.93	Above Average	4.20	Above Average	3.40	Average	3.93	Above Average
21. Others	3.61	Above Average	4.09	Above Average	3.09	Average	3.78	Above Average

**Legend:** 4.21 - 5.00 - Excellent; 3.41 - 4.20 - Above Average, 2.61 - 3.40 - Average; 1.81 - 2.60 - Below Average; 1.00 - 1.80 - Well Below Average.

## Attachment 13h

### Employer Ratings: Gaps in the Perceived and Desired Level of Competencies of TVET Graduates on the job by Industry Classification

Competencies	Technical Skills			
	Perceived		Desired	
	Mean	Interpretation	Mean	Interpretation
1. Agriculture, Hunting and Forestry	4.43	Excellent	4.67	Excellent
2. Automotive and Land Transportation	4.00	Above Average	4.44	Excellent
3. Construction	3.71	Above Average	3.64	Above Average
4. Electronics	3.75	Above Average	4.63	Excellent
5. Financial Intermediation	3.50	Above Average	4.00	Above Average
6. Furniture and Fixtures	4.00	Above Average	4.00	Above Average
7. Garments	4.00	Above Average	4.00	Above Average
8. Health and Social Work Activities	3.33	Average	3.67	Above Average
9. Heating, Ventilation, Air-conditioning and Refrigeration	3.00	Average	3.00	Average
10. Information and Communication Technology	4.25	Excellent	4.13	Above Average
11. Maritime	4.00	Above Average	4.00	Above Average
12. Metals and Engineering	3.67	Above Average	4.17	Above Average
13. Other Community Social and Personal Service Activities	3.80	Above Average	3.60	Above Average
14. Processed Food & Beverages	3.38	Average	3.62	Above Average
15. Public Administration and Defense	3.00	Average	5.00	Excellent
16. Technical Vocational Education Training (TVET)	4.13	Above Average	4.25	Excellent
17. Tourism (Hotel and Restaurant)	3.41	Above Average	4.12	Above Average
18. Utilities (electricity, gas and water)	4.00	Above Average	5.00	Excellent
19. Visual Arts	N.I.	Excellent	3.00	Average
20. Wholesale and Retail Trading	4.20	Above Average	4.13	Above Average
21. Others	3.74	Above Average	4.13	Above Average

**Legend:** 4.21 - 5.00 - Excellent; 3.41 - 4.20 - Above Average, 2.61 - 3.40 - Average; 1.81 - 2.60 - Below Average; 1.00 - 1.80 - Well Below Average.

## Attachment 14a

### Employers' Preferred Educational Attainment for Techvoc Workers by Industry Classification

	College Graduate		College Graduate with TESDA Certification		College Undergraduate	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
1. Agriculture, Hunting and Forestry	4	7.27	7	8.64	1	2.78
2. Automotive and Land Transportation	2	3.64	5	6.17	2	5.56
3. Construction	3	5.45	1	1.23	2	5.56
4. Electronics	2	3.64	1	1.23	0	0.00
5. Financial Intermediation	2	3.64	2	2.47	1	2.78
6. Furniture and Fixtures	0	0.00	0	0.00	0	0.00
7. Garments	0	0.00	0	0.00	0	0.00
8. Health and Social Work Activities	1	1.82	0	0.00	0	0.00
9. Heating, Ventilation, Air-conditioning and Refrigeration	0	0.00	0	0.00	0	0.00
10. Information and Communication Technology	6	10.91	7	8.64	2	5.56
11. Maritime	0	0.00	1	1.23	0	0.00
12. Metals and Engineering	2	3.64	4	4.94	2	5.56
13. Other Community Social and Personal Service Activities	0	0.00	1	1.23	2	5.56
14. Processed Food & Beverages	3	5.45	7	8.64	2	5.56
15. Public Administration and Defense	1	1.82	2	2.47	0	0.00
16. Technical Vocational Education Training (TVET)	3	5.45	7	8.64	0	0.00
17. Tourism (Hotel and Restaurant)	7	12.73	11	13.58	5	13.89
18. Utilities (electricity, gas and water)	1	1.82	1	1.23	1	2.78
19. Visual Arts	1	1.82	0	0.00	0	0.00
20. Wholesale and Retail Trading	9	16.36	8	9.88	7	19.44
21. Not Indicated	0	0.00	0	0.00	0	0.00
22. Others	8	14.55	16	19.75	9	25.00
<b>Total</b>	<b>55</b>	<b>100.0</b>	<b>81</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>

## Attachment 14b

### Employers' Preferred Educational Attainment for Techvoc Workers by Industry Classification

	High School Graduate		High School Undergraduate		Technical Vocational Graduate with TESDA certification	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
1. Agriculture, Hunting and Forestry	0	0.00	0	0.00	6	5.61
2. Automotive and Land Transportation	0	0.00	0	0.00	8	7.48
3. Construction	2	20.00	0	0.00	8	7.48
4. Electronics	1	10.00	0	0.00	6	5.61
5. Financial Intermediation	0	0.00	0	0.00	2	1.87
6. Furniture and Fixtures	0	0.00	0	0.00	1	0.93
7. Garments	0	0.00	0	0.00	1	0.93
8. Health and Social Work Activities	1	10.00	0	0.00	2	1.87
9. Heating, Ventilation, Air-conditioning and Refrigeration	0	0.00	0	0.00	2	1.87
10. Information and Communication Technology	0	0.00	0	0.00	3	2.80
11. Maritime	0	0.00	0	0.00	1	0.93
12. Metals and Engineering	1	10.00	0	0.00	5	4.67
13. Other Community Social and Personal Service Activities	1	10.00	0	0.00	3	2.80
14. Processed Food & Beverages	1	10.00	0	0.00	18	16.82
15. Public Administration and Defense	0	0.00	0	0.00	9	8.41
16. Technical Vocational Education Training (TVET)	0	0.00	0	0.00	2	1.87
17. Tourism (Hotel and Restaurant)	0	0.00	0	0.00	5	4.67
18. Utilities (electricity, gas and water)	1	10.00	0	0.00	13	12.15
19. Visual Arts	0	0.00	0	0.00	1	0.93
20. Wholesale and Retail Trading	0	0.00	0	0.00	0	0.00
21. Not Indicated	2	20.00	0	0.00	10	9.35
22. Others	0	0.00	3	100.00	1	0.93
<b>Total</b>	<b>10</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>107</b>	<b>100.0</b>



## Attachment 14c

### Employers' Preferred Educational Attainment for Techvoc Workers by Industry Classification

	Technical Vocational Graduate without TESDA certification		Technical Vocational Undergraduate		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
1. Agriculture, Hunting and Forestry	0	0.00	0	0.00	18	5.49
2. Automotive and Land Transportation	2	9.52	0	0.00	19	5.79
3. Construction	2	9.52	1	6.67	19	5.79
4. Electronics	0	0.00	0	0.00	10	3.05
5. Financial Intermediation	0	0.00	0	0.00	7	2.13
6. Furniture and Fixtures	0	0.00	0	0.00	1	0.30
7. Garments	0	0.00	0	0.00	1	0.30
8. Health and Social Work Activities	0	0.00	0	0.00	4	1.22
9. Heating, Ventilation, Air-conditioning and Refrigeration	0	0.00	0	0.00	2	0.61
10. Information and Communication Technology	0	0.00	0	0.00	18	5.49
11. Maritime	0	0.00	0	0.00	2	0.61
12. Metals and Engineering	1	4.76	1	6.67	16	4.88
13. Other Community Social and Personal Service Activities	2	9.52	2	13.33	11	3.35
14. Processed Food & Beverages	4	19.05	3	20.00	59	17.99
15. Public Administration and Defense	2	9.52	1	6.67	24	7.32
16. Technical Vocational Education Training (TVET)	0	0.00	0	0.00	5	1.52
17. Tourism (Hotel and Restaurant)	0	0.00	0	0.00	15	4.57
18. Utilities (electricity, gas and water)	4	19.05	3	20.00	44	13.41
19. Visual Arts	0	0.00	0	0.00	4	1.22
20. Wholesale and Retail Trading	0	0.00	0	0.00	1	0.30
21. Not Indicated	4	19.05	4	26.67	44	13.41
22. Others	0	0.00	0	0.00	4	1.22
<b>Total</b>	<b>21</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>328</b>	<b>100.0</b>

## Attachment 15a

### List of Adjectives that Come to Employers' Minds when they hear the acronym TESDA

List of Adjectives	Frequency	Percent	List of Adjectives	Frequency	Percent
1. Skilled	87	21.3	39. Fast Learner	2	.5
2. Hard Working	36	8.8	40. Industrious	2	.5
3. Technical	30	7.4	41. Initiative	2	.5
4. Competent	28	6.9	42. Qualified	2	.5
5. Trained	25	6.1	43. Specialized	2	.5
6. Vocational	14	3.4	44. Work	2	.5
7. Certified	10	2.5	45. Affordable	1	.2
8. Trustworthy	9	2.2	46. Aggressive	1	.2
9. Flexible	6	1.5	47. Assessment	1	.2
10. Knowledgeable	6	1.5	48. Attitude	1	.2
11. Responsible	6	1.5	49. Average	1	.2
12. Efficient	5	1.2	50. Capable	1	.2
13. Employability	5	1.2	51. Cooperative	1	.2
14. Competitive	4	1.0	52. Dependable	1	.2
15. Dedicated	4	1.0	53. Die hard	1	.2
16. Excellent	4	1.0	54. Diligent	1	.2
17. Good attitude	4	1.0	55. Dreamers	1	.2
18. Helpful	4	1.0	56. Dynamic	1	.2
19. Productive	4	1.0	57. Easy Job	1	.2
20. Reliable	4	1.0	58. Easy to please	1	.2
21. Short course	4	1.0	59. Effective	1	.2
22. Adaptable	3	.7	60. Electronics	1	.2
23. Developed	3	.7	61. Entrepreneurship	1	.2
24. Educated	3	.7	62. Exceptional	1	.2
25. Equipped	3	.7	63. Experienced	1	.2
26. Literate both on written and oral	3	.7	64. Goal-oriented	1	.2
27. Motivated	3	.7	65. High Salary	1	.2
28. Patient	3	.7	66. high school graduate	1	.2
29. Well experienced	3	.7	67. Highly skilled	1	.2
30. Active	2	.5	68. Inexperience	1	.2
31. Appropriate skills	2	.5	69. Innovative	1	.2
32. Attentive	2	.5	70. Complying To Requirements	1	.2
33. Can work in minimal supervision	2	.5	71. Kind	1	.2
34. Creative	2	.5	72. Lack in training	1	.2
35. Disciplined workers	2	.5	73. Lack in work experience	1	.2
36. Energetic	2	.5	74. Lack of skills	1	.2
37. Enthusiastic	2	.5	75. Licensed by the govt.	1	.2
38. Expert	2	.5	76. Loud Attitude	1	.2

## Attachment 15b

### List of Adjectives that Come to Employers' Minds when they hear the acronym TESDA

Adjective	Frequency	Percent	Adjective	Frequency	Percent
77. Marginalized	1	0.2	89. Proficient	1	0.2
78. Matured	1	0.2	90. Provides good training	1	0.2
79. Mechanical	1	0.2	91. Resourceful	1	0.2
80. Menial	1	0.2	92. Scholar	1	0.2
81. Needs improvement	1	0.2	93. Smart	1	0.2
82. Opportunities	1	0.2	94. Support scholars	1	0.2
83. Performs well	1	0.2	95. Teamwork	1	0.2
84. Perseverance	1	0.2	96. Understanding	1	0.2
85. Persistent	1	0.2	97. Willing to listen and learn	1	0.2
86. Poor Communicator	1	0.2	98. With sense of direction	1	0.2
87. Power	1	0.2	99. Young	1	0.2
88. Practice career professionalism	1	0.2	<b>Total</b>	<b>408</b>	<b>100.0</b>

## Attachment 16

### Top 29 Schools (From what school did you get most of your hired Techvoc Workers)

Name of School	Frequency	Percent
1. TESDA Schools	48	11.7
2. Don Bosco Technical Institute	23	5.6
3. STI College	12	2.9
4. AMA Computer Learning Center	10	2.4
5. Polytechnic University of the Philippines	10	2.4
6. Technological University of the Philippines	10	2.4
7. Dualtech Training Center	7	1.7
8. International Electronics and Technical Institute	6	1.5
9. Any School in Metro Manila	5	1.2
10. Batangas State University	5	1.2
11. La Union Christian Comprehensive College	5	1.2
12. University of the Philippines	5	1.2
13. Xavier Technical School	5	1.2
14. Any school offering vocational courses	4	1.0
15. Electron Technical School	4	1.0
16. Laguna State Polytechnic University	4	1.0
17. Mindanao State University	4	1.0
18. Rizal Technological University	4	1.0
19. Technological Institute of the Philippines	4	1.0
20. ABE International Business College	3	.7
21. ACLC College	3	.7
22. Bohol Island State University	3	.7
23. Bulacan State University	3	.7
24. CITE	3	.7
25. Laguna College	3	.7
26. Lyceum of the Philippines University	3	.7
27. Meralco Foundation Inc.	3	.7
28. Meralco Foundation Institute	3	.7
29. St. Paul College	3	.7

## Attachment 17

### On-line Survey

#### **What is Lime Survey?**

*Lime survey is a free and open source on-line survey application system written in PHP based on a MySQL, Postage SQL or MSSQL database and distributed under the GNU General Public License. As a web-based software it enables the users to develop and publish online-surveys, and collect responses, without doing any programming.*

*As a web application, Lime Survey is installed to the user's server. After installation users can manage LimeSurvey from a web-interface. Users can use rich text in creating questions and messages. Images and videos can be also integrated into the survey. The layout and design of the survey can be modified under a template system.*

*Once a survey is finalized, the user can activate it, making it available for respondents to view and answer. LimeSurvey has no limit on the number of surveys a user can create and there is no limit on how many participants can respond to a particular survey. There is also no limit on the number of questions each survey may have. Questions are added in groups. The questions within each group are organized on the same page. Surveys can include a variety of question types that take many response formats, including multiple choice, text input, drop-down lists, numerical input, slider input, and simple yes/no input. Questions can also be arranged in a two-dimensional array, with options along one axis based on the questions on the other axis. Questions can depend on the results of other questions.*

*LimeSurvey also provides basic statistical and graphical analysis of survey results. Surveys can either be publicly accessible or be strictly controlled through the use of "once-only" tokens, granted only to selected participants.*

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