



**REPORT OF THE TRACER STUDY OF  
2015, 2016, 2017 GRADUATES  
FROM FORMAL POST SCHOOL EDUCATION AND  
TRAINING (PSET) PROVIDERS IN SAMOA**

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- All formal PSET providers that submitted graduate information to assist SQA;
- Fieldwork Assistants and Data Entry Clerks recruited by SQA to work together with the Research, Policy and Planning Division (RPPD) in carrying out the fieldwork;
- All of the 2015, 2016 and 2017 graduates from formal Post School Education and Training (PSET) providers that took time out from work and busy schedules to participate in the study; and
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The Samoa Qualifications Authority wishes to thank you all for your valuable contributions from the beginning of the study to the completion of this report.

## ACRONYMS

AHCBC	Apia Harvest Centre Bible College
CCCSFAM	Congregational Christian Church School of Fine Arts and Museum
CCCSVC	Congregational Christian Church Vocation College
DBTC	Don Bosco Technical Centre
DBCVTC	Don Bosco College & Vocational Technical Centre
ECETTI	Early Childhood Education Teachers Training Institute
HTC	Harvest Theological College
IFTI	Ierusalem Fou Theological Institute
MBS	Malua Bible School
MTC	Malua Theological College
MTCC -LoP	Methodist Technical and Creative Centre –Laumua o Punaoa
MCILAPP	Ministry of Commerce, Industry and Labour Apprenticeship Scheme
MoTC	Moamoa Theological College
NUS	National University of Samoa
PSET	Post School Education and Training
PTC	Piula Theological College
RHEMA	RHEMA Bible Training Centre – South Pacific
SPNTC	South Pacific Nazarene Theological College
SQA	Samoa Qualifications Authority
SSMA	Samoa Shipping Maritime Academy
SSS	Samoa Shipping Services
TI	Tesese Institute
TVET	Technical and Vocational Education and Training
USP	University of the South Pacific
UVC	Uesiliana Vocational Centre
VFTC	Vailima Fou Theological College
WMTC	Worldwide Mission Training Centre

## Executive Summary

A tracer study of 2015, 2016 and 2017 graduates from formal Post School Education and Training (PSET) providers in Samoa was conducted from November 2018 to April 2019. It achieved a 51 percent response rate of 4,125 graduates who were targeted. There were 175 qualifications available but only 156 were covered from 24 formal PSET providers that were able to submit graduates information.

The study objectives were;

- to identify the employment status of graduates with formal PSET qualifications;
- to assess the relevance of qualifications to the workplace; and
- to determine reasons why some graduates were unable to find employment

### *Employment and related outcomes*

A total of 1,415 respondents, or 65 percent of graduates were engaged in paid activities, including those who are self-employed. A total of 722 graduates were identified to be unemployed, with majority pursuing further studies (17.3 percent) and occupied in domestic work (15.3 percent). Females were more likely to be working for employers for pay, and more likely to be doing further studies compared to males. However, males were more likely to be self-employed.

The number of Certificate holders is 1,132, Bachelor degree holders is 743, and Diploma holders is 183. There are 67 holders of Postgraduate Certificates and Diplomas, and only 12 holders of Masters Degrees. Only 41.5 percent of Certificate holders are working for employers for pay. Considering the number of respondents for each qualification type, the best employment outcome is that of the Bachelor degree holders, with 96.9 percent of them holding paid jobs. This is followed by 91 percent for Postgraduate Certificate and Diploma holders.

Majority of respondents are employed within the Public Sector (70 percent). This is followed by the Private Sector (19 percent), and 8 percent are employed by Non-Government Organisations. Employed graduates took an average of 2.9 months to find their jobs within six months, with 34.7 percent who secured new jobs after graduation.

The higher the qualification, the higher the average weekly income. Masters degree holders earn SAT\$953.61 a week, while Certificate holders earn only SAT\$265.72 a week. Males earn higher average mean weekly income compared to females for respondents with Postgraduate Certificates and Diplomas, and Certificates. Females on the other hand earn higher average mean weekly income for those with Masters Degrees, Bachelor Degrees, and those with Diplomas.

### *Graduates' assessment of their education and training*

The respondents rated many aspects of their training as highly positive, however lowest ratings were made to the statement: 'my teacher or institute helped me to find work', and lower ratings were made for the following statements:

- safety gear was used during the practical component of the program
- my teacher or institute arranged for me to get work experience during the training or programme

Work experience had an impact on a graduate's chances of getting a job. For all respondents, 66 percent received work experience during their studies, mostly those already working for employers. Graduates rated an overall average of 2.9 out of 3 that the skills and knowledge learned were very "useful".

Most of the graduate respondents indicated that 'knowledge and understanding' in their study areas and generic skills were being mostly used in their jobs. More than 50 percent of respondents did not indicate any skills they had not learned enough, but of those who did indicate an inadequacy; technical skills are by far the largest category. For generic skills, computing skills were notably mentioned as inadequately covered in their training, followed by communication skills and customer service.

#### *Graduate suggestions*

Graduates offered suggestions for improving their programme of study and the associated formal PSET provider or institution they attended. Although they had rated most aspects of their studies highly positive as explained above, their suggestions also refer to the improvement of these same aspects as explained in the report.

#### *Recommendations*

PSET providers are encouraged to work closely with SQA using findings of this study to improve the quality and relevancy of their programmes delivered, and continue to provide accurate and complete graduates' information to the SQA through its PSET Annual Survey. Furthermore, PSET providers are to improve the employment outcomes of their graduates by ensuring that they have relevant work experience with employers (specifically for programmes that must have practical components).

The SQA needs to continue to conduct a national tracer study every three years to crosscheck the information that providers are reporting on an annual basis and to carry out more complex analysis of the labour market outcomes. Moreover, tracer study findings are to include in the SQA Career Advisory Services activities such as the school visits and National Career Day events particularly on information related to employment outcomes of specific qualifications, relevancy of qualifications/skills/knowledge to and the wages earned by graduates in specific occupations.

## **1. INTRODUCTION**

This report presents the findings of the **Samoa Qualifications Authority (SQA) National Tracer Study of 2015, 2016, and 2017 Graduates from formal Post School Education and Training providers in Samoa**. The national study of graduates is conducted by SQA on a triennial basis.

Graduate tracer studies or graduate destination surveys, are a key source of evidence to assess the effectiveness of Post School Education and Training (PSET). As one of its key mandates, the SQA is required to improve the quality of the education and training provided by accredited PSET providers. The links between quality of education and training, quality standards, accreditation processes and the outcomes achieved by graduates are becoming more and more emphasized and valued.

Tracer Studies are an important way of understanding the relevance and quality of programmes offered by the training and education providers in relation to the labour market. They provide information on how graduates have fared in the local and international labour market, and at the same time show the value and relevance of qualifications offered by PSET providers. Moreover, tracer studies can also provide graduate assessment and feedback to PSET providers on the relevance of their education and training to the jobs or employment secured by the graduates thereafter.

It is critically important for PSET providers to show each year that they acquire and utilise information on graduate employment outcomes and graduate assessment of the relevance of the education and training they have received from providers. Providers will also need to show they are using this information for continuous improvement through reviews of their programmes and their facilities.

Governments, communities, parents and graduates want to know whether their investment is producing the returns, they are expecting. For the clients of the PSET system such as prospective students, parents and career advisors; tracer studies at the national level are an invaluable source of reliable information on job prospects taking into account information such as pay rates of recent graduates with specific qualifications. Tracer studies also help prospective students to make informed choices as to which of the PSET providers offering similar qualifications produces better employment outcomes.

### **The study objectives**

The three main objectives of the study were:

- i. to identify the employment status of graduates with formal PSET qualifications;
- ii. to assess the relevance of qualifications to the workplace; and
- iii. to determine reasons why some graduates are not finding employment

### **Target population**

A list of 4,215 graduates was identified and compiled from 24 PSET providers graduates data submitted to SQA. This number consisted of graduates who completed studies in the calendar years 2015, 2016, and 2017. The total number of qualifications listed was 175. Graduates from the Australian-Pacific Technical College (APTC) were excluded as in the 2013 study because they are surveyed independently by the APTC.

The SQA targeted all the listed graduates to meet the study objectives, and to gather enough information to meet the Education Sector 2019-2024 Key Indicator – *the percentage of PSET graduates finding employment within 6 months*. With this target, the SQA focused on achieving a 70 percent response rate.

### **Timing of the Study**

The Tracer Study was coordinated and conducted by Research, Policy and Planning Division (RPPD) staff, under the supervision of the Assistant CEO RPPD. A total of 20 Fieldwork Assistants and 4 Data Entry Clerks were contracted by the SQA to assist in the data collection phase of the study. Prior to the fieldwork, RPPD conducted a 5-day training from the 8<sup>th</sup> to the 12<sup>th</sup> of October to prepare Fieldwork Assistants and Data Entry Clerks for the survey.

This intensive training workshop covered relevant topics on tracer study data collection as well as practical activities on how to facilitate interviews using the questionnaire. All of the Fieldwork Assistants and Data Entry Clerks, at the completion of their employment with the SQA, were presented with Certificates of Completion to recognize their participation.

During the fieldwork, RPPD staff and Fieldwork Assistants were assigned to locations around both Upolu and Savaii to search, identify and carry out personal interviews using a structure questionnaire during the following dates:

- Upolu fieldwork (05<sup>th</sup> - 30<sup>th</sup> November 2018)
- Savaii fieldwork (28<sup>th</sup> January 2019 – 1<sup>st</sup> February 2019)
- Upolu follow-up fieldwork (4<sup>th</sup> February – 5<sup>th</sup> April 2019)

### **Limitations**

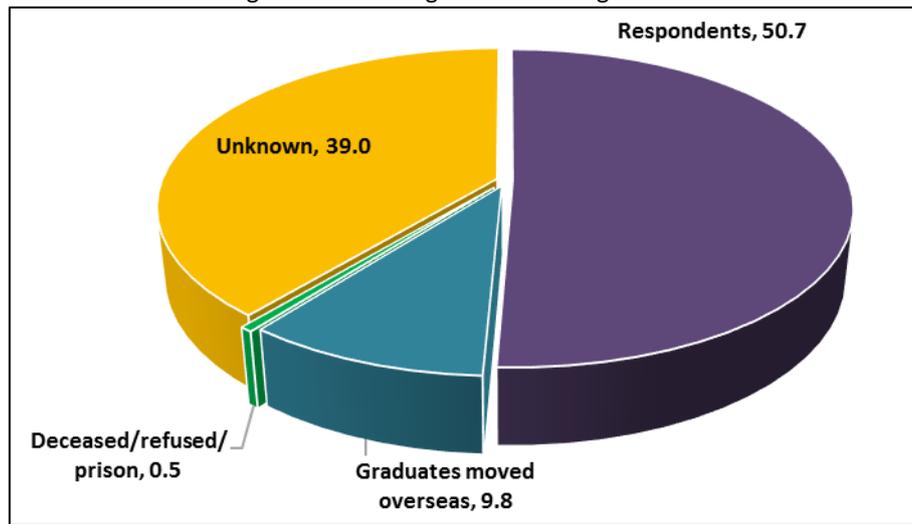
The difficulty in locating graduates during data collection was a major constraint in achieving the desired response rate and employment outcomes. The information submitted by formal PSET providers was neither sufficient nor accurate enough to assist in the identification of graduates' whereabouts.

As the SQA national studies are one of the few sources of data with enough detail on PSET graduate outcomes, it is crucial that the supply of accurate and complete information from formal PSET providers is provided to assist in the facilitation of future national studies.

## Response Rate

Out of the 4,125 listed graduates, the study managed to locate and identify 61 percent (2,572) of the study population. Only 51 percent (2137) of the graduates responded to the study through face-to-face and phone interviews while 10 percent were identified to have migrated overseas for permanent residency, visiting families or pursuing further studies through scholarships. For the purpose of this study, the report will only focus on the 51 percent response rate for analysis and reporting.

Figure 1: Percentage of identified graduates



High proportions above 40 percent were recorded from each graduation year as shown in Table 1. When comparing each graduation year, the highest response rate of 60 percent is recorded for graduation year 2017.

Table 1: Respondents' Gender comparisons, by number listed and response rate

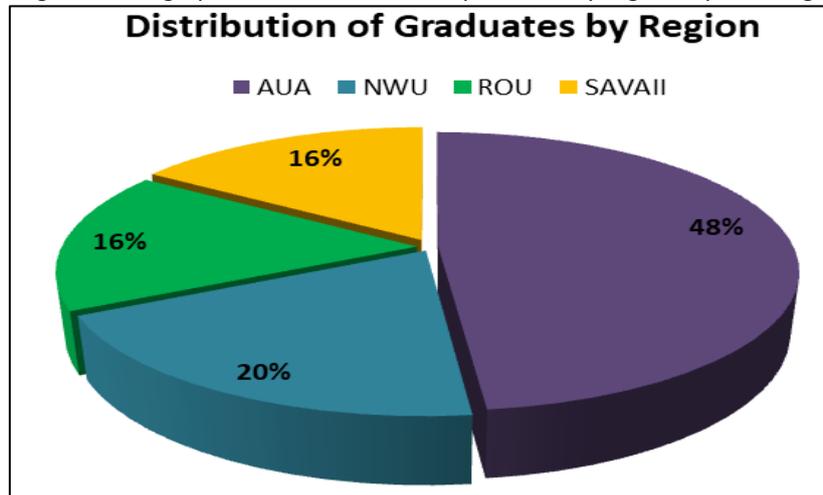
YEARS	2015			2016			2017			TOTAL		
	F	M	TOTAL	F	M	TOTAL	F	M	TOTAL	F	M	TOTAL
Listed	479	462	941	1036	872	1908	692	674	1366	2207	2008	4215
Surveyed	261	232	493	460	365	825	456	363	819	1177	960	2137
Percentage	54.5	50.2	52.4	44.4	41.9	43.2	65.9	53.9	60.0	53.3	47.8	50.7

Response rate from graduates shows significant differences in terms of gender proportions. Findings interestingly show that for each year, more females were listed in the study, hence a high response rate of (53.3 percent) compared to their male counterpart. The year 2017 holds the highest number of both males and females compared to other graduation years.

## Profile of respondents

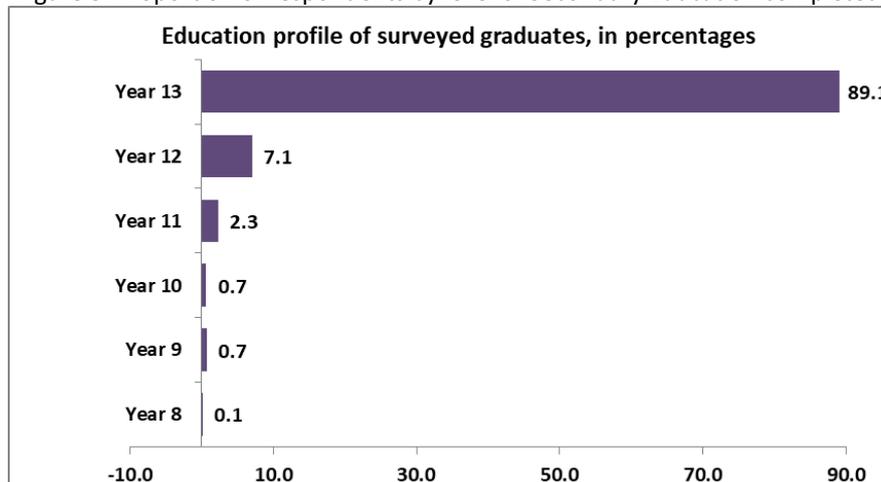
Figure 2 shows the geographical distribution of respondents. Almost half of the study population resides in the Apia Urban Area (48 percent). A proportion of 20 percent of graduates identified are living in the North West of Upolu, and 16 percent resides in both Rest of Upolu and Savaii.

Figure 2: Geographical distribution of respondents by region & percentage



Graduates were asked to indicate the level they had completed in secondary education prior to enrolling in a PSET provider. As shown in Figure 3, the majority (89.1 percent) of respondents completed their Year 13 in high schools or colleges. Less than 10 percent managed to complete Year 12 before enrolling in post school education.

Figure 3: Proportion of respondents by level of Secondary Education completed.



A total number of 24 PSET providers were covered in the study, which includes eleven (11) Technical and Vocational Education and Training providers, eleven (11) Religious Institutes, and two (2) Universities. From each category of PSET, the highest number of 1,479 graduate interviewed were from Universities. The second largest, 581 were from TVET providers, and only 77 respondents came from Religious Institutes.

Table 2: Distributions of respondents by formal PSET providers, numbers & percentage

	<b>PSET Providers</b>	<b>No. of Grads</b>	<b>Percent</b>		<b>PSET Providers</b>	<b>No. of Grads</b>	<b>Percent</b>
1.	NUS	1356	63.45	13.	CCCSFAM	19	0.89
2.	USP	123	5.76	14.	CCCSVC	15	0.70
3.	DBTC	116	5.43	15.	MTC	15	0.70
4.	ECETTI	87	4.07	16.	HTC	13	0.61
5.	TI	71	3.32	17.	MoTC	8	0.37
6.	LoP	64	2.99	18.	RHEMA	6	0.28
7.	MCILAPP	56	2.62	19.	IFTC	4	0.19
8.	SSMA	51	2.39	20.	SPNTC	4	0.19
9.	MHIL	49	2.29	21.	PTC	3	0.14
10.	UVC	29	1.36	22.	MBS	2	0.09
11.	DBCVC	24	1.12	23.	WMTC	2	0.09
12.	AHCBC	19	0.89	24.	VFTC	1	0.05

The majority of the respondents were from the National University of Samoa with a high response rate of 63.5 percent. Second highest proportions are shown for the University of the South Pacific (5.8 percent), followed by Don Bosco Technical Centre (5.4 percent). It is also important to note that the USP graduates targeted in this study only included those that undertook studies at the Alafua Campus. Furthermore, Table 2 above reflects percentage of respondents from the other 20 PSET providers.

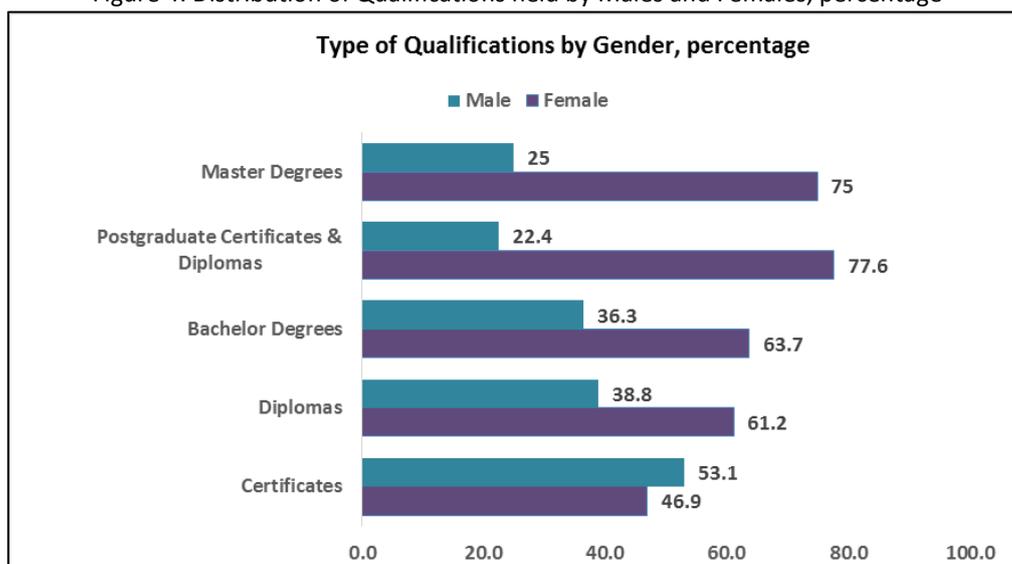
A total number of 156 different qualifications from various disciplines were covered in the study, with levels of qualifications ranging from Certificates to Masters Degrees. Majority of the graduates interviewed were certificate holders, which covered more than 50 percent of the response rate as reflected in Table 3. Bachelor degree holders were the second highest with 34.8 percent. The duration of respondents' studies to complete these qualifications is within the range of 1 to 7 years with an overall average of 1.4 years. Moreover, out of the total number of respondents, 12.1 percent of graduates held qualifications on accredited programmes.

Table 3: Distribution of Respondents by type of Qualification, in number & percentage

<b>QUALIFICATIONS</b>	<b>GENDER</b>		<b>Total</b>	<b>Percentages</b>
	<b>Female</b>	<b>Male</b>		
Certificates	531	601	1132	53.0
Diplomas	112	71	183	8.6
Bachelor Degrees	473	270	743	34.8
Postgraduate Certificates & Diplomas	52	15	67	3.1
Master Degrees	9	3	12	0.6
<b>TOTAL</b>	<b>1177</b>	<b>960</b>	<b>2137</b>	<b>100.0</b>

In terms of gender distribution, more females were interviewed in the study compared to males. A considerable variation was noted between female and male respondents in terms of the types of qualifications they have completed. As elaborated in Figure 4, females are more likely to pursue and graduated with high qualifications compared to males. Overall, females outnumber males in all qualifications except for certificate level.

Figure 4: Distribution of Qualifications held by Males and Females, percentage



Males dominated (53 percent) in the certificate level compared to females, and this is probably due to higher percentages of certificate programmes being TVET related, and given the male oriented nature of these programmes in fields such as plumbing, electrical and mechanical engineering to name a few. It may also reflect that females tend to outperform males academically at secondary level opening more opportunities for them to pursue the academic stream.

## 2. KEY FINDINGS: EMPLOYMENT OUTCOME MAIN ACTIVITIES

The study found that 66.2 percent of the respondents are employed while 33.8 percent are either unemployed or engaged in unpaid activities. Almost all of the 1415 employed graduates are in paid employment except for an insignificant one percent who are either in Ministerial work or are self-employed.

Table 4: Main Activities of Respondents, by gender & percentage

EMPLOYED (Paid activities)					UNEMPLOYED (Unpaid Activities)				
Activities	GENDER		Count	Percent	Activities	GENDER		Count	Percent
	Female	Male				Female	Male		
Working for employers for pay	796	599	1395	65.3	Pursuing further education	209	161	370	17.3
Church Minister/Pastoral Work	4	11	15	0.7	Doing domestic work	155	179	334	15.6
Self-employed	3	2	5	0.2	Not able to work due to sickness	10	8	18	0.8
<b>TOTAL</b>	<b>803</b>	<b>612</b>	<b>1415</b>	<b>66.2</b>	<b>TOTAL</b>	<b>374</b>	<b>348</b>	<b>722</b>	<b>33.8</b>

For unemployed graduates, 15.6 percent are occupied in domestic work. This includes providing or delivering unpaid services to the village, family or the church. A total of 18 respondents' or 0.8 percent of respondents have been identified to be incapable for employment due to sickness or disability, and the rest (17.3 percent) are pursuing further studies for higher qualifications.

In terms of gender comparisons, females are more likely to be working for an employer for pay and doing further studies compared to males. Furthermore, it is noted that more females are unable to work due to certain illnesses and disability while more males preferred to be engaged in domestic duties in the community rather than being involved in paid activities.

Table 5: Main Activities of Respondents by Formal PSET Provider

PROVIDER	RESPONDENTS	EMPLOYED			UNEMPLOYED	
		Work for employer (%)	Church Minister/Pastors (%)	Self-employed (%)	Engaged in Unpaid activities (%)	Pursuing further Studies (%)
AHCBC	19	78.9			21.1	
CCCSFAM	19	52.6			10.5	36.8
CCCSVC	15	13.3			86.7	
DBCVTC	24	54.2			45.8	
DBTC	116	40.5			30.2	29.3
ECETTI	87	66.7			27.6	5.7
HTC	13	38.5	7.7		53.8	
IFTC	4	25.0			75.0	
LoP	64	45.3		1.56	50.0	3.1
MBS	2	50.0			50.0	
MCILAPP	56	94.6			5.4	
MHIL	49	51.0			42.9	6.1
MoTC	8	12.5	37.5		50.0	
MTC	15	66.7	33.3			
NUS	1356	67.2		0.22	9.8	22.8
PTC	3	33.3	66.7		0.0	
RHEMA	6	16.7	33.3		50.0	
SPNTC	4		50.0		50.0	
SSMA	51	94.1			3.9	2.0
TI	71	63.4			35.2	1.4
USP	123	91.1			3.3	5.7
UVC	29	20.7		3.45	72.4	3.4
VFTC	1				100.0	
WMTC	2	50.0			50.0	
<b>TOTAL</b>	<b>2137</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

PSET Providers such as SSMA, MCILAPP and USP are shown to have high proportions of graduates who are ‘working for employers’ for pay’, as indicated in Table 5. On the other hand, high percentages of respondents from VFTC, IFTC, and CCCSVC are engaged in unpaid activities although actual numbers may not be significant like in the case of VFTC with only one respondent who was unemployed.

### **i. EMPLOYED GRADUATES AND QUALIFICATIONS**

Table 6 shows different types of qualifications attained by graduates who are engaged in paid activities. Out of the five qualifications, most of the graduates are Certificate holders. This is because the most available qualification in Samoa is a Certificate with the least amount of time to complete compared to other qualifications.

Table 6: Respondents in paid employment by qualification type, in number and percentage

QUALIFICATIONS LEVEL	No. OF RESPONDENTS	EMPLOYED GRADUATES	PERCENTAGE OF EMPLOYED GRADUATES
Master Degrees	12	10	83.3
Postgraduate Certificates & Diplomas	67	61	91.0
Bachelor Degrees	743	726	97.7
Diplomas	183	139	76.0
Certificates	1132	479	42.3
<b>TOTAL</b>	<b>2137</b>	<b>1415</b>	<b>66.2</b>

Although Certificate holders dominate the response rate, findings reported that only 42.3 percent of these graduates are involved in paid activities. On the other hand, high proportions of employed graduates are shown for Bachelor Degrees (97.7 percent) and Diplomas (76.0 percent) when comparing to all other qualifications. Moreover, 9.7 percent of graduates in paid employment held qualifications from accredited programmes.

In terms of qualifications by type, 911 (64 percent) employed graduates held Higher Education qualifications, ranging from Foundation Certificate level to Master’s Degree level. A proportion of 33 percent (462 graduates) of respondents attained TVET qualifications, and the remaining 3 percent (42 graduates) of respondents held religious types of qualifications.

Figure 5: Gender proportions of Respondents by Qualifications type

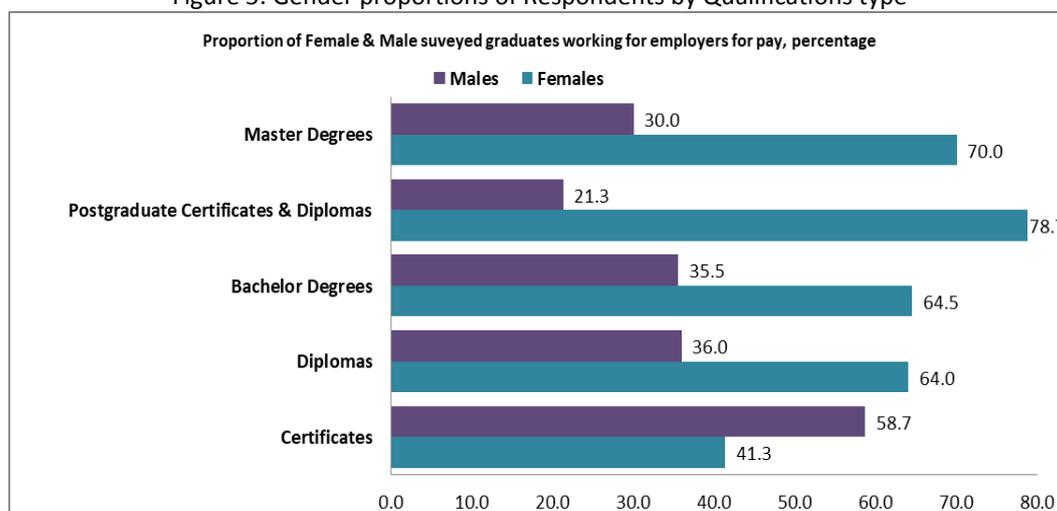
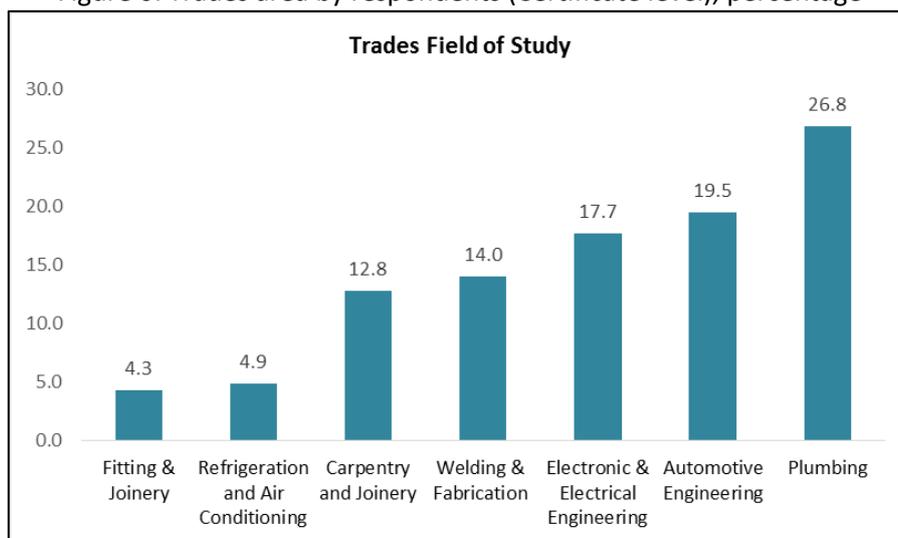


Figure 5 displays gender distribution by qualifications level, where a significant difference is noted between both genders that held Masters Degrees and Postgraduate Certificate and Diplomas. Females outnumbered males in high-level qualifications starting from Diploma going up to Master’s Degree, whereas males dominate Certificate level. As mentioned earlier, significant proportions of Certificate level programmes are TVET related, and specifically in the Trades, more males enrolled in these programmes as traditionally expected.

Figure 6: Trades area by respondents (Certificate level), percentage



Findings show that 12 percent (164) of qualifications from Certificate level are categorised under Trades field of study as shown below. High percentage of respondents are shown in plumbing, automotive engineering, and electronic and electrical engineering. Low percent shown for trades such as fitting and joinery, and refrigeration and air conditioning. However, in terms of qualification mismatch, 22 percent (36 graduates) of these respondents from each trade areas are in paid jobs that do not match their qualifications.

Figure 7: Distribution of Graduates by Employer type, percentage

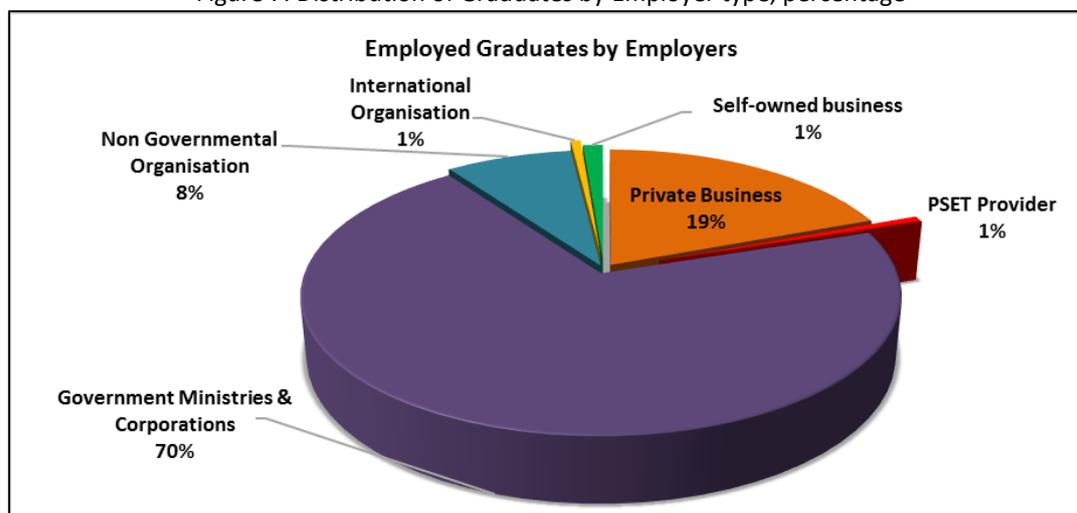
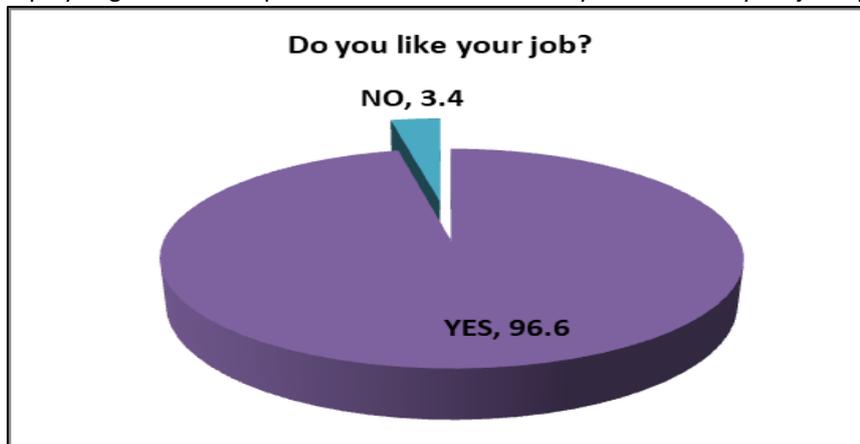


Figure 7 shows that the majority of 993 (70 percent) graduates are employed in the Public Sector including Government Ministries and Corporations. From this 993 graduates, 760 are higher education qualification holders, 222 have TVET qualifications, and 11 held religious qualifications. The private businesses employed 271 graduates (19 percent), in which 194 are TVET graduates, 73 are higher education graduates, and four with religious qualifications. The Non-Government Organisations, International Organisation, PSET providers employed the rest of the graduates with some owning small businesses.

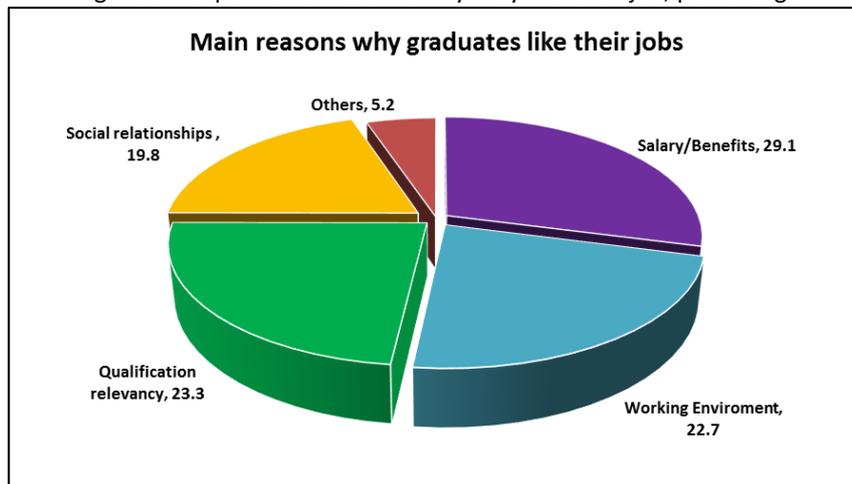
Graduates were asked to indicate whether they like their jobs or not, and to give reasons for their responses. The second part of this question was an open response where graduates listed more than one reasons for their answers. According to Figure 8 below, 96.6 percent answered positively (yes), whereas 3.4 percent disclose reasons why they do not like their employment.

Figure 8: Employed graduates' responses to Question 'How do you feel about your job?' percentage.



Outlined in Figure 9 are major factors why graduates liked their jobs or workplace, with good salaries and benefits from employers as the top reason (29.1 percent). Moreover, graduates were comfortable with the work environment, qualifications are relevant to their job, and they are also maintaining good interpersonal relationships with other employees. Other reasons include 'trainings provided by employers', 'flexible hours', 'capacity building', and 'challenges'.

Figure 9: Respondents' reasons why they like their job, percentage

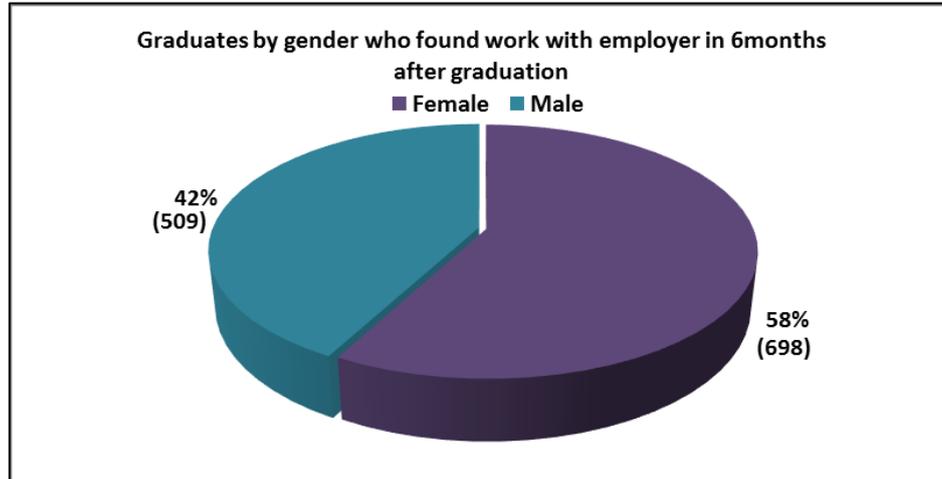


A small proportion of respondents (3.4 percent) also gave reasons why they did not like their job and these included poor salaries, irrelevant qualifications, having bad relationships with other colleagues, non-flexible hours, no benefits, to name a few.

## TIME-PERIOD FOR GRADUATES TO FIND EMPLOYMENT

From the 1,415 employed respondents, a total of 1,207 graduates were able to secure jobs within 6 months after graduation. This includes graduates that were already in paid jobs, and at the same time studying for their qualifications.

Figure 10: Gender Comparison of Respondents who found work with Employer within 6 months after Graduation



They took an average of 2.2 months to find their jobs after graduation with females taking less time to find jobs compared to males. Figure 11 shows that more females were able to find work with employers within six months after graduation compared to males.

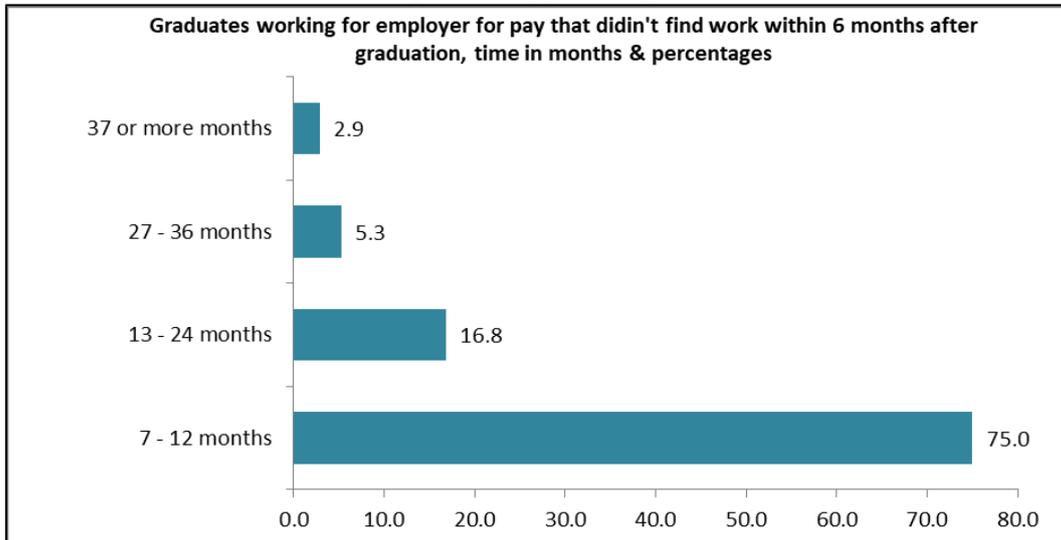
However, to work out the value of qualifications on the chances of obtaining a job, it is important to exclude respondents that were employed while studying. After excluding graduates that were employed before graduation, this leaves 742 graduates (34.7 percent) of respondents who are in new jobs. These respondents took an average of 2.9 months to find their new jobs. This may show the importance of having a qualification to secure a job.

Table 7: Total and percentages of employed graduates that found work within six (6) months

Graduation Year	Female	Male	Total	Female employed within six months	Male employed within six months	Total employed within six months	% females employed within six months	% males employed within six months	% total employed within six months
2015	183	154	337	99	84	183	54.1	54.5	54.3
2016	315	242	557	160	110	270	50.8	45.5	48.5
2017	305	216	521	172	117	289	56.4	54.2	55.5

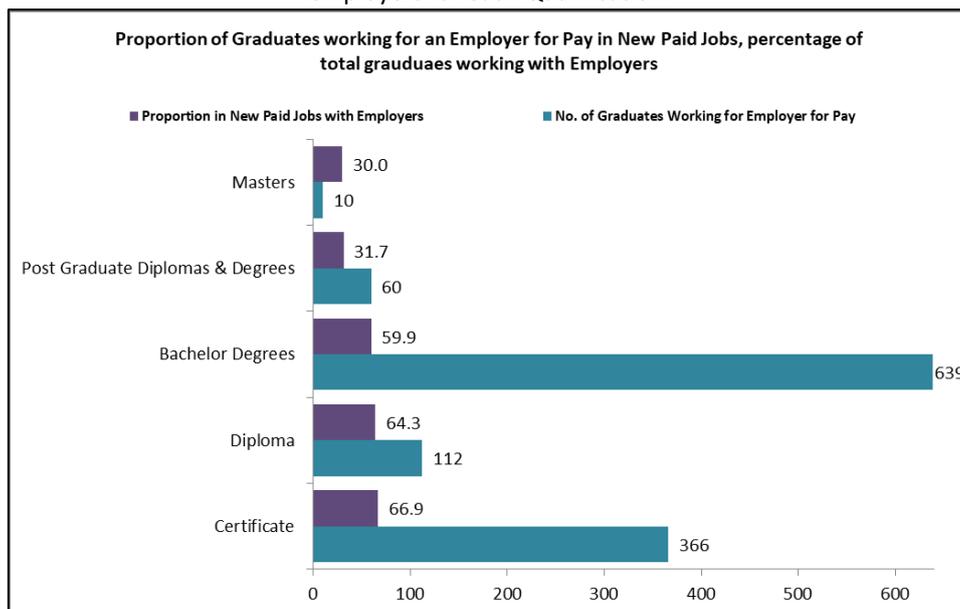
The remaining respondents working with employers that did not find jobs within 6 months after graduation (17.5 percent) took an average time of 15.2 months to find their jobs with a significant 75 percent securing jobs between 7 to 12 months according to Figure 11 below. A significant 20.9 percent took 13 to 24 months after graduation to find employment.

Figure 11: How long it took to find work for respondents who did not find work within 6 months after graduation, percentage



The proportions of respondents by qualification type in new jobs are shown in Figure 12. Shown are relevant proportions above 50 percent of graduates' new jobs for Certificate holders (70 percent), Diplomas (64.3 percent), and Bachelor Degree (60 percent). However, there are smaller numbers of respondents for the Master Degree and the Postgraduate Diploma/Certificate – many of them had been working before or during their studies.

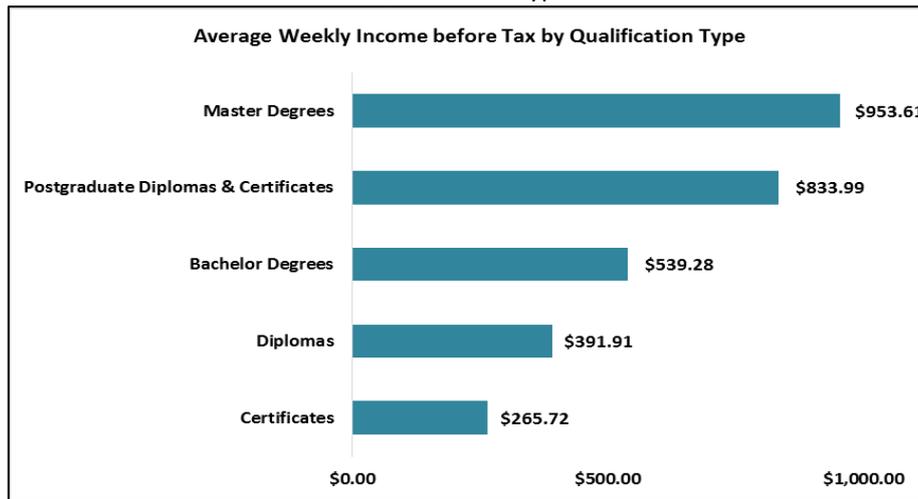
Figure 12: Proportions of respondents working for Employer for Pay in New Paid Jobs by number with employers for each Qualification.



## INCOME EARNED

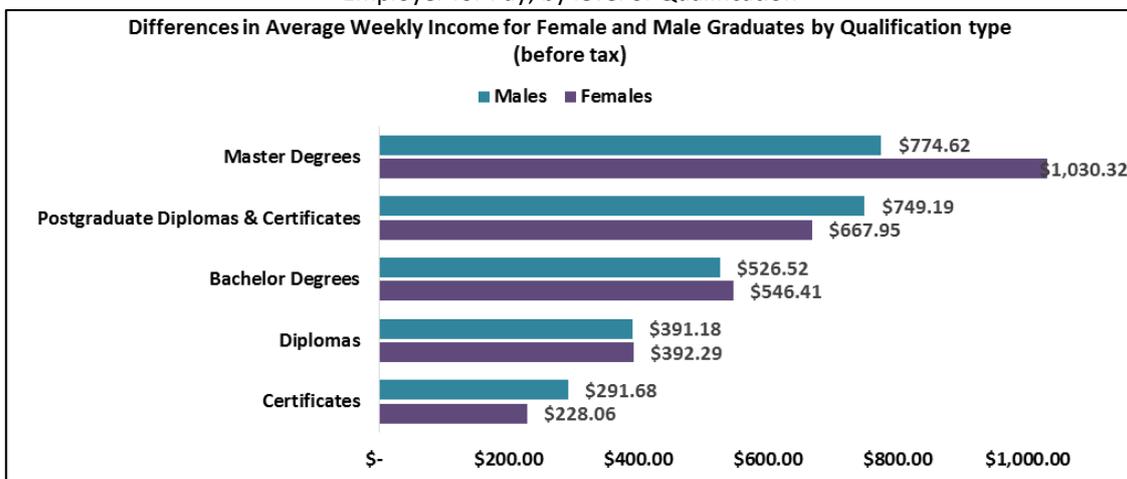
Figure 13 below shows average weekly income of employed graduates by qualifications. The higher the qualification, the higher the income. This has evidently shown that Master's Degree holders earn the highest average weekly income of \$953.61, while Certificate holders earn the lowest of \$265.72. Higher average weekly income above \$500 is noted for Bachelor Degree holders (\$539.28) and Postgraduate Diploma & Degree holders (\$833.99). The overall average weekly income is \$596.90.

Figure 13: Average Weekly Income before Tax (Samoan Tala) of Respondents working for an Employer by Qualification Type



Average weekly income by gender in each qualifications level shows significant results. Females with Masters degrees and Bachelor degrees earn a higher average weekly income compared to males. However, males with Postgraduate Degrees and Diplomas earn much more even though females outnumbered them in this level. Earnings for both gender are relatively the same for Diploma holders, and males are ahead of females in income earning for Certificate level qualifications.

Figure 14: Differences in Average Weekly Income Earned by Female and Male Graduates Working for an Employer for Pay, by level of Qualification



## JOB SKILLS MATCH

Information about the match between graduates' field of study and their jobs is a significant part of assessing employment outcomes. This assessment will determine whether the graduates were able to find work that matches the skills and knowledge obtained from their studies.

The information on the respondents' jobs with employers was coded using the 'International Standard Classification of Occupations' (ISCO). This system is maintained and updated by the International Labour Organization (ILO). It provides a skills-based coding for different occupations across nine levels, which is most detailed for an occupation at level four (four digits). Table 8 shows results of this coding.

Table 8: Proportion of employed respondents Pay by 9-levels of the ILO ISCO System, number & percentage

ISCO CLASSIFICATIONS	No.	Percentage
(1) Managers	35	2.5
(2) Professionals	874	61.8
(3) Technicians and associate professionals	57	4.0
(4) Clerical support workers	123	8.7
(5) Service and sales workers	98	6.9
(6) Skilled agricultural, forestry & fisheries workers	1	0.1
(7) Craft & related trades workers	145	10.2
(8) Plant & machine operators, & assemblers	37	2.6
(9) Elementary occupations	45	3.2
<b>TOTAL</b>	<b>1415</b>	<b>100.0</b>

The highest proportion of respondents (61.8 percent) is at Level 2. This is followed by Level 7 at 10.2 percent, and Level 4 at 8.7 percent.

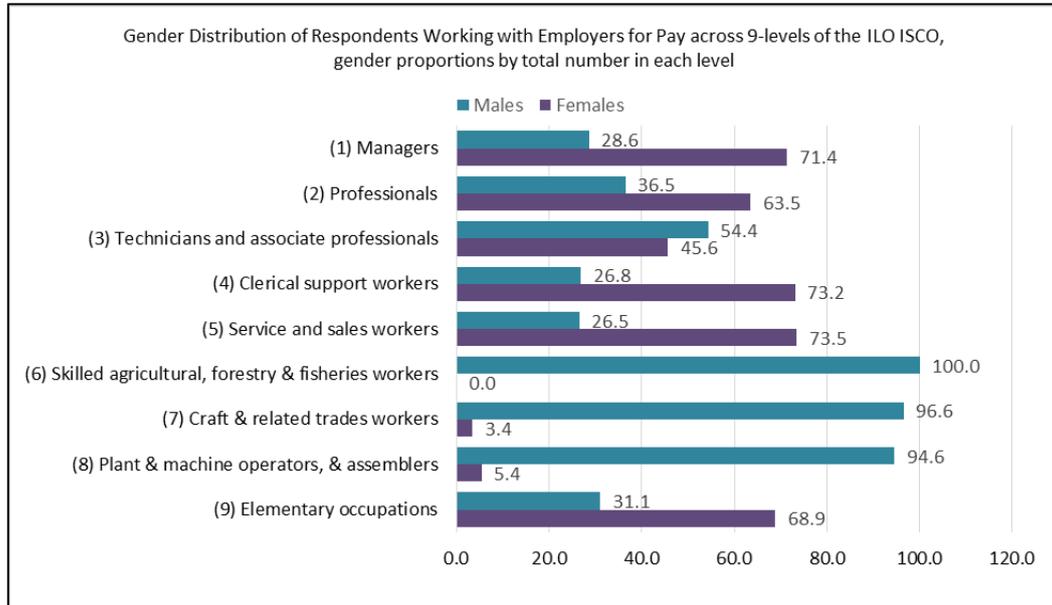
The distribution of respondents working with employers across the 9 Levels of ISCO by qualification type is shown in Table 9. The Professionals at Level 2 are substantially made up of Bachelor Degree holders (73.9 percent), followed by Certificate holders (12 percent) and Diploma holders at 8.9. The majority of graduates at Level 2 are made of teachers (23.8 percent) and nurses (12.1 percent). The Certificate holders have jobs with the widest distribution across the 9 occupation levels, with the highest proportions recorded at Levels 5, 7, 8 and 9.

Table 9: Distribution of employed respondents across 9 ISCO Levels by Qualification Type, percentage of total for each level

ISCO CLASSIFICATIONS	QUALIFICATIONS					TOTAL
	Masters	Postgraduate	Bachelor	Diploma	Certificate	
(1) Managers	2.9	28.6	40.0	8.6	20.0	100.0
(2) Professionals	1.0	5.1	73.9	7.9	12.0	100.0
(3) Technicians and associate professionals	-	8.8	47.4	28.1	15.8	100.0
(4) Clerical support workers	-	-	26.0	16.3	57.7	100.0
(5) Service and sales workers	-	-	7.1	25.5	67.3	100.0
(6) Skilled agricultural, forestry & fisheries workers	-	100.0	-	-	-	100.0
(7) Craft & related trades workers	-	-	-	-	100.0	100.0
(8) Plant & machine operators, & assemblers	-	-	-	-	100.0	100.0
(9) Elementary occupations	-	-	-	13.3	86.7	100.0

The distribution of male and female respondents across the 9 Levels of ISCO in Figure 15 shows that females are concentrated at Levels 1 to 5, while males are more dominant at Levels 6 to 8. Males dominate Levels 7 and 8 as many of them hold TVET qualifications in trade.

Figure 15: Gender Distribution of Respondents Working with Employers for Pay across 9-levels of the ILO ISCO, gender proportions by total number in each level



Overall results of job-skills match show that 85.4 percent of respondents working for employers have jobs that match their skills and qualifications. There is a strong match between skills and qualifications held by graduates of Bachelor, Masters Degrees, Postgraduate Certificates and Diplomas, and their jobs. Diplomas in Education and Nursing have a good match with jobs and relatively easier access as many; if they are teachers, are referred for employment to the Ministry of Education, Sports and Culture (MESC) and similarly, nurses, to the Ministry of Health (MOH). Furthermore, there is also a strong skills match for those who completed qualifications in maritime training and trades areas.

## ii. GRADUATE ASSESSMENT OF EDUCATION & TRAINING RECEIVED

Feedback from graduates on aspects of the education and training they received is another major outcome of the study. The respondents were asked to rate whether they agreed or disagreed with 13 statements about their programmes of study. Ratings were converted to an average and reported below;

Graduates were asked to make their assessment using a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). The higher the reported average out of 5, the stronger the agreement with the statement. The ratings provided were converted into an average and reported in Table 8 and 9. In general, graduates have rated many aspects of their education and training highly positive.

Table 10: Average rating by Graduates (working for employer & graduates working for themselves) of statements about aspects of the Education and Training they received, from 1 (strongly disagree) to 5 (strongly agree)

STATEMENTS	AVERAGE
My teachers allowed me to ask questions	4.4
My teachers had good knowledge of their subjects	4.4
Overall, I am happy with the way the training/programme was done	4.4
Overall, the skills and knowledge I received while studying for the qualification were relevant to my job	4.4
My teachers taught me well	4.4
My teachers treated me with respect	4.4
The way I was assessed was a fair test of my skills	4.3
My teachers helped to solve any problems I had	4.2
The components of the training/programme are relevant to my job now	4.2
Access to textbooks or support materials during training/programme was good	4.1
Access to equipments or tools during the training/programme was good	4.0
Work experience was an important part of the training/programmes	4.0
My teacher or Institute arranged for me to get work experience during the training/programme	3.9
Safety gear used during practical components of the program	3.8
My teacher or Institute helped me to find work	3.5

Table 11: Average rating by Respondents (unemployed & studying) of statements about aspects of the Education and Training they received, from 1 (strongly disagree) to 5 (strongly agree)

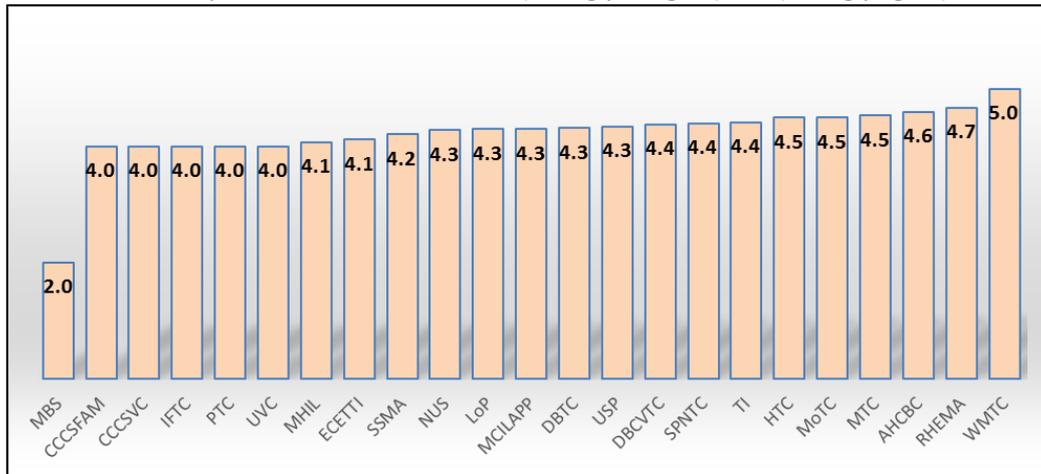
STATEMENT	AVERAGE
My teachers allowed me to ask questions	4.3
Overall, I am happy with the way the training/programme was done	4.3
My teachers treated me with respect	4.3
My teachers taught me well	4.3
My teachers had good knowledge of their subjects	4.3
The way I was assessed was a fair test of my skills	4.2
My teachers helped to solve any problems I had	4.2
The components of the training/programme are relevant to my job now	4.1
Access to textbooks or support materials during training/programme was good	3.9
Access to equipments or tools during the training/programme was good	3.9
Safety gear used during practical components of the program	3.5
Work experience was an important part of the training/programmes	3.1
My teacher or Institute arranged for me to get work experience during the training/programme	3.0
My teacher or Institute helped me to find work	2.7

Assessment by both employed and unemployed graduates shows positive feedback on trainers/teachers in PSET providers, with high average ratings above 4.0 for statement such as 'my teacher allowed me to ask questions', 'my teacher treated me with respect', 'my

teacher taught me well’, ‘my teacher had good knowledge of their subject’. Moreover, average rating above 4.0 is recorded for overall satisfaction of respondents on how the training/program was conducted.

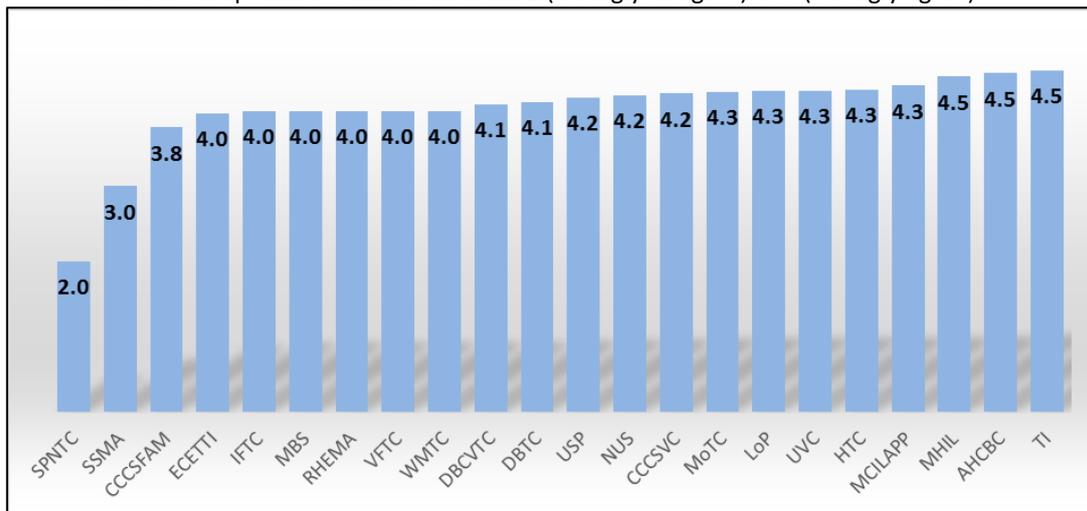
Rating by respondents in paid activities for the statement “My teacher or institute helped me to find work” shows high average ratings from each PSET Provider. Majority of providers covered in the study shows rating above 4.0. This indicates that trainers in PSET providers are actively engaged in seeking employment for their graduates.

Figure 16: Average rating by Respondents in Paid activities of providers for statement "My Teacher or Institute helped me to find work" from 1 (strongly disagree) to 5 (strongly agree)



Furthermore, respondents who are unemployed also provide similar ratings for the statement “My teacher or institute helped me to find work”. High average ratings above 4.0 are recorded from the majority of PSET providers surveyed.

Figure 17: Average rating by Respondents in Unpaid Activities of providers for the statement 'My Teacher or Institute helped me to find work' from 1 (strongly disagree) to 5 (strongly agree)



## WORK EXPERIENCE DURING STUDY

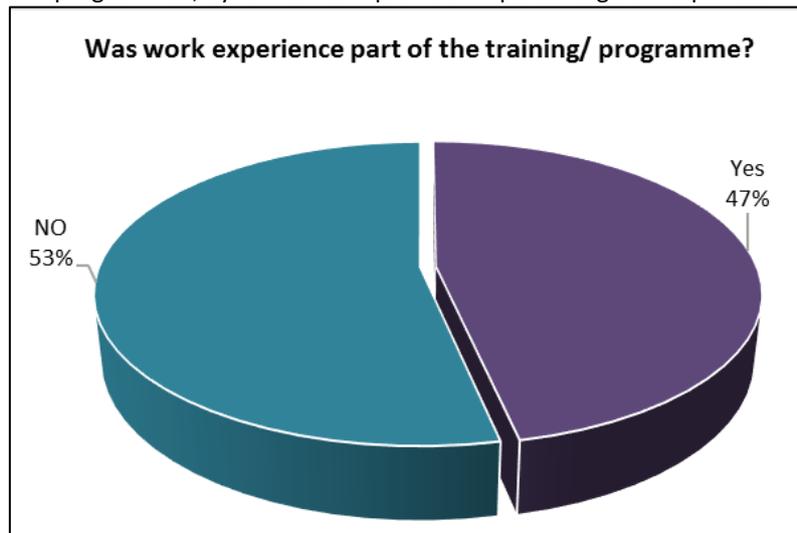
For all respondents (except for Pastors/Ministers), 66 percent received work experience during their studies – mostly those working for employers.

Table 12: Proportion of employed respondents who had received work experience as part of their programmes, by formal PSET provider in percentage of responses

Work Experience during study by provider?	PSET PROVIDERS																					
	AHCBC	CCCSFAM	CCCSVC	DBCVTC	DBTC	ECETTI	HTC	IFTC	LoP	MBS	MCILAPP	MHIL	MoTC	MTC	NUS	PTC	RHEMA	SSMA	TI	USP	UVC	WMTC
Yes (%)	60	60	0	100	87	90	80	0	93	0	79	92	100	70	65	0	0	90	76	63	86	0
No (%)	40	40	100	0	13	10	20	100	7	100	21	8	0	30	35	100	100	10	24	37	14	100

Table 12 shows the range in proportions of respondents that received work experience from each PSET provider. Overall, 69 percent of them said they got a job with the employer they had work experience with. These graduates were also asked to assess the relevance of their work experience on a 3-point scale from 1 (not relevant) to 3 (very relevant). Majority of graduates (90 percent) rated their work experience as “very relevant” (3), and 1.3 percent as “not relevant” (1).

Figure 18: Proportion of unemployed respondents who had received work experience as part of their programmes, by formal PSET provider in percentage of responses



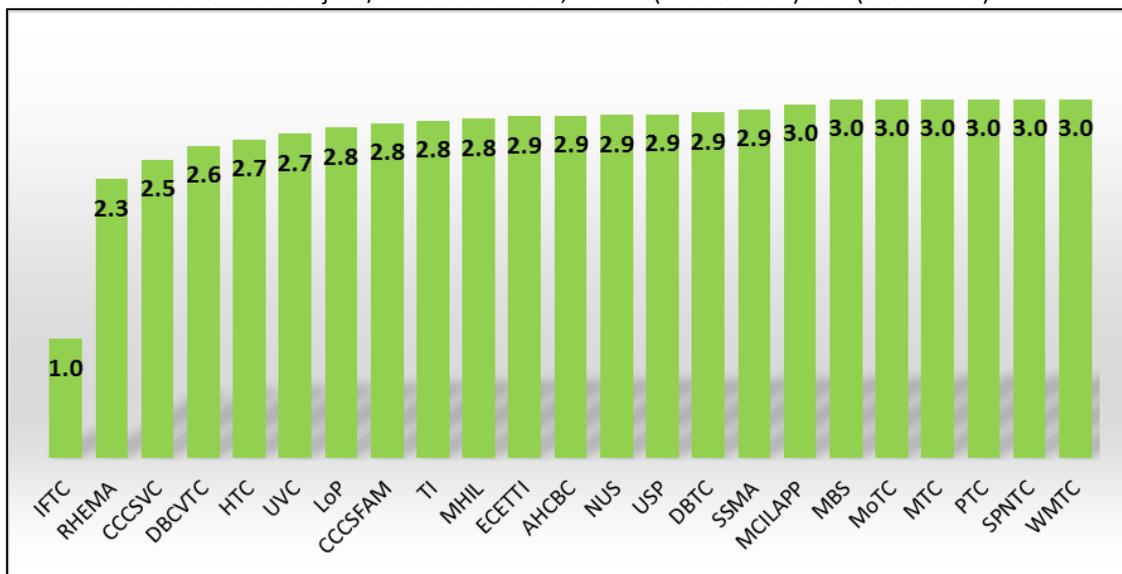
Graduates engage in unpaid activities also respond to the question, ‘was work experience part of the programme/training?’ A total of 337 (47 percent) stated that work experience was a part of their training, whereas 385 (53 percent) did not receive any work experience while studying.

### iii. GRADUATES FEEDBACK ON KNOWLEDGE AND SKILLS

All employed respondents were asked to assess the relevancy of skills and knowledge gained while studying, to job or any paid activity they were engaged in. Using a 3-point scale from 1 (Not relevant) to 3 (Relevant), a combined average rating of 2.9 out of 3 was the result of their assessment.

Most providers show high average ratings from 2 to 3 indicating that skills and knowledge learned by their graduates are relevant to their job and their workplace or in their self-owned business.

Figure 19: Average rating by Respondents in paid activities of how useful the knowledge and skills have been to their jobs/current activities, from 1 (no use at all) to 5 (used in full)

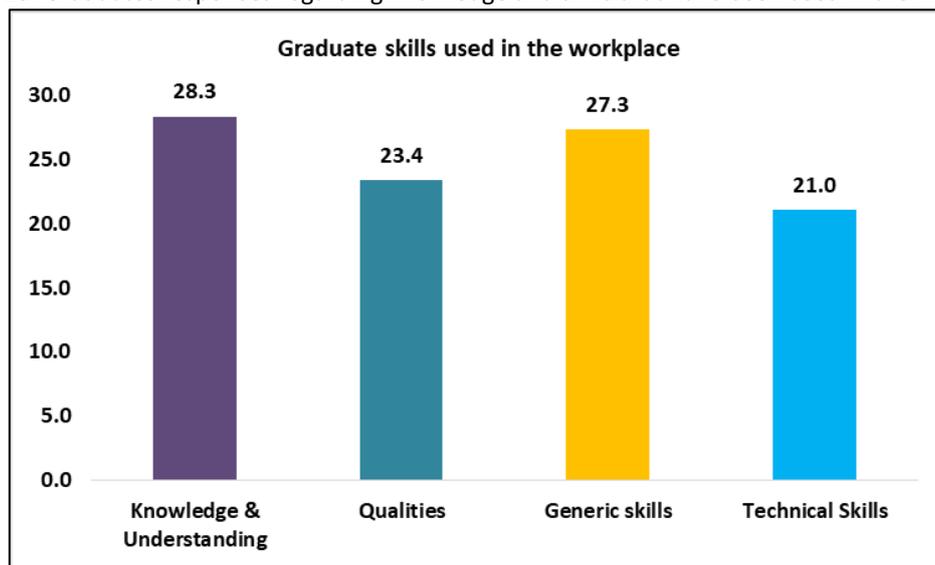


As part of the assessment, graduates engaged in paid activities listed skills and knowledge learned in the training or programme that are relevant and now in used in the workplace. This is illustrated in Figure 20. Each respondent was given the opportunity to list at least three (3) skills that are used in their jobs and current activities. The skills indicated were noted as major/important skills for the graduates themselves. All responses collected were also categorised under knowledge and understanding, qualities, generic and technical skills.

The majority (28.3 percent) of the skills listed are the respondents' knowledge and understanding in their field of study and are specifically linked to the job they do. This also includes understanding of job related information, organisational structure, and also knowledge of the working environment, people and culture.

Furthermore, 23.4 percent of the responses are quality related skills acquired by graduates that are now in use in the workplace. These include integrity, flexibility, creativity, self discipline, respect and fostering positive relationships with colleagues or peers.

Figure 20: Graduates responses regarding knowledge and skills that have been used in the workplace

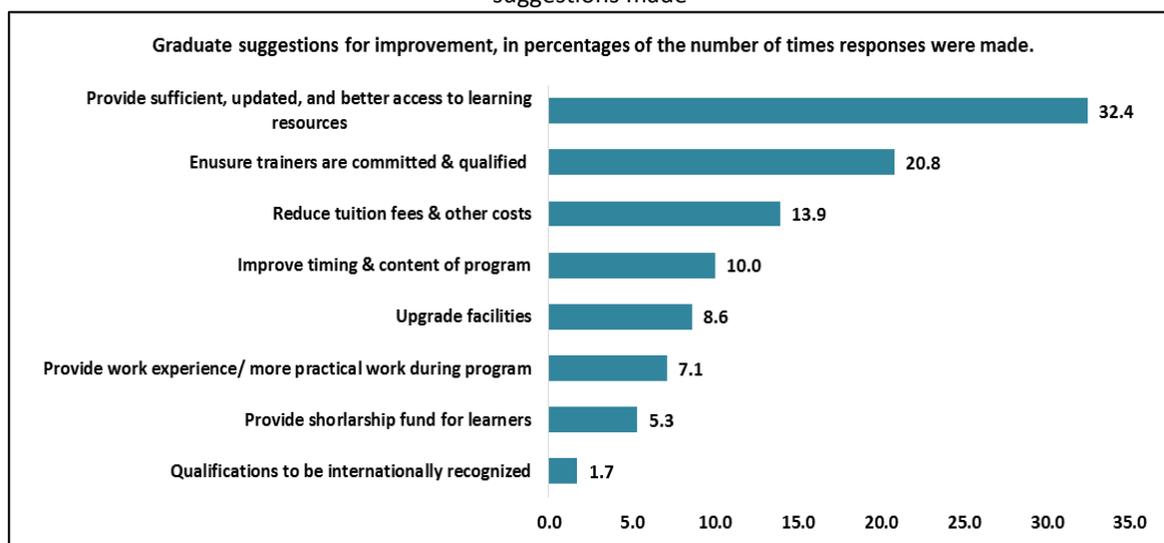


A high proportion (27.3 percent) of responses indicated graduates utilising their generic skills in the workplace such as verbal and non-verbal communication skills, critical thinking, customer service, computation and listening skills. Moreover, technical skills are also put to use as indicated by 21 percent.

All graduates were asked to list skills that they did not learn enough while studying for their qualification. Again, questions were open-ended and graduates were to indicate at least three. More than 50 percent of graduates listed skills that they had not adequately learned during training. For these, technical skills were by far the largest category, followed by graduates' specific knowledge and understanding on their area of study. For generic skills, computing skills were notably mentioned in response followed by communication skills and customer service.

In addition, respondents also provided suggestions for improvement of PSET providers, and these are grouped in categories as shown in Figure 21. Most of the suggestions made by graduates (32.4 percent) are for the learners to have access to sufficient and updated learning resources. The responses include comments such as *'need more or new tools and equipment'*, *'more computers and access to internet'*, and *'provide more textbooks and update learning materials'*.

Figure 21: Respondent suggestions for improving Programmes and Formal PSET Providers, percent of all suggestions made



Moreover, suggestions by graduates also show that there is a need for PSET providers to recruit more trainers who are committed and qualified. The responses include comments like *‘teachers to upgrade their skills and knowledge’*, *‘trainers who treats learners the same’*, *‘provide more qualified teachers’*, *‘teachers to teach face to face classes’*, and *‘teacher must have enough time to work with students’*.

In terms of costing for programmes offered by PSET providers, suggestions were made to reduce tuition fees and other costs (13.9 percent). This is linked to the category *‘provide scholarships for learners’*, where students have appeal to PSET providers through their comments for provision of scholarships or funding assistance for students to pursue their qualifications. For the category *‘improving timing and content of the program’* (10 percent), some comments include *‘assign equal time between practical and theory’*, *‘more time for discussion’*, and *‘sessions to be on time’*. On the same note, 7 percent proportion of responses suggests to include *‘work experience’* as a component of the program.

Furthermore, for the *‘upgrade facilities’* category (8.6 percent), some comments include *‘need bigger classrooms’*, *‘clean study environment’*, *‘more computer labs’*, and *‘health & safety facilities’*. Also, a notable suggestion made by respondents is for *‘qualifications to be internationally recognised’* (1.7 percent).

## **FINDING EMPLOYMENT**

Responses were collected from graduates regarding information they need to help them find work after graduation. The majority of the responses pointed to;

- *curriculum vitae;*
- *references;*
- *clean police;*
- *health report, and*
- *qualifications*

In addition, findings reported that media (television and radio advertisements, newspaper ads, and social media) is another means of information for graduates to secure employment.

The Public Service Commission's website and its weekly circular has also been noted to be utilised by graduates.

Furthermore, respondents were asked the question "what do you want the Government and/or Employers to do to help you find work after graduation?" Common responses include;

- *Provide more job opportunities;*
- *Government to allocate graduates to workplace relevant to qualification;*
- *more awareness in PSET providers for finding jobs;*
- *more job opportunities from the private sector;*
- *Government and employers to prioritise local graduates;*
- *business to have more work experience opportunities for learners; and*
- *graduates to freely access job advertisements and list of vacancies.*

### **3. CONCLUSION**

The major findings of this National Tracer Study show that employment and related outcomes greatly vary between PSET providers, qualification types, and the field of study of the graduates. Key issues from findings for further consideration are as follows;

#### **i. Employment Outcomes**

The findings on employment outcomes show that the majority of the graduates are employed (working for employer for pay), and a small proportion are self-employed. Females dominate high-level qualifications from Diploma to Master Degrees. Most of respondents were Certificate holders; however, when compared to other qualifications type, Certificate holders have low employment outcomes.

A 34.7 percent of graduates found jobs within six months after graduation. This does not include those who were employed before their studies. A low percentage of students were able to secure jobs between 7 to 12 months. Findings also reported that graduates with higher-level qualifications are in higher average income brackets compared to other qualifications.

#### **ii. Relevance of education and training**

Overall results show a good match between jobs of graduates working with employers with their qualifications. However, findings for specific qualifications show that several graduates are working in areas not directly related to the education and training they received. The formal PSET providers with qualifications that have good employment outcomes also have good ratings by respondents of the 'usefulness' of skills and knowledge in jobs.

Findings on type of employers' shows that majority of the graduates are employed in the Public Sector. Certificate holders, in particular those from smaller formal PSET providers, are employed within the private sector; many are in jobs not directly linked to their qualifications.

The responses from graduates on skills they had not learned enough identify the type of skills that need to be emphasized more in PSET. The responses also show that these skills are common across many of the formal PSET. Technical skills are mostly needed in the workplace, followed by communications, and customer service.

The graduates' assessment of the education and training they received recorded many of them giving high ratings for aspects as shown in the findings. However, part of graduate's suggestions for improvement of PSET providers also refer to the same aspects that are key elements of programmes to show their achievement of required standards for quality and effective PSET learning.

The formal PSET providers are encouraged to request from SQA, data specific on their graduates as well as a list of all the skills that graduates said they had not learned enough during their studies. This information should assist in their efforts to improve the qualifications or programmes that they offer.

### **iii. Why some graduates cannot find work**

One of the objectives of the study is to determine why graduates are not finding work. Findings show that 34 percent are not engaged in paid activities. Possibly this proportion could have been higher if those who could not be traced or interviewed had participated in the study. Of the ones who were, about one-out-of-two had a job prior to the study, but subsequently became unemployed. Many of the respondents were Certificate holders, and are staying at home and occupied in domestic activities such as housework and/or caregiving. A large number are also unemployed per se because they are pursuing further studies. ?

The respondents' feedback on the statement "my teacher or institute helped me to find work" showed high average ratings. However, there are many who are still unemployed. The majority are from small PSET providers who are less likely to have a wide network and engagement with employers and industry.

The graduates who could not find work plausibly rated work experience very highly (4.4 average) as an important part of the programme. A high proportion of them had not received any form of work experience compared to respondents that had work experience during the programme and had landed jobs with greater ease.

The arrangement of work experience by formal PSET providers (particularly for programmes that require a practical component), is the first step to assisting graduates to find work after graduation. There are several strategies that institutions and teachers can use to establish partnerships with employers for work experience. The providers can get from employers, through these partnerships, information on skills required of their graduates as potential workers, how well the students perform during work experience and after they are employed. These all add to confirming the relevance of the education and training to the workplace. What is expected of students during their work placements or experience paves the way to stronger matches between qualifications from a training provider and actual employment in a workplace.

## RECOMMENDATIONS

- i. SQA to work closely with the PSET providers offering qualifications with low employment outcomes to show determine whether offering these qualifications are justified or feasible from an economic and social perspective.
- ii. All PSET providers especially the smaller ones to improve the employment outcomes of their graduates by ensuring that they have relevant work experience with employers (specifically for programmes that must have practical components). Apropos to this that SQA develop and support implementation of an effective practice guide for PSET providers, employers and public for student work placements. This can also be part of the SATVETI agenda.
- iii. SQA to continue working with PSET providers highlighting tracer study findings to improve the quality and relevancy of education and training programmes delivered and offered to ensure parents and students are getting value for their money and graduates receive recognized qualifications. Moreover that graduates are thereby able to secure gainful employment and contribute to national economic and social development.
- iv. That tracer study findings are included in the SQA Career Advisory services and activities which inform potential post school students on employment outcomes of specific qualifications, and the associated wages earned by graduates in specific occupations.
- v. That the SQA also include other related information required by both providers and employers and that a template of key questions be developed and circulated to all providers and employers before the next tracer study.
- vi. PSET providers to provide accurate and complete graduates' information to the SQA through its PSET Annual Survey. PSET Providers to also conduct their own annual surveys of their graduates as part of the requirements leading to their graduation ceremony.
- vii. That SQA continues to conduct its national tracer study every three years to crosscheck the information that providers are reporting on an annual basis and to carry out more complex analyses of the labour market outcomes.