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Research Article

Assessment of Employability Skills of Technical-Vocational Education and Training (TVET) Graduates: Basis for an Enhancement Program

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ABSTRACT

The study aims to determine the employability skills of Technical-Vocational Education and Training Graduates of Valenzuela City Polytechnic College.

This study was carried out to 423 graduates of TVET using convenience sampling and forty-five (45) employers who were selected purposively in the City of Valenzuela. The respondents had completed the TVET program. A survey questionnaire, document analysis and an interview guide were used. Frequency, percentage, and weighted mean were utilized in the statistical analysis and handling of the data.

Among 423 TVET graduates of ValPoly from 2015 to 2019, majority are employed which had an employment rate of 87.94 percent, compared to a rate of 12.06 percent for those who were unemployed. Carpentry obtained the highest employment rate while the bread and pastry production got the lowest employment rate. The year 2019 also has the highest rate while respondents who graduated in 2016 have the lowest employment rate.

Half of the employed graduates acquired a "regular status". Despite the skills mismatch, graduates have managed to seek employment related to their training right after graduation. Communication skills is the most useful skill in the workplace.

ValPoly has provided comprehensive and effective programs and provisions that enhance graduates' employability skills. TVET graduates employed were assessed as highly competent by their employers. Several factors that facilitate the acquisition of employment. A proposed enhancement program for the employability skills of TVET graduates is formulated based on findings of this study to ensure that all graduates will be equipped with skills for employment.

Keywords: Assessment, Employability, Employability skills, Tracer Study, TVET Graduates

Introduction

A key driver toward a sustainable economy is a competent workforce. Occupational Safety and Health Administration (2021) defines a competent worker as one who is appropriately qualified, adequately trained, and has sufficient experience to execute work safely without or with minimal supervision. To be competent, a person must undergo an assessment from his or her employer whether the required work-related skills, also known as employability skills, were performed.

Employability skills help employees secure and keep jobs, according to the ILO (2013). Most employable individuals have comprehensive education in communication, teamwork, IT, and problem-solving. These skills enable workplace adaptability. Mello et al. (2017) also defined employability skills as non-technical abilities including productivity, comprehension, and personal traits that help people get jobs and succeed in their careers. Legg and Jack (2014) on employability skills of Technical graduates, showed that skills mismatches are manifestations of misalignment between policy and programs which is influenced the stakeholders concerned.

On the highly competitive labor market of today, technical skills alone are not sufficient to guarantee employment. Employers now seek graduates with employability skills, also known as soft skills, including interpersonal skills, teamwork, problem-solving, flexibility and leadership.

Technical-Vocational Education and Training (TVET) graduates who are primarily trained for positions in technical fields must possess employability skills in order to increase their employability and career advancement opportunities. Studies have revealed, however, that many TVET graduates lack the employability skills required by employers, resulting in high unemployment and underemployment rates among them. Ismael & Mohammed (2015) revealed in their analysis of the TVET curriculum the lack of integration of problem-solving skills, lifelong learning skills, and competencies in specific TVET disciplines such as electrical, where the curriculum has given attention more to theoretical courses than practical courses. The absence of problem-solving and lifelong learning skills could limit their ability to adapt to changes in the labor market and acquire the necessary skills.

A study commissioned by the British Council revealed that many developing countries, such as Ghana, Afghanistan, Albania, Bangladesh, Armenia, China, and Vietnam, reported a significant increase in the employment rate of their TVET graduates (Cooper, 2017). Moreover, TESDA Women's Center Tracer Study of Graduates from 2014-2016 revealed that most of the graduates were employed following their graduation. More than half of employed graduates worked full-time in the formal sector. The majority of those interviewed worked in the hospitality and food service industries and other service industries and construction. The study also revealed the reason for unemployment, such as peer influence, skills mismatch, personal reasons, and discrimination (Ignacio & Tabu, 2018).

A tracer study as mandated by the Commission on Higher Education (CHED) to academic institutions provides feedback to the employability of graduates (Rojas & Rojas, 2016). Educational institutions should monitor the employability of its graduates to determine the its capability in producing graduates. Improving quality and responsiveness to the labor market requires sufficient data on the employment profile of TVET graduates and assessment from the employers. The results of tracer studies are also essential in nation-building which can be utilized on enhancing curriculum and employment training programs, strengthening educational standards (Malahay and Saing, 2018).

The researcher has focused five (5) employability skills based on the skills mentioned in several studies. These are communication skills, information skills, interpersonal skills, leadership skills and problem-solving since these skills were also given emphasis in training programs offered by the school. Further, an interview was conducted to obtain a broader understanding of the employers about the factors that facilitate employment. The researcher believed that a semi-structured interview to employers delivers richer information.

The acquisition of the necessary information about the employability skills of TVET

graduates will aid TVET institutions in focusing its efforts and achievements on the pursuit of technological excellence. This will be accomplished by facilitating a seamless transition for graduates from the educational system into the workforce, as well as by creating a better match between the available skills produced by the institution and the demand from the industry.

The study, therefore, aims to determine the assessment of employability skills of TVET graduates of Valenzuela City Polytechnic College. The findings of this study will serve as basis for developing an enhancement program to enhance the employability skills. This will aid policymakers and education sector stakeholders in the development of strategies to enhance the employability of TVET graduates, ultimately contributing to the development of a competent labor force and the economic growth of the country.

To have a comprehensive understanding about the implications of the study, employment profile such as employment rate, employment status, length of time acquired first job, relevance of acquired skills to first employment, useful skills and difficulties encountered in search for employment were determined using a tracer study questionnaire, programs and provisions provided by the school will be analyzed, employers were selected to assess the employability skills of TVET graduates employed in their company such as communication skills, information technology skills, interpersonal skills, leadership skills and problemsolving skills, consequently an interview will be conducted to identify factors that facilitate employment. The findings obtained from the study were used as basis of formulation of enhancement program.

Review of Literature

Graduates from TVET programs are trained in technical-vocational skills, but they are also taught employability skills. TVET in the Philippines was established eighty (80) years ago but now offers post-secondary and non-formal technical vocational education and training. It is managed by Technical Education and Skills Development Authority (TESDA), a regulatory body established under R.A. 7796 in 1994 that sets standards, accredits programs, and

manages the system of certifying skills. In practice, many institutions adopt the whole set of TESDA promulgated T.R.s. Trainers may deliver the instruction in their style or preferred methodology and use their learning materials or hand-outs.

The study of Maireva et al. (2021) on the employability of accounting TVET graduates in Zimbabwe found that the main contributor to graduate unemployment is the worsening economic conditions in the country, and most graduates lack the necessary skills and work experience to compete on the labor market.

Maireva et al. also mentioned that various educational institutions implement several programs and strategies, such as providing work-based learning, employability skills modules, and work readiness, and involve employers in course design and delivery. Consequently, the study endorses that TVET institutions in Zimbabwe must develop graduates with the necessary skills, entrepreneurial skills, and sufficient knowledge acquired through work-based learning to increase employability among the graduates.

The Employers' Satisfaction Surveys of TESDA in 2014 reviewed by the Asian Development Bank (2021) showed a slight decrease in the employer's degree of satisfaction with employees' work performance who were TVET in two of the theoretical and practical knowledge in doing tasks and work attitudes. The former study guides the researcher to establish an idea of determining how may the employers of the TVET graduates of ValPoly assess their work performance in terms of employability skills. In the advent of Industry 4.0, it is inevitable that TVET institutions should equip students with information technology skills to apply numeracy, design, and technology abilities to prepare and accomplish tasks in the workplace and all aspects of life (Paryono, 2014).

The study of Legg and Jack (2014) on employability skills of Technical graduates, showed that skills mismatches are manifestations of misalignment between policy and programs which is influenced the stakeholders concerned.

However, ensuring that students graduate with the necessary skills required by employers involves more than just reviewing

academic programs and curricula to make sure they are in line with industry needs. It also necessitates the availability of training facilities, infrastructure, equipment, qualified technical personnel, and effective TVET program administration.

Communication skills were also emphasized in the study of Omar & Rajoo (2016). They stressed the importance of this skill during recruitment processes. Further, both employers and graduates perceived that having poor communication skills is one of the main reasons for graduates are unemployed.

Seetha (2014) suggested that the crucial skills that will bring success in the workplace should include good communication, to be the ability to maintain a good attitude, interpersonal skills, working in teams, and analyzing and thinking critically in order to solve problems and to be able to lead. The review of Nugraha et al. (2020) about Employability Skills in Technical Vocational Education and Training also revealed that communication skills are one of the necessary skills that TVET graduates should acquire to equip them for entering the labor market. Besides communication skills, social skills, knowledge in the engineering field, information and technology skills, management skills, problem-solving, and critical thinking were also included.

This study also highlights the importance of communication skills in equipping TVET graduates to enter the labor market. The finding from Nugraha et al. reinforces the importance of communication skills by identifying them as one of the necessary skills that TVET graduates need to acquire. Moreover, the inclusion of other essential skills such as social skills, information and technology skills, management skills, problem-solving, and critical thinking further shows that these skills are essential in various industries and possessing them can improve a worker's employability and job performance.

As indicated in various studies above, harnessing employability skills such as communication, problem-solving, leadership, technical, teamwork, and other soft skills mentioned is crucial to TVET students. This conclusion could be the same in the current study in such a way that findings can be in any of the skills that

TVET Institutions lack emphasis. Thus, making it difficult for TVET graduates to be employed. Furthermore, strengthening the school-industry partnership will greatly help determine the skills and competencies that must be given importance in implementing programs and activities.

Objectives of the Study

The general problem of the study is How may the employability skills of TVET graduates be assessed? Specifically, the study sought to answer the employment profile of the TVET graduates in Valenzuela City Polytechnic College from 2015-2019 in terms of employment rate, employment status, length of time, relevance of skills, useful skills, and difficulties encountered in search for employment, the programs and provisions implemented by ValPoly relevant to the employability of its graduates, the assessment of employability skills of TVET graduates in terms of communication skills, information technology skills, interpersonal skills, leadership skills, problem-solving skills, factors that facilitate employment, a proposed enhancement program for the development of employability skills of TVET graduates.

Methods

Research Design

The researcher employed mixed-methods research both quantitative and qualitative data utilized concurrently.

Respondents of the Study

There were four hundred twenty-three (423) TVET Graduates of Valenzuela City Polytechnic College (ValPoly) who graduated from 2015 to 2019. The researcher employed convenience sampling for TVET graduates-respondents. The documents presented in tabular form were selected to analyze the data and come up with a discussion to reach a conclusion to answer the question "what are the programs and provisions provided by ValPoly". While purposive sampling was utilized in selecting the thirty-five (35) employer-respondents for an interview to the was conducted to gather information about the factors that facilitate job acquisition.

Research Instruments

For quantitative data, a modified and adapted tracer survey questionnaire from CHED was utilized as the primary source of data on employment profile of TVET graduates and a researcher-made survey questionnaire was distributed to selected employers to quantify their assessment of the employability skills acquired from ValPoly.

To gather qualitative data, document analysis was employed. In this study, the documents were focused on programs and provisions provided by the school administration of ValPoly upon request.

The documents were derived from the Administration office of Valenzuela City Polytechnic College, which oversees managing and organizing the documents regarding school programs and implementing guidelines including TVET programs offering.

Lastly, an interview was conducted to employers to elicit clear, verbatim, and compre-

hensive responses regarding the questions being asked. The interview was made face to face to answer the question "what are factors that facilitate employment?"

Statistical Treatment and Data Analyses

To determine and describe the quantitative data in connection with the employment profile of TVET graduates and assessment of employability skills by employers, frequency, mean and five-point Likert scale were utilized. To prevent interpretation bias, each interview was transcribed verbatim. The data analyses were analyzed in an iterative procedure of reading and rereading the data, selecting, and coding (data reduction), and presenting the data in within case and cross-case matrices.

Results and Discussions

This part presents the significant findings of the study.

Employment Profile of the TVET Graduates

Table 1. Employment Rate based on qualifications (N=423)

TVET Qualification		Emp	loyed	Not Employed	
TVET Qualification	N	f	%	f	%
Automotive Servicing (AT)	42	38	90.48	4	9.52
Bread and Pastry Production (BPP)	71	60	84.51	11	15.49
Carpentry (CARP)	31	29	93.55	2	6.45
Computer Software Servicing (CSS)	12	11	91.67	1	8.33
Dressmaking (DRM)	33	29	87.88	4	12.12
Electrical Installation and Maintenance (EIM)	73	62	84.93	11	15.07
Electronics Products Assembling and Servicing (EPAS)	42	39	92.86	3	7.14
Food and Beverages Services (FBS)	57	49	85.96	8	14.04
Masonry (MAS)	14	12	85.71	2	14.29
Refrigeration and Air-conditioning (RAC)	16	14	87.50	2	12.50
Shielded Metal Arc Welding (SMAW)	32	29	90.63	3	9.38
Total	423	372	87.94	51	12.06

Table 2. Employment Rate of TVET Graduates from 2015-2019 (N=423)

Year	N -	Emp]	loyed	Not Em	ployed
I eal	IN	f	%	f	%
2015	62	55	88.71%	7	11.29%
2016	54	46	85.19%	8	14.81%
2017	78	69	88.46%	9	11.54%
2018	93	80	86.02%	13	13.98%
2019	136	122	89.71%	14	10.29%
Total	423	372	87.94%	51	12.06%

Table 3. Current Employment Status

TVET	N	Re	gular	Cont	ractual	Ten	nporary	Self-e	mployed	Never	Employed
Qualification	IN	f	%	f	%	f	%	f	%	f	%
AT	42	32	76.19	4	9.52	2	4.76	3	7.14	1	2.38
BPP	71	34	47.89	19	26.76	7	9.86	11	15.49	0	0
CARP	31	15	48.39	9	29.03	6	19.35	1	3.23	0	0
CSS	12	4	33.33	7	58.33	0	0.00	1	8.33	0	0
DRM	33	10	30.30	11	33.33	8	24.24	4	12.12	0	0
EIM	73	36	49.32	20	27.40	6	8.22	11	15.07	0	0
EPAS	42	20	47.62	13	30.95	4	9.52	4	9.52	1	2.38
FBS	57	23	40.35	17	29.82	9	15.79	7	12.28	1	1.75
MAS	14	4	28.57	5	35.71	4	28.57	1	7.14	0	0
RAC	16	6	37.50	6	37.50	2	12.50	2	12.50	0	0
SMAW	32	9	28.13	14	43.75	6	18.75	3	9.38	0	0
Total	423	193	45.63	125	29.55	54	12.77	48	11.35	3	0.71

Table 4 Length of Time in Acquiring First Job (N=423

TVET	N	Less tha	n a month	Less tha	an a year	More th	an a year	Never E	mployed
Qualification	IN	f	%	f	%	f	%	f	%
AT	42	23	54.8	12	28.6	6	14.3	1	2.38
BPP	71	33	46.5	31	43.7	5	9.9	0	0.00
CARP	31	17	54.8	14	45.2	0	0.0	0	0.00
CSS	12	7	58.3	5	41.7	0	0.0	0	0.00
DRM	33	17	51.5	15	45.5	2	3.0	0	0.00
EIM	73	48	65.8	23	31.5	1	2.7	0	0.00
EPAS	42	20	47.6	19	45.2	2	4.8	1	2.38
FBS	57	23	40.4	27	47.4	6	10.5	1	1.75
MAS	14	7	50.0	7	50.0	0	0.0	0	0.00
RAC	16	8	50.0	6	37.5	2	12.5	0	0.00
SMAW	32	17	53.1	14	43.8	1	3.1	0	0.00
Total	423	220	52.0	173	40.9	27	6.4	3	0.71

Table 5. Relevance of Training in the First Employment (N=423)

TVET Qualification	n N	Re	lated	Not I	Related	Never	Employed
TVET Qualification	II N	f	%	f	%	f	%
AT	42	25	59.52	16	38.10	1	2.38
BPP	71	48	67.61	23	32.39	0	0.00
CARP	31	22	70.97	9	29.03	0	0.00
CSS	12	8	66.67	4	33.33	0	0.00
DRM	33	19	57.58	14	42.42	0	0.00
EIM	73	52	71.23	21	28.77	0	0.00
EPAS	42	22	52.38	19	45.24	1	2.38
FBS	57	36	63.16	20	35.09	1	1.75
MAS	14	11	78.57	3	21.43	0	0.00
RAC	16	12	75.00	4	25.00	0	0.00
SMAW	32	25	78.13	7	21.88	0	0.00
Tot	al 423	280	66.19	140	33.10	3	0.71

Table 6. Acquired Skills that are Useful in the First Employment (N=420)

Items	Frequency	Percentage	Rank
Communication skills	319	75.9%	1
Leadership skills	273	65%	2
Problem-solving skills	270	64%	3
Technical skills	222	52.8%	4
Interpersonal Skills	207	49.2%	5
Information technology skills	169	40%	6
Entrepreneurial Skills	94	22.3%	7
Others	57	13.6%	8

Table 7. Difficulties Encountered by the Respondents in Search for Employment

Items	Frequency	Percentage	Rank
Skills mismatch	158	38%	1
Few Job Vacancies	134	32.3%	2
Inadequate experience	127	30.6%	3
None	120	28.9%	4
Passing the interview	75	18.1%	5
Passing the pre-employment exam	26	6.3%	6
Health Concerns	25	6%	7
Others	6	1.2%	8

Table 1 shows that among the 423 respondents who graduated from 2015 until 2019, 87.94% were employed, and 12.06% were unemployed, right after graduation. Carpentry has the highest employment rate. The "Build, Build, Build program of Duterte administration was felt by the graduates from construction sectors since the said projects requires more workers especially the contracts set for completion this year as stated by DPWH Secretary Mercado in his interview last November 2021 in Philippine News Agency (Agoot, 2021). The Bread and Pastry Production (BPP) got the lowest number of 60 or 84.51% employed graduates and 11 or 15.49% unemployed. It is noteworthy that due to pandemic, many bakeries and food establishments were forced to close their businesses, thus, affecting the availability of jobs in food services. However, based on the results presented in Table 6, it was also found out that all BPP graduates who were not employed at the time of the study resorted to selfemployed by selling baked goods via online platforms.

As gleaned in Table 2, the year 2019 has the highest rate of employment as well as the least rate of unemployment, while respondents who

graduated in 2016 have the lowest rate of employment and the highest rate of unemployment. Overall, from 2015 until 2019, there were an 87.9% employment rate and a of 12.06% unemployment rate. This is much higher than the TESDA's Study on the Employment of TVET Graduates (2022), which reveals that almost 7 out of 10 TVET graduates were employed at the time of the study which is equivalent to 74.76 percent employment rate over the last five year.

Table 3 presents that as to employment status at the time of the study, 45.63% of the graduates are employed as regular employees, 29.55% are contractual, and 12.77% are temporarily employed which includes projectbased work, freelancing, or job orders. Further, 11.35% are self-employed, leaving 0.71% who admitted that they have never been employed due to health-related reasons. Similar result was found in the study in Eastern Visayas State University (Bahian et.al, 2019) which was conducted to the Teacher Education graduates, among other employment status 50.63% of the graduates are regular employee, while self-employed also obtained the lowest number which is 5.08%.

The length of time of acquiring the first employment is shown in Table 4. Among the respondents, 50% of graduates employed were hired for less than a month. While 43.28% managed to acquire their first job less in than a year leaving 6.72% were employed more for than a year. Electrical (EIM) qualification obtained the highest percentage to acquire employment "less than a month" or right after graduation and the lowest score of graduates employed "less than a year" there is only 1.61% among the EIM who was employed "more than a year".

As can be seen in Table 5, the relevance of employment to training acquired, overall, among 423 graduates, 66.19% said that the training acquired in ValPoly is related to their first acquired job 34.28% of the graduates said that the training acquired is not related to their first job. There were 0.71% of respondents who have not been employed so they could not respond to the question. Masonry (MAS) got the highest number of respondents which is 78.57% were able to acquire their first employment related to training. It gives high regard to the rising industry of construction and cement works in relation to the "Build, Build, Build program of the Duterte administration as mentioned in Table 1. Electronics (EPAS) obtained the lowest number wherein 52.38% only were able to relate the training in their first employment. This is surprising since the electronics manufacturing industry is one of the most important contributors to Philippine industrial output as reported in Statista Research Department (2022).

Table 6 presents the acquired skills that are useful in the first employment. Communication skills obtained the highest rank with an A percentage of 75.9% as the most useful skills acquired in ValPoly in their first employment. The result showed the usefulness of communication skills in the workplace which conforms to the study of Omar & Rajoo (2016) who emphasized communication skills. They stressed the importance of this skill during recruitment processes. Further, both employers and graduates perceived that having poor communication skills is one of the main reasons for graduates to be unemployed. Similarly, Seetha (2014) suggested that the critical skills for workplace success should include good communication,

interpersonal skills, work in teams, and analyses and thinking critically in order to solve problems and to be able to lead.

In table 7, The respondents identified skill mismatch as the number one difficulty they encountered during their search employment. It was seen in the data that skills mismatch is the top problem encountered by the respondents. This can be due to a lot of qualifications that the industry is looking for from their applicants. According to Holzer (2015). The gap between industry demand for specific skills worsens. The current TVET system cannot meet numerous problems posed by rapidly changing industrial employment demands, resulting in a skills gap. The high unemployment rate could be a pointer to a skills mismatch in the vocational sector.

Second is few job vacancies. According to Biazen and Amha (2009), a considerable number of the skilled labor force is facing problems of unemployment due to a lack of employment opportunities.

In this connection, the school, ValPoly conducted a meeting with the owners of these industries to determine what workers will fit in their industry. This information will help ValPoly to focus more on the training of students that will be employed in these industries.

Third is inadequate experience. Lack of work experience is one of the difficulties confronting graduates, as stated by to Ideh (2013). Despite those difficulties, there are other respondents who did not encounter any problems at all during seeking employment which rank at fourth. Their qualifications and training were enough to make them land employment easily. Fifth is passing the interview. Gines (2014) included passing the interview as one of the difficulties in obtaining employment. Poor interview skills are a critical aspect of the job search. Every company requires an interview as one of the steps an applicant should take before he or she is hired into the position. Some companies take seriously the result of this interview, while others are just for formalities. Communication skills is very much necessary during interviews. TVET graduates may lack this skill, which made it impossible for them to get a job. Sixth is passing the pre-employment exam. Examinations administered in the

workplace are tools to measure the competency possessed by their applicants and to evaluate their knowledge about the position they are applying for. Some graduates could fail the said examination due to some reasons such as lack of preparation or lack of focus while taking the exam.

Seventh is health concerns, Every company requires medical certificate, certifying that the person is fit to work in their company. Such certification is being certified by a government physician if the person is applying for a government position and a private physician could certify for private companies and there were very few who stated other reasons.

Programs and Provisions Implemented by ValPoly to enhance Employability Skills

Table 8. Document Analysis on Programs and Provisions Implemented by ValPoly to enhance Employability Skills

Objectives	Programs and Provisions	Persons Involved	Time Frame
Enhance the mastery of knowledge, technical skills and attitude on the intended competencies through hands-on activities and demonstrations.	Laboratory Activities Actual Demonstration of skills	TVET Trainers	During the training dura- tion
Allow students to gain knowledge on entrepreneurship, Interpersonal and technical skills. Nurture their capabilities such as problem solving, communication, leadership and the like in an actual situation.	Entrepreneurial Activity -Food stalls -Trade fairs	Committee Chairpersons Area Coordinator	1 day
Deliver professional and community service to address the needs of society. Instill the importance of social responsibility by sharing your knowledge and skills that would be beneficial to other people.	Community Outreach Program Brigada Eskwela -Cleaning of Window Type aircon -Welding of Windows, Garden grills, and Stairs -Repair of Electrical Wirings and outlet -Repair of Armchairs and tables -Curtain Making Skills Training to PDL Adopt-A-School -Free Haircut "Bahay Kalinga" -Basic Electricity and Electrical Repairs -Carpentry and Masonry Works	Committee Chair- person TVET Trainer	1 week
Strengthen the value of skills and promote healthy competition among students while they demonstrate their capabilities based on their field of specialization.	Skills Competition -Founding Anniversary	Area Coordinator	1 day

Objectives	Programs and Provisions	Persons Involved	Time Frame
Provide a real-world expe-	On-the-Job Training	Job Placement Of-	280 hours
rience to the trainers.	-Industry partners trains stu-	ficer	
Build a harmonious rela-	dents	Area Coordinator	
tionship with industry-	-Out campus student teaching		
partners to support the so-	Social Contract		
cio-economic goals which			
is employment.			
Evaluate trainee's	Institutional Assessment	Area Coordinator	1 day.
knowledge, skills and atti-	-Written Assessment	TVET Trainer	
tude once they completed	-Oral Questioning		
all the requirements for a	-Demonstration		
specific qualification			
based on the competency			
standards which will			
serve as basis for them to			
qualify for the National As-			
sessment.			

Table 8 presents the programs and provisions such as Laboratory activities, Entrepreneurial activities, Community outreach programs, Skills competitions, On-the-job training, and Institutional assessment were some of the programs provided by the institution.

Laboratory activities are done every after discussion. These activities provide the students with a real opportunity to hone their skills in the said areas. These activities also served as a showcase of the skills acquired after the discussion. In these laboratory activities, the trainers also demonstrate the activity first before the students. Acquiring and performing the skills during training will contribute to workplace readiness.

Students were also given the opportunity to showcase their skills in producing products that they may sell during foundation day and other occasions. This is to help them experience how to become entrepreneurs. Entrepreneurship is one of the skills that the institution aims to develop to enable graduates to be independent after graduation. The study of Ismail et.al (2019), showed that TVET students' perceptions of the effectiveness of entrepreneurship programs have a positive moderate correlation to students' perceived self-entrepreneurial skills development. Thus, these findings have a significant impact on the implementation of the entrepreneurship programs

organized by the university, especially to students.

According to Mack A.J. et.al, (2019), TVET and entrepreneurship have always been used as a vehicle for economic and social transformation within many nations. Their study revealed that most of the TVET students were interested in pursuing entrepreneurship as a career path. Conducting an entrepreneurial activity will also help the trainees develop the essential skills that lead to employability such as communication skills, interpersonal skills, problem-solving skills, creativity and information and technology skills in terms of designing their posters and labels, and most especially their technical skills which will help them in making their products.

Community outreach program also provides an opportunity for the institution to engage their students in community services which will enrich not only their technical skills but also other valuable skills necessary to bring the program into success at the same time it would be beneficial to the community involved in the said program. Another way of enhancing the skills of the trainees is the Brigada Eskwela, wherein the trainees apply their technical skills in preparing the school for the opening of classes. The students volunteered to fix windows and other parts of the school. They also volunteered to help with the clean-up, sewing

curtains, and seat cover, and repainting the school. Other activities such as, cleaning of aircon units, computer troubleshooting, and carpentry were also done by the students. This program enhances not only the technical skills of the students but also their problem-solving, interpersonal skills and leadership skills as they accomplish the tasks and contribute to the school at the same time. According to Suresan (2019), more of such outreach programs should be encouraged so that students not only become knowledgeable in the field but also develop features such as community awareness, teamwork, commitment to service, career development, self-awareness, leadership skills, and understanding of course content.

The institution's founding anniversary competitions tested students' specialization skills. Skills competitions are the highlight of every TVET qualification. Math, science, and other competitions were also held. Prizes motivated students. Section 30 of the TESDA Act of 1994 promotes skills excellence through Skills Competition. It allows young people to compete in task and industry-based vocational skills. It motivates youth to pursue their passions.Industry immersions followed education-

related topics. This activity allows students experience the industry they'll be employed in later. Valenzuela's big industries serve these students. Some industries pay students, while others provide allowances. After immersion, the industry sometimes offers students wellpaid jobs, prompting them to leave school. TESDA Circular 89(2019) states that exposing TVET learners to work realities through sufficient industry or work experience prior to graduation will improve their skills, including soft skills and life skills, and prepare them for work. After completing the training, students must take the institutional assessment to qualify for a national assessment and receive a national certificate certifying that they have undergone rigorous training and completed all competencies needed for a skilled worker. Student workers abroad need these National Certificates.

De Ungria (2019) found that TESDA-accredited centers' Institutional Assessment students are ready for the National Certification II Assessment for Electrical Installation Maintenance.

These programs help trainees become employable after graduation.

Table 9. Level of Competence of Employability Skills of TVET Graduates as assessed by Employers

Employability Skills	Weighted Mean	Descriptive Interpretation	Rank
Communication Skills	4.26	Very competent	4
Information Technology Skills	4.26	Very competent	4
Interpersonal Skills	4.45	Very competent	3
Leadership Skills	4.55	Very competent	1
Problem-Solving Skills	4.49	Very competent	2
Average Weighted Mean	4.40	Very competent	

Table 9 shows that the employers assessed the employability skills of TVET graduates employed in their companies as "Very competent" in terms of communication skills, information technology skills, interpersonal skills, leadership skills, and problem-solving skills.

As shown by the data, graduates of TVET institutions had the leadership skills necessary for managing a team. Every job requires leadership skills to handle different situations and people. Everyone can lead. ValPoly students have demonstrated leadership through Brigada Eskwela and Community Outreach.

Such programs and provisions implemented by ValPoly also enhance the graduates' problem-solving abilities, as evidenced by its second-place ranking. According to Doyle (2020) problem-solving skills involve coming up with a solution and implementing it, which builds trust with coworkers and employers and boosts morale. Workplace issues require problem-solving skills.

Interpersonal skills were third in employability. Future careers require these skills. They must interact with managers, customers, and teammates. Thus, they must collaborate well.

Most employers thought TVET graduates were competent, but few thought they lacked communication and technology skills. They tied for last. This may be due to TVET qualifications' short communication skills integration time. Powzi and Yamat (2017) declare the modern workplace requires multiple skills, with communication being the most important. Employers value communication skills.

Employers ranked IT skills fourth among employability skills. The students there were marginalized. Some can't afford IT tools. Some had no Internet access before the Venezuelan government intervened.

The city gave these students electronic devices and internet access monthly to prepare for COVID-19.Industry 4.0 requires TVET institutions to teach students how to use numeracy, design, and technology to prepare and complete tasks in the workplace and in life (Paryono, 2014). Technology can expand TVET instruction. Internet-connected devices allow students to access classes. To improve technology skills, a high-tech learning environment is needed (Veal & Dunbar, 2017).

Table 10. Factors that Facilitate Job Acquisition

Skills Needed for Employment	 Communication skills
	 Knowledge in IT
	 Professionalism
	 Problem solving skills
	 Leadership skills
	Team Player
	 Technical Skills
Work Performance of the TVET Graduates	 Equipped with skills
	 Can work with less supervision
	 Has work quality
	 Hard working and efficient
	 Reliable and honest
Programs that should be implemented by	 Skills training
TVET providers to enhance employability of	 Leadership and career development
the graduates	 Communication skills training
	 Training on work ethics and OHS
	 Training on Problem solving skills
Contribution of the industries to strengthen	Provision of Job Opportunities
partnership with TVET providers to facilitate	 Open for partnership
both the match of skills, demand, and job ac-	 Absorb trainees who have excellent
quisition	performance
quisition	performance

As gleaned in table 10, employers elaborated on several factors that facilitate employment. They have emphasized the adequate skills they require in the companies which includes the five (5) major employability skills provided in the pieces of training of ValPoly, they have also mentioned professionalism and technical skills. Employers have mentioned positive feedback on the work performance of the TVET graduates. In addition, they are recommending intensive training for every employability skill.

Proposed Enhancement Program on Employability skills of TVET Graduates

A proposed enhancement program for the employability skills of TVET graduates is offered herein based on the findings of this study to ensure that all graduates will be equipped skills focusing on communication skills and information technology skills which obtained the lowest mean among the assessed employability skills to acquire and maintain employment. Provided that every students are diverse they may be different in terms of their level of competence in employability skills.

The proposed enhancement program involves several key steps aimed at improving the employability skills of TVET graduates specifically the Communication and Information Technology skills. The first step is the selection of a person in-charge of IT, who will be responsible for overseeing the implementation of the program and ensuring that it meets the needs of the organization. This person will work closely with other stakeholders to develop a comprehensive plan for enhancing the organization's digital infrastructure. The second step involves enhancing digital infrastructures such as information and communication technology (ICT). This may include upgrading hardware and software, implementing new digital tools and systems, and improving network security.

The third step is the pre-employment assessment, which is designed to identify the skills and knowledge required for employability of TVET graduates. This assessment can help identify the strength and weaknesses of the students when it comes to demonstrating the employability skills. Among those skills, weakness in communication and IT skills will be taken into consideration to undergo a training course. The fourth step is the design of a training course, which will be created through the collaborative efforts of trainers and career experts. This training course will be tailored to the specific needs of the students and will help to ensure that graduates have the skills and knowledge necessary to become employable.

The final step is the implementation of the training course, which will involve delivering the course to students and assessing their progress. This step will help to ensure that they have developed their communication and IT skills.

Conclusion

ValPoly's TVET graduates are employed. Half of them have acquired a "regular status" of employment. Despite the skills mismatch prevalent in the labor market, graduates have managed to look for employment related to their training acquired right after graduation. Communication skills are the most useful skill in the workplace. Graduates may be provided with intensive training for employability skills to help them excel in their career path and the school

may seek more partnerships with industries to address skills mismatch.

ValPoly has provided comprehensive and effective programs and provisions that enhance graduates' employability skills. The latter may revisit their implementation, gearing towards a demand-driven institution.

Employers are delighted with the performance of the TVET graduates employed in their companies based on their employability skills. There are lots of factors that facilitate the acquisition of employment. Adequate skills are some identified factors needed to be developed to acquire a job in an industry. Soft skills are necessary to acquire a job. Interpersonal relationships, work ethics, and honesty are some of these factors, to name a few. ValPoly may further enhance its programs to cater to the needs of the industries.

A proposed enhancement program for the employability skills of TVET graduates is formulated based on the key findings of this study to ensure that all graduates will be equipped with the necessary skills to acquire and maintain employment. ValPoly may seek adequate support from stakeholders of the institution to ensure effective and efficient delivery.

Similar research will be recommended, which may involve the various TVET Institutions in the future.

References

Asian Development Bank. (2021, November 3). What we look for. Retrieved from https://www.adb.org/work-with-us/ca-reers/what-we-look-for

Agoot L.,(2021, November), 20K more jobs available for "Build, Build, Build": DPWH. Philippine News Agency. https://www.pna.gov.ph/articles/1159999

Cooper, C. (2017). Systemic TVET reforms - Impact on employment outcomes., British Council, https://www.britishcouncil.org/sites/default/files/employment_outcomes

De Ungria, A. (2019, January 18). National Certificate II Institutional Assessment for Electrical installation Maintenance: Basis for Intervention Program. https://ojs.aare-searchindex.com/index.php/AAJMRA/article/view/8890

- Doyle, A. (2020, October). What Are Problem-Solving Skills? *The Balance*. https://www.the-balancemoney.com/problem-solving-skills-with-examples-2063764
- Gines, A. C. (2014). Tracer study of PNU graduates. American International Journal of Contemporary Research, 4(3), 81-98.
- Ideh, V. (2013). Students' perception of strategies for improving delivery of Industrial Work Experience in Delta State University, Abraka. Nigeria Vocational Association Journal, 18 (2), 237-242.
- Ignacio, M. B., & Tabu, L. P. (2018). TESDA Tracer Study. TESDA Women Center. https://twc.tesda.gov.ph/advocacy/re-searches/11.pdf
- ILO OECD, (2013). Engaging employers in apprenticeship opportunities. International Labour Organization
- Ismail, S., & Mohammed, D. S. (2015). Employability skills in TVET curriculum in Nigeria Federal Universities of Technology. Procedia-Social and Behavioral Sciences, 204, 73-80.
- Legg-Jack, D. W. (2014). Employability skills of technical college graduates: a case study for Government Technical College (GTC) in Ahoada Rivers State Nigeria (Doctoral dissertation).
- Mack, A.J., White, D. & Senghor, O. An insight into entrepreneurship education practices in Technical and Vocational Education and Training institutions. J Glob Entrepr Res 9, 48 (2019). https://doi.org/10.1186/s40497-019-0169-z
- Maireva, C., Muza, C., & Beans, H. Employability of Accounting TVET Graduates: A Case of One Polytechnic College in Zimbabwe. East African Journal of Education and Social Sciences (EAJESS), 2(2), 97-107.
- Marope, P.T.M; Chakroun, B.; Holmes, K.P. (2015). Unleashing the Potential: Transforming Technical and Vocational Education and Training (PDF). "What is TVET?". www.une-voc.unesco.org. Retrieved 1 April 2017. UNESCO. "Technical and Vocational Education and Training (TVET)". www.unesco.org.
- Masrom, M., Ali, M. N., Ghani, W., & bdul Rahman, A. H. (2022). The ICT implementation in the

- TVET teaching and learning environment during the COVID-19 pandemic. International Journal of Advanced Research in Future Ready Learning and Education, 28(1).
- Mello, L. V., Tregilgas, L., Cowley, G., Gupta, A., Makki, F., Jhutty, A., and Shanmugasundram, A. (2017). 'Students-As-Partners' scheme enhances postgraduate students' employability skills while addressing gaps in bioinformatics education. Higher Education Pedagogies, 2(1), 43–57.
- Nugraha, H. D., Kencanasari, R. V., Komari, R. N., & Kasda, K. (2020). Employability Skills in Technical Vocational Education and Training (TVET). INVOTEC, 16(1), 1-10.
- Occupational Safety and Health. (2021). Competent person Overview | Occupational safety and health administration. Retrieved from https://www.osha.gov/competent-person
- Che Omar, C., & Rajoo, S. (2016). Unemployment Among Graduates in Malaysia. International Journal of Economics, Comemrce and Management, 4(8), 367-374.
- Paryono (2014). Transferable skills in Technical and Vocational Education and Training (TVET) in Brunei Darussalam. In: TVET@Asia, issue 3, 1-15. Online: http://www.tvetonline.asia/issue3/paryono_tvet3.pdf (retrieved 30.06.2014).
- Powzi, N. F. A., & Yamat, H. (2017). Strengthening the English language competency: A content analysis of UKM's Curriculum. Journal of Education and Social Sciences, 6(2), 303-308.
- Republic Act No. 7796 Sec 23, TESDA Act of 1994: Administer Training Programs, Retrieved from

https://tesda.gov.ph/About/TESDA/27878

- Seetha N. (2014). Are Soft skills Important in the Workplace? A Preliminary Investigation in Malaysia. International Journal of Academic Research in Business and Social Sciences. 4. 10.6007/IJARBSS/v4-i4/751.
- TESDA Circular No. 89 s. 2019, Implementing Guidelines for Supervised Industry Learning (SIL). Retrieved from www.tesda.gov.ph