

BRIDGING THE GAP: A SELF-ASSESSMENT OF WORK SKILLS BY TECHNICAL VOCATIONAL LIVELIHOOD GRADUATES FOR ENHANCED CAREER READINESS PLAN

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ABSTRACT

This quantitative descriptive-correlational study sought to determine the work skills employed by Senior High School Technical Vocational Livelihood (TVL) graduates in a public high school in the Division of Pampanga, Philippines through a survey questionnaire. A total of 152 SHS-TVL graduates from the last three school year (2020-2022) who chose employment and entrepreneurship as curriculum exits assessed their work skills. In the analysis and interpretation of data gathered, the researcher applied descriptive statistical techniques such as mean, weighted mean, standard deviation, and inferential statistics such as t-test, ANOVA, and Pearson-r. Results show a favorable assessment of the SHS-TVL graduates on their work skills. Specifically, they tend to display high skills on creative thinking, problem-solving, critical thinking, planning, and collaborative. However, results reveal that the graduates show moderate skills on communication and Information and Communications Technology. It was also found that there is no significant difference in their assessment on their work skills when grouped according to their sex and batches. The researcher concluded that TVL graduates, regardless of their sex and batch, possess a similar level of skills. As for the relationship between the work skills of the TVL graduates and their career path pursued, no significant correlation was found. This means that the work skills such as creative thinking skills, problem-solving skills, critical thinking skills, collaborative skills, communication skills, and ICT skills of SHS-TVL graduates are not directly associated with their career path. Prioritizing communication and ICT skills among the graduates is recommended through curriculum enrichment.

Keywords: Work skills, Assessment, Career Readiness, Technical Vocational Livelihood

INTRODUCTION

Every country's aspiration is to grow and develop. Thus, acquiring necessary knowledge and skills is highly important in order to support progress. Education has been viewed to be an essential aspect in a country's development since it is a significant factor in promoting better income, sustained health, and eradicated poverty and in developing the capacity of the human resources of the country. The country's implementation of the K to 12 Program has resulted in a more streamlined curriculum to assist learners find employment as soon as they graduate from Senior High School or to further expand their knowledge and skills when they enter higher education. Without doubt, the development of the education system as a result of the demands of the 21st century has required individuals to prepare and equip themselves with the necessary knowledge and competencies in order to adequately prepare them for the workplace, entrepreneurship, or higher education, putting Filipino students at par with the rest of the world. Over the years, it has been clear that the Philippines' goal is to improve the standard of education and ensure that every student is equipped to excel in both their personal and professional endeavors. A number of key education reforms and initiatives have been carried out to bring it into line with other nations, in addition to increasing the basic education from 10 to 12 years (K to 12 Program). The establishment of the Philippine Qualifications Framework (PQF), which establishes standards for requirement outcomes and describes the levels of qualifications in education, the release of the New General Education Curriculum (CMO 20, s. 2013), and the paradigm shift to outcomes-based education, which emphasizes a learner-centered approach are a few examples of these. Such initiatives have addressed the need for the Philippine education system in responding to the demands of globalization and the ASEAN integration. Furthermore, such reforms have offered substantial opportunities for learners to acquire communication, innovation, media and technology, and life skills that are embedded both in the Junior High School and Senior High School curricula which serve as a crucial means to improve Philippines' competitiveness globally and meet the international standards (Cabral & Abanto, 2020). As a result, the knowledge required for both quality learning and quality teaching necessitates the acquisition of competencies and skills other than literacy and numeracy, which are commonly construed to include a wide range of competencies such as critical thinking, creativity, problem solving, communication, metacognition, digital literacy, global awareness, and civic responsibility (Kim et al., 2019). The competencies of the 21st century must also be realized and promoted from the basic school to higher education institutions (De Leon, 2020). As stated by Canez (2018), educators must improve the teaching of core content subjects such as math, social studies, and the arts by incorporating critical thinking, communication, collaboration, and creativity as they prepare students for the new global society. Among the responsibilities and concerns of education are preparing students for higher levels of education and employment, as well as providing them with appropriate knowledge and competencies. As said by Sumen and Calisici (2017), an educational system achieves success by providing its students with the knowledge and skills required in the 21st century. Jacolbia (2016) stated that educational institutions have the responsibility to support and improve learners' academic and lifelong learning because they are expected to make a significant contribution

to the expansion of an active and self-sustaining economy, the pursuit of a better quality of life, and the realization and fulfillment of global competitiveness. Notably, given the country's current economic conditions, students should obtain an education that is relevant to the workforce and can help individuals improve their lives. De Leon (2020) claimed that education is the process of preparing students to face a brighter and better future and the various difficulties that may arise along the way. This is attainable if learners possess lifelong skills that they can apply in their future endeavors. As for Voogt and Roblin (2012), lifelong skills are competencies which are increasingly needed in the existing labor force and expected of the youths who must be educated and trained today for future jobs. Scott (2015) reiterated that 21st century skills are the knowledge, skills, and attitudes required in a 21st century workforce. Added that people with such skills can appropriately participate in a better and different society, use new technology, and handle the obstacles brought about by rapidly changing workplaces. These skills are considerably being identified as the 'gold standard' for the abilities of the learners and requirements expected of them to meet the demands in the workforce and in life (Binkley et al., 2012). In preparing for work and life, learners need to be trained on how to solve difficult, complex problems and be able to communicate their decisions in an effective manner (Moyer, 2016). Furthermore, as crucial components of college and career readiness, these skills are becoming increasingly important in policy considerations. Assessing these competencies or skills can offer educators with a larger set of indications to use when giving instructions and creating goals with students (Jackson et al., 2014). Saxena (2015) affirmed that these skills aid in the development of attributes that students will acquire in the 21st century. It should be mentioned that these are the skills that students must have in order to properly contribute to the country's progress and prosperity. In the implementation of the K to 12 Basic Education, it is worthy to mention that teaching the subjects in the Senior High School plays a pivotal role in the realization of the overall objective of the curriculum, and the success of its goal depends on how effectively these subjects are taught in school (K to 12 BEC, March, 2012). Consequently, DepEd and TESDA field offices have been working together to determine the qualifications being offered from Grade 9 to Grade 12, ensuring that the students will possess the standard knowledge, skills, and competencies needed to go to college and to be ready in joining the workforce as soon as the students graduate from Senior High School. The addition of the Senior High School in the basic education has opened opportunities for work. Thus, the Department has been preparing its learners to equip them with the necessary skills. It is worth mentioning that these skills are crucial tools for individuals to achieve their life objectives, particularly in higher education and in the workplace. However, only 24% of employers in the Philippines, according to Job Street Philippines, are most likely to hire recent K to 12 graduates because they still place a higher priority on hiring people with college degrees. Based on the Job Street data, 35% of these employers do not hire K to 12 graduates because openings are only for college graduates; K to 12 graduates are not qualified to fill vacancies; there are no openings for the position; and there are no insufficient openings. It was added that despite an increase in the number of college and K to 12 graduates, there is still a mismatch between the quality of applicants and the needs of potential employers. Similarly, only 20% of 70 of the top corporations in the country

across all industries were willing to hire senior high school graduates, according to a 2018 report by Philippine Business for Education. This is because of their concerns about their employment preparation. The K to 12 education system has been fully adopted as the new educational landscape designed to attain and encourage paramount learning knowledge, highly competent learners equipped with desirable skills needed in engaging occupations to address societal challenges such employment job mismatch (Diamante, 2014). The initial implementation of SHS was investigated by Maghuyop (2017) where he used Yins Case Study Analysis: the within-case analysis and the cross-case analysis to identify the common and unique practices of those schools who implemented already their SHS Program. In this connection, the case studies were conducted at three private, religious schools in Manila, including in-depth interviews with the principal, one teacher, and one student at each school. The results demonstrate that there are certain similar themes among respondents on the mindset and behaviors necessary for the successful implementation of SHS that go above and beyond the framework for K to 12 Implementation provided by the DepEd. This report offers recommendations for other Philippine schools based on the experience of these early adopters and provides a detailed description of these examples. Likewise, descriptive research was undertaken by Arturo and Arturo (2020) to establish the level of work readiness of SHS graduating learners as the cornerstone for the creation of a program to improve work immersion. Academic focus (ABM, HUMMS, and STEM), gender (male and female), and work immersion setting are the independent variables. The dependent variable is the degree to which students are prepared for the workforce in terms of their foundational academic abilities, higher order thinking abilities, interpersonal and teamwork skills, and personal traits and attitudes. Respondents to the survey were graduates of Grade 12 and the managers charged by the partner universities with supervising the students during their company immersion. The data were gathered using a researcher-made survey questionnaire that had been properly validated and pilot tested. It was created based on a review of the work readiness literature and in accordance with the work readiness framework by O'Niel et al (2014). The learners have excellent interpersonal and teamwork skills, as well as excellent personal characteristics and attitudes, according to the findings. They also have very good work readiness in terms of basic academic and higher order thinking skills. When the students were divided into groups based on academic strand and sex, there were no discernible differences in their degree of work preparedness. However, there was a noticeable distinction between learners who had work immersion in public and private firms in terms of alignment with work immersion. Additionally, when evaluated by the work immersion supervisors, the learners' level of readiness for the workforce is excellent in every way, and there were no discernible differences in the learners' perceptions when they were classified according to the work immersion area. Regardless of their academic strand, gender, or place of work immersion, the study came to the conclusion that senior high school students are prepared for the workforce. It is strongly recommended that the proposed work immersion enhancement program be put into action to target the particular subjects where it was discovered that the students had the lowest ratings. More learning activities that would improve the students' foundational academic and higher order thinking skills should be provided by the

teachers. The study's conclusions should also be taken into account when reviewing senior high school curricula and curriculum developers. The related literature and studies mentioned above affirmed the importance of enhancing students' employability or work skills particularly on the Senior High School level. Evidently, there are numerous studies which focused only on the assessment of students' employability skills and their career choices. The present study is hoped to contribute to the existing body of literature on the SHS graduates. This study is different from the existing studies as this focused mainly on the work skills employed by TVL graduates, which has not yet been explored. Moreover, the researcher aims to explore the possible link of these skills to their chosen career path as it would contribute to the limited theoretical and conceptual discussions of the concept. Further, this initiative to conduct this study complies with the K to 12 Law and the DepEd's requirements for tracking graduates' development as they move toward higher education, business, and employment.

STATEMENT OF THE PROBLEM

The researcher aimed to look into the work skills employed by Senior High School Technical Vocational Livelihood (TVL) graduates in a public high school in the Division of Pampanga, Philippines from the last three school year (2020-2022) towards enhanced career readiness plan.

Specifically, this seeks to answer the following questions

1. What is the profile of the senior high school technical, vocational, livelihood learners?
2. What career path is pursued by the SHS-TVL graduates?
3. How may the level of work skills of the SHS-TVL graduates be described?
4. Is there a significant difference in the assessment of the graduates on their work skills when grouped according to profile?
5. Is there a significant relationship between the respondents' self-assessment of work skills and career path pursued?
6. Based on the findings of the study, what career readiness plan may be proposed?

HYPOTHESES

The following hypotheses were tested at .05 level of significance:

1. There is no significant difference in the assessment of the graduates' sex and batch.
2. There is no significant relationship between the graduates' self-assessment of works skills and career path.

RESEARCH DESIGN

The researcher used the quantitative-correlational survey research design. The method and measurements used in quantitative research, Descriptive-correlation research design is used to explain the subject phenomenon and to articulate what variables, conditions, and attributes are present. Correlational research is a systematic

investigation of the relationship present between two or more variables. According to Siquijor-Enriquez (2000),

Respondents

The respondents of the study were the SHS-TVL graduates of a public high school who have chosen ‘employment’ and ‘entrepreneurship’ as their career path. The graduates who belong to batch 2020 to 2022 assessed their work skills employed in the workplace in relation to their chosen career path.

Instrumentation and Data Collection

a survey questionnaire which was crafted by the researcher was used to collect relevant data. The content of the survey questionnaire is of two parts. First is the profile of the senior high school graduates in terms of sex and batch. Second is the assessment of the work skills of the TVL graduates in terms of their creative thinking skills, problem solving skills, critical thinking skills, planning skills, collaborative skills, communication skills, and ICT skills. For the validation process of the research instrument, the researcher sought comments and suggestions from experts in the field of education. The researcher made sure that the comments and suggestions were incorporated in the final draft of the questionnaire. Before the distribution of the questionnaires to the respondents, a pilot survey was conducted among SHS-TVL graduates who were not included in the actual data gathering procedure. This process was administered to identify the possible difficulties. Then, the survey questionnaire was subjected to a Cronbach’s Alpha Item Analysis for its reliability and acceptability. The alpha results of 0.893 indicates that the instrument is reliable and can be distributed further to the identified respondents.

Tools for Data Analysis

The data gathered from the respondents were organized and were tabulated and processed using the Statistical Packages for Social Sciences (SPSS). In the analysis of the data, descriptive statistics such as frequency distribution, percentage, and weighted mean and inferential statistics such as t-test and Pearson-rho were utilized in the study.

RESULTS AND DISCUSSION

Profile of the TVL Graduates

This section covers the demographic profiles of the respondents according to sex and batch.

As can be gleaned from the table, the greatest number of respondents (53 or 34.87%) belong to batch 2021-2022 followed by batch 2020-2021 which has a total number of 51 or 33.55% graduates. Meanwhile, 48 or 31.59% of the graduates are from batch 2019-2020. As for sex, there are 63 male and 89 female graduates in total who were selected to assess their work skills.

Table 1 Respondents' Profile according to Sex and Batch

Batch	Sex		f	%
	Male	Female		
Batch 2019-2020	19	29	48	31.59
Batch 2020-2021	18	33	51	33.55
Batch 2021-2022	26	27	53	34.87
Total	63	89	152	100.00

Career Path Pursued by the SHS-TVL Graduates

Table 2 contains the data on the career path pursued by the TVL graduates. From a total of 215 TVL graduates, only 63 or 29.30% of them pursued higher education. The other 141 or 65.58% chose employment while the remaining 11 or 5.12% chose entrepreneurship. As regards the number of graduates who are employed, it can be noted that this contradicts the data emphasizing that employers do not hire K to 12 graduates because openings are only for college graduates; K to 12 graduates are not capable to fill vacancies; no openings for the position are available; and there are no insufficient openings. It can be noticed that none of the graduates selected middle-skills development. In the study of Chavez (2019), it was reported that more than half of the TVL graduates in a public school in Pampanga or 55% from them chose employment as their career path. Meanwhile, only those who selected entrepreneurship and employment were chosen to participate in the study, while those who pursued higher education were excluded

Table 2 Career Path Pursued by SHS-TVL Graduates

Batch	Higher Education	Entrepreneurship	Employment
2019-2020	12	3	45
2020-2021	16	0	51
2021-2022	13	8	45
Total	63	11	141

Senior High School Technical Vocational Livelihood Graduates' Work Skills

This section covers the data on the respondents' work skills which include creative thinking skills, problem solving skills, critical thinking skills, planning skills, collaborative skills, communication skills, and information and communications technology (ICT) skills.

Creative Thinking Skills

Table 3.1 presents the work skills of TVL graduates regarding creative thinking skills. As can be gleaned, the graduates possess creative thinking skills, as indicated by the weighted mean of 3.87, which has a verbal

interpretation of "High Skills." On the other hand, their responses are quite similar, as is evident from the average standard deviation of 0.58. Moreover, it can be noted that the respondents scored lowest in exploring information from reliable sources needed to accomplish a certain job ($M = 3.78, SD = 0.58$), and scored highest in creating new ideas in group tasks ($M = 3.97, SD = 0.54$). Senel and Baceci's (2019) idea on creativity substantiates the abovementioned result. According to them, creativity develops as a result of thinking, and it is possible to develop creativity at any age; the school environment is one of the most suitable settings for creative thinking education, so long as it is designed with a culture of thinking and the process is guided by a dedicated teacher.

Table 3.1 SHS-TVL Graduates' Work Skills as to Creative Thinking Skills

Items	Mean	SD	Descriptive Rating	Verbal Interpretation
1. I create new ideas in group tasks.	3.97	0.54	Agree	High Skills
2. I always create new ways to do things faster and better.	3.95	0.52	Agree	High Skills
3. I create relevant technology that is beneficial to my tasks.	3.79	0.64	Agree	High Skills
4. I can explore information from reliable sources needed to accomplish a certain job.	3.78	0.63	Agree	High Skills
Weighted Mean	3.87	0.58	Agree	High Skills

Meanwhile, Gafour and Gafour (2020) affirmed that creativity is a unique method of seeing and solving issues, rejecting conventional answers, and thinking outside the box that enables one to establish new connections, confront new obstacles, and seek uncommon, original, and inventive solutions. As for Sokó and Figurska (2021), creativity is a crucial component of innovation, competitiveness, and enhanced organizational performance. Therefore, it can be concluded that the capacity to digest and use knowledge creatively is far more essential than the quantity of knowledge possessed. Although the graduates' overall rating on their problem-solving skills is "High Skills", developing strategies and solutions in solving problems and challenges ($M = 3.26, SD = 0.60$) was rated lowest. Meanwhile, identifying problems at work and evaluating solutions ($M = 3.78, SD = 0.42$) and assessing situations and recognizing the root causes of a problem ($M = 3.78, SD = 0.63$) were rated highest. According to McGunagle and Zizka (2020), problem-solving skills are one of the top job skills that Manufacturing

HR professionals value the most. HR professionals look for applicants who can provide solutions to problems and verbally communicating proposed solutions.

Problem-Solving Skills

Table 3.2 shows the work skills of TVL graduates concerning problem-solving skills. It can be seen from the data that the average weighted mean of 3.55, which was rated as “Agree”, indicates that the graduates are highly skilled in identifying problems in the workplace. In addition, the standard deviation of 0.58 indicates low dispersion among the graduates’ responses. Although the graduates’ overall rating on their problem-solving skills is “High Skills”, developing strategies and solutions in solving problems and challenges (M = 3.26, SD = 0.60) was rated lowest. Meanwhile, identifying problems at work and evaluating solutions (M = 3.78, SD = 0.42) and assessing situations and recognizing the root causes of a problem (M = 3.78, SD = 0.63) were rated highest. According to McGunagle and Zizka (2020), problem-solving skills are one of the top job skills that Manufacturing HR professionals value the most. HR professionals look for applicants who can provide solutions to problems and verbally communicating proposed solutions.

Table 3.2 SHS-TVL Graduates’ Work Skills as to Problem-Solving Skills

Items	Mean	SD	Descriptive Rating	Verbal Interpretation
5. I can identify problems at work and evaluate solutions.	3.78	0.42	Agree	High Skills
6. I develop strategies and solutions in solving problems and challenges.	3.26	0.60	Moderately Agree	Moderate Skills
7. I can assess situations and can recognize the root causes of a problem.	3.78	0.63	Agree	High Skills
8. I exemplify logical reasoning in understanding a specific problem.	3.38	0.68	Moderately Agree	Moderate Skills
Weighted Mean	3.55	0.58	Agree	High Skills

Critical Thinking Skills

Table 3.3 presents the respondents’ critical thinking skills. The graduates of TVL described themselves as “highly skilled” in terms of critical thinking (M = 3.82). In terms of response dispersion from the average weighted

mean, as indicated by the average standard deviation of 0.64, there is low variation in the responses of TVL graduates. Furthermore, it can be noted that they scored highest in determining strategic solutions from different perspectives by analyzing and interpreting valid information (M = 4.16, SD = 0.67).

Table 3.3 SHS-TVL Graduates’ Work Skills as to Critical Thinking Skills

Items	Mean	SD	Descriptive Rating	Verbal Interpretation
9. I can identify what needs to be known about a specific task.	3.84	0.60	Agree	High Skills
10. I can assess the usefulness, accuracy, and credibility of information collected for the task/s.	3.61	0.65	Agree	High Skills
11. I can determine strategic solutions from different perspectives by analyzing and interpreting valid information.	4.00	0.67	Agree	High Skills
Weighted Mean	3.82	0.64	Agree	High Skills

Reckman (2023) affirmed that critical thinking in the workplace ensures objective and effective problem-solving, thus minimizing costly errors and ensuring that the organization's resources are utilized effectively. She added that team members who are critical thinkers can link concepts, identify flaws and inconsistencies, and always make the best judgments. Meanwhile, in the educational context, O’Brien (2013) argued that many students' education overlooks critical thinking since they are taught memorization with little time left for the growth of their critical thinking skills, which aid in the acquisition of deeper information and a more diverse experience. Moreover, when critical thinking skills are not utilized in the classroom, students' prospects of success are significantly diminished (Irfaner, 2006, cited in O'Brien, 2013).

Planning Skills

The assessment of TVL graduates on their planning skills is shown in Table 3.4. Based on the result, TVL graduates are highly skilled in planning which is indicated by the weighted mean of 3.55 and standard deviation of 0.58. Specifically, item #14 was rated highest (M =4.70, SD = 0.46) by the graduates. This indicates that they

possess a very high level of proficiency in being constantly prepared to perform daily tasks. Meanwhile, the graduates demonstrate a moderate level of planning skills in demonstrating decision-making skills ($M = 3.15$, $SD = 0.50$). According to Akinsowon (2019), the key to an individual's success is their capacity for planning. She added that skilled planners imbue their daily work with qualities such as passion, motivation, and enthusiasm. It cannot be denied that planning is a skill that needs to be developed in students as this enables them to devise strategies for achieving the desired goals. Moreover, planning is a skill that facilitates the management of workloads, the completion of tasks, and collaboration with others.

Table 3.4 SHS-TVL Graduates' Work Skills as to Planning Skills

Items	Mean	SD	Descriptive Rating	Verbal Interpretation
12. I demonstrate ability in prioritizing work tasks.	3.84	0.90	Agree	High Skills
13. I demonstrate decision-making skills affecting work tasks.	3.15	0.50	Moderately Agree	Moderate Skills
14. I am always ready to work on daily tasks.	4.70	0.46	Strongly Agree	Very High Skills
15. I can perform assigned tasks well.	4.06	0.48	Agree	High Skills
Weighted Mean	3.55	0.58	Agree	High Skills

Collaborative Skills

Table 3.5 shows the TVL graduates' work skills concerning their collaborative skills. Notably, the graduates possess collaborative skills based on the average weighted mean of 3.81. The average standard deviation of 0.55 shows that the graduates' responses are lowly dispersed. Significantly, TVL graduates are highly skilled in all of the indicators. Specifically, they assessed themselves highest in showing utmost respect for the views and opinions of co-workers ($M = 4.01$, $SD = 0.49$). Nonetheless, they rated themselves the lowest in terms of expressing their views and opinions when performing a particular task ($M = 3.57$, $SD = 0.54$).

Table 3.5 SHS-TVL Graduates’ Work Skills as to Collaborative Skills

Items	Mean	SD	Descriptive Rating	Verbal Interpretation
16. I work well with other people and access learning opportunities when accomplishing tasks with them.	3.89	0.57	Agree	High Skills
17. I assist the group solve problems and manage conflicts to establish cooperation and teamwork.	3.89	0.57	Agree	High Skills
18. I show utmost respect for the views and opinions of co-workers.	4.01	0.49	Agree	High Skills
19. I can share my own views and opinions that can be used in carrying out a specific task.	3.57	0.54	Agree	High Skills
20. I can track everyone’s progress toward goals.	3.70	0.57	Agree	High Skills
Weighted Mean	3.81	0.55	Agree	High Skills

Friend and Barron (2015) claimed that there are numerous challenges and practical barriers to collaboration, including preparation for collaborative duties and time availability. Furthermore, Butterfield (2018) also stated that the success of a team in the workplace can accomplish more tasks and produce higher quality outcomes than a person working alone.

Communication Skills

Table 3.6 reveals the results of the TVL graduates’ assessment on their communication skills. As can be seen from the results, TVL graduates fall a little short in their communication skills. It is described as “moderately skilled” with an average weighted mean of 3.33. Moreover, the average standard deviation of 0.57 implies that their responses are quite alike. It is also indicated in the table that they scored lowest in understanding and

analyzing details and information in words, graphs, diagrams, charts, etc. (M = 2.82. SD = 0.55). Campbell (2022) opined that communication in the workplace is essential as it enhances employee morale, engagement, productivity, and job satisfaction, and communication is also crucial for improved team collaboration and cooperation. She further added that effective workplace communication ultimately contributes to improved outcomes for individuals, teams, and businesses. It is important to note that improving students' effective communication skills in school settings is crucial to their growth and future learning. The importance of having communication skills was explained by Asemanyi (2015) in his study. According to him, this skill introduces students to concepts such as sentence pattern, concord, ambiguity, and many others, and it necessitates more than just sitting through lectures and being a passive member of the class. As for Palos (2014), students who are more willing to communicate speak more in class, participate in more projects requiring communication, and are much more comfortable taking initiative and cultivating communication relationships than

Table 3.6 SHS-TVL Graduates' Work Skills as to Communication Skills

Items	Mean	SD	Descriptive Rating	Verbal Interpretation
21. I can express my views, opinions, and ideas to avoid misunderstandings.	3.50	0.69	Moderately Agree	Moderate Skills
22. I express my own feelings clearly so that people in the workplace can understand me.	3.78	0.41	Agree	High Skills
23. I speak clearly in order for me to be understood.	3.52	0.54	Agree	High Skills
24. I can understand and analyze details and information in words, graphs, diagrams, charts, etc.	2.82	0.55	Moderately Agree	Moderate Skills
25. I communicate with others so as to understand their thoughts and views about things.	3.01	0.67	Moderately Agree	Moderate Skills
Weighted Mean	3.33	0.57	Moderately Agree	Moderate Skills

Those who are less willing to communicate. The need to improve students’ communication skills has been given emphasis over the years. It has been observed that employers expect SHS graduates including TVL graduates in general to enter the workplace with higher-level communication skills.

Information and Communications Technology

Table 3.7 reveals that the TVL graduates have a moderate level of Information and Communications Technology (ICT) skills, with a weighted mean of 3.49. The average standard deviation of 0.54 shows that the responses of the graduates are quite similar. Notably, the graduates assessed themselves highest in the first item *I demonstrate familiarity with the use of basic computer applications (e.g. MS Word, MS PowerPoint, MS Excel)* (M = 4.53, SD = 0.53). This implies that the graduates have practiced and developed the use of basic computer applications in the workplace. Meanwhile, *accessing online platforms such as learning management system, internet streaming or broadcast, online libraries, video lectures, Google classrooms, WebQuest* gained the lowest rating (M = 3.03, SD = 0.49). Because of the advent of modern technology, today's graduates must be able to independently access online platforms such as learning management system, internet streaming or broadcast, online libraries, video lectures, Google classrooms, WebQuest, and many others as this may assist them in locating information from credible and scholastic sources that may be regarded to be essential to the completion of a job. According to Sicat and Magbag (2016), training in the use of computers and other technologies is indispensable and crucial. Although the said result indicates that the graduates only possess “moderate” level of ICT skills, it has been viewed that those considered to be part of Generation Z are digital natives, thus it is unsurprising that they possess

Table 3.7 SHS-TVL Graduates’ Work Skills as to ICT Skills

Items	Mean	SD	Descriptive Rating	Verbal Interpretation
26. I demonstrate familiarity with the use of basic computer applications (e.g. MS Word, MS PowerPoint, MS Excel).	4.53	0.53	Strongly Agree	Very High Skills
27. I can easily access materials and resources online.	3.34	0.47	Moderately Agree	Moderate Skills
28. I can access online platforms such as learning	3.03	0.49	Moderately Agree	Moderate Skills

management system,
 internet streaming or
 broadcast, online libraries,
 video lectures, Google
 classrooms, WebQuest.

29. I demonstrate knowledge on how to operate e-mails properly.

Weighted Mean	3.49	0.54	Moderately Agree	Moderate Skills
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Outstanding ICT skills (Muthmainnah et al., 2022). Institutions play significant roles in ensuring that they meet the requirements and expectations of graduates as far as employability is concerned. Students’ improved ICT skills likely to have a significant impact on job creation, business innovation, and work productivity. It is essential to note that technologies help the employee to complete work more quickly and effectively.

Summary Table on Work Skills of SHS-TVL Graduates

Table 3.8 presents the overall results of the TVL graduates’ work skills. Based on the results of the assessment, the overall ratings of TVL graduates indicate that they are highly skilled as attested by the grand mean of 3.63 and standard deviation of 0.58. Moreover, it can be noted from the results that the graduates assessed themselves as possessing “high skills” in creative thinking (M = 3.87, SD = 0.58), problem solving (M = 3.55, SD = 0.58), critical thinking (M = 3.82, SD = 0.64), planning (M = 3.55, SD = 0.58), and collaborative (M = 3.81, SD = 0.55) and “moderate skills” in communication (M = 3.33, SD = 0.57) and Information Communications Technology (M = 3.49, SD = 0.54). Clarke (2018) and Ferns et al. (2019) found that graduates who are prepared for the workforce are imperative for sustaining economic growth. During periods of economic expansion, employers may seek employees with well-developed skills outside of their discipline (McGunagle & Zizka, 2020). It is noteworthy to mention that TVL graduates must be equipped with the work skills necessary for success in one or multiple workplaces over the course of their careers in order to face the challenges they may encounter as they embark on their journey in the world of work. Undeniably, every educational institution with the support of everyone in the community has its roles to play to improve the skills of graduates so that they may be able to increase their chances for employment. In a multicultural and digital society, it is necessary for students to possess these skills to live a meaningful existence.

Table 3.8 Summary Table on Work Skills of SHS-TVL Graduates

Work Skills	Mean	SD	Descriptive Rating	Verbal Interpretation
Creative Thinking Skills	3.87	0.58	Agree	High Skills
Problem Solving Skills	3.55	0.58	Agree	High Skills
Critical Thinking Skills	3.82	0.64	Agree	High Skills
Planning Skills	3.55	0.58	Agree	High Skills
Collaborative Skills	3.81	0.55	Agree	High Skills
Communication Skills	3.33	0.57	Moderately Agree	Moderate Skills
ICT Skills	3.49	0.54	Moderately Agree	Moderate Skills
Grand Mean	3.63	0.58	Agree	High Skills

According to Casner and Barrington (2006), cited in Sicat and Magbag (2016), a new social contract has developed in which only those with the knowledge and skills to negotiate perpetual change and reinvent themselves to new circumstances will be successful in their career. Incorporating such skills into the fundamental curricula of programs in the basic education is also essential for preparing young individuals for the demands of the 21st century workplace. The Department of Education emphasizes through its several programs the acquisition of skills such as creative thinking, collaborative, communication, critical thinking alongside numeracy, literacy, scientific and technological knowledge through the application of real-world problems to the learning of academic content.

Difference in the Assessment of SHS-TVL Graduates on Work Skills when Grouped according to Profile

Table 4.1 shows the significant difference in the assessment of TVL graduates' work skills when grouped according to their sex. The results disclose that there is no significant difference in terms of the assessment of the male graduates ($M = 3.68$, $SD = 0.19$) and female graduates ($M = 3.69$, $SD = 0.18$) on their work skills as attested by the p -value of 0.81 which is higher than the α level of 0.05. Thus, this leads to the failure of rejecting the null hypothesis. This finding implies that, regardless of their sex, the TVL graduates have statistically the same level of assessment on their work skills. This result is similar to the findings of Bartolo and Icbán (2022) who found that there is no significant difference in terms of the SHS graduates' 21st century skills when grouped according to sex.

Table 4.1 Difference in the Assessment of SHS-TVL Graduates’ Work Skills when Grouped according to Sex

Position	N	Mean	Std. Deviation	t	df	p-value	Interpretation	Decision	
Work Skills	Male	63	3.68	0.19	-	150	0.81	Not Significant	Failed to reject Ho
	Female	89	3.69	0.18	236				

Table 4.2 presents the significant difference in the assessment of TVL graduates’ work skills when grouped according to their batch. As revealed, there is no significant difference in the assessment of the work skills of TVL graduates when they are grouped according to their batch as evident on the *p-value* of 0.95

Table 4.2 Difference in the Assessment of SHS-TVL Graduates’ Work Skills when Grouped according to Batch

Source of Variation	SS	df	MS	F	p-value	Interpretation	Decision
Between Groups	.004	2	.002	.051	0.95	Not Significant	Failed to Reject Ho
Within Groups	5.18	149	.035				
Total	5.18	151					

which is greater than the *alpha* 0.05 which means “failed to reject the null hypothesis.”

Relationship between SHS-TVL Graduates’ Work Skills and the Career Path Pursued

The correlation between the TVL graduates’ work skills and their career paths pursued is shown in Table 5. The results revealed that there is no significant correlation between the career path pursued by the graduates and their work skills. Specifically, no significant correlation was found between creative thinking skills and career path ($r=.078$, $p=0.35$), problem-solving skills and career path ($r=-.096$, $p=0.24$), critical thinking skills and career path ($r=.067$, $p=0.41$), planning skills and career path ($r=.067$, $p=0.41$), collaboration skills and career path ($r=.072$, $p=0.38$), communication skills and career path ($r=.056$, $p=0.50$), and ICT skills and career path ($r=.124$, $p=0.13$); thus, failing to reject the null hypothesis. This implies that

Table 5 Correlation of SHS-TVL Graduates’ Work Skills and the Career Path Pursued

Variables	<i>r</i> value	<i>p</i> value	Remarks	Decision on <i>H₀</i>
Creative Thinking Skills and Career Path	.078	0.35	Not Significant	Failed to reject
Problem-Solving Skills and Career Path	-.096	0.24	Not Significant	Failed to reject
Critical Thinking Skills and Career Path	.067	0.41	Not Significant	Failed to reject
Planning Skills and Career Path	.067	0.41	Not Significant	Failed to reject
Collaboration Skills and Career Path	.072	0.38	Not Significant	Failed to reject
Communication Skills and Career Path	.056	0.50	Not Significant	Failed to reject
ICT Skills and Career Path	.124	0.13	Not Significant	Failed to reject

the work skills such as creative thinking skills, problem-solving skills, critical thinking skills, collaborative skills, communication skills, and ICT skills of the graduates do not have a direct association with their career path pursued which include employment and entrepreneurship.

Career Readiness Plan

The significant change in the structure of the Philippine educational system has aimed to produce graduates who are holistically developed and endowed with skills that will help them stand out globally. The implementation of the K to 12 Program in the country has resulted in a more updated and efficient curriculum designed to help students find employment as soon as they graduate from senior high school. Under the DepEd Memo No. 169, s. 2018, after acquiring the essential skills, knowledge, and attitude in upper secondary education, students have the option to select from the curriculum exits following graduation. Unquestionably, the development of the education system necessitated by the demands of the 21st century has required individuals to prepare and provide themselves with the necessary knowledge and competencies and to adequately prepare them for the workplace, entrepreneurship, or higher education, bringing Filipino students on a par with those of the rest of the world. This is

the reason why every school, through the mandates of the DepEd, is doing its best to maximize its resources to provide quality basic education and to empower Filipino learners. Under the 1987 Philippine Constitution, Article XIV Section 1 states that “the State shall protect and promote the right of all citizens to quality education at all levels, and shall take appropriate steps to make such education accessible to all.” Therefore, schools are expected to intensify their efforts in preparing students to become holistically developed Filipinos and in providing them with opportunities to apply the competencies and skills they have acquired in basic education to their future endeavors. As the results suggest, there are areas needing to be addressed regarding the work skills of senior high school technical vocational livelihood students. These results propel the development of a learning plan that may assist teachers in the development of the students’ skills. The plan consists of objectives that should be attained after the application of the output, the various activities that teachers can engage in, the resources required to support the aforementioned activities, and the expected outcomes that will guarantee the achievement of the intended goals.

Key Result Area	Specific Objectives	Activities	Persons Involved	Source of Funds	Time-Frame	Expected Outcome
Creative Thinking Skills	To enhance the creative thinking skills of the Senior High School Technical Vocational Livelihood students	Create a learning environment that provides idea generation strategies to improve students’ creative and innovative skills	Senior High School Students, Teachers,	School and Local Funds	Year-round	Enhanced creative thinking skills of Senior High School Technical Vocational Livelihood Students
Problem-Solving Skills	To improve the Senior High School Technical Vocational Livelihood students’ problem-solving skills	Engage SHS-TVL students in real-world activities that are output-oriented Develop learning materials that focus on situational analyses	Senior High School Students, Teachers,	School and Local Funds	Year-round	Improved problem-solving skills of Senior High School Technical Vocational Livelihood Students

<p align="center">Critical Thinking Skills</p>	<p>To develop critical thinking skills of Senior High School Technical Vocational Livelihood Students</p>	<p>Provide higher-order thinking exercises that help students hone their analytical skills in order to promote greater understanding among them</p>	<p>Senior High School Students, Teachers,</p>	<p>School and Local Funds</p>	<p>Year-round</p>	<p>Developed critical thinking skills of Senior High School Technical Vocational Livelihood Students</p>
	<p>To develop planning skills of Senior High School Technical Vocational Livelihood Students</p>	<p>Provide activities promoting the importance of prioritizing tasks and managing time properly</p> <p>Provide actual scenarios where students can practice putting more time into planning</p>	<p>Senior High School Students, Teachers,</p>	<p>School and Local Funds</p>	<p>Year-round</p>	<p>Developed planning skills of Senior High School Technical Vocational Livelihood Students</p>
<p align="center">Collaborative Skills</p>	<p>To increase collaboration among Senior High School Technical Vocational Livelihood Students</p>	<p>Create and maintain learning environment that provides opportunities aligned with the collaborative</p>	<p>Senior High School Students, Teachers, School Head</p>	<p>School and Local Funds</p>	<p>Year-round</p>	<p>Increased collaboration among Senior High School Technical Vocational Livelihood Students</p>



	Students	<p>academic needs of the learners</p> <p>Engage TVL students in activities that are task-oriented, student-oriented, and output-oriented</p> <p>Develop an activity that will teach students help the group solve problems</p>				Students
Communication Skills	To improve effective communication skills of Senior High School Technical Vocational Livelihood Students	<p>Engage students in oral and written task-oriented activities</p> <p>Create a safe learning environment where students can freely communicate with their classmates and teacher</p> <p>Incorporate activities such as blind drawing, blindfolded obstacle course, four at a time, etc.</p>	Senior High School Students, Teachers	School and Local Funds	Year-round	Improved effective communication skills of Senior High School Technical Vocational Livelihood students



<p>Information and communication Technology (ICT) Skills</p>	<p>To improve the ICT skills of Senior High School Technical Vocational Livelihood Students</p>	<p>Help the students increase their knowledge of accessing different online platforms such as learning management system, internet streaming or broadcast, online libraries, video lectures, Google classrooms, and WebQuest</p> <p>Create a learning environment that provides activities about the use of different tools to complete everyday tasks</p> <p>like sending emails</p> <p>Integrate activities that may help students operate a wide range of technology software</p>	<p>Senior High School Students, Teachers</p>	<p>School and Local Funds</p>	<p>Improved ICT skills among Senior High School Technical Vocational Livelihood Students</p>
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SUMMARY

This study focused on the 215 Senior High School Technical Vocational Livelihood graduates' self-assessment of their work skills for the last three school years (2020-2022). It determined the profile of the respondents in terms of sex and batch, career path pursued, the TVL graduates work skills, the difference in the assessment on work skills when group according to profile and the relationship of work skills and career path pursued. It utilized percentage, t-test and Pearson rho to treat the data.

Based on the collected and analyzed data, the following are the findings:

1. The respondents of the study include 63 or 41.45% male and 58.55% female TVL graduates who were selected to assess their work skills. The majority of the TVL graduates come from batch 2021-2022 (34.87%) followed by batch 2020-2021 (33.55%) and batch 2019-2020 (31.59%).
2. Twenty-nine and thirty percent of the TVL graduates chose higher education as their career path while 5.12% of them chose entrepreneurship and 65.58% chose employment.
3. TVL graduates assessed their work skills as “High Skills (3.63).” They assessed their creative thinking skills (3.87), problem-solving skills (3.55), critical thinking skills (3.82), planning skills (3.55), and collaborative skills (3.81) as “High Skills.” However, they assessed their communication skills and ICT skills as “Moderate Skills” as evident by the average weighted mean of 3.33 and 3.49, respectively.
4. Based on the results, the p-value of 0.81 which is greater than the alpha 0.05 indicates that there is no significant difference in terms of the TVL graduates' work skills between male and female. As for the batches, no significant difference was found as seen on the p-value of 0.95 which is greater than the alpha 0.05.
5. Based on the results of the correlation analysis among the TVL graduates' work skills, there is no significant association between the respondents' work skills and the career path they pursued.

CONCLUSIONS

Based on the findings, the following conclusions are hereby presented:

1. More than half of the respondents are female. Meanwhile, it appears that the proportion of respondents from the batch of 2021-2022 is greater than that of the batches of 2019-2020 and 2020-2021.
2. Compared to higher education and entrepreneurship, employment is the most chosen career path among TVL graduates.
3. TVL graduates are highly skilled in terms of creative thinking, problem-solving, critical thinking, planning, and collaborative thinking. However, communication and ICT skills of students may be the skills that need to be given priority. The graduates lagged in terms of these skills as they are only “moderately skilled”.
4. There is no gender gap in the work skills of TVL graduates as there is no significant difference between male and female graduates' assessment. While other studies affirmed the significant difference between students' skills in relation to their sex, this was not proven in this study. Furthermore, there was no

significant difference among the graduates' work skills in terms of their batch. It can be concluded that TVL graduates, regardless of their batch, possess a similar level of skills.

5. No significant relationship has been established between the graduates' work skills and their career path pursued. Hence, work skills of the respondents are not dependent on the career path they choose.

RECOMMENDATIONS

Based on the conclusions, the following recommendations were drawn:

1. More TVL graduates, regardless of sex and batch, may be encouraged to evaluate their work skills. Thus, future researchers may take TVL graduates into account at the cluster or division level.
2. The retooling and pedagogical development of SHS particularly TVL teachers must be carried out. Teachers should prioritize learning objectives that will further improve students' communication and ICT skills in light of the TVL graduates' assessment that they have the requisite skills. In addition, schools should evaluate the employability of grade 12 TVL students with a focus on work skills such as creative thinking, problem-solving, critical thinking, planning, collaborative, communication, and ICT skills. These skills have to be emphasized in the curriculum across programs not just in the senior high school but also in the junior high school and elementary level.
3. The findings of the study must be used by the academe and policymakers as an input for the formulation of programs and guidelines toward the improvement of students' skills and knowledge and the development of a specific framework of educational outcomes.
4. To ensure the academic success of every student, faculty members and several stakeholders and partner institutions should establish or strengthen their partnerships and collaborations by maximizing and strengthening the work immersion/practicum opportunities of TVL students.
5. Further studies on the assessment of TVL graduates' work skills in relation to other variables not covered in this study are encouraged. Specifically, future researchers may include graduates from other strands.

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