



---

## Competency Level, Employers' Expectations and Work Immersion Performance of Senior High School Technical-vocational and Livelihood (TVL) Students

**Donnie Marc Louie Roble**

De La Salle University – Dasmariñas  
Dasmariñas City, Cavite, Philippines

### Abstract

A huge number of high school and college graduates lack the important knowledge and skills to be effective members of the workforce. This study aimed to describe the socio-demographic profile of TVL (Technical-vocational and livelihood) Senior High School students in a private school in the Philippines--their competency level, work immersion performance, and expectations of employers in terms of the competencies set by regulators. A descriptive correlational method of research was used to get the responses of 18 employers and 84 TVL students. Results suggest that there is no significant difference between the students' competency level and their employers' expected competencies in terms of collaboration, critical thinking, entrepreneurship, environmental literacy, information technology, learning and innovation, lifelong learning, and occupational health. In contrast, a significant difference exists between the two groups in terms of communication and occupational health. No significant difference was found in their work immersion performance when grouped according to sex and socio-economic classification, but a significant difference was found when grouped according to strand and specialization. The result of this study provides valuable insights for educational institutions, policymakers, and business owners in the Philippines on bridging the gap between the vocational training offered in schools and the needed competencies in the industry.

### Keywords

Technical-vocational education, competencies, employers' expectations, work immersion, K-12 curriculum

---

#### Corresponding Author:

Donnie Marc Louie Roble, De La Salle University-Dasmariñas., DBB-B, Dasmariñas, Cavite, Philippines.

Email: [donniemarclouierooble@gmail.com](mailto:donniemarclouierooble@gmail.com); [diroble@dlsud.edu.ph](mailto:diroble@dlsud.edu.ph)

#### Recommended Citation:

Roble, D. (2021). Competency Level, Employers' Expectations and Work Immersion Performance of Senior High School Technical-vocational and Livelihood (TVL) Students. *Asian Journal on Perspectives in Education*, 1(2), 43-63

## **Introduction**

In an emerging economy like the Philippines, the battle for a job post is stronger than ever. Prospect employees should aspire for a higher level of competence to land a decent job; thus, making themselves competitive should be the priority of every professional (Soliman, 2000). It is very risky for emerging economies like the Philippines that the number of skilled workers who are ready to take on the challenges of a 21st-century workplace is limited. A huge number of high school and college graduates lack the important knowledge and skills to be effective members of the workforce (Imperial, 2017). In the same way, De Castro, Cheng, Montenegro, and Pelmonte (2015) agree in concluding that education mismatch positively correlates with skill mismatch. Also, this mismatch negatively affects job satisfaction and productivity.

The World Bank in their study quoted “skills gaps” as serious bottlenecks for innovation and productivity among Filipino companies. They pointed out that skill gaps in the Philippines are particularly large in the service industry, export, and technology sectors. Similarly, the report said employers and employees find these gaps to be particularly severe in creativity, leadership, and problem-solving skills (Asean Affairs, 2011).

Various government agencies and organizations have worked together to address these challenges in the employment and education sector. The Department of Education (DepEd), Commission on Higher Education, Professional Regulation Commission (CHED), Technical Education and Skills Development Authority (TESDA), Department of Labor and Employment (DOLE), and Department of Science and Technology (DOST) came up with its job-skills matching agenda that aims to provide long-term solutions to employment problems.

Among the programs that the government laid out and seen to be the biggest and most important is the K to 12 Program. The Technical-Vocational and Livelihood Track (TVL) is one of the features of the K to 12 tracking schemes. DepEd coordinated with TESDA to offer the vocational standards in basic education allowing students to get the training needed to land a job right after graduation. The DepEd has partnered with different businesses and industries to cater to Grade 12 students who will undergo work immersion which served as one of their requirements before graduation. Learners are immersed in actual work environments such as workshops, offices, and laboratories in which their prior training is made relevant (DepEd, 2017).

For immersion to be successful, acquiring the required competencies are essential for students. This goes to show that K to 12 is the best time to investigate the competencies that SHS-TVL graduates have acquired. Therefore, it is vital for the government as well as the other educational institutions and stakeholders to make authentic and thorough reviews and evaluation of the competencies that students should acquire for them to land a suitable job for them after graduation.

---

## Framework

Skinner's behaviorist theory of psychology, Kolb's theory of experiential learning, and Bandura's self-efficacy theory were utilized in this study. Skinner's behavioral theory of psychology is based on the fundamental idea that reinforced behaviors tend to continue, while behaviors that are punished will eventually end. This learning theory states that for learning to be reinforced, skills and behaviors should be observable and specific thus identifying such skills is vital in developing the learners. Applying the said idea in this study, competencies are a set of observable skills and behavior which are used to evaluate and guide the learners. The competency-based training that is known today is strongly influenced by the theory of behaviorism which means that an in-depth assessment of these competencies is necessary for schools and the education system in making sure that competencies are aligned to the demands of the economy and society. This study had determined several behavioral indicators which primarily show the skills and behavior needed in the workplace. This study should determine which of these behavioral indicators are deemed to be important in the workplace setting.

Experiential learning is any learning that supports students in applying their knowledge and conceptual understanding to real-world problems or authentic situations where the instructor directs and facilitates learning. This learning theory puts greater emphasis on work-related learning activities that will enhance the knowledge and skills needed by the students for learning to take place. Out of all the common practices in the workplace and education, the work immersion feature of the K to 12 curriculum is heavily anchored on the theory of experiential learning whom David Kolb (1984) had worked on. This was based on the works of John Dewey (1938) and Jean Piaget (1936). As indicated in DepEd Order no. 30 s. 2017, work immersion aims to achieve greater congruence between basic education and the nation's development targets. It is also a requirement for graduation in secondary education. Through the K to 12 and its TVL track, students get to experience a real-life and hands-on approach to learning, therefore, enabling them to acquire the competencies needed to land a job. Considering this principle, this study aimed to get an impression of the current performance of SHS TVL students in their work immersion and of how does it relate to another variable which is their academic performance.

Bandura (1986) defines self-efficacy as "...people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 354). This is considerably true with a competency-based assessment that enables its participants to evaluate their capabilities and skills on their judgment. This research aimed to magnify the same idea presented on the self-efficacy theory specifically on domain specificity which allows people to judge their capability depending on the domain of functioning (Bandura, 2006). Given all the theories and variables presented, the conceptual framework of this study was formulated. The variables in this study tried to measure the capacity and learning of students by putting prime consideration in their workplace competencies, academic and work immersion performances.

By getting the relationship among the variables, this study would be able to shed light on whether the K to 12 graduates is competent enough to be part of the workforce and if indeed the K to 12 curricula has succeeded in its aim to educate the students of the skills and knowledge relevant to the 21st-century settings

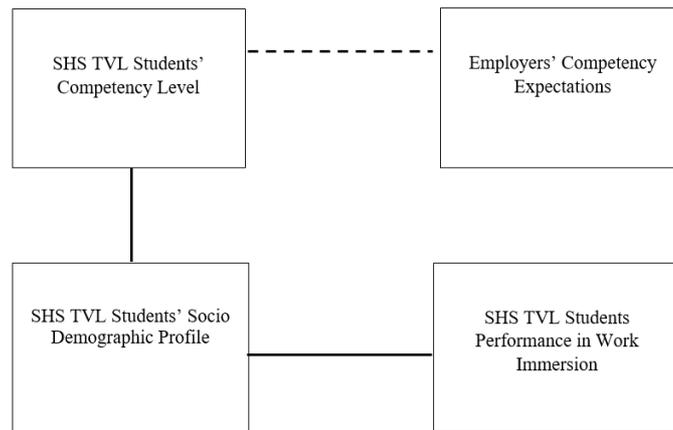


Figure 1. Framework of the Study

### Statement of the Problem

Generally, this study aimed to determine the level of competency, competency expectations of employers, and the work immersion performance of DLSU-D Senior High School TVL Students.

Specifically, it seeks to answer the following questions:

1. What is the socio-demographic profile of the students in terms of:
  - a. Sex
  - b. Socio-economic Classification
  - c. TVL Strand
  - d. Specialization
  
2. What is the competency level of SHS TVL students as perceived by themselves in terms of:
  - a. Collaboration;
  - b. Communication;
  - c. Critical thinking;
  - d. Entrepreneurship;
  - e. Environment literacy;
  - f. Information technology;
  - g. Learning and innovation;
  - h. Lifelong learning; and
  - i. Occupational health?
  
3. What are the competencies expected by the employers from SHS TVL students in terms of:
  - a. Collaboration;
  - b. Communication;
  - c. Critical thinking;
  - d. Entrepreneurship;
  - e. Environment literacy;
  - f. Information technology;
  - g. Learning and innovation;
  - h. Lifelong learning; and
  - i. Occupational health?

4. What is the performance of SHS TVL students in work immersion?
5. Is there a significant difference between the competency level of SHS TVL students and the competencies expected by the employers?
6. Is there a significant difference in the students' performance in work immersion when grouped according to their socio-demographic profile?

## Method

This study used a descriptive correlational method and adopted a descriptive survey design where data were collected and analyzed from a sample population – SHS TVL graduates and employers. They are both important stakeholders in the educational and workplace settings. The participants of this study came from a private SHS, the researcher's place of work.

Grade 12 students who took the TVL track specializing in different strands were asked to accomplish the survey instrument after their 80-hour work immersion. The employers are the business owners of the establishments where the Grade 12 TVL students spent their immersion period. The 63-item self-made instrument was patterned after various competency assessment models including the model of University of Victoria (2010). The indicators in the instrument were based on the international and local workplace competencies which were reviewed by three professionals who had significant experience in the field of TVL, educational management, and competency assessment. The instrument was pilot tested on 20 Grade 12 TVL SHS students. The result of the evaluation was compared, analyzed, and interpreted to check the reliability of the items using the split-half method function of SPSS - Reliability Analysis. The instrument was found to be highly reliable after it garnered high scores in three statistical tests namely: Cronbach's Alpha (0.967), Spearman-Brown Coefficient (0.900), and Guttman Split Half Coefficient (0.900). This study used frequency to describe the demographic profile of the TVL students according to sex, socio-economic classification, TVL strand, and specialization; mean was used to describe the collective assessment of the respondents of the study; Mann-Whitney test was used to determine the existence if difference between the competency level of TVL students and competency expectations of the employers; T-test for independent samples was used in determining the difference between the work immersion performances of TVL students when they were grouped according to sex and TVL strand; and Analysis of Variance was used to determine if a significant difference exists between the work immersion performances of TVL students when they were grouped according to socio-economic classification and specialization.

## Results and Discussion

### *Socio-Demographic Profile of Students*

Sex. Data showed that 51 (61%) out of 84 participants are female and 33 (39%) are male. Female respondents make up most of the participants in this study. The difference in the number between the two sexes can be explained by the fact that most enrollees in the school are female and most specializations being offered in the TVL track are under the Home Economics strand which is commonly more appealing for females than male.

Cavanaugh (2002, cited in Nelson, 2009), obtained a similar pattern of results where more females than males are enrolled in vocational courses under Home Economics. Similarly, Lubis (2012) found that there were more females enrolled in technology and vocational education courses than males. However, Fournier and Ineson (2014) found otherwise. Most research findings revealed that females were more likely to work in the food and hospitality industry than men (Hemedez, Herrera, Lacambra, & Lebrilla, 2015).

Socio-economic classification. It can be noted that most of the students fall under the middle- and high-income ranges. Data shows that 39 (47%) out of 84 students fall under the middle-income range, 38 (45%) fall under high-income range while only 7 (8%) are under the low-income range. The result obtained by this study can be explained by the fact that all participants came from a private institution whose fees are known to be higher compared to other private schools in the area thus families who belong to higher income bracket have the capacity to send their children in such schools. This result ties well with a previous study by Amar and Anwhar (2013) conducted in a private school where most of the student respondents are of high socioeconomic status. On the contrary, the research by Aliyu (2016) where the participants are mostly members of families under low-middle income. This is consistent with a separate study conducted by Ovansa (2017), where most of the sample students were from the low economic status background.

TVL Strand. As shown in Table 1, the Home Economics strand had the greatest number of participants with 75 (89%) out of 84. The ICT strand on the other hand had 9 (11%). The result can be attributed to the fact that more female students are enrolled in the TVL Track and female students tend to be more interested in the culinary and tourism industry than male students. Based on the interview of the researcher to the administrators, students who plan to take up Computer Engineering and Computer Science courses in college are enrolled in the STEM track thus limiting the number of prospective enrollees under the TVL-ICT strand.

*Table 1*  
*Distribution of students according to TVL strand*

TVL STRAND	FREQUENCY	PERCENTAGE
Home Economics	75	89
ICT	9	11
TOTAL	84	100

The Home Economics and ICT strand under TVL allows its graduates to be eligible for TESDA, this ensures their competency in the strand that they choose. Such qualification should also enhance their chance of landing jobs locally and internationally. Talking about this issue, Gayatin (2018) explained that the TVL track is a viable option to get jobs faster, however, for those who still wish to pursue a college education, having the skills acquired during their SHS TVL years is a huge advantage. Having good practice before starting college would impress their professors during class.

Specialization. Table 2 shows that 46 (55%) out of 84 respondents took Culinary/Cookery as their specialization, 29 (34%) took Tourism Services while 9 (11%) are under Computer Systems. It can be noted that most of the participants in this study chose Culinary/Cookery as a specialization. This is consistent with what has been found in Angel, Pangilingan, and Laniba's

study (2012). Technical-vocational students choose Food Technology as their specialization due to the high demand for jobs and business opportunities evident in the food sector.

*Table 2*

*Distribution of students according to TVL specialization*

SPECIALIZATION	FREQUENCY	PERCENTAGE
Culinary/Cookery	46	55
Tourism Services	29	34
Computer Systems	9	11
TOTAL	84	100

The findings are directly in line with previous findings of Saycon, Valle, and Yap (2016) that Food Technology and Hotel and Tourism Services are the most desired technical-vocational specializations among high school students.

Competency Level of SHS TVL Students. Table 3 shows the overall assessment of the participants on their competency level in terms of the set TVL competencies. As can be seen from the table below, students rated themselves as “Advanced” in terms of Collaboration (4.05), Communication (3.94), Critical Thinking (3.93), Entrepreneurship (3.73), Environment Literacy (4.05), Information Technology (3.99) and Occupational Health (4.08). In terms of Learning and Innovation (4.30) and Lifelong Learning (4.26), the participants rated themselves as “expert” in these competencies. Among those competencies where students consider themselves as “advanced”, Occupational Health got the highest mean score while Entrepreneurship had the lowest mean score. In the case of the competencies where students rated themselves as “expert”, Learning and Innovation got the highest mean score followed by Lifelong Learning. The result did not come as a surprise as students nowadays are more aware that non-technical skills such as Lifelong Learning and Innovation are becoming more useful in the modern world as suggested by the study of Drennan and Kavanagh (2008).

Apparently, the students are highly competent in demonstrating the competencies indicated by DepEd and TESDA. This is an important finding in the understanding of the competency level of SHS TVL graduates and how likely are they ready to take employment posts in their field of choice. In a way, this gives more reasons for institutions to continually improve the K to 12 Programs they offer using high-standard instructional programs to build student’s knowledge and skills in different subject areas, including courses that make them employable as they finish high school (Ramiro, 2016).

*Table 3*

*Competency level of SHS TVL students*

COMPETENCIES	N	MEAN	SD	LEVEL OF COMPETENCY
Collaboration	84	4.05	0.564	Advanced
Communication	84	3.94	0.655	Advanced
Critical Thinking	84	3.93	0.676	Advanced

Entrepreneurship	84	3.73	0.809	Advanced
Environment Literacy	84	4.05	0.741	Advanced
Information Technology	84	3.99	0.776	Advanced
Learning and Innovation	84	4.30	0.677	Expert
Lifelong Learning	84	4.26	0.670	Expert
Occupational Health	84	4.08	0.712	Advanced
OVERALL		4.04		Advanced

The result of this study found clear support for the programs and reforms that DepEd and TESDA are working on in line with other studies conducted in the previous years by Necesito, Santos, and Fulgar (2010) and Syjuco (2005) in preparation for the K to 12 curricula. Overall, these findings are consistent with the studies of Hemedez, et. al (2015), Moreno (2014), and Gener and Nahial (2015). Students in the TVL field rate themselves as “highly competent” or “advanced” after undergoing intensive and rigorous skills-based training in their field of specialization.

Competency Expectations of the Employers. Table 4 reveals the level of importance of each competency as rated by the employers and industry practitioners. Of the nine competencies listed, seven of which are deemed “essential” by the employers while two are considered to be “important”. Competencies like collaboration (4.25), communication (4.37), environment literacy (4.28), information technology (4.21), learning and innovation (4.35), lifelong learning (4.44), and occupational health (4.54) are those considered to be “essential” by the employers. Critical thinking (4.11) and entrepreneurship (4.05) on the other hand is considered to just be “important” by the employers. Among the competencies listed as “essential” by the employers, occupational health got the highest mean score while information technology had the lowest mean score. Between the competencies rated as “important” by employers, critical thinking got a higher mean score than entrepreneurship. It is evident that occupational health is the most important competency for employers. This is quite revealing as limited number of studies have embarked on the TVL competencies of Senior High School students. Seemingly, employers have raised their expectations high to TVL track students when it comes to Occupational Health and Safety (OHS).

Likewise, non-technical skills like collaboration, learning and innovation, and lifelong learning are deemed essential to employees as revealed in this study. On the other hand, Ito’s study (2014) showed a small contrast in the aspect of logical thinking, critical thinking, presentation skills, discussion skills, and foreign language skills as these competencies are considered less important to employers.

Gutierrez (2007) and Falame, et. al (2011) had a similar result suggesting that both technical and non-technical competencies are important to employers when looking for prospective employees.

Table 4  
Competencies expected by the employers.

COMPETENCIES	N	MEAN	SD	LEVEL OF IMPORTANCE
Collaboration	18	4.25	0.271	Essential
Communication	18	4.37	0.390	Essential
Critical Thinking	18	4.11	0.549	Important

Entrepreneurship	18	4.05	0.492	Important
Environment Literacy	18	4.28	0.583	Essential
Information Technology	18	4.21	0.693	Essential
Learning and Innovation	18	4.35	0.455	Essential
Lifelong Learning	18	4.44	0.556	Essential
Occupational Health	18	4.54	0.499	Essential
OVERALL		4.29		Essential

Difference in the competency level of SHS TVL students and the competency expectations of the employers

The difference in the competency level of SHS TVL students and the competencies expected by the employers. Table 5 shows the difference in the competency level of SHS TVL students, and the competencies expected by the employers. To determine the difference between the two variables, the Mann-Whitney test was used. The p-values of competencies like Collaboration (0.078), Critical Thinking (0.297), Entrepreneurship (0.109), Environment Literacy (0.310), Information Technology (0.808), and Lifelong Learning (0.396) are more than the 0.05 level thus making the null hypothesis accepted. This goes to show that there is no significant difference between the competency level of SHS TVL students and the level of importance of each competency as rated by the employers. The results lead to a similar conclusion that no gap exists between the competency level of the students and the competency expectations of the employers in terms of the competencies mentioned above. A similar conclusion on the employability perceptions of employers and students was reached in Wye (2009).

On the other hand, the p-values of Communication (0.005) and Occupational Health (0.010) are less than the 0.05 level. From this result, a significant difference between the competency level and employee expectation exists in these competencies. This is consistent with what has been found in a study conducted by Lubis (2012) where a gap exists between the perception of employers and students when it comes to communication skills.

Very little was found in the literature about Occupational Health but in this study, it is revealed that is one competency that the school needs to focus on to fill in the gap between the students and employers. Comparing with the findings in Table 4, Occupational Health was the most essential competency that students should possess. Likewise, communication is also essential to employers.

*Table 5*

*Difference in the competency level of SHS TVL students and the competencies expected by the employers.*

COMPETENCIES	MANN-WHITNEY Z-STAT APPROX.	P-VALUE	DECISION	INTERPRETATION
Collaboration	-1.760	0.078	Accept Ho	Not significant
Communication	-2.788	0.005	Reject Ho	With Significant difference
Critical Thinking	-1.043	0.297	Accept Ho	Not significant
Entrepreneurship	-1.603	0.109	Accept Ho	Not significant

Environment Literacy	-1.015	0.310	Accept Ho	Not significant
Information Technology	-1.071	0.284	Accept Ho	Not significant
Learning and Innovation	-0.244	0.808	Accept Ho	Not significant
Lifelong Learning	-0.850	0.396	Accept Ho	Not significant
Occupational Health	-0.2575	0.010	Reject Ho	With Significant difference

Difference between the socio-demographic profile of students and their performance in Work Immersion

Sex and Work Immersion Performance. To show if a significant difference exists in the work immersion performance of students when they are grouped according to sex, a t-test for independent samples was used. The data in Table 6 reveals that the p-value (0.277) is more than the 0.05 level thus, the null hypothesis is accepted. This study did not find a significant difference in the performances of students in work immersion when grouped according to sex. These findings support the notion that sex is not a factor in the immersion performance of students. This finding supports the claim of the Asian Development Bank (2013) that there is little to no gap between men and women in terms of employment and work performance in the Philippines.

Although these results differ from the study conducted by Fournier (2014), they are consistent with that of O' Halloran (2012) who pointed out that no gender difference exists in the students' OJT performance.

Table 6

*Difference in the students' performance in Work Immersion when grouped according to sex.*

SEX	T-COMPUTED	P-VALUE	DECISION	INTERPRETATION
Male	-1.094	0.277	Accept Ho	Not significant
Female				

Socio-economic Classification and Work Immersion Performance. The table reveals that the p-value (0.282) is more than the 0.05 level therefore, the null hypothesis is accepted. No significant difference is observed between the performances of students in their Work Immersion when they are grouped according to their socio-economic classification making household income or economic status a factor in their Work Immersion performance. A similar conclusion was reached by Tullao and Rivera (2011) when they studied the effect of household income on students' performance in school activities like immersion. Stone and Aliaga (2005) on the other hand, assert that socioeconomic differences exist among students and have impacted the performance of the students in all academic aspects including their immersion. Comparing the result of the current study, it must be pointed out that most of the participants are part of the middle income and high-income bracket therefore financial support, though a factor, is not an issue for most students to perform well during their work immersion.

Table 7

*Difference in the students' performance in work immersion when grouped according to socio-economic classification.*

SOCIO ECONOMIC CLASSIFICATION	F-COMPUTED	P-VALUE	DECISION	INTERPRETATION
Low Income Level				
Middle Income Level	1.285	0.282	Accept Ho	Not significant
High Income Level				

TVL Strand and Work Immersion Performance. In table 8, a t-test for the independent sample was utilized to know if a significant difference exists between the work immersion performances of students when grouped according to their TVL strand. The table reveals that the p-value (0.000) is less than the 0.05 level therefore, the null hypothesis is rejected. This study revealed that a significant difference exists between the work immersion performance of students when grouped according to their TVL strand. Between the two groups, the mean of students under the ICT strand is significantly higher than that of the students under the Home Economics strand.

ICT students spent their work immersion in a single company while the Home Economics students had their work immersion in several establishments. This does seem to depend on the ratings they received during work immersion where more employers and supervisors contributed more to the ratings received by students under the Home Economics strand than that of the ICT strand.

Table 8

*Difference in the students' performance in work immersion when grouped according to TVL strand.*

TVL STRAND	T-COMPUTED	P-VALUE	DECISION	INTERPRETATION
Home Economics ICT	-3.726	0.000	Reject Ho	With significant difference

Specialization and Work Immersion Performance. Analysis of Variance (ANOVA) was used in measuring the difference in the work immersion performance of the students when grouped according to specialization. As shown in Table 9, the computed p-value (0.001) is less than the 0.05 level therefore, the null hypothesis is rejected. A significant difference exists in the work immersion performances of students when grouped according to specialization. As discussed, the Computer System students under the ICT strand all spent their work immersion in a single company whereas Culinary/Cookery and Tourism students under the Home Economics strand were distributed to multiple establishments to spend their work immersion. The findings are in line with that of Lerios and Sapin (2017) that ICT students perform very well during their OJT.

Table 9

*Difference in the students' performance in work immersion when grouped according to specialization.*

SPECIALIZATION	F- COMPUTED	P- VALUE	DECISION	INTERPRETATION
Computer System *a				
Culinary/Cookery *b	8.094	0.001	Reject Ho	With significant difference
Tourism *b				

\*Means followed by common letters are not significant at 5% DMRT.

## Conclusions

Based on the above-mentioned findings, the following conclusions were drawn:

1. The TVL Track is composed mainly of more female students than male. In terms of socio-economic status, most students came from the middle income and high-income levels. There are more students under the Home Economics strand than the ICT strand and more students took up Culinary/Cookery than Tourism and Computer Systems as their specialization.
2. Senior High School TVL students are advanced in demonstrating the competencies of collaboration, communication, critical thinking, entrepreneurship, environmental literacy, information technology, and occupation health while they are experts in demonstrating learning and innovation and lifelong learning competencies.
3. The employers in the TVL sector consider collaboration, communication, environmental literacy, information technology, learning and innovation, lifelong learning, and occupational health as competencies that are essential in the workplace while critical thinking and entrepreneurship are competencies, they find important.
4. The students' performance in work immersion is generally outstanding across all strands; few managed to obtain satisfactory performance in work immersion.
5. There is no significant difference between the competency level of students and employers' competency expectation in terms of collaboration, critical thinking, entrepreneurship, environmental literacy, information technology, learning and innovation, and lifelong learning. On the other hand, the two groups significantly differ in terms of communication and occupational health. This implies that there is a gap between the competency level of TVL students and the expectations of employers in terms of communication and occupational health.

6. No significant difference exists between the work immersion performances of the students when they are grouped according to their sex and socio-economic classification while a significant difference was found when students are grouped according to their TVL strand and specialization. Students under the ICT strand tend to get higher performance ratings for work immersion than those from the Home Economics strand.

## **Recommendation**

In the light of the findings of the study, the following recommendations are laid:

TVL Students can focus on developing their competency level in collaboration, communication, entrepreneurship, environmental literacy, information technology, learning and innovation, lifelong learning, and occupational health as these are the competencies that are deemed to be essential by employers in the industry.

Curriculum planners may consider the competencies that employers find essential for their business to thrive. More emphasis should be given on tasks and assessments that will develop the students' competence in collaboration, entrepreneurship, environmental literacy, information technology, innovation, and lifelong learning especially for the competencies in communication and occupational health where gaps were determined.

1. It is also noteworthy that employers find the 80-hour work immersion insufficient for students in the TVL track. Curriculum planners can consider allowing more time for students to be immersed and learn by experience to enhance their chances of getting employment should they decide to apply for a job or run a business after graduation.
2. The schools may hold orientation before the students are deployed in their immersion. The said orientation may focus on the use of written and verbal communication in the workplace and application of Occupational Health and Safety (OHS) standards since these are the competencies that were determined to have been very important by the employers. It also recommended that additional training may be conducted during the immersion as reflected in the MOUs (Memorandum of Understanding) between the school and partner establishment.
3. It is the school's mandate to make sure that their TVL graduates are equipped and job-ready therefore it is recommended that teachers and administrators give more emphasis and focus on developing their competencies in communication and occupational health for the gaps to be filled in. This can be done by allowing students to explore, communicate and collaborate in achieving specific learning tasks and effective assessment designed to enhance and develop the above-mentioned competencies. Elective subjects focusing on workplace communication and occupational health and safety may also be offered to make sure that these competencies are developed accordingly.

4. Future researchers who would like to embark on competency-based assessment can use the same instrument used in this study to be administered on a larger scale. For instance, TVL tracks are given more emphasis in public schools than in private schools, and an evaluation of whether students' competency level met the employers' competency expectations will bring more meaningful and useful results knowing that TVL students in the public schools are more likely to look for employment after graduation. They may also embark on studies comparing the competencies of SHS TVL students in the public and private schools as there could be a discrepancy in the competencies being developed and to know which area of the curriculum and instruction should be improved.
5. Also, since the current study was conducted on Senior High School TVL Track students, other researchers may consider assessing the competency levels of students under different tracks. Other Senior High School tracks like STEM, ABM, HUMMS, Arts and Design, Sports, and GAS also offer work immersion and it will be quite interesting to know how students under these tracks fare in their immersion programs and whether expected competencies based on the curriculum are met. Similarly, future researchers may also consider other variables that might influence the competency levels of students like academic achievement, co-curricular activities, career assessment results, and intelligence quotient among others. Results of such a study will be a big addition to the developing body of knowledge and literature about the impact of K to 12 in the Philippines.
6. Moreover, other researchers may embark on assessing the effects of K to 12 and TVL curriculum in the local economy and standard of living in a particular place or even the entire country by employing methodologies to predict the possible workplace performance of students through linear regression analysis.

## References

- Ahmar, F. & Anwar, E. (2012). Socio Economic Status and its Relation to Academic Achievement of Higher Secondary School Students. *IOSR Journal of Humanities and Social Science*, 13 (6). 13-20.
- Aliaga, O. & Stone, J. (2005). Career & technical education and school-to-work at the end of the 20th Century: Participation and Outcomes. *Career and Technical Education Research*. 30(2). 125-144. <https://doi.org/10.5328/CTER30.2.125>
- Aliyu, G. (2016). Influence of socio-economic status on academic achievement of Senior Secondary students, in Nassarawa Zonal Education area of Kano State, Nigeria. *Asian Journal of Educational Research*. 4 (4). 1-8.
- Asean Affairs. (2011, October 14). Skills gap in Philippines labor force. Retrieved from [http://www.aseanaffairs.com/philippines\\_news/labor/skills\\_gap\\_in\\_philippines\\_labour\\_force](http://www.aseanaffairs.com/philippines_news/labor/skills_gap_in_philippines_labour_force)
- Asian Development Bank. (2013). Key Indicators for Asia and the Pacific 2013. Mandaluyong City, Philippines. Retrieved from <http://www.adb.org/publications/key-indicators-asiaand-pacific-2013>.

- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Clinical and Social Psychology*, 4, 359-373.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.). *Self-efficacy beliefs of adolescents*, 5, 307-337. Greenwich, CT: Information Age Publishing.
- De Castro, B., Cheng, Y., Montenegro, J., & Pelmonte, J. (2015). The consequences of education mismatch and skill mismatch on employees' work productivity: A structural equation model. *Luz Y Saber*. 9. 1-2. Retrieved from <https://ejournals.ph/article.php?id=9808>
- Department of Education. (2017, June 5). DepEd Order no. 3, s. 2017: Guidelines for Work Immersion. Retrieved from [http://www.deped.gov.ph/sites/default/files/order/2017/DO\\_s2017\\_030.pdf](http://www.deped.gov.ph/sites/default/files/order/2017/DO_s2017_030.pdf)
- Dewey, J. (1938). *Experience and education*. New York: Macmillan.
- Fournier, S. & Ineson, E. (2014). Age, gender, and work experience as predictors of success. *Education + Training*. 56. 10.1108/ET-10-2012-0093.
- Falame, P. F., Gelaga, R. P., Magangcong, A. L., Patayon, A. B. Resurreccion, P. F., & Ravacio, N. S. (2011). Skill and Competency Requirements of the Industries and Business Firms in Iligan City: Input to Curriculum Development. *The Mindanao Forum*, 24(2). Retrieved from <http://ejournals.ph/form/cite.php?id=7104>
- Gayatin, R. A. (2018, April 3). The importance of TVL skills development in senior high school. *Watchmen Daily Journal*. <https://watchmendailyjournal.com/2018/04/03/importance-tvl-skills-development-senior-high-school/>
- Gener, E. C. & Nahial, N. B. (2015). Assessment of the 21st Century Skills of the Letran High School Graduates AY 2012-2013: A Guide to Curriculum Enhancement. *Letran-Calamba Journal of Institutional Research and Development*, 1(2). Retrieved from <http://ejournals.ph/form/cite.php?id=10664>
- Gutierrez, M. E. (2007). Manpower Requirements of Manufacturing Industries: Inputs to Curriculum Development. *TIP Research Journal Quezon City*, 4(1). Retrieved from <http://ejournals.ph/form/cite.php?id=9169>
- Hemedez, C. N., Herrera, A. V., Lacambra, J. C. & Lebrilla, M. B. (2015). Competency assessment of hotel and restaurant management graduates Of Letran Calamba as inputs to program educational objectives review and enhancement. *Ani: Letran Calamba Research Report*, 2(1). Retrieved from <http://ejournals.ph/form/cite.php?id=11232>
- Hernandez, B. (2016, September 10). Fluency in 21st-century competencies. Retrieved from <http://opinion.inquirer.net/97206/fluency-in-21st-century-competencies>

- Imperial, M. (2017, November 21). Despite educated workforce, Filipinos lack 'soft skills' companies need—World Bank. Retrieved from <https://verafiles.org/articles/despite-educated-workforce-filipinos-lack-soft-skills-compan>
- Ito, H. (2014). Challenges towards employability: Higher education's engagement to industrial needs in Japan. *Higher Education Studies* 4(2): 1-8. <http://dx.doi.org/10.5539/hes.v4n2p1>
- Kavanagh, M., & Drennan, L. (2008, June 28). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting & Finance*. 48 (2). 279-300.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development* (Vol. 1). NJ: Prentice-Hall.
- Lubis, D. (2012, March 1). Success factors of business graduates of Lyceum of the Philippines University: Its Implications to curriculum functionality. *International Peer Reviewed Journal IAMURE: International Journal of Business and Management*. 1. 42-56.
- Moreno, R. B. (2014). Level of competence of Food & Beverage Services NC II Passers: Basis for strengthening the training program in Western Visayas. *Asia Pacific Journal of Multidisciplinary Research*, 2(1). Retrieved from <http://ejournals.ph/form/cite.php?id=5729>
- Necesito, M.E., Santos, R.B., & Fulgar, J.I. (2010). A Results-Based Monitoring and Evaluation Framework to Determine Performance and Success of ESD in TVET: The Case of the Philippines.
- Nelson, K. E. (2009). An examination of the perceptions of middle school students related to a technology, life, and careers curriculum. (Order No. 3404786, University of Wyoming). ProQuest Dissertations and Theses, 96. Retrieved from <https://search.proquest.com/docview/598309666?accountid=34302>
- O'Halloran, P.L. (2012). Performance pay and employee turnover. *Journal of Economic Studies*. 39 (6). 653-674.
- Ovansa, J. (2017). Effect of socio-economic status on the academic performance of senior secondary schools' students: A case study of public senior secondary schools in Adarri L.G.A of Kogi State. *International Journal of Education and Evaluation*, 3(8): 7 – 17.
- Pangiligan, R. B., Angel, D. M. & Laniba, A. T. (2012). Technical/Vocational Training Needs in Loon, Bohol. *IAMURE International Journal of Education*, 1(1). Retrieved from <http://ejournals.ph/form/cite.php?id=824>
- Piaget, J. (1936). *Origins of intelligence in the child*. London: Routledge & Kegan Paul.
- Ramiro, H. (2016, December 15). Public-school students become globally competitive with DepEd's K-12 Program. Retrieved from <https://businessmirror.com.ph/public-school-students-become-globally-competitive-with-depeds-k-12-program/>

- Rivera, J. & Tullao, T. (2011). The role of income and employment on school participation rate in Pasay City and Eastern Samar. *DLSU Business & Economics Review*. 20. 23-31. 10.3860/ber.v20i2.1911.
- Saycon, M. T., Valle, G. P. & Yap, E. B. (2016). K-12 Educational Program: 21st Century Learners' Interests and Directions. *The Confluence*, 7(2). Retrieved from <http://ejournals.ph/form/cite.php?id=10355>
- Soliman, P. (2000). Foreword - Competency Standards Handbook for Advanced Level Engineer. APEC- National Monitoring Council.
- Syjuco, A. (2005). The Philippine Technical Vocational Education and Training (TVET) System. Retrieved from <http://www.tesda.gov.ph/uploads/file/Phil%20TVET%20system%20-%20syjuco.pdf>
- Wye, C. (2009). Perception differential between employers and undergraduates on the importance of employability skills. *International Education Studies*. 2(1).

### **Author's Bionote**

Donnie Marc Louie I. Roble finished his master's in education Major in Curriculum and Instruction from Cavite State University as a consistent university scholar. His master's thesis about TVL competency and work immersion has been presented to different local and international forums and has garnered awards. He took his bachelor's degree in Technical Teacher Education major in Civil Engineering Technology at Technological University of the Philippines at Cavite and researched the competencies needed by the construction industry with an aim to link school aptitudes to work-field practices.

He was involved in different academic undertakings in and out of the country most of which are international benchmarking among Lasallian and secondary schools in Thailand and South Korea and has served as coordinator and mentor in the student-Teacher Exchange program by SEAMEO (Southeast Asian Ministers of Education Organization). He also shares his knowledge and expertise through various speaking engagements around the country.

Currently, Roble is teaching General Physics in De La Salle University – Dasmariñas High School where he also served in various key administration positions such as Junior High School Academic Coordinator and Academic Moderator for Technology and Livelihood Education. He also involves himself in a civic organization promoting science and nation-building.