COMPETENCIES OF GRADUATING TVL SENIOR HIGH SCHOOL STUDENTS

A Dissertation

A Dissertation Presented to
The Faculty of the College of Graduate Studies
Samar State University
City of Catbalogan, Samar

In partial fulfilment
of the Requirements for the Degree
Doctor of Philosophy in Educational Management (PhD-EM)

Submitted by:

JANICE R. MANICANE

May 2019

APPROVAL SHEET

In partial fulfilment of the requirements for the degree, **Doctor of Philosophy**, this dissertation entitled **"COMPETENCIES OF GRADUATING TVL SENIOR HIGH SCHOOL STUDENTS"**, has been prepared and submitted by **JANICE R. MANICANE** who, having passed the comprehensive examination and pre-oral defense, is hereby recommended for final oral examination.

May 10, 2019
Date

EMILIO H. CEBU, Ph.D.
Associate Professor III, SSU
Adviser

.....

Approved by the Committee on Oral Examination on May 10, 2019 with a rating of PASSED.

ESTEBAN A. MALINDOG, JR., Ph.D.
Dean, College of Graduate Studies, SSU
Chairperson

FELISA E. GOMBA, Ph.D.
Vice President for Academic Affairs, SSU
Member

RONALD L. ORALE, Ph.D.
Vice President for Research, Development and Extension Services, SSU
Member

RODRIGO G. ESTRADA, Ph.D.
Planning Management Officer, SSU
Member

DEBORAH T. MARCO, Ph.D.
Graduate School Faculty, SSU- CGS
Member

.....

Accepted and approved in partial fulfilment of the requirements for the degree, **Doctor of Philosophy (Ph.D.)**, major in **Educational Management**.

May 27, 2019
Date

ESTEBAN A. MALINDOG, JR., Ph. D.
Dean, College of Graduate Studies, SSU

ACKNOWLEDGEMENTS

Praises and thanks to Almighty God and the Blessed Virgin Mary for all the blessings, wisdom and strength showered to the researcher to complete this research work successfully.

This dissertation would not have been realized without the guidance and support of the generous individuals who selflessly shared their time, support, knowledge and expertise for the completion of this book. A message of gratitude is due to the following:

Dr. Emilio H. Cebu, for his assistance, professional guidance, and generous sharing of his know-how in the conduct of this study;

Dr. Esteban A. Malindog, Jr., Chairman of the Dissertation Committee; Dr. Felisa E. Gomba, Dr. Ronald L. Orale, Dr. Deborah T. Marco, and Dr. Rodrigo G. Estrada, the panel members, for their invaluable suggestions and sharing their ideas for the refinement of this book.

Dr. Carmelino P. Bernadas, Schools Division Superintendent of DepEd-Catbalogan City Division, for allowing the researcher in conducting and gathering data.

Dr. Linda S. Legarse, Chief for Planning and Research Division, for sharing her insights in research and for the motivation.

Principals and School Heads of Secondary Schools in Catbalogan City Division, for their prompt support and assistance in the conduct of this study.

Dr. Marife M. Lacaba and Dr. Rezy V. Mendaño, for their technical assistance and friendship.

TVL SHS Graduating Students for the SY 2018-2019, for giving their time, cooperation, and active participation in the conduct of this research.

Parents, siblings, in-laws, relatives, DEO Maya-Uwak family and friends, for their prayers, care, and helping hand.

Husband and children, for their love, understanding and continuous support to complete this research.

JhaM

DEDICATION

This masterpiece is dedicated to:

Almighty God

My loving and supportive husband

Rey

My lovely children

Princess, Queenie & Precious

Mother, Siblings, In-laws, Relatives

DEO – Maya-Uwak Family

Friends

JhaM

ABSTRACT

This study sought to evaluate the competencies of the graduating Technical-Vocational-Livelihood (TVL) Senior High School (SHS) students in Secondary School of Catbalogan City Division, Department of Education (DepEd) during the SY 2018-2019. The factors that motivated the students to choose a certain TVL Strand ere ranked according to the strength of their perception in this order as: 1) The school is near to our residence/home; 2) The skill learned has high local demand; 3) I want to work and have an immediate income to help my parents financially; 4) My parents cannot financially afford to send me to other schools; 5) The field I specialized is my passion/personal choice; 6) It is the only strand offered by the school where I enrolled; 7) It is the choice of my parents; 8) It is friends' influence; 9) Because of its demand in the domestic and international labor market, and 10) It is peer influence. The graduating TVL SHS students in Catbalogan City Division generally belonged to poor families who were motivated to take the TVL strands, some of them were not able to take the competency examination due to incapacity to pay, while others strived to pass the NC II hoping to land in job to help their respective parents financially after their graduation. Finally, in the revisit of the TVL Curricula preparation, the participation of the planners, of the school heads, the teachers and the industry partners be had along with the local Government Unit (LGU) representatives to acquaint the group of the local resources and LGU blueprint of development.

TABLE OF CONTENTS

Chapter 1

THE PROBLEM AND ITS SETTING

Introduction

Every individual as a whole person, must learn, able to develop the potentials of well-being and able to shape his future. They should be well empowered to become productive and responsible members of the communities who value prosperity, sustainability and well-being (OECD, 2018). The transformation of an individual into a productive human being, involves the prior development of his cognitive senses through education.

Akinwunmi and Adeyanju (2011) as cited by Ishola, Adeleye and Tanimola (2018) argued that although education is a priceless asset, it is of fundamental value to develop the potentialities of every individual and the society as a powerful and dynamic instrument for change and national development. The quality of human resources is a wealth of every nation which sets the pace for its social, economic and political development.

Education can make a difference to people being challenged by the growing array of complex societal problems they are confronted within an era characterized by a new explosion of scientific knowledge that requires a radical and continuous evolution of curricula (OECD 2018). As a social institution, education must serve sustainably, comprehensively and superbly the needs of the society to survive. It must continuously evolve to meet the challenges of the

fast-changing and unpredictable globalized world (Serdyukov, 2017).

The youths or the young individuals are considered the most viable labor force for the future in every country around the world. No matter how able they are, they require an appropriate education to completely empower, enable them to analyze and resolve problems in work setting, and participate actively and productively in a collective decision making (Hossain, 2010). As the requirement of the potential workforce for the 21st century, the competency (Keogh, Maguire and O'Donoghue, 2015) needed for employees should have strong interpersonal skills, good problem-solving and time-management skills, to possess the ability to participate effectively in teams and networks, and a strong sense of personal efficacy (Riddle, 2018).

It is assumed globally that the society will not function optimally, until it is properly educated. The progress of most nations is attributed to the education of its citizens (Komakech and Osuu, 2014). Young individuals need to be given opportunities to develop generic attributes besides disciplinary knowledge which includes communication skills, problem-solving skills, ability and willingness to learn, and to participate meaningfully in teamwork. They must strive to learn more technical knowledge to the job in a knowledge-based economy (Lau, Baranovich and Leong, 2018).

Prior to the K to 12 Basic Education Program, the Philippines was one of the remaining ASEAN countries and of the world with 10-year basic education program (Mohammad, 2016). It allowed Filipinos to formally start in basic

education at 6 years old and graduate at 12 years old in the elementary level. The student graduates in the secondary level after four years in high school at 16 years old, is still underage to many to assume some productive contribution to the society. This situation suggested that the basic education acquired in studying and training Filipinos was very short (Magno, 2011). Aside from the short period, the old curricula had overcrowded subjects with longer time allotted and tended to cover too much technical content (SEAMEO INNOTECH, 2016; Cocal and Marcellano, 2017).

In addition, lessons in the old educational system lacked progression wherein the students found difficulty in catching up with their studies because most subject lessons were all being laid out to them without any introduction (Fioriello, 2019). This resulted to a very low quality of education in the public secondary schools and low confidence in government for several decades to develop the potentials of the students. (Sarvi, Munger and Pillay, 2015)

Alimzhanova, Bekturganova, Umirzakova, Makulova and Karymbayeva (2015) citing Raven (2002) explained that competency as a phenomenon consists of 37 components which are relatively independent of each other. Some are likely from cognitive sphere and others from emotional sphere which can interchangeably be used as components of effective behaviour. On the other hand, according to Chomsky (2010), the word skill is a manifestation of competence in different activities which is associated with human's thought and experience. Makulova et al (2015) stressed that education should focus on core

competencies for the long-range transport process of using skills acquired and is important to teach the students about what they may face in the future and what they can apply in any situation.

The Philippine school system is getting better at educating students, but many young people lack the skills and knowledge they need to be successful (Dagget, 2010) especially in work settings. Very high number of youths (15-34 years of age) still comprises the unemployed in the Philippines since January 2018 (PSA, 2018). Accordingly, there was mismatch of skills as required under Industry (Pascuala, 2014; Moya, 2016; Rodriguez, 2017). Problem of education-occupation mismatch are explored in terms of the level of education and the field of education (Humal, 2013). Skills mismatch is a result of imperfect training and labor market, changes in supply and demand which do not reach the concerned people who generally ruin the country's economy and society (Rihova, 2016).

Education and training institutions in the Philippines has been teaching skills which most employers no longer need and the competencies of graduates do not meet the industries need/s. There is a shortage of skilled, qualified and competent workers for certain occupations and industries that is more pronounced in manufacturing and electronic industries (PASEI, 2016),

In response to this problem, the Philippine government came up with an educational reform in the Basic Education Program mandated in RA 10533, The Enhanced Basic Education Act, popularly known as the K to 12 Program. Under this education program, the number of years that the Filipino student has to

spend in basic education (elementary and secondary levels) has been increased from 10 to 12 years. The Philippine government envisioned the Senior High School program (Grades 11 and 12) to produce graduates prepared for higher education and capable for starting their own businesses or land in job even without a college degree (DepEd, 2016). Effective education system has four components: standards for kindergarten to 12-year education; expert teachers; adequate funding levels, and effective information-technology-infrastructure (Buchanan, Wheelahan and Yu, 2018). The student-learners are allowed to acquire life skills, self-actualization and prepare for the world of the work, entrepreneurship and higher education (Ocampo, 2014) during their last two years in Senior High School.

Like in other parts of the world, Senior High School curriculum is offered to prepare students for work (Samiento and Orale, 2016). The students may choose among the four tracks: Academics, the Sports, Arts, and the Technical-Vocational-Livelihood (TVL) specializations based on aptitude, interests, and school capacity. The latter includes the Agri-Fishery Arts, Home Economics, Industrial Arts and Information and Communications Technology (ICT) strands (DepEd, 2016).

Along this line, a total of 768 graduating TVL students this SY 2018-2019 in Catbalogan City Division are expected to be well-prepared for a life-long employment. The Philippines' Department of Education (DepEd) emphasized that the Senior High School Program should offer a lot of benefits. One of which

is that the Senior High School Program, especially the Technical Vocational and Livelihood (TVL) track graduates will be readily employable (Del Mundo, 2013; Bacarra, 2016). Accordingly, it will equip the graduates with the skills that will make them more productive members of society (Patrinos & Samer, 2016). Pajares, Yadao, Bongcales, Avenido, Roda, Foronda, Villeta and Susada (2018) and Malipot (2018) explained that the Department of Education presumed that the K to 12 Basic Education Program had equipped Senior High School (SHS) graduates with the values, knowledge, and skills that the communities, businesses, and industries need. However, there was no scientific evidence exhibited, along this assumption.

The work-readiness of the SY 2018-2019 graduating TVL students depends on how their competencies (knowledge, abilities and skills) are honed both by the schools and the industry partners. They must exhibit some characteristics that lead to the demonstration of skills and abilities for an effective performance within an occupational area. Hence, they should embody the capacity to transfer skills and abilities from one area to another, the subjects which have not been investigated yet.

Statement of the Problem

This study sought to evaluate the competencies of the graduating TVL SHS students in Secondary Schools of Catbalogan City Division during the SY 2018-2019. Specifically, this study aimed to answer the following questions:

1. What is the profile of the TVL SHS graduating students in terms of:

    1.1 age;

    1.2 sex;

    1.3 specialization and

    1.4 national certification?

2. What is the profile of the school in terms of:

    2.1 curriculum;

    2.2 teachers' qualification in terms of:

        2.2.1 educational qualification;

        2.2.2 certification and/or license;

        2.2.3 industry experience, and

        2.2.4 teaching experience?

    2.3 facilities/equipment availability in terms of:

        2.3.1 compliance to minimum requirements and

        2.3.2 extent of utilization?

3. What are the characteristics of the industry immersion program in terms of:

    3.1 technical area of specialization;

    3.2 no. of hours;

    3.3 assessment of learning?

4. What factors motivated the TVL SHS graduating students to pursue a particular TVL strand?

5. What are the experiences of the graduating TVL students during the immersion program in terms of advantages and challenges?

Theoretical Framework

This study is linked to the set of interdisciplinary theories that were based on scientific ideas formed by assertions and propositions which further linked this study to the broader body of literatures and studies already under taken.

This research is grounded on the Theory of Human Capital of Adam Smith (1723-1790) which sets the framework of government policies as a key determinant of economic performance that conceives individuals as human capital and various economic metaphors such as technological change, research, innovation, productivity, education, and competitiveness (Fitzsimons, 2018:30). The key constructs of human capital theory are (a) human capital is knowledge, (b) human capital is characteristics, (c) human capital is behaviors the worker has (acquired or innate) that contributed to productivity, and (d) human capital becomes the labor forces and/or the marketable skills (Vomberg, Homburg, and Bornemann, 2015).

Sung (2018:25) further explained that human capital theory also assumes that improving the supply of skills will also increase the demand for it because employers will make use of the extra skills, and as an automatic skills adopters, the employers treat the workplace as a black box, wherein policies need not consider demand for skills, for it can be resolved through the systematic

adoption by employers on new and higher skills that are made available in the workplace. Brunello and de Paola (2009) as cited by Buchanan et al (2018) added that Human Capital theory relies on the concept of market failure (and its presumed connection with the under provision of training), dominates much of the thinking and approaches to national skills and training policy.

Human capital development is closely linked to Social Cognitive Career Theory developed by Lent, Brown and Hackett (1994) which expounds that there are interplaying factors when the student chooses a certain track and progresses on the chosen career path. The framework of this theory explains the student's success and failure, academic and career outcomes using the social cognitive processes (Gestiada, Nazareno and Villanueva, 2017: 446). These conditions are connected to the Competence Theory of Lawson (2004:12) which expounds that competence basically depends on the disposition or propensity as a way of acting of being that which is likely or inclined to accomplish. This explains the individuals motivation to participate, persist, and work hard in any particular achievement context.

Another theory is the Competence Motivation theory which is a conceptual framework designed whose central thesis is that individuals are attracted to participate in activities at which they feel good at. (Horn, 2019).

On the other hand, the Job-competition theory explains the persistence of qualification mismatch. It assumes that lesser training is required to most qualified individuals. To be competitive and just to get a job, individuals are

forced to get more skills even if their skills are not fully utilized. In this theory, qualifications substitute and save the training costs (Grapsa, 2017:3). When linked to human capital theory, this theory spouses that, an individual who lacks work experience and/or on-the-job training just compensate his work by using his additional and surplus education in which the employers prefer to save training costs. Workers like this are likely to be offered a promotion when they are already equipped with specific skills and enhanced work experience (Wen and Maani, 2018:8). It is expounded in the Job fit Theory that the higher the fitness of an individual's job characteristics in the job environment is, the higher the individual job performance (Kimand Choi, 2018:2)

Conceptual Framework

Figure 1 presents the framework of the research approaches in dealing with the problems of this study. Initially, the profile of the graduating TVL students as the primary respondents/participants such as: age, sex, specialization, national certification, and the factors that motivated them to pursue a particular TVL strand were taken through the survey questionnaires administered. It was heavily complemented with Focused Group Discussion (FGD) and interview with the respective SY 2018-2019 graduating TVL students.

As a potential human capital, the TVL students require inputs (knowledge) that are related to their specialized TVL strands. These were delivered through classroom instructions as part of the interventions for the total

development of the students' skills and further enhance their competencies for work-readiness.

Along this line, the profiles of public secondary schools in Catbalogan City Division that implement the required intervention in honing the knowledge of the graduating TVL students were respectively evaluated along the three aspects: the TVL teachers' qualifications along their educational qualifications, certifications and license, industry experience their teaching experiences and the schools' profile in terms of the available facilities/equipment; its compliance to the set of minimum requirements/standard and their extent of utilization. At this stage, the capabilities of the schools to deliver the required interventions in the competency development of the TVL students were evaluated.

Basically, classroom instruction is not enough in developing the knowledge and skills of TVL student. Their competencies would be half-baked if they were not exposed to actual or hand-on full skills and competency development. As required by the curriculum, every student taking the TVL Track must undergo the industry immersion program to expose them to the real world of work. Along this line, the characteristics of the graduating TVL students' industry immersion program were also evaluated in terms of its specialization, number of hours of exposure and their learning assessment. The advantages and challenges the graduating TVL students have experienced during their industry immersion program were elicited through the focus group discussions (FGD) and in-depth one-on-one interviews.

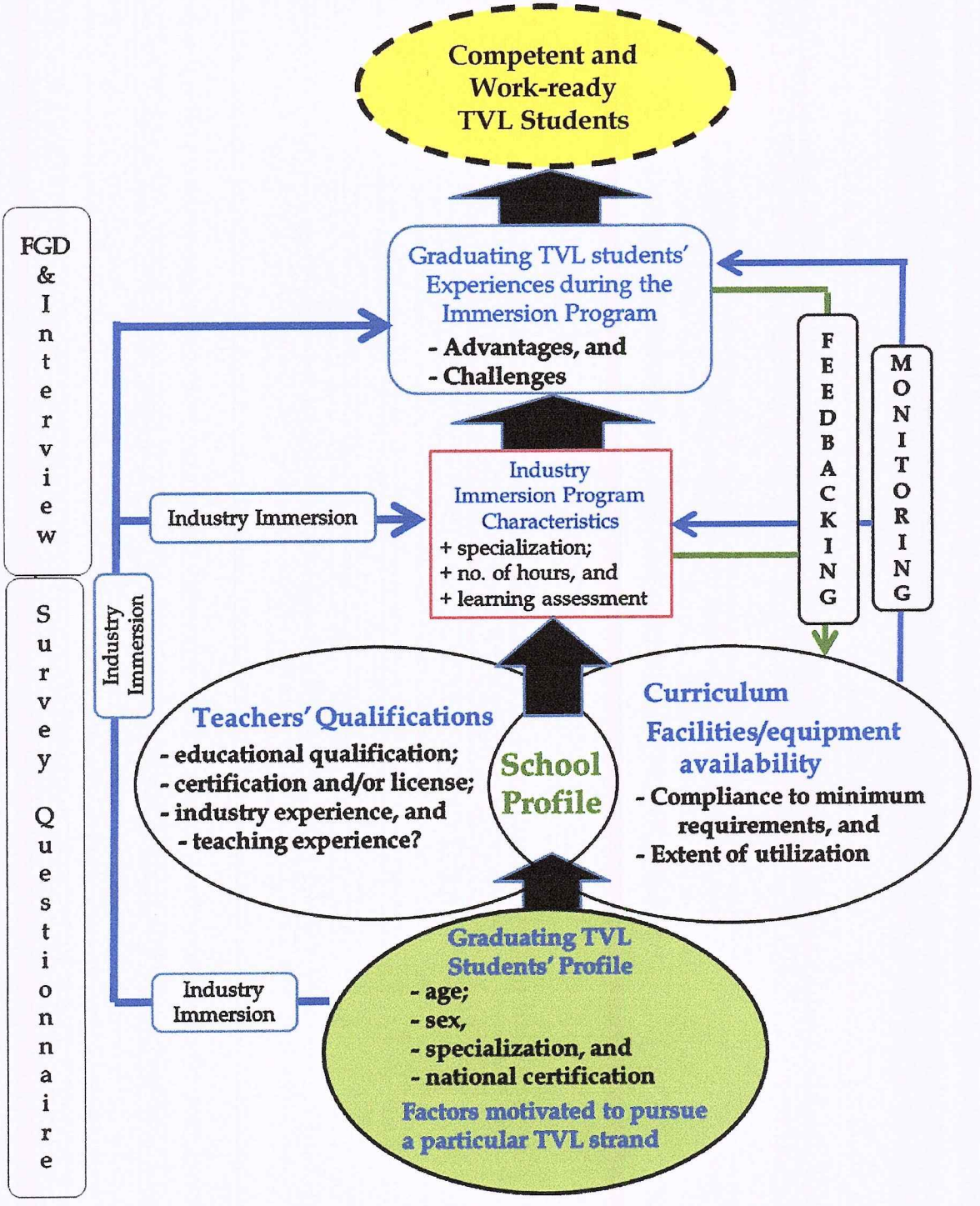

Figure 1. The Conceptual Framework of the study

The evaluation of the aforementioned variables were pursued based on the premise and the idea that the DepEd through the schools implementing the TVL strands has designate to enrich the students' values, knowledge, and skills that the communities, the local, domestic and international businesses and industries need. It is a common knowledge that the students' skills, knowledge and attitude towards work depends on the cognitive inputs.

It was expected that with the schools' inputs such as the pedagogical knowledge and practices of teachers (UNESCO, 2018), the available instructional equipment and facilities and that of the industry partners/experts' have contributed to the total development of competencies for work-readiness among the graduating TVL students before they exit from their alma mater.

Significance of the Study

This result of this study is beneficial to the:

DepEd's decision and policy-makers. The results of this study could be the essential basis in formulating policies (plans, program and intervention) for the enhancement of the TVL track implementation, for its revision modification and improvement.

TVL teachers. The recommendations in this study offer them an opportunity to attend the capacity-enhancement training or other related activities that may be planned by the DepEd's decision and policy-makers for an enhanced TVL Track implementation;

Future TVL students. The study increases the opportunity of the students to avail of the appropriate and required pedagogical approaches for the furtherance of their ability (knowledge and skills) that will increase their employability because of the match of their preparation to the real world of work/labor market.

Business and Industrial Sectors. This study would serve as the basis in their requirements for recruiting the competent and employment-ready workforce for their respective businesses spelling a difference in the need of aligning preparation of the work force for a productive work place.

Educational and social researchers. The result of this study could be a stepping, so to speak, good reference, serving as basis in determining gaps for future research/study in K to 12 implementation, specially along enhancing the capabilities of the teachers, the schools the students and the industry partners for more meaningful and productive endeavors.

Scope and Delimitation

This study was delimited by the data/information obtained or gathered from the graduating TVL students, this School Year 2018 – 2019 in the following Secondary Schools of Catbalogan City Division as influenced by the schools, the teachers and the industry partners readiness to implement the program:

1. Antonio G Tuazon National High School (AGTNHS), Barangay Rama;
2. Catbalogan City Agro-Industrial School (CCAIS), Barangay San Vicente;

3. Catbalogan National Comprehensive High School (CNCHS), Barangay Mercedes;

4. Guinsorongan National High School (GNHS), Barangay Guinsorongan;

5. Pangdan National High School (PNHS), Barangay Pangdan;

6. Samar National School (SNS), Barangay Poblacion 7 and

7. Silanga National High School (SNHS), Barangay Silanga;

Definition of Terms

For a clearer understanding of the readers and the researchers, providing a continuous reference through the definition of terms used in this study conceptually and operationally as follows:

Competence. This term refers to an ability of a person to handle and cope or complete a task or job successfully (Schriver, 2017). Operationally it refers to the capability of the TVL graduates to perform a task.

Employability. This term refers to a set of skills which are necessary, but not sufficient for gaining employment (Rowe and Zegwaard, 2017). In this study, it refers to the chance of the graduating TVL students to be employed based on the skills acquired during their 2-year post-secondary studies.

Employment-readiness. This term refers to one being able, with little or no outside help, to find, acquire, and keep an appropriate job as well as to be able to manage transitions to new jobs as needed (Ward and Riddle, 2003). In this

study it refers to the know-how, skills and abilities acquired by the TVL graduates which help them to enter in an industry.

Employability skills. This term refers to the knowledge, skills and the ability of a person to enter the workplace and retain the job (Rosenberg et al., 2012). In this study it refers to the different skills which will help the TVL graduates to land in job.

Human capital. This term refers to the skills the labor force possesses and is regarded as a resource or asset (Goldin, 2014). In this study, it refers to the graduating TVL students.

Industry Partner. This term refers to the partner institutions that are able and willing to lend their expertise and resources. (DepEd Order 30, s.2017). In this study, this refers to the person who makes assertions that his workplace fits the needs of a TVL student who is on a job-immersion to further hone his competences that would redound to an improved would be worker in a workplace; the owner of the job immersion area.

Knowledge. This term refers to the capabilities and competencies that increase an individual's ability for productive outcomes (Alavi and Leidner, 2014). In this study, it is part of the individual competencies gained in school and industry partners of the graduating TVL students.

LET. This term stands for the Licensure Examination for Teachers, which refers to the qualifying exam for all aspiring teachers (PRC, 2017; Carbonel 2019). In this study, it refers to the examination administered by the Professional

Regulations Commission to all students of education degree holders for them to be hired permanently as teacher in the private and public educational institutions.

NC II. This term stands for a Second Level National Certificate issued by the Technical Education and Skills Development Authority (TESDA) after passing the chosen field of specialization (TESDA, 2016). In this study, it refers to one of the eligibilities that qualify the teacher to handle a certain TVL strand.

Pedagogy. This term refers to the interactions between teachers, students, and the learning environment and the learning tasks (UNESCO, 2018). Operationally, it refers to how the teachers and students relate together as well as the instructional approaches implemented in the classroom.

Skill. This term refers to the ability of the person to carry out mental or manual activity, acquired through learning and practice which includes knowledge, competency and experience as well as the ability to apply these in order to complete tasks and solve work related problems. (Rihova, 2016), which is similar to those acquired by the graduating TVL students.

TM- I. This refers to the acronym of Trainer's Methodology Level – I that must be achieved by TVET trainer or assessor. It consists of competencies such as training and learning session plan, work-based learning supervision, facilitating competency assessment, maintain training facilities and utilize electronic media in the conduct of training (TESDA, 2019). In this Plan, it refers to the certificate issued by TESDA to a senior high school teacher who has

achieved the competencies in teaching TVET course related to his/her line of specialization.

TVET. It stands for Technical and Vocational Education and Training. It refers to a person who enables teamwork or a group if learners to develop competencies to perform a particular trade or technical work (TESDA 2011). Operationally, this refers to the courses that focus on building the technical capacity of the learner/s.

Underemployment. As defined by the International Labor Organization it refers to those who worked or had a job during the reference week but were willing and available to work more adequately (World Bank, 2018). In this study, it refers to the off and on employment status of an individual work.

Work immersion. This term refers to the subject of the Senior High School Curriculum which involves hands-on experience or work simulation in which learners can apply their competencies and acquired knowledge relevant to their track. (DepEd Order 30, s.2017). In this study it refers to the actual experiences of the TVL graduates in their on-the-job training.

Work-readiness. This term refers to set of conditions sufficient for gaining initial employment (Rowe and Zegwaard, 2017). In this study it refers to the competencies acquired by the TVL graduates.

Chapter 2

REVIEW OF RELATED LITERATURES AND STUDIES

This chapter reviews some literatures and studies that helped in the conceptualization of this study. The information herein presented has been accessed from various sources that have seemingly similar problems, subject, strategies and approaches, but did not duplicate with those reference materials. Instead, they served as basis for the validity and acceptability of the methodologies outlined, especially on the instruments for the precise measurement of variables and in contrasting results.

Review of Related Literatures

Education is a priceless asset of fundamental value to the individual and the society. It provides a sound basis for individuals to develop their potentialities. It is a powerful instrument for effecting national development. It is a dynamic instrument of change. As earlier pointed out, the wealth of a nation is determined to a large extent by the quality as well as the quantity of its human resources that ultimately set the pace for the social, economic or political development of a nation (Akinwunmi and Adeyanju, 2011). Education is always part of the top priorities in most countries in the world, which includes implementing better systems for the children's future, advanced learning systems and improving the country's academic curriculum (Fioriello, 2019).

Students acquire their sets of formal knowledge, skills and competence in the classroom as determined by the curriculum and as assessed by references to expected learning outcomes. The extent to which this activity meets its purpose is determined by an assessment of a reflective diary (Keogh, Maguire, and O'Donoghue, 2015). Part of the curriculum is the key skills that should have the opportunity to develop, in conjunction with subject specific skills and knowledge, to enable the graduates to make a dynamic start and rapidly adapt to change (Saunders and Zuzel, 2010).

Graduates must strive to learn more technical knowledge to the job in a knowledge-based economy. Graduates need to be given opportunities to develop generic attributes besides disciplinary knowledge. These generic attributes include communication skills, problem-solving skills, computer literacy, information literacy, ability and willingness to learn, and teamwork (Lau, Baranovich and Leong, 2018).

The schools have always ensured the honing of skills needed by students for the job or career they have chosen (Connelly, 2013). The Challenge for educators is not to dismiss or keep up with students' latest technological know-how, but to create meaningful learning experiences in which students are taught how to apply their knowledge to solve real-world problems (Daggett, 2010).

The educational system throughout the world pushes into a transition to the norm for pre-tertiary education, from kindergarten through grade 12 (or K to 12) education system due to the time required to acquire the necessary sets of

knowledge and skills for the 21st century taking into consideration the social benefits of long-term learning for school readiness programs (Sarvi, Munger and Pillay, 2015). Globalization is the transformative force and power seemingly like an unstoppable machine from which the Philippines cannot escape. The Philippines has been catching up with the global standards in secondary education (Okabe, 2013). Meeting its challenges may bring positive effects for the Filipino workers like employment opportunities and more foreign investments (Abulencia, 2015).

The World Bank (2018) report revealed that the level of education of Filipino workers is always linked to the state of labor market. Since poor Filipinos cannot afford to be idle and not working, unemployment of least educated individuals is lower, but receive salary rate of about 25-30 per cent of the salary of educated individual. The Philippine Statistics Authority (2019) reported that out of the estimated 71.9 million with 15 and above population, 43.5 million of them, are in the labor force. As of January 2019, this same age population was estimated at 72.52 million with 5.2% and 15.6% rates of unemployment and under-employment, respectively. The International Labor Organization (2017) report revealed that the Philippines' workforce is relatively young, with 45.0% of the population aged 15 years and above.

Moya (2018) reported that one of youth's unemployment problems is that high school graduate takes up to 3 years to find a first job and 4 years to find a permanent waged job. The high unemployment rate among the high school

graduates is caused by skills' mismatch. Skills' mismatch is a result of imperfect training and labor market, changes in supply and demand which does not reach the concerned people which is generally the country's economy and society (Rihova, 2016).

Bernarte (2014) noted that despite the adoption of the principle of academia-industry partnership, the private and public partnership has been problematic due to the driven interests and attitudinal differences of stakeholders. Orale (2012) argued that achieving a certain societal goal requires the involvement of organizations, the government and non-government and the academe as players in development. Canezo (2016) suggested that there is a need to come up with contingency measures particularly the advocacy, linkages and partnerships; curriculum development and upgrading; instructional materials development; skills enhancement of tools and equipment, and the provision of laboratory workshops. Agero and Bonotan (2016) recommended that to fully develop the students' competencies on certain work, industry partners should be informed on the aims and purposes of on-the-job training (or industry immersion) by providing the latter with the copy of the curriculum.

On the other hand, mismatch in the labor market exists in the form of educational or skills mismatch which has serious effects on wages associated with negative labor market outcomes. Mismatch happens and is noticeable when workers are randomly assigned on jobs to labor markets (Alejandre, Carandang, Catena1, Deomampo, Magpantay, Punzalan, Manongsong and

Pateña, 2015). While Philippine society and economy continues to evolve, it may be time to rethink how public education aids students in choosing career and education pathways. Additionally, due to the present economic and social changes the Philippine government is dealing with, it is imperative that it thinks more deeply about the future of those students who will enter the workforce immediately after high school. (Aida et al, 2015).

Driven by its commitment to achieving the Education for All (EFA) goals (Cocal and Marcellano, 2017), enhancing the capacities and employability of human capital in providing quality labor/workforce and in increasing educational cycles, the Philippines implemented an ambitious educational reform, the Enhanced Basic Education under Republic Act № 10533, tagged as the K to 12 Program (DepEd, 2016; Noche, Guinto, Paulo, and Sahagun, 2017). Education is the key function necessary to fully prepare students for life after schooling preparation for the world of work. (Aida et al, 2015). Okabe (2013) explained that he emergence of K to 12, the structure, the curricula, the philosophy of education system it has undergone reform and improvement. The key points of K to 12 led towards a holistically developed Filipino such as preparation for higher education; eligibility for entering domestic and international higher education institutions, and immediate employability on graduating students.

The senior high school under the K to 12 program has four tracks to choose from:

Academic, Technical-Vocational-Livelihood (TVL); Arts and Design, and Sports (DepEd, 2016). Among these four tracks, large concentrations are in the Academic and the TVL tracks, both of which have five strands. The Technical-Vocational-Livelihood (TVL) Track gives the student two options whether to enter a job related to his/her specialized strand but will be equip first with job-ready skills, acquire Certificates of Competency (COC) and National Certifications (NCs) even without the college degree or have the student pursue any college degree after Senior High School (Orbeta et al, 2018; DepEd, 2019; Edukasyon.ph, 2019; K to 12 Philippines, 2019).

The strands offered under this track include: (1) the Agri-Fishery (AF), in which skills to be acquired will be applied in agriculture and aquaculture-related jobs such as, but not limited to rubber, vegetable, animal production, etc. and food processing and fish culture respectively; (2) the Home Economics (HE) will hone the students on-job-readiness skills, especially for home-based livelihood projects; (3) Industrial Arts (IA) which provides skills and knowledge on carpentry, automotive servicing, driving, electronics repair, electrical installation, welding, plumbing, and tile setting following the TESDA curriculum; (4) Information and Communications Technology (ICT) which will encourage the students to utilize ICT tools to contextualize, collaborate, and create experiences for learning; and (5) TVL Maritime which capacitates the students on Safety, Navigation and Engine Watch and in Ship's Catering Services (DepEd, 2019; Edukasyon.ph, 2019; K to 12 Philippines, 2019).

The K to 12 education is intended to develop the students' general academic skills, such as reading comprehension, writing ability, researching ability, and presentation skills. These skills are also further developed in post-secondary education, which most high school students will undertake to fit them on work (Heslop, 2016; Fiorello, 2019). The content of the K to 12 curriculum provides students with the foundational knowledge and skills which are then built up at the post-secondary level (McQuarrie, 2016). Agero and Bonotan (2016) reported that most industry executives are concerned essentially on the functional competencies that graduates demonstrate across disciplines.

Thus, part of the curriculum is the key skills that the K to 12 students have to develop in conjunction with subject specific skills and knowledge to enable the graduates to make a dynamic start and rapidly adapt to change (Saunders and Zuzel, 2010). One of the biggest challenges that educators face today is determining clear goals and objectives for the curriculum that meets the constantly changing needs of the industry (Daggett, 2010). The schools always ensure in honing the skills needed by students for the job or career they have chosen (Connelly, 2013). Countries using a different education system land lesser jobs as compared to those graduates of the K to 12 learning system (Fioriello, 2019).

K to 12 also challenges the government, the educators, the society and its institutions to develop productive and responsible citizens who are ready to face the global challenges in our contemporary world. K to 12 places Philippine

Educational system at par with international standards (Bologna Accord, Washington Accord, ASEAN 2015; Rivera, 2016) in both the number of years of education and quality as it emphasizes on building vital competencies of the individual learners which the society and the industry need in the 21st century.

Under the Industry Competence Framework of Brunei Darussalam, the Industry Skills Qualifications (ISQ) involves training the unemployed youths in one of six trades: marker/fitter, rigger, welder, scaffolder, heavy vehicle driver and industrial blaster/painter, so that they can work in industry. On the other hand and to help move towards advanced economy and society, Singapore is engage in multiple stakeholders involvement wherein the companies, industry associations and unions help to identify skills gaps at the industry level. Individuals especially the youths are encouraged and motivated to have a personal commitment and devotion to excellence in developing and cultivating skills to support their passion (UNESCO-ILL, 2017)

Employers expect graduates to have the technical and discipline competencies from their degrees but require graduates to demonstrate a range of broader skills and attributes that include team-working, communication, leadership, critical thinking, problem solving and often managerial abilities or potential (Lowden et al, 2011).

While the possession of generic employability skills or attributes that allow students to progress to interview or assessment center, the problem remains of high levels of subjectivity or invisible criteria being applied to select

from a pool of applicants. In this sense, therefore, 'absolute' or human capital "employability" is more than the demonstrable possession of skills, knowledge and attributes (Aluko, 2014). However, recruiters use extra-curricular activity and (any) employment experience as a proxy for applicant possession of desired attributes such as personal ambition, maturity and motivation (Wilton, 2014).

It is better to holistically consider that a graduate needs to be both employable and work-ready to increase their chances of employment (Sachs et al, 2017). Smith et al (2014) further identified six dimensions of employability (termed work-readiness): professional practice and standards; integration of theory and practice; lifelong learning; collaboration; informed decision-making; and commencement-readiness (confidence to start a job in the discipline). However, ILO (2016) argued that the ability of the skills system to anticipate such needs is critical for preparing individuals, enterprises, governments and training providers with relevant competences. Skills anticipation involves activities that assess future skills needs in the labour market in a strategic way, using consistent and systematic methods.

During the International Conference on Law, Business, Education and Corporate Social Responsibility (LBECSR-17) held last January 23-24, 2017 in Manila, Philippines, the views of the twelve (12) companies in Makati City on hiring Senior High School graduates were elicited by Noche et al (2017). It was reported in this survey that the Senior High School (SHS) graduates are assured in the Business Process Outsourcing (BPO) due to their working capabilities.

Companies will adopt changes in their hiring process to cater to SHS graduates, who will be treated like regular employees, with normal working hours; promotion opportunities; contracts and privileges, once the companies accept, but parental consent before working will be needed. Companies will help the skills development of the SHS graduates through trainings. Companies of real estate and health industries will hire SHS graduates, if they see the right characteristics.

JICA (2017) reported that the labor demand in the Philippines comprised of 131,471 industry workers. The workers needed in the hard-to-fill vacancies are found in the following occupational groups: professionals (29.1%) or 38,214 individuals, technicians and associate (24.6%) or 32,285 workers; clerks (21.5%) or 28,222 workers; plant and machine operators and assemblers (5.7%) or 7,532 workers; service workers and shop and market sales workers (4.8%) or 6,248 workers; craft and related trade-workers (4.8%) or 6,240 workers; laborers (2.8%) or 3,712 workers, and others. According to this report, the Department of Labor and Employment's (DOLEs) Roadmap 2022 Summary report revealed that there will be an estimated shortage of 2.34 million people for middle management such as supervisors, corporate executives and specialized managers, and general managers or managing-proprietors.

The TESDA (2018) reported the latest top industries with the skilled labor force making the Philippines the best country for investment are top industries that need of skilled workers that include the Business Process Outsourcing

(BPO), Manufacturing Industry, Utilities and Shipbuilding Industries and the Construction Sector. This is due to the flowing foreign development investments (FDI) into the country and the "Build, Build, Build" Program of President Duterte's administration. These translate to a large pool of able-bodied workers for these industries, especially the young age population.

Pajares et al (2018) reported that skilled workers on manufacturing, agribusiness, hotel/restaurant/food business/tourism, wholesale/retail trade, transportation and logistics, information technology business, health and wellness and banking and finance are now in-demand in the Province of Cebu. Along this line, the TVL specializations which are in-demand include the cookery, bread and pastry, computer programming, electrical installation and maintenance, shielded metal arc welding, computer hardware servicing, food and beverage services, horticulture, housekeeping and animation. This is an opportunity for the employment of the first batch of K to 12 TVL Tracks graduates.

Citing the DepEd's pronouncement, Arayata (2018) reported that the K to 12 graduates now is job or work-ready. The program has equipped the SHS students with the values, knowledge and skills that the industries need. Thus, they were able to strike the balance between theory and practice with the industry partners.

At the European Union (EU) level, the new skills for new jobs initiative sets out to promote better anticipation of future skill-needs; develop better

matching between skills and labor market needs, and bridge the gap between the worlds of education and work. Skills demand in Sri Lanka is on Information Computer Technology (ICT), tourism and infrastructure workers (Rihova, 2016)

Review of Related Studies

Some related studies to this research have been reviewed which found some literature supports to this current study.

Hall (2010) studied work-readiness of 501 Career and Technical Education (CTE) high school students of Georgia school districts which employed causal-comparative research to analyse the differences on work readiness between the two groups of students. Work Keys, a USA national testing system was used in gauging the level of work readiness and to assist employers, schools, students, and workers alike in building a skilled workforce, and designed to evaluate a person's ability to use knowledge by providing contextualized workplace situations and problems. The descriptive statistics was used to describe the participants' CTE High School Graduation Test and one-way Analysis of Variance (ANOVA) was used to compare High School Graduation Test.

The above study is related to the current as it also determined work readiness which had also the same attributes for a high school student who can be considered as employment-ready. Similarly, it used descriptive statistics in describing the profiles and the employment-readiness of TVL students.

The Saunders and Zuzel (2010) study on Evaluating Employability Skills: Employer and Student Perceptions aimed to determine some attributes that characterize the quality of a certain graduate student-applicant as employment-ready based on employability skills as one of the dimensions. The study used a formulated questionnaire containing some attributes of the students which was used to extract information from various sources. Descriptive statistics was used to describe the personal profiles of the respondents and the one-way ANOVA to compare the personal qualities, core skills and subject knowledge at the different levels.

The above study of Saunders and Zuzel (2010) is likewise related to the current study as it determined the employability skills of the students as one dimension (or factor) of the student's employment-readiness which is likewise the subject of the current study. Both studies used a questionnaire in collecting data from students and the descriptive statistics to describe the respondents' profiles. Getting the employer's perception, the study locale and the use of ANOVA made both studies differ from each other.

Buted, Felicen and Manzano (2014) assessed the performance of the 64 students on Food and Beverage Services (FBS) Course and their internship performance in different hospitality businesses in Batangas City. They used the standard performance evaluation tool which was divided into four areas: knowledge, skills, attitudes and personality and with five (5) scoring grades from the lowest of 1 as very poor to the highest of 5 as very good, to measure and

obtain the necessary information that pertained to the evaluation of the work performance.

The performance rating of FBS students were conducted by the managers or immediate supervisors of the establishments where they were deployed. Using the Statistical Package for the Social Sciences (SPSS) software with 0.05 alpha level, the data obtained were statistically analyzed using the frequency distribution and ranking, weighted mean and Pearson-Product Moment Correlation (Pearson-r) in determining the relationship between the internship performance and the academic performance in Food and Beverage Service course.

The result of the study revealed that the 64 FBS students had satisfactory academic performance rating, but had obtained the highest "very good" performance evaluation rating in personality followed by attitude, knowledge and skills. The result further showed that there was no significant relationship between the academic performance in Food and Beverage Service Course and the training performance of student-interns in the Food and Beverage Department of the restaurant and hotel where they assigned. Based on the result, Buted et al (2014) recommended the enhancement of the curricular program and existing activities such as personality development seminar, english proficiency seminar and the pre-internship seminar and orientation including the quality upgrading of the university's facilities and laboratories from where the students came.

The above study of Buted et al (2014) is related to the current research as it concerned on Food and Beverages Services (FBS) which was one of the TVL strands specialized by the graduating students. The studies only differed on the manner of obtaining the data and on student-competencies' assessment.

Caballero and Cabahug (2015) evaluated the optimal readiness of the three groups of stakeholders, namely: the Division of Zamboanga del Sur, the Industries, and the Community in the implementation of Technical-Vocational Livelihood Track for Senior High School in 2016. The study employed the descriptive research design; and used a validated survey questionnaire. Results revealed that the facilities/ equipment, and the school administrators were "not at all ready" in the SHS Technical-Vocational Livelihood Track, while the LGUs and industries are "partially ready" to support the SHS implementation.

The above study of Caballero and Cabahug (2015) is very much related to this current study since it also evaluated the readiness of the SHS for the TVL Track implementation under the K to 12 Curriculum which also employed the use of the questionnaire for data collection. The only difference in both studies is the respondents. The former involved the school administrators and the industry while this proposal was focused on the readiness of the school to offer the TVL and the employment-readiness of the subject graduating TVL students, not to mention the "when and where of the studies.

Gualiza, Naelga and Blanco (2017) also studied the qualifications of 2 TLE teachers handling Cookery and Horticulture; the competencies of 171 students

(84 males and 87 females) and the facilities of San Vicente National High School in West Butuan District, Butuan City. The descriptive research design and the use of the questionnaire to collect data particularly on the teaching methods and approaches of the TLE teachers, the problems encountered in teaching TLE and the profiles of the students were used. The Department of Education's required 50-item-test questionnaire (with rating/scores 1-2 as very poor to 9-10 as very good) was used in measuring the competencies of the students. Frequency count, percentages, and weighted mean were used to describe the students and teachers' responses; T-test to test the students' achievement when grouped according with the teachers' profile; and regression analysis to test the effect of independent variables to the dependent variables as used in the study.

The result of the study in Butuan City showed that the teacher-respondents had both obtained MA units in their field of specialization in Home Economics, both were LET passers and NC II-holders. However, the tools and equipment needed in Cookery NC II were not available. This could have affected the performance of the students in competencies required in qualifying for the NC II Certificate. The inadequacy of tools was resolved through the effort and the resourcefulness of the teachers and students by bringing their own tools available in their respective homes. This led to a fair level of competency among Cookery students with scores varying at 27±4.93 and good competencies in Horticulture with mean scores of 5.10±2.30. The students lacked familiarization on some tools in both cookery and the horticulture strands. Based on the results,

Gualiza et al (2017) highly recommended for the revision of the curricula; teachers to be encourage to attend training and the use of innovative teaching strategies to cater students' need, and the enhancement of the procurement processes to facilitate the acquisition of equipment and materials needed.

The study of Gualiza et al (2017) is likewise related to the current study as they both concern the assessment on the qualification of the teachers and on the competencies of students on Cookery and the qualifications of the teachers handling technical-vocational courses. Likewise, both revealed inadequacy of training tools and equipment in both schools studied.

Palafox, Lorenzo and Palafox (2018) surveyed the SHS students' perceptions regarding the employability skills of the Grade 12 Senior High School Students of Malacampa National High School utilizing the quantitative and qualitative designs in providing a statistical description of the perceptions of the respondents and the convenient sampling method the researchers-constructed-survey questionnaire tailored from the learning competencies provided in the curriculum. Result of their study showed that the perceived Entrepreneurial Skills and Independent Learning Skills with high ratings as the most significant for their employability.

This study of Palafox et al is related to the current study as it concerned on the employability which is also directly related to the competencies of the Grade 12, K to 12 Students. Both studies used similar research designs, instruments for data collection and the statistical tools used in the treatment of data. However,

the former study did not include the qualification of the teachers and school facilities used which are contributory to their skills development. Both studies also differed on the study locale.

Pilar (2017) studied the reading competencies and technical skills of Technical-Vocational students in Iloilo City to determine the relationships of the two skills to the Industrial Electronics Technician, General Electronics Technician and Electronics Servicemen students of the TESDA-Supervised Institutions using the descriptive-correlational research design. The researcher-made test which the subject jurors/experts of experts Pilar administered had 119 items test questions administered to a total of 110 stratified randomly-sampled students. The grade classification as adopted by every TESDA institution was used to assess the level of technical skills. The data were subjected to ANOVA and Correlational Analysis.

The result of Pilar's study revealed that the technical skills performance, technical skills in the psychomotor area when both classified with age and the schools where the respondents graduated did not differ, but differed on the exposure to electronics repairs which were the focus of their technical skills. The result further revealed that the level of reading competence in English and their performance in technical skills in the cognitive and psychomotor areas have no significant relationship. The result implied that learning the practical way or hands-on (psychomotor) may consistently activate the schema of the students which ensures the permanent learning.

The study of Pilar (2018) is related to the current study as it likewise concerns on the technical skills as one of the competencies among the K to 12 TVL track students which are likewise the subject of the problem of the current study. The locales of the current research are the secondary schools that offered TVL strands. While the former was on the institutions supervised by TESDA that similarly evaluated the Grade 12, K to 12 student's competencies and performances for the acquisition of Certificate of Competency (COC) and the National Certification (NC) to ultimately qualify the young students to the world of work. The current study simply used the TESDA tool to assess the level of the technical skills of the TVL students.

Pilar's study disseminated that skill's improvement applied to the real-world situations can be facilitated through practical teaching strategies. This information may serve as a recommendation that skills acquired from the TVL strands should be developed through learning by doing.

Orbeta, Lagarto, Ortiz and Potestad (2018) studied the firms' perspective regarding the Labor Market of the Senior High School in 18 schools in the National Capital Region (NCR), Region III and Region IV-A using the Focus Group Discussions (FGDs) involving the Grade 12 students from the said schools to generate the students' perspective of their labor-market prospects and the Human Resource Managers/Officers of 26 firms in NCR, CALABARZON and Cebu as the key informants/participants. The study used the Qualitative Research Design and the triangulation to: (1) look into the SHS curriculum and

the competencies developed; (2) identify the types of jobs that fit the Grade 12 graduates; (3) gather private sector's perspective on the jobs available and appropriate for the Grade 12 graduates, and (4) provide policy recommendations for the improvement of the implementation of the SHS program.

The study of Orbeta et al (2018) revealed a total of 1,252,357 Grade 12 students enrolled in 11,087 schools nation-wide on SY 2017-2018. There were 6,911 (28.2%) enrolled in the Home Economics (HE), Information and Communications Technology (ICT), Industrial Arts, Agri-Fishery, and TVL Maritime of the Technological-Vocational-Livelihood (TVL) Track. The business associations and chambers affirmed through the Philippine Business for Education (PBEd) the opening employment positions for SHS graduates and rethinking of hiring guidelines to put a premium on competencies instead of credentials.

This was supported by the leaders from the Philippine Chamber of Commerce Inc. (PCCI), Makati Business Club (MBC), IT and Business Process Association of the Philippines (IBPAP), Management Association of the Philippines (MAP), People Management Association of the Philippines (PMAP), and the Joint Foreign Chamber of the Philippines (JFCCP). The DepEd is building and maintaining a strong partnership between the private sector and the academe in collaboration with PBEd for a change in the hiring policies by getting industry-partner to accommodate the SHS graduates for entry level work.

The satisfaction of TVL students' impression regarding their 2-year learning revealed that schools were not completely prepared. The external challenges mentioned regardless of track include: 1) Lack of required facilities (especially for TVL students), textbooks, and materials for demonstration purposes; 2) Dissatisfaction with the teaching methods and class and curriculum management, e.g., combining class sections (TVL and Academic tracks), offering subjects in Grade 12 instead of Grade 11, offering both Research 1 and 2 during the same semester when these are supposed to be conducted in two separate semesters as the prerequisite of the other; 3) Teachers handle subjects that are not related to their specialization and sometimes handle too many subjects and other tasks which compromise the quality of teaching, as well as learning of the students, and 4) Have a standardized exam even if teachers cover different contents or topics.

Although the objectives of the Orbeta et al (2018) study differed from the current study, both are still related, since they concern on the TVL students. While the current study is about TVL students' competencies which are directly related to their employability, the study of Orbeta et al (2018) looked into the labor-market perspective for the TVL students who were graduate in SY 2017-2018. The study of Orbeta et al (2018) provided assurance for the graduating TVL students of SY 2018-2019 that they had employment opportunities in the Philippine labor market, which is also the hope of this current study.

Chapter 3

METHODOLOGY

This chapter presents the methods and procedures that served as guide of the researcher in accomplishing this study, specially in the collection of data, their interpretation and their analyses to come up with results and findings relevant to address the problems related to the TVL program providing its graduates with competence that shall bring about their community, their country and the world.

Research Design

The mixed method or the combination of the quantitative and the qualitative research designs was employed because this study required both. Fischer, Boone and Neumann (2014) explained that the two designs have particular rules for estimating the quality of evidences in their field. However, the quantitative research design is oftentimes characterized by investigating commonalities in which the quality of evidence and the techniques for data collection and analysis were of particular importance.

Quantitative research requires the reality which is something tangible and that can be objectively measured and when used in collection, provides a broad picture in the data, like the profiles of the graduating TVL students, the teachers and those of the schools (the available tools and equipment), through statistical analysis. The researcher had recognized and made fixed decision about what to

measure and compare. On the other hand, the qualitative aspect of this study looked into the experiences of the graduating TVL student-respondents by listening to their stories and narrations or revelations which were the data needed to understand the nature and complexity of the challenges experiences they had in their industry immersion program, their short stay in the industry partners and the factors affecting them (Kielmann, Cataldo and Seeley, 2012). Fischer et al (2014) further explained that qualitative and quantitative research designs should be used since this study involves investigation, address the results to the concerned government agency for the enhancement of program implementation.

Instrumentation

There is no rule of thumb for the preparation of survey questionnaires but they should contain sufficient items to measure the construct of interest (Tsang, Royse and Terkawi, 2017). The researcher's formulated survey questionnaire (Appendix 3) was used to gather the necessary and relevant data/information from the SY 2018-2019 graduating TVL students to answer the outlined problems of this study. The contents of the questionnaire had four (4) parts and they were:

Part I was concerned on the graduating TVL students-respondent's personal profile: the age, sex, specialization (TVL strand chosen) and NC II certification;

Part II evaluated the readiness of the school in the implementation of Technical-Vocational Livelihood (TVL) Tracks for Senior High School (Caballero and Cabahug, 2015). It focused on the school's profile in terms of TVL curriculum, number of facilities/equipment available (Appendix 4) for the use of the students and the number of hours for their utilization, and the TVL teachers' profiles in terms of their educational qualifications, license and/or National Certification), industry experience and number of years in teaching experience.

A separately prepared Survey Questionnaire was administered with the TVL teachers who knew best of their qualifications and on the facilities and equipment available and used.

Part III concerned on the industry immersion program of the graduating TVL students, particularly on their specialization, the number of hours spent and the assessment of learning (the grade of the student) on the expected knowledge, skills and work values of the students.

Part IV of the questionnaire concerned on the factors that motivated the student-respondents to choose the certain TVL strand. The respondents were allowed to rate from 1 to the most influential to possible factors as enumerated in this section of the questionnaire. 1) The school is near to our residence/home; 2) The skill learned has high local demand; 3) I want to work and have an immediate income to help my parent financially; 4) My parents cannot financially afford to send me to other schools; 5) The field I specialized is my passion/personal choice; 6) It is the only strand offered by the school where I

enrolled; 7) It is the choice of my parents; 8) It is friends' influence; 9) Because of its demand in the domestic and international labor market, and 10) It is peer influence.

Validation of Instrument

For the completeness and consistency of the survey questionnaire, the researcher had consulted her adviser, the chairperson and the members of the dissertation committee for content validation. As suggested by Taherdoost (2016), the application of content validity as a protocol is highly recommended for the newly developed instrument to ensure that all the essential items to a particular construct domain are included and the undesirable items are eliminated.

Sampling Procedure

In this aspect, the researcher considered the data of the graduating TVL students (Table 1) given by the respective school heads/principals of the study locales. Based on the population size of graduating TVL students, the researcher considered the arguments of Shi (2015) that the sample size is mainly decided by the degree of variation of the survey objects, requirements and the allowable size of error (accuracy requirements), the required confidence coefficient, which is generally taken as 95%, the population and the sampling method.

A stratified sampling was used in this study in which the common criteria used for stratification are gender, age, ethnicity, and socioeconomic status.

However, the criteria vary greatly from investigation to investigation (Alvi, 2016). Due to the large total number of graduating TVL students' population in each study locale, the portion or subset of the individuals within the subject population was taken to estimate the sample populations' characteristics (Singh and Masuku, 2014). However, in schools that offer two or more TVL curricula the heterogeneity of the students' population was taken into consideration. The students' population were organized into separate strata (strands) as an independent sub-population. The purpose of which was to ensure that every TVL strand is represented.

Table 1

Graduating TVL Students' Populations by Study Locale

Name of School	No. of Graduating TVL Students
Antonio G Tuazon National High School (AGTNHS)	69
Catbalogan City Agro Industrial School (CCAIS)	40
Catbalogan National Comprehensive High School (CNCHS)	66
Guinsorongan National High School (GNHS)	243
Pangdan National High School (PNHS)	19
Samar National School (SNS)	111
Silanga National High School (SNHS)	220
Total	**768**

Out of the independent sub-populations, the sample students' population was determined as respondents to this study adopting the Yamane (1967)

formula: $n = N/(1+Ne^2)$, where n represents the sample size, N for population size by TVL strand, and e as margin of error set at 0.05 on sample size population assumed at 95% confidence level (Singh and Masuku, 2014). The estimated number of respondents is shown in Appendix 2 and represented by the different schools considered in the study so as shown in Table 1.

Data Gathering Procedures

The instrument used in the data collection/gathering was the researcher's developed survey questionnaire. Prior to its distribution, the researcher sought first the permission and approval of the Catbalogan City School Division Superintendent and the school principal/school heads through a letter (Appendix 1) hand-carried and directly given to the concerned officials.

Upon approval of the request, the researcher immediately contacted the respective school heads/principals, arranged the schedules and elicited assistance for the availability of the graduating TVL students. As scheduled, the researcher went to the targeted secondary schools of Catbalogan City Division (Figure 2) and administered the instruments with the assistance of the respective schools' TVL teachers. It was ensured during the administration of the survey questionnaire that the student-respondents understood its content by reading them in local dialect, waray-waray.

After responding to the questionnaire, 6-10 graduating students per TVL strand in every school were formed into groups for the focused group discussion

(FGD) guided by the prepared questions as its content. Ideally, FGD should have six to twelve participants (Arvi, 2016; Eeuwijk and Zuzanna, 2017). After the FGD, the one-on-one in-depth interview was conducted with the organized student-respondents to obtain information regarding their experiences during their respective industry immersion. The interviews were performed until the saturation of the information needed.

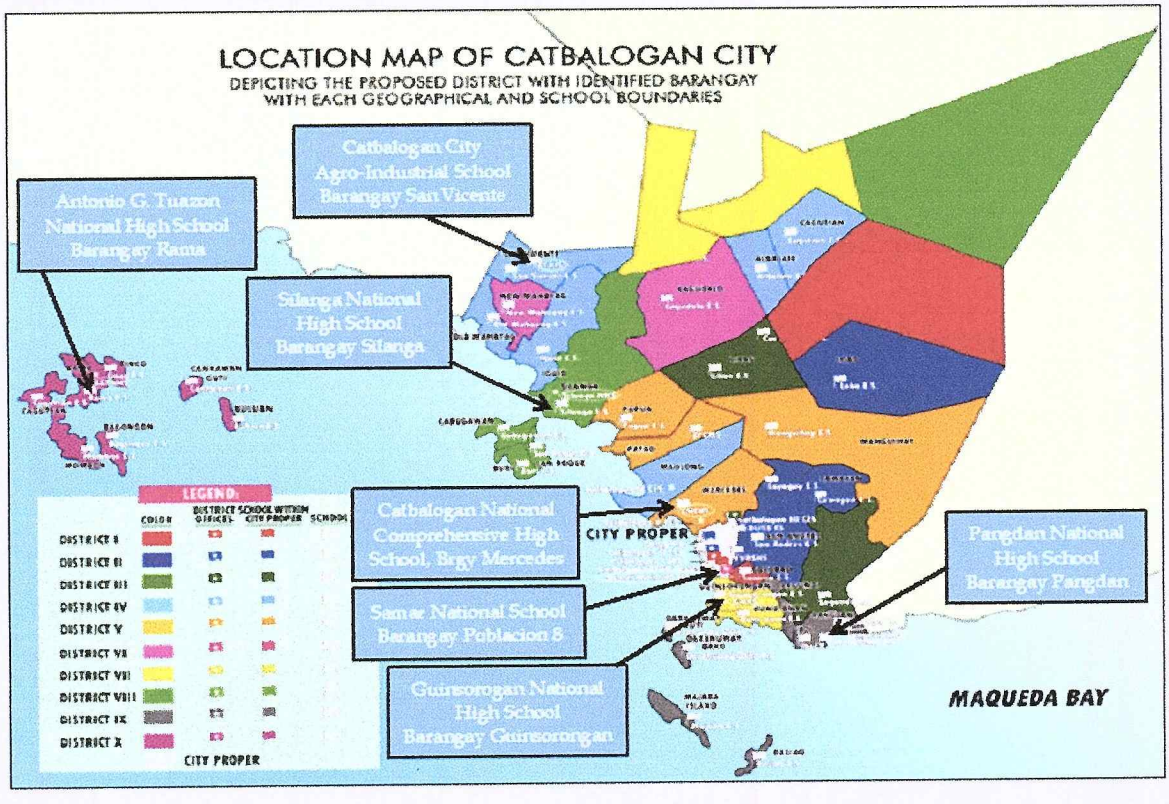

Figure 2. Map showing the locale of the study
(*Source*: DepEd Catbalogan City Division)

Statistical Treatment of Data

After the retrieval of the data, all the information gathered were transcribed or encoded on the spread sheet, arranged according to the TVL strands and the schools where the student-respondent is enrolled. After the encoding, the data were subjected to descriptive statistical analyses, such as frequency percentage distribution, mean and standard deviation.

Ethical Consideration

This study followed the principles of autonomy (informed consent), confidentiality and ethical standards in the conduct of research to ensure the integrity of the results. Prior to the conduct of the study, the suggestions of the Committee on Oral Examination were considered and integrated in the manuscript. Author/s of all sources of information are acknowledged and cited to address the issues on honesty, objectivity, and respect for intellectual property rights. The manuscript's initial output was subjected to plagiarism scan as part of the ethical research protocol for acceptability. The approval of the permit to conduct research in the locales of this study was sought from all officials concerned.

The respondents and participants who were of legal aged population of the focus group discussions (FGD) and in-depth interviews and were oriented on the purpose of the research, informed of their rights and elicited full and active

participation during the data collection. All of them were assured that their names and responses will be treated with utmost confidentiality.

Chapter 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the data collected in the locale of this study. The information herein presented were the product of actual observations, responses on the instrument made and from the manifestations among the graduating TVL students.

Profile of the Graduating TVL Students

Age and sex. These are the two (2) demographic data most commonly part of the study when dealing with human population. They are very essential for socio-economic services' provision, planning and are very useful in analyzing social phenomenal variations in demographic structure in its heterogeneity. As explained by Robertson and Watts (2016), they are an important consideration in the development of more effective and targeted interventions which usually differ with populations of different individual characteristics. With emerging evidence that sex is a biological attribute that distinguishes male from female (Tannenbaum, Greaves, and Graham, 2016) which have an effect on how an individual selects and responds (Clayton and Tannenbaum, 2016).

Table 2 reflects the age and sex distribution of the graduating TVL students during the School Year 2018-2019. The data showed that 75% of the respondents are aged 19 years old and below. The female students have

Table 2

The Respondents' Age and Sex Distribution

Age Range (yrs. old)	Sex				Total	
	Male		Female			
	f	%	f	%	f	%
17- 19	79	30	118	45	197	74.91
20 - 22	32	12	24	9	56	21.30
23 - 25	2	1	2	1	4	1.52
26 & above	5	2	1	0	6	2.27
Total	**118**	**45**	**145**	**55**	**263**	**100.00**

outnumbered the males by 15% in population. Those with ages 20-22 years old comprised 21% and those 23 years old and above comprised 4%. To the relatively older respondents, females were outnumbered by males by 5%.

Table 3

Descriptive Statistics on the Ages of Graduating TVL Students in Catbalogan City Division, SY 2018-2019

Statistics	Sex		Total
	Male	Female	
N	120	143	263
Minimum	17	17	17
Maximum	29	27	29
Mean	**19.36**	**18.64**	**18.97**
SD	**2.11**	**1.44**	**1.81**

The descriptive statistics on the age of the respondents in Table 3 suggests that the males are relatively older than the females by an average of 0.71 year (8.5 months). The data imply that the 75% TVL graduates were timely able to have their continuous education. Prior to the education reform (K to 12) in the

Philippines, children with age 6-7 years were accepted in Grade 1 and finished Grade six at age 12-13 years old (Macha, Mackie, and Magaziner, 2018).

Commonly, Grade six pupils graduated at the age ranging from 11-13 years old, and fourth year high school students graduated at the range of 15-17 years old (Mohammad, 2016). Regardless of their sex or gender, they graduated in Grade 12 at their right ages.

However, there were a total of 12% TVL graduates of SY 2018-2019 who were still at 17 years of age. The age of the K to 12 graduating TVL students had implication on various laws. There are Philippine laws that protect the rights of children below 18 years.

Mohammad (2016) stressed that these learners are still considered children and they were not yet capable to handle serious situations like decision-making and work task. The International Labor Organization has set a minimum age for admission to employment or work to effectively abolish child labor (ILO Convention 138, 1997). The best option that they had is to take the opportunity of the free education and continued their studies in tertiary or college level.

The remaining 25% were the older respondents who would have quit from their studies and took the opportunity of the government's free education program. Most of them were males and few were females who could be categorized already as women but were interested and prepared themselves for the work or job which was their passion.

Specialization. This generally refers to the different TVL strands where the respondents enrolled in. As reflected in Table 4, the enrolment of the total respondents' population was distributed in fifteen TVL Strands. The highest number of TVL students (32%) specialized in Bread and Pastry/ Cookery/Food and Beverages. These graduating TVL students must have thought of the number of bread-makers (Bakeries) and restaurants enumerated respectively, where they could apply for local employment and/or had self-employment.

Table 4

The Specialized TVL Strands of the Respondents

TVL Strands	f	%
Agri Crops Production	9	3.42
Animal Production (Poultry & Swine)	5	1.90
Beauty and Nail Care/Wellness Massage/ Hairdressing	4	1.52
Bread and Pastry/Cookery/Food and Beverages Servicing	85	32.32
Care Giving	19	7.22
Programming .Net Technology	38	14.45
Electrical Installation and Maintenance	37	14.07
Electronics Product Assemble Servicing	27	10.27
Food Processing	24	9.13
Shielded Metal Arc Welding	15	5.70
Total	**263**	**100.00**

The graduating TVL students who specialized in Computer Programming and Electrical Installation and Maintenance comprised 14% respectively, in each strand, followed by those who specialized in Electronics Product Assemble Servicing and Food Processing with 10% and 8%, respectively from the total TVL strands graduates. There was relatively a few numbers of graduates who had specialized in Agri Crops and Animal Production, Beauty and Nail Care/Wellness Massage/Hairdressing, and Shielded Metal Art Welding.

The above data implied that human beings have different passions in work. Kant, as cited by Formosa (2011), defines a passion as "a sensible desire that has become a lasting inclination. Passions are lasting and belong to the faculty of desire. On the other hand, Valler and, Paquet, Philippe and Charest (2010), and Vallerand and Verner-Filion (2013) as cited by Curran, Hill, Appleton, Vallerand, and Standage (2015) defined passion "as a strong inclination toward a personally meaningful and highly valued activity that one loves, finds self-defining and to which substantial time and energy is invested." It can fuel motivation, well-being and enthusiastic task engagement—providing a balanced and purposeful life. Spehar, Forest and Stenseng (2016) further explained that passion is "a strong inclination towards an activity that an individual likes, considers important, and invests considerable time and energy in. Passionate activities are internalized into the self, until they become part of the individuals' identity.

National Certification. This is one of the requirements for the 21st century workforce who are technically competent, innovative, creative, knowledge-based with higher order thinking skills, pursuing lifelong learning opportunities and possessing desirable work attitudes and values (TESDA, 2016). As explicitly prescribed in the Philippine Qualifications Framework.

Table 5 reflects the distribution of the TVL graduates' national certificate according to the strand they specialized. The data shows that only 69% of the total TVL graduates on SY 2018-2019 had acquired a National Certificate (NC) issued by the Technical Education and Skills Development Authority (TESDA). National Certificate is issued when an individual or a candidate has passed the Competency Assessment which focuses on the skills, knowledge, attitude and work values in relation to a certain specialization that comprise a Qualification (TESDA, 2017). Graduates of Bread and Pastry/Cookery/Food and Beverages, Care Giving, Shielded Metal Arc Welding, Agri Crops Production, and Animal Production TVL Strands obtained their National Certificates II (NC II). This implies that these 69% TVL graduates could already perform a prescribed range of functions involving known routines and procedures that has limited choice and complexity of functions (TESDA, 2017).

However, there were 27% of the total graduates in Food Processing, 18% of those who specialized in Electrical Installation and Maintenance, and those who graduated in the TVL Strands of Computer Programming, Electronics Product Assemble Servicing, and Beauty and Nail Care, Wellness Massage,

Hairdressing had not been able to obtain the National Certificate. The primary cause was not because, they did not pass the competency assessment, but was due to their lack of capacity to pay the assessment fee which varies according to strand, while those who specialized in programming .Net Technology, was due to the absence of a TESDA-Accredited Assessor in Region VIII. This implies that the latter TVL graduates came from a financially handicapped family. The respondents revealed that their parents were not able to produce the required fee despite their interests.

While the 31% of the respondents' population comprising the latter graduating TVL students had not obtained a National Certificate, similar to those under aged (17 years old) graduating TVL students, they can still continue to fully capacitate themselves by studying in the tertiary education. This is one advantage of the current educational reforms in the Philippines. The students who failed to attend and/or have not been able to qualify in the competency assessment have still the option to enrol in college (DepEd, 2016). They have the opportunity to become a teacher or an IT engineer, but their parents must provide them the financial and the moral support. No matter how interested these students are, their aspirations or ambitions and dreams in life may not be realized without their parents' support. The students may also ask for logistics support (for fares and projects) from their respective Local Chief Executives to sustain their schooling.

Table 5

Percentage Distribution of Graduating TVL Students Who Acquired National Certification According to Strand in Catbalogan City Division

TVL Strands	With Certification		Without Certification		Total	
	f	%	f	%	f	%
Agri Crops Production	9	3.42	0	0	9	3.42
Animal (Poultry and Swine) Production	5	1.90	0	0	5	1.90
Beauty and Nail Care/Wellness Massage/Hairdressing	0	0.00	5	1.90	5	1.90
Bread and Pastry/Cookery/Food and Beverages	85	32.32	0	0.00	85	32.32
Care Giving	18	6.84	0	0.00	18	6.84
Programming.NET Technology	0	0.00	38	14.45	38	14.45
Electrical Installation and Maintenance	32	12.17	5	1.90	37	14.07
Electronics Product Assemble Servicing	0	0.00	27	10.27	27	10.27
Food Processing	18	6.84	6	2.28	24	9.13
Shielded Metal Arc Welding	15	5.70	0	0.00	15	5.70
Total	**182**	**69.20**	**81**	**30.80**	**263**	**100.00**

Profile of the Schools

The schools being discussed here were the secondary schools where the respondents took their respective specialized courses. The discussions provided

an idea and a reflection as to how the skills, knowledge and work values of the graduating TVL students were honed.

Curriculum. This aspect describes and prescribes the content and the goals of formal instruction, but lays the means of instruction out of the foreground of focus (Su, 2012). The Philippines envisions that every graduate of basic education shall be an empowered individual who has learned, through a program that is rooted on sound educational principles and geared towards excellence, the foundations for learning throughout life, the competence to engage in work and be productive, the ability to coexist in fruitful harmony with local and global communities, the capability to engage in autonomous, creative, and critical thinking, and the capacity and willingness to transform others and one's self (RA 10533).

Anchored on the fundamental educational philosophies, the curriculum has an essential role in learner-teacher interactions and is designed based on the need, problem and interests that planners have. It outlines the subject matter, the appropriate pedagogies, learning experiences and outcome after its delivery especially for the learners' socio cultural and economic value (Rivera, 2018).

Table 6 reflects the distribution of curricula delivered in different secondary schools of Catbalogan City Division. The result showed that there are 15 curricula of TVL strands that were offered in seven secondary schools. These curricula represent the different TVL Strands which were prepared at DepEd

Table 6

Distribution of Curriculum Delivered by Secondary Schools in Catbalogan City Division

Curriculum	Name of Schools						
	AGTNHS	CCAIS	CNCHS	GNHS	PNHS	SNHS	SNS
Agri Crops Production		■					
Animal (Poultry) Production		■					
Animal (Swine) Production		■					
Beauty Nail Care			■				
Bread and Pastry				■		■	
Care Giving			■				
Computer Programming							■
Cookery				■		■	
Electrical Installation and Maintenance				■	■	■	
Electronics Product Assemble Servicing				■		■	
Food and Beverages Servicing				■		■	
Food Processing	■						
Hairdressing			■				
Shielded Metal Arc Welding				■			
Wellness Massage			■				
Total Curricula Assigned/ Delivered	**1**	**3**	**4**	**6**	**1**	**5**	**1**

Central Office and were cascaded to the secondary schools in different localities of the country for implementation (Naelga and Blane, 2017).

Guinsorongan National High School (GNHS) has six, the most in the number of curricula assigned to deliver, followed by Silanga National High School (SNHS). Both the GSNHS and the SNHS had five similar curricula, namely: Bread and Pastry; Cookery; Electrical Installation and Maintenance; Electronics Product Assemble Servicing; and Food and Beverages Servicing. The two schools differed in the curriculum on Shielded Metal Arc Welding which was only assigned to and delivered by GNHS. The Catbalogan National Comprehensive High School (CNCHS) delivered four curricula (strands), namely: Beauty and Nail Care, Wellness Massage, Hairdressing and Care Giving.

On the other hand, the Catbalogan City Agri-Industrial School (CCAIS) had three delivered TVL strands/curricula which one on agricultural food production such as: (1) agri-crops production, (2) swine and (3) poultry production; Three schools had only one assigned curriculum like the: Antonio G. Tuazon National High School (AGTNHS) on Food Processing; Samar National School (SNS) on Programming .Net Technology; and Pangdan National High School (PNHS) on Electrical Installation and Maintenance.

Noted is that the assignment of TVL Strands curriculum were not evenly distributed to the different schools. This strategy was generally based on some selected and identified requirements such as: the buildable space; its proximity to tech-voc centers; the school's internal capacity to offer Senior High School;

strategic location; accessibility; commute time and distance; and the potential partnerships and potential demand creation, which was carefully planned since community and industry linkages are involved in the work immersion of the senior high school students respondents (Naelga and Blane, 2017).

Number of hours. This variable refers to the time duration required to finish from each TVL strand is reflected in Table 7. With these different curricula, the students were required to complete the number of hours per curriculum as set by the DepEd Central Office. This number of hours by curriculum should be completed by the student to enable him/her to graduate in that certain TVL Strand.

The data showed that the duration to complete a certain TVL strand vary with the number of hours. Every TVL student who specialized a certain TVL Strand curriculum must be able to complete the maximum of 640 hours which is equivalent to two years or four (4) semesters. Students specializing in a TVL Strand that has lesser number of hours required, can take two to four strands/curricula at the same time, so as to complete the maximum number of study hours in Grades 11 and 12 of the K to 12 Program.

Graduating from these TVL strands will undergo competency evaluation/examination which is undertaken by the TESDA. The Certificate of Competency (COC) and the NCs (National Certifications) will be awarded to every TVL student who passes the test/examination for every specialized strand. These certificates serve as the students' eligibility when applying for a job and

Table 7

The Number of Hours to Complete and Graduate from A TVL Strand/Curriculum

Curriculum / Strand	Number of Hours to Complete
Agri Crops Production	640 Hours
Animal (Poultry) Production	320 Hours
Animal (Swine) Production	320 Hours
Beauty Nail Care	160 Hours
Bread and Pastry	160 Hours
Care Giving	640 Hours
Cookery	320 Hours
Electrical Installation and Maintenance	640 Hours
Electronics Product Assemble Servicing	640 Hours
Food and Beverages Servicing	160 Hours
Food Processing	640 Hours
Hairdressing	320 Hours
Programming .Net Technology	552 Hours
Shielded Metal Arc Welding	640 Hours
Wellness Massage	160 Hours

Source: TVL Strand Curricula – Department of Education

intends to join the workforce in agriculture, electronics, and trade in both the domestic and the international labor market.

Teachers' Qualifications. Honing the competences (skills, knowledge and work values) of students is generally the tasks of teachers. They are the agents of change in the world. Thus, their qualifications must be a very strong

attribute to ensure the work-readiness of the TVL students in their specialized curriculum.

In the K to 12 implementation, the teachers 'qualifications such as their education, license and national certifications, industry and teaching experiences or possession of specialized skills area are major determinants of performance. Their technical competence is often achieved through the acquisition of professional qualification and training (ADB, 2017) like in the Philippines.

Table 8 reflects the qualifications of the teachers handling the different TVL strands offered in DepEd - Catbalogan City Division. The result showed that in terms of the teachers' educational qualifications, it was always expected that they were hired because of these requirements.

The result revealed that the 18 teachers' were holders of a baccalaureate degree which may have differed or in accordance with the curriculum assigned. Out of the total number, 94% of them had courses which were very much related to the TVL curriculum they delivered. However, 6% (or one) was assigned to deliver the Beauty and Nail Care Strand but had a degree of BS in Commerce because of being an eligible employee. In this case, the classroom delivery of the Beauty and Nail Care could be linked to business or entrepreneurship.

Table 8

Qualifications of Teachers Handling the TVL Strand/s Curricula in Catbalogan City Division

Code Names of Schools	TVL Strand/s Assigned	№ of Teachers	Qualifications	
			Course and Specialization	Eligibilities
AGTNHS	Food Processing	1	Bachelor of Science in Fisheries	-NC II Food Processing
CCAIS	Agri-Crops Production	1	Bachelor of Science in Agriculture	- Licensed Professional Teacher - Licensed Agriculturist (LIA) - NC II (Agri-Crops)
CCAIS	Poultry/Chicken and Swine Production	1	Bachelor of Secondary Education major in Technology and Livelihood Education (BSE-TLE)	- Licensed Professional Teacher - NC II – Animal (Poultry and Swine) Production
CNCHS	Care Giving Wellness Massage	1	Bachelor of Science in Nursing	- Licensed Professional Teacher - Registered Nurse (RN) - Trainer Methodology (TM) I - NC II (Care Giving and Wellness Massage)
CNCHS	Beauty and Nail Care	1	Bachelor of Science in	- Licensed Professional

			Commerce	Teacher - NC II in Beauty & Nail Care
CNCHS	Hairdressing	1	Bachelor of Science in Education major in MAPE	- Licensed Professional Teacher - NC II in Hairdressing
GNHS	Bread and Pastry & Food and Beverage Servicing	1	Bachelor of Science in Industrial Technology (BSIT – Foods)	- Licensed Professional Teacher -NC II- Bread and Pastry FBS &
GNHS	Cookery	1	Bachelor of Secondary Education major in Technology and Home Economics (BS-HT)	- Licensed Professional Teacher - Trainer Methodology (TM) I - NC II Cookery & Bread and Pastry
GNHS	Shielded Metal Arc Welding	1	Bachelor of Science in Industrial Technology Major in Machine Shop	-NC II Shield Metal Arc Welding
GNHS	Electrical Installation and Maintenance	1	Bachelor of Science in Electrical Engineering	- Licensed Electrical Engineer - Trainer Methodology (TM) I - NC II-IV (ElM)
GNHS	Electronics	1	Bachelor of	- Trainer

	Product Assemble Servicing		Science in Industrial Technology major in Electronics	Methodology (TM) I - NC II (Electronics Product Assemble Servicing)
PNHS	Electrical Installation and Maintenance	1	- Bachelor of Technology major in Electrical (BT-Electrical)	- Licensed Professional Teacher NC-II- EIM
SNHS	Cookery	1	Bachelor of Arts	NC II-Cookery
SNHS	Food & Beverages Servicing and Bread & Pastry	1	Bachelor of Science in Accountancy	- Licensed Professional Teacher - Trainer Methodology (TM) I - NC II (Food & Beverages Servicing and Bread &Pastry)
SNHS	Electrical Installation and Maintenance	1	Bachelor of Science in Technician Education major in Electrical Technology (BSTE-ET)	- Licensed Professional Teacher - Training Methodology (TM) I - NC II-IV (Electrical Installation and Maintenance)
SNHS	Electrical Installation and Maintenance	1	- Bachelor of Science in Industrial Technology	- Licensed Professional Teacher - Training

			major in Electrical (BSIT-Electrical)	Methodology (TM) I - NC II (Electrical Installation and Maintenance)
SNHS	Electronics Product Assemble Servicing	1	Bachelor of Science in Industrial Technology major in Electronics (BSIT-Electronics)	- NC II (Electronics Product Assemble Servicing)
SNS	Programming .Net Technology	1	Bachelor of Science in Information Technology (BSIT)	- Trainer Methodology (TM) I - NC II (CSS)
Total No. of TVL Teachers		**18**		

Eligibilities. As it is always expected and required, all the hired 18 teachers had their respective eligibilities. The result further showed that 61% (or 11) of the TVL teachers in Catbalogan City Division were passers of the Licensure Examination for Teachers (LET) administered by the Professional Regulation Commission (PRC). This qualified them for the teaching profession. 6% (or 1) is licensed Electrical Engineer teaching Electrical installation and Maintenance (EIM). On the other hand, 11% had eligibility in Training Methodology consists of competencies in which the TVET trainer performs the functions of a trainer and assessor. A TVET trainer is a person who enables a learner or a group of learners to develop competencies to performing a particular

trade or technical work (TESDA, 2011). Furthermore, 22% were National Certificate II (NC II) eligible in their respective specialization.

While the TVL Strands are a competency-based education, the National Certificate II issued by TESDA has been considered by the Department of Education as qualification to teach a certain strand/curriculum (DepEd, 2018). In fact, all the teachers hired in the Division to deliver the TVL curriculum were NC II holders. This certificate indicates that the TVL teacher can perform a wide range of applications that are complex and non-routine, provides some leadership and guidance of others, and performs evaluation and analysis of work practices and the development of new criteria and procedures (TESDA, 2016).

The above scenario implies that the TVL teachers continuously strive to enhance their competencies, not just as a mere teacher, but at the same time to become an assessor, the function that a TVL teacher must possess in ensuring that the competencies (knowledge, skills and work attitudes) of students and TVL graduates of certain strand are well-developed. According to Clayton, Staden and Lynch (2010), it is a core value of people who possess a combination of skills learnt over time, highly committed to their profession freedom. Alsuwailem and Elnaga (2016) expounded that the performance of an individual, like the TVL teachers, may be facilitated by their time availability, job related information and individual factors such as ability, effort and personality. In K to 12, the measurable teachers' characteristics such as certification, advanced

degrees, and teacher scores on standardized tests are related to student achievement (Aaronson, Barrow, & Sander, 2007; Kane, Rockoff, & Staiger, 2006).

Industry experience. This is one aspect of the TVL teachers' profession that most of them had experienced. The CHED Memorandum Order (CMO) № 14, Series of 2008 requires BS Agriculture students to undergo field practice or practicum on agricultural crops and animal productions. None of them had gone on actual industry immersion in their field of specialization. The TVL teachers handling EPAS, SMAW and EIM had their industry immersion for 240-hours each, while those handling TVL Strands other than those mentioned above only got an experience during their TESDA training to acquire the NC II certification. To acquire the same certification requires a number of hours/days to be certified-competent in a certain TVL strand set by the TESDA.

Although training is one strategy in building the competency of an individual, it would be much better if teachers have an actual industry experience through immersion which will enable them to interact and communicate with people who have diverse background, and further think innovatively. Personal and professional developments include the combination of knowledge, skills and social abilities that applied in work situations (APEC, 2017).

Teaching experience. This is usually measured in terms of the length of service in teaching, which is one contributory factor to a teachers' competence. Teachers develop a better understanding of classroom management with years of

Table 9

Years of Teaching Experience among the TVL Teachers

Name of Schools	TVL Strand/s Assigned Teacher	Years in Teaching Experience
AGTNHS	Teacher A (Food Processing)	2 Years
CCAIS	Teacher A (Agri-Crops Production)	1 Year
	Teacher B (Poultry and Swine Production)	2 Years
CNCHS	Teacher A (Care Giving and Wellness Massage)	3 Years
	Teacher B (Beauty and Nail Care)	2 Years
	Teacher C (Hairdressing)	2 Years
GNHS	Teacher A (Cookery)	2 Years
	Teacher B (Food and Beverages Servicing & Bread and Pastry)	1 Year
	Teacher C (Shielded Metal Arc Welding)	3 Years
	Teacher D (Electrical Installation and Maintenance	3 Years
	Teacher E (Electronics Product Assemble Servicing)	3 Years
PNHS	Teacher A (Electrical Installation and Maintenance)	1 Year
SNHS	Teacher A (Cookery)	3 Years
	Teacher B (Food and Beverages Servicing & Bread and Pastry)	1 Year
	Teacher C (Electrical Installation and Maintenance)	15 Years
	Teacher D (Electrical Installation and Maintenance)	2 Years
	Teacher E (Electronics Product Assemble Servicing)	2 Years
SNS	Teacher A (Programming .**Net Technology**)	2 Years

experience and allow them to foresee issues and adapt those according to their classroom management practices (Berger, Girardet, Vaudroz and Crahay, 2018).

Table 9 reflects the duration of teaching experience among the TVL teachers. The data showed that 22% of them were just newly hired, with one year as the minimum number of teaching service as revealed. Most of them comprising 44%, had 2 years teaching experience, and were TVL teachers who delivered/taught the TVL Strands that required 640 hours to graduate inclusive of the immersion period.

On the other hand, 28% of the TVL teachers revealed that they already had 3 years teaching experience. These were the teachers who were assigned to handle the TVL Strands which required 640 hours and 320 hours, or two Strands of 160 hours. One or 6% of the TVL teachers had already 15 years in the teaching profession.

This scenario implies that the hiring of Senior High School (SHS) teachers was in accordance with the K to 12 plan. Likewise, the delivery of the TVL strands in the first batch of Senior High School TVL graduates may have encountered insufficiency of teachers. It was noted that some TVL teachers had baccalaureate course and specialization which was not in line with the TVL Strand they handled. On the qualification standards for TVL Track teachers, the SHS teacher requirements were amended and some criteria, mechanisms and procedures were added (DepEd, 2017).

Along this aspect, Kini and Podolsky (2016) argued that more-experienced teachers support greater student learning for their colleagues and the school as a whole, as well as for their own students. Teachers' effectiveness increases with experience, which is best realized at their entry into the teaching workforce. Afshara, Rahimib, Ghonchehpourc, and Saedpanah (2014), noted that teacher's sense of efficacy is affected by the years of teaching experience. As teachers gain experience throughout their careers, their students' achievement gains increase. Although the steepest gains in effectiveness are in the first few years of teaching, this improvement continues in the second and often third decade of their careers, especially when they work in collegial work environments. However, Pourjamal Ghouyjagh, Sotoudehnama, and Faghih (2017) argued that years of teaching cannot solely be the indicator of expertise in teaching. How one utilizes experience is the more crucial factor in self-improvement.

The current education reform agenda or K to 12 program does not only call for academic excellence, but also on higher teacher qualification. One of the initiatives to ensure high quality teachers is through the licensing system. Teacher licensure is a key requirement that allows teachers to engage in the teaching profession (Aquino and Balilla, 2015; Acosta and Acosta, 2016). It is vital that educators adhere to these standards to meet the required qualifications of those who enter the teaching profession (Acosta and Acosta, 2016)

Facilities and Equipment Availability. Laboratory and/or shop's facilities and equipment are very essential component of the school in

developing the competencies of TVL students. Their absence will generally affect the human capacity development.

Compliance to minimum requirements. This aspect reflects the extent of facilities and equipment availability in compliance to the minimum requirements set by the TESDA. It is expected that in preparing the students' competencies on their specialized TVL Strand, the instructional and laboratory requirements which are enumerated in the Training Regulation Manual should have been provided by the schools. These requirements generally vary with TVL strands and with the school.

The results of the study showed that the laboratory facilities/equipment requirements generally varied with schools. The data suggests that the ability of the school to provide the required tool, facilities, equipment and materials depended on the available funds and the support of the school head/principal. Generally, the locales of this study had been able to provide the required facility, but were not much compliant with what was prescribed in the Training Regulations of TESDA. The facilities as mandated generally comprised of the classroom and the laboratory shop, while the tools and equipment composed of the semi-expendable items, and the materials compose of the consumable items.

The Antonio G. Tuazon National High School (AGTNHS) is located in an island of Barangay Rama, Catbalogan City, where fishing is the main sources of income among the residents. The school serves the island barangays of Rama,

Bulo-an, Cagutsan, Cinco, Canhauan Guti, Bagongon and Mombon, the school offered the TVL Strand on Food Processing.

Table 10

Extent of Compliance with the Minimum Requirements of Facilities, Equipment, Tools and Materials for TVL Strand Delivery in Antonio G. Tuazon National High School, Brgy. Rama, Catbalogan City

TVL Strand Offered & Requirements	Extent of Availability		Extent of Compliance (%)	Item-User Ratio	
	No. of Units Required in Training Regulation	No. of Units Actually Available		№ of Users	Ratio
Food Processing					
Tools	42	38	90.47%	69	1:2
Facilities	2	2	100.00%	(69)	1:35
Equipment	43	2	55.81%	(69)	1:35
Materials	33	19	87.87%	(69)	1:4

Table 10 showed the AGTNHS's extent of compliance on the minimum requirement of Facilities, Equipment, Tools and Materials for the delivery of the delivery of the TVL strand. The data showed that the school was compliant in terms of the facilities needed. These included the laboratory and the fish drying facility. The equipment was least provided compared to the minimum requirement. Both the facility and the equipment had an item-user ratio of 35 students, the total number of graduating TVL students per facility and equipment. On the other hand, the number of available tools was satisfactorily complied with 90.47 per cent of the minimum tools required and had an item-user ratio of one unit for every two students. The materials provided for

instructional purposes were about 87.87 per cent of the minimum requirement with an item-user ratio of one unit for every four students.

Table 11

Extent of Compliance with the Minimum Requirements of Facilities, Equipment, Tools and Materials for the TVL Strand Delivery in Catbalogan City Agri-Industrial School, San Vicente, Catbalogan City

TVL Strand Offered & Requirements	Extent of Availability		Extent of Compliance (%)	Item-Users Ratio	
	№ of Units Required in Training Regulation	№ of Units Actually Available		№ of Users	Ratio
Animal (Poultry) Production					
Tools	19	14	73.68%	15	1:1
Facilities	2	2	100.00%	(15)	1:8
Equipment	9	4	44.44%	(15)	1:4
Materials	35	20	57.14%	(15)	1:2
Animal (Swine) Production					
Tools	5	2	40.00%	(15)	1:8
Facilities	2	2	100.00%	(15)	1:8
Equipment	19	6	31.57%	(15)	1:3
Materials	37	17	45.94%	(15)	1:1
Agri-Crop Production					
Tools	31	15	48.38%	25	1:2
Facilities	2	2	100.00%	(25)	1:13
Equipment	14	2	14.28%	(25)	1:13
Materials	32	19	59.37%	(25)	1:2

The Catbalogan City Agri-Industrial School (CCAIS) is located in the locally classified upland Barangay of San Vicente though it is along the Maharlika Highway. The school served the upland barangays of San Vicente, New Mahayag, Cagudalo, Albalate, Cagutian, and the coastal barangay of Old

Mahayag. The school offered three Agriculture-related TVL strands as reflected in Table 11. Similar with AGTNHS, the school was found compliant (100 percent provision) on the facilities needed to the minimum requirement for the strands delivery but, the provisions for the equipment, tools and materials varied with strands.

For the Animal (Poultry) Production-strand instructions, two poultry houses were constructed for this purpose to cater to eight students per poultry house. While the numbers of tools and equipment were not compliant with the minimum requirements set as standard, they were almost enough for the number of students specializing the strand. The tools and equipment had an item-user ratio of one per student and one for every four students, respectively. On the other hand, the materials required for this strand included the feeds and chicks-stocks wherein only 57.14 per cent to the minimum requirements of which were provided. This implied that every student was provided with two chicks and the corresponding amount of feeds for him/her to grow into a marketable size.

For the instructions on Animal (Swine) Production, the school has two required number of facilities (piggery houses) that catered to eight students each for swine production. The number of tools required was only 40 per cent compliant with the minimum requirements as set and has item-user ratio of one unit for every eight students. The least provision was on the number of equipment acquired for an instructional purpose which was assessed only 31.57

per cent compliant to the minimum requirements and had an item-user ratio of one unit for every three students.

The materials needed for this strand included the hog feeds and piglets. Although the provisions were only 45.97 per cent to the minimum requirements, the number of piglets acquired was more than enough for the number of enrollees. With the corresponding amounts of hog feeds, the item-user ratio of materials provided was one for every student. This implied that every student had to grow one piglet to its marketable size.

Similar with the other strands offered and aside from the classroom, the school had a required number and area of farm lots as the laboratory/practicum facilities for agricultural crop production. Each area of which catered to 13 students for knowledge applications during practicum periods. While the tools and materials were not compliant with the minimum requirements, the tools and materials had an item-user ratio of one tool per every two students. Tools needed for this purpose included the bolos and the mattocks while, the materials included the planting materials such as seeds and seedlings. Under this strand, the students had constructed their plots for crops and vegetables-production.

The Catbalogan National Comprehensive High School (CNCHS) is located along the Maharlika Highway of Barangay Mercedes, about 2-kilometers North from the city proper of Catbalogan. Generally, the school offered the four HE-related TVL strands as shown in Table 12.

Like in other schools, the CNCHS was 100 per cent compliant to the minimum requirements in terms of the number facilities (room/laboratory) for all the TVL strands it offered. The item-user ratio also varied in terms of its tools, equipment and materials provided for the period which depended on the

Table 12

Extent of Compliance on the Minimum Requirements of Facilities, Equipment, Tools and Materials for the TVL Strand Delivery in Catbalogan National Comprehensive High School, Mercedes, Catbalogan City

TVL Strand Offered & Requirements	Extent of Availability		Extent of Compliance (%)	Item-Users Ratio	
	№ of Units Required in Training Regulation	№ of Units Actually Available		№ of Users	Ratio
Beauty &Nail Care					
Tools	27	27	100.00%	13	1:2
Facilities	1	1	100.00%	(13)	1:13
Equipment	8	4	50.00%	(13)	1:3
Materials	40	37	92.50%	(13)	3:1
Care Giving					
Tools	54	23	42.59%	53	1:2
Facilities	1	1	100.00%	(53)	1:53
Equipment	45	20	44.44%	(53)	1:3
Materials	18	10	55.55%	(53)	1:5
Hair Dressing					
Tools	58	27	46.55%	(13)	1:2
Facilities	1	1	100.00%	(13)	1:13
Equipment	15	10	66.66%	(13)	1:3
Materials	30	15	50.00%	(13)	1:1
Wellness Massage					
Tools	3	3	100.00%	(13)	1:4
Facilities	1	1	100.00%	(13)	1:13
Equipment	7	2	28.57%	(13)	1:7
Materials	15	15	100.00%	(13)	1:1

number of enrollees per strand.

For the delivery of the Beauty and Nail Care strand, the number of tools acquired was 100 per cent to the minimum requirements that had an item-user ratio of one set for every two students. The tools for this strand included one set of scissors, nippers and nail cutters. The number of equipment which included the chairs for customers was only 50 per cent of the minimum requirements that had an item-user ratio of one unit for every three students. The materials provided were relatively enough for the delivery of this strand. The number was almost compliant to the minimum requirements with an item-user ratio of three units for every student. The materials for this strand included the bottles of cuticle remover and nail polishes.

The Hair Dressing and Wellness Massage strand had the same students enrolled in the Beauty and Nail Care who used the same facility (the laboratory room). Thus, it had an item-user ratio of one unit for the thirteen students. The number of tools, equipment and materials for Hair Dressing were not all compliant to the minimum requirement for the strand, but were adequate for instructional purposes. The tools (which include the scissors, sprayer and hair blowers) had an item-user ratio of one unit for every two students; the equipment (which include the chairs) had an item-user ratio of one unit for every three students, and the materials included the sets of bottled hair dressing liquids which were provided to students at one set for every student.

For use in the Wellness Massage strand, both the tools and materials provided according to the minimum standard. The tools used for this strand were the electric massager that was provided at one unit for use by four students, materials which include the bottled liquids for massaging were provided at one unit per student. The equipment (the foam matting) was the least provision at 28.57 per cent to the minimum requirements and had an item-user ratio of one unit for every seven students.

On the other hand, the tools, equipment and materials for the delivery of Care Giving strand were generally not compliant in terms of their numbers. Although they were not sufficiently acquired, their number could be enough for instructional use. The item-user ratio of the tools was one unit for two students, the equipment was one unit for three students and the materials at only one unit for every five students.

The Guinsorongan National High School (GNHS) is located in a coastal barangay approximately 1.5 kilometers south of the city proper of Catbalogan. The residents of the barangay have varied socio-economic activities like fishing, transport services, trading, etc. The school delivered a total of six (6) TVL strands, three (3) of which were Industrial Arts-related and three (3) were Home Economics-related strands as reflected in Table 13.

As in other schools, the facilities for all TVL strands in GNHS were all provided and were compliant to the minimum requirements. The compliance on the number of tools, equipment and materials likewise varied with strand and

depends on the number of enrollees. For the delivery of HE-related strands, the school had only one facility provided for it had similar laboratory settings. It may had insufficient space to accommodate the 116 students enrolled in these strands.

For an acceptable classroom environment, only 50 students should be the classroom capacity during instructions. However, there were some remedial measures that could be done for this situation. With the recorded number of enrollees for the school year, the school head/principal must divide the batch into three to four sections and come-up with the unhindered scheduling of classes to ensure competency development of the students. If the enrollees will be divided into four sections then the classroom environment will become more acceptable with an item-user ratio of 29 students per class.

The number of tools, equipment and materials for the delivery of Bread and Pastry Production strand was almost compliant with the minimum requirements. However, the available number of tools was very insufficient if the number of enrollees were considered. Its item-user ratio is one unit for every four students, but it would be sufficient enough if the number of enrollees were divided into four sections, thereby making the item-user ratio of one unit per student.

The number of equipment acquired for the delivery of Bread and Pastry strand was generally not compliant to the standard set by the TESDA, with only one unit for every 24 students. However, the item-user ratio could be enhanced

Table 13

Extent of Compliance on the Minimum Requirements of Facilities, Equipment, Tools and Materials for the TVL Strands Delivery in Guinsorongan National High School, Brgy. Guinsorongan, Catbalogan City

TVL Strand Offered & Requirements	Extent of Availability		Extent of Compliance (%)	Item-Users Ratio	
	№ of Units Required in Training Regulation	№ of Units Actually Available		№ of Users	Ratio
Bread and Pastry Production					
Tools	37	35	94.59%	116	1:41
Facilities	1	1	100.00%	(116)	1:116
Equipment	8	5	62.50%	(116)	1:24
Materials	28	28	100.00%	(116)	1:5
Food and Beverages Services					
Dinnerware	28	18	64.28%	(116)	1:7
Facilities	1	1	100.00%	(116)	1:116
Cutleries	21	18	85.71%	(116)	1:5
Glassware	12	9	75.00%	(116)	1:13
Cookery					
Tools	69	65	94.20%	(116)	1:2
Facilities	1	1	100.00%	(116)	1:116
Equipment	44	43	97.73%	(116)	1:3
Materials	25	14	56.00%	(116)	1:9
Electrical Installation and Maintenance					
Tools	33	28	84.84%	39	1:2
Facilities	1	1	100.00%	(39)	1:39
Equipment	14	9	64.28%	(39)	1:5
Materials	35	21	60.00%	(39)	1:2
Electronics Products Assemble Services					
Tools	13	8	61.53%	44	1:6
Facilities	1	1	100.00%	(44)	1:44
Equipment	25	2	8.00%	(44)	1:22
Materials	19	13	68.42%	(44)	1:4
Shielded Metal Arc Welding					
Tools	14	9	64.28%	44	1:5
Facilities	1	1	100.00%	(44)	1:44
Equipment	12	7	58.33%	(44)	1:7
Materials	10	7	70.00%	(44)	1:7

to one unit for every six students if the number of enrollees would be divided into four sections. On the other hand, the materials provided for this Bread and Pastry strand would likewise be insufficient if the number of students was not divided into four sections and it would become more than one unit per student if the division of students into four was done.

Similarly, the number of available dinnerware, cutleries and glassware acquired for the delivery of Food and Beverages Services were not compliant with the standards set in the training regulations of the TESDA. Thus, they were insufficient for the number of enrollees. However, the item-user ratio of dinnerware and cutleries was one unit per two students and one unit of glassware for four students should have been item-user had the number of enrollees had been divided into four sections.

The same laboratory facility is being used for the delivery of Cookery strand. The available number of tools for instructional use in Cookery was almost compliant (94.20 per cent) with the minimum requirements and had an item-user ratio of one unit for every two students. The equipment acquired for this stand was likewise almost compliant (97.73 per cent) with the minimum requirement and had an item-user ratio of one unit for every three students. However, had the number of enrollees been divided into four section, the number of both the tools and equipment would have been very much sufficient for instructional use. The material for this strand was the least provided and did

not accord with the minimum standard. The item-user ratio was one unit for every nine students.

The number of facility (laboratory shop) provided by the GNHS for the delivery of Industrial Arts-related strands was also compliant with the standards of the TESDA. For its use in Electrical Installation and Maintenance (EIM) strand, the shop had sufficient space to accommodate the 39 students enrolled in the class. The available number of tools (wire cutter-pliers) was almost compliant (84.84 per cent) to the standards with an item-user ratio of one unit for two students. The number of equipment acquired was also not compliant (only 64.28 per cent) to the standards and had an item-user ratio of one unit for every five students. Although the number of materials was not compliant (only 60 per cent) to the minimum requirement, its provisions, however, could be considered sufficient for instructional purposes with an item-user ratio of one unit for every two students.

On the other hand, the GNHS had the number required for a facility (laboratory shop) for the Electronic Products Assemble Services (EPAS) that could accommodate the 44 enrollees who took this strand. However, the number of tools, equipment and materials acquired by the school for use in this strand were insufficiently provided and were not compliant to the minimum standards. The item-user ratio of the tools was only one set (of pliers, screw driver, etc.) for every six students, while the equipment (electronic tester) was only one unit for every 22 students. Similarly, the provision for materials was

also not compliant to the minimum standards, which had an item-user ratio of only one unit for every four students.

The same facility (laboratory shop) was being used for the delivery of the Shielded Metal Arc Welding (SMAW) which accommodated another 44 students enrolled in this strand. However, the number of tools did meet the minimum standard and so with the equipment and materials needed, though for instructional purposes, the item-user ratio of one set for every five students for the tools (weld holder, hammer, etc.); one unit for every seven students both for equipment (welding machines and face welding shield), and materials (welding rods, metal sheets and GI rods) could be enough provisions for the number of students during the period.

Table 14

Extent of Compliance on the Minimum Requirements of Facilities, Equipment, Tools and Materials for the TVL Strands Delivery in Pangdan National High School, Brgy. Pangdan, Catbalogan City

TVL Strand Offered & Requirements	Extent of Availability		Extent of Compliance (%)	Item-Users Ratio	
	№ of Units Required in Training Regulation	№ of Units Actually Available		№ of Users	Ratio
Electrical Installation And Maintenance					
Tools	33	-	-	-	-
Facilities	1	1	100%	19	1:19
Equipment	14	-	-	-	-
Materials	35	-	-	-	-

The Pangdan National High School (PNHS) is located in the coastal area approximately 10-kilometers south of Catbalogan City which can only be accessed through motorized-boat ride within 30 minutes and a 30 - 35 minutes ride from the National high way at City Homes Subdivision. The primary source of income of the barangay residents is fishing, farming and transport services. The school serves the enrollees from the coastal barangay of Ibol, the island Barangays of Basiao, Darahuway Dako, Darahuway Guti, and from Sitio Majaba, all of Catbalogan City. It delivered only one TVL strand as reflected in Table 14. The data show that the PNHS has the facility (laboratory shop) that accommodated the 19 enrollees. Regarding the number of tools, equipment and materials for the TVL strand it delivered, no information was given to this study by the concerned school authorities.

The largest number of enrollees among the TVL strand was the Samar National School (SNS) which is located at Poblacion 7 of the City. The school offered only one TVL strand, the ICT, which focused in computer programming using the .Net Technology as reflected in Table 16. There were 111 students who enrolled in this strand that had the provisions on tools, equipment and materials which were compliant to the TESDA's minimum requirements. Tools were the least provided requirement mainly because that each graduating TVL students in ICT strand did not necessarily have tools. This was only needed as the need arises, especially when there were minor repair/rehabilitation to be done. The SNS had also another available tool which was used in programming, but was

not compliant in terms of the numbers which were only 75 per cent of the minimum requirement, resulting to an item-user ratio of one unit for every 37 students.

In terms of facility, the school had two (2) computer laboratories. With the number of Grade 12 TVL students enrolled, the item-user ratio reached to one for every 56 students. Each of these laboratories was provided with equipment (a total of sixty (60) units of computers) for use in the ICT strand. The equipment was very much compliant at it reached to 1,200 per cent of the minimum requirement. Since the number of graduating TVL students were divided into two sections, the item-user ratio became one unit for every student. The number of materials acquired for ICT strand was also compliant to the minimum requirement, although it was not usually used. The lacking requirement for this strand in SNS was the internet connection which is needed in students' laboratory work.

The observed data on tools, equipment and materials acquired for the purpose of academic instructions imply that the schools had a poor capability to provide completely the needs for TVL strands delivery. While some of the requirements were completely provided and/or compliant, their numbers were consequently not sufficient due to the unexpected and excessive number of enrollees in every TVL strand offered in Catbalogan City Division. This only implied that the government had been achieved the goals of Education for All.

On the other hand, the poor capability of the secondary schools to provide

the needs of the TVL students could be attributed to the lack of funds. They are only provided with a limited funds for Maintenance, Operating and Other Expenses (MOOE) which cannot be diverted for the acquisition of tools and equipment as these require capital outlay. However, there are some strategies which can be done to ensure the honing of the students' competencies, and this would depend on the school head/principal as to how to execute them.

Table 15

Extent of Compliance on the Minimum Requirements of Facilities, Equipment, Tools and Materials for the TVL Strand's Delivery in Samar National School, Brgy. Poblacion 7, Catbalogan City

TVL Strand Offered & Requirements	Extent of Availability		Extent of Compliance (%)	Item-Users Ratio	
	№ of Units Required in Training Regulation	№ of Units Actually Available		№ of Users	Ratio
Programming .Net Technology					
Tools	4	3	75.00%	111	1:37
Facilities	1	2	200.00%	(111)	1:56
Equipment	5	60	1,200.00%	(111)	1:2
Materials	5	20	100.00%	(111)	1:6

Lastly, Silanga National High School (SNHS) is in a coastal barangay north of the city proper of Catbalogan.

It is about 10-kilometer away. Its residents have varied socio-economic activities such as fishing, transport services, variety store and trading. The SNHS delivers five TVL strands, three (3) of which were on Home Economics related and two (2) were Industrial Arts-related strands as reflected in Table 15.

The SNHS has one common laboratory facility for the Home Economics-related strands that catered to the 131 enrollees. Based on the enrollees, the classroom was divided into four sections. Similar with other schools, the numbers of tools acquired by the SNHS for Bread and Pastry strand were almost Compliant (94.59 per cent) to the minimum requirements set by the TESDA. With the number of the enrollees, the number of available tools was found insufficient with an item-user ratio of one unit for every four students. However, by dividing the enrollees into 4 sections, the ratio became one unit for every student.

The number of equipment acquired for this strand was basically not compliant to the minimum standard with an item-user ratio of one unit for every 26 students. While the number of materials (consisting of flour and other ingredients) was compliant to the standard, the same was still insufficient to the number of enrollees, thereby resulting to an item-user ratio of one unit for every five students.

The laboratory facility for Cookery was also the venue for the Bread and Pastries production. The number of tools acquired by the school for use in Cookery instructions was also almost compliant (92.75 per cent) to the minimum requirement which had an item-user ratio of one unit for every two students. Meanwhile, the equipment available was only more than half of the minimum requirement.

This means that its available number was insufficient for the enrollees

Table 16

Extent of Compliance on the Minimum Requirements of Facilities, Equipment, Tools and Materials for the TVL Strands Delivery in Silanga National High School, Brgy. Silanga, Catbalogan City

TVL Strand Offered & Requirements	Extent of Availability		Extent of Compliance (%)	Item-Users Ratio	
	№ of Units Required in Training Regulation	№ of Units Actually Available		№ of Users	Ratio
Bread and Pastry					
Tools	37	35	94.59%	131	1:4
Facilities	1	1	100.00%	(131)	1:131
Equipment	8	5	62.50%	(131)	1:26
Materials	28	28	100.00%	(131)	1:5
Cookery					
Tools	69	64	92.75%	(131)	1:2
Facilities	1	1	100.00%	(131)	1:131
Equipment	44	27	61.36%	(131)	1:5
Materials	25	22	88.00%	(131)	1:6
Food and Beverages Services					
Dinnerware	28	18	64.28%	(131)	1:8
Facilities	1	1	100.00%	(131)	1:131
Cutleries	21	18	85.71%	(131)	1:8
Glassware	12	9	75.00%	(131)	1:15
Electrical Installation and Maintenance					
Tools	33	28	84.84%	54	1:2
Facilities	1	1	100.00%	(54)	1:54
Equipment	14	9	64.28%	(54)	1:6
Materials	35	21	60.00%	(54)	1:3
Electronics Products Assemble Services					
Tools	13	8	61.53%	35	1:5
Facilities	1	1	100.00%	(35)	1:35
Equipment	25	2	8.00%	(35)	1:18
Materials	19	13	68.42%	(35)	1:3

need. Until they were divided into four sections, only then that the item-user ratio was enhanced from one unit for 5 students to one unit for 2 students. The number of materials was likewise almost compliant, but not enough for the number of enrollees. The available materials for Cookery had an item-user ratio of only one for every six students.

For Food and Beverages Services, the same numbers of 131 students were accommodated in the same laboratory facility for Cookery and Bread and Pastry Production strands. The tools and equipment used were all fragile, semi-expendable items, and the number was generally not compliant with the TESDA standard minimum requirement. The dinnerware and cutleries had an item-user ratio of one unit for every eight students. However, had the enrollees been divided into four sections, the ratio can be enhance to one unit for every two students. The glassware was generally insufficient for the number of enrollees, but the item-user ratio can similarly be enhanced from one unit for every 15 students to one unit for every two students if the class were divided into four sections.

Another TVL strand that was delivered by SNHS was the Electrical Installation and Maintenance (EIM). The school had a laboratory shop for this strand that can accommodate 54 enrollees. All numbers of the tools, equipment and materials were generally not compliant with the minimum requirements. However, the available tools and materials were enough for instructional

purposes. Based on the number of enrollees they had an item-user ratio of one unit for every two and three students, respectively, while the Equipment had one unit for every six students.

In Electronic Products Assemble Services (EPAS) instructions, there were 35 students using the same laboratory/shop facility for that of the EIM. As with other strands, the number of tools, equipment and materials acquired by the school were generally not compliant with the TESDA minimum requirement. The number of tools used for EPAS instructions was only one unit for every five students, while the materials had one unit for every three students. The equipment needed was the least provided with only one unit for every 18 students.

Extent of Utilization. This aspect generally concerned on the used of the available tools, equipment and materials in the delivery of the TVL strand. All TVL strands have their respective curriculum that reflects the duration at which they would be delivered, as prepared by the DepEd Central Office. As planned by the government in collaboration with the private sector and other stakeholders, every TVL strand shall be delivered every day within a period as reflected in Table 17. Thus, the extent of facility, equipment, tools and materials' utilization have to be done in accordance with the curriculum.

The results showed that the delivery of the TVL strand's curriculum has a uniform duration. The curricula show that every TVL Strand was scheduled to have a two-hour class instruction daily. These two hours was divided into two

sessions, 1- hour was devoted for theoretical instructions and the other 1-hour was for Practicum (laboratory work).

Table 17

Extent of Facilities, Equipment, Tools and Materials' Utilization for the TVL Strands Delivery in Catbalogan City Division

Strand/Curriculum	Extent of Utilization (Hrs/d) Class Instructions	Practical Instructions	Rate of Utilization (%)
- Agri-Crops Production	2 Hours	1-Hour	50%
- Animal (Poultry) Production	2 Hours	1-Hour	50%
- Animal (Swine) Production	2 Hours	1-Hour	50%
- Food Processing	2 Hours	1-Hour	50%
- Beauty and Nail Care Services	2 Hours	1-Hour	50%
- Bread and Pastry Production	2 Hours	1-Hour	50%
- Care Giving	2 Hours	1-Hour	50%
- Cookery	2 Hours	1-Hour	50%
- Food and Beverages Services	2 Hours	1-Hour	50%
- Electrical Installation and Maintenance	2 Hours	1-Hour	50%
- Electronics Product Assemble Servicing	2 Hours	1-Hour	50%
- Hairdressing	2 Hours	1-Hour	50%
- Programming .Net Technology	2 Hours	1-Hour	50%
- Shielded Metal Arc Welding	2 Hours	1-Hour	50%
- Wellness Massage	2 Hours	1-Hour	50%

The above scenario implies that for the TVL curricula to be implemented

successfully, classroom instructions should be a done through a combination of theory and the concepts and the practicum (laboratory works). For skills-development courses, theoretical instructions was not enough to develop competency of the students, but must be coupled with an actual application to master the work.

Characteristics of the Industry Immersion Program

Industry immersion is an integral part of the K to 12 Program in furthering the work-competencies and readiness of TVL Graduates to fully realize its goal to produce TVL graduates equipped with industry-based skills (Rodriguez, 2017). The Senior High School industry work immersion program is a simulated workplace experience for the students to develop industry-based competencies to improve their employment prospects (Aid, 2018).

As prescribed in the DepEd's TVL Strands curricula, every Senior High School student specializing a TVL strand has to undergo Work Immersion Program in an industry that directly relates to his specialized strand. Through this Program, the students are exposed to and become familiar with work-related environment related to their chosen field of specialization to enhance their competence.

During the TVL students' industry immersion program, they have to take the opportunity to fully acquire the knowledge imparted by the industry experts and in like manner apply what they have learned from their respective schools.

The experts of industry partners on the other hand, should teach or equip students with technological know-how and in the skills and knowledge-application to develop a learning experience on problem solving.

As noted by the Australian Aid and the Asia Foundation (2018) through their Coalition for Change, work immersion improves student competencies and helps them create employment opportunities straight out of Senior High. Waddell, Gauvin and Mattison (2018) added that to better engage the K to 12 students, the supportive learning environments for global competencies should be in place for them to have an authentic learning opportunities using real-life problems which includes offering hands-on experiences incorporating into the students' learning activities their historical, natural and cultural environment, and the implementation of deeper-learning strategies focused on fostering deeper learning competencies.

In the process, the students under the guidance of industry experts and workers are expected to gain relevant and practical industrial skills. He/she must apply the principles and theories taught in school to enhance their technical knowledge and skills. While continuously in the industry-immersion, the students enrich their skills in communications and human relations, and develop good work habits, attitudes, appreciation, and respect for work. These prepare them to meet the needs and challenges of employment or higher education after graduation.

Technical Area of Specialization. This aspect is concerned about the nature of works assigned to the TVL students during their work-immersion. This is performed in collaboration with the industry-partners which are identified by the school's TVL coordinators. During this period, the graduating TVL students are expected to be exposed to and learn in various technological systems that are related to their respective specialized strand. Along this line, the core competencies should be looked into as they are the focus on the personal development in work-immersion. Agero and Bonotan (2016) expounded that this strategy bridges the gap between industry skills requirements and curricular offerings to develop employability skills especially among the K to 12 students.

Table 18 shows the core competencies to be developed in graduating Agri-Fishery TVL strand students and the actual work/functions assigned by the industry-partners where the work immersion was conducted. The result showed that the graduating TVL students had acquired the skills needed to fully develop their respective competencies for the strands they specialized.

The nine (9) graduating TVL students who chose the agri-crops production were actually exposed to the work required for one production cycle (from planting to harvesting) on agricultural crops based on the information they revealed. Likewise, the five (5) students who took TVL animal (poultry and swine) production strands had also exposed themselves to the works which were exactly for competency enhancement.

However, with the short period of exposure required for every TVL strand, the whole technology process in agricultural crops cannot be possibly completed. The work-immersion was exact and related to the expected application of knowledge learned from school. This implies a properly coordinated and collaborated activity between the school and the industry-partner, the Villa Conzoilo Farm School in Jaro, Leyte. The work-immersion of the student had been successfully performed possibly due to the readiness of the same farm school. It may not be a totally complete knowledge application but, it was expected that the graduating TVL students had also gained other learnings from their work-immersion.

On the other hand, the 24 TVL students who chose food processing had their industry-work-immersion in an establishment which was not a fish processor but, a raw fish exporter which did not engage and delivered the core competencies required for food processing strand. While the works/jobs performed by the students such as fish sizing and weighing were the initial stage of fish processing technology process, they were not able to totally apply the knowledge gained from classroom. They were supposedly expected to have processed fish food by salting, curing and salting, by fermentation and pickling, and by sugar concentration which were not engaged by the identified establishment. Instead, they applied and practiced fish food preservation by icing which was the common method used by the same establishment.

Table 18

The Core Competencies to be Developed and the Actual Work/ Functions Assigned and Conducted During the Industry Work Immersion By and Among the Graduating Agri-Fishery TVL Strand Students

TVL Strands	№ of Students Immersed	**Core Competencies to be Developed	Industry Partner/s where the TVL student Immersed	Actual Work/ Function Assigned & Conducted	Remarks
Agri-Crops Production	9	-Perform plant nursery operation; -Plants crops; -Care and maintain plant crops, and -Carry-out harvest and post-harvest operation.	Villa Conzoilo Farm School Jaro, Leyte	- Prepare the soil; - Make plots; - Perform nursery operation; - Plant and care the crop, and - Harvest the crops	Perfect works/ functions assigned and conducted for competency enhancement
Animal (Poultry) Production	5	- Maintain poultry house; - Brood and grow chicks; - Perform pre-lay and lay activities, and - Trim beaks	Villa Conzoilo Farm School Jaro, Leyte	- Clean the poultry area; - Feed the chicks, and - Create the bedding of the chicks.	Perfect works/ functions assigned and conducted for competency enhancement
Animal (Swine) Production	(5)	- Handle breeders; - Handle farrowing sows and sucklings; - Raise weanlings; - Produce finishers - Maintain animal healthy environment, and - Apply bio-security measures	Villa Conzoilo Farm School Jaro, Leyte	- Perform castration and vaccination; - Handle breeders, and - Maintain the cleanliness of the stocks' environment	Perfect works/ functions assigned and conducted for competency enhancement

Food Processing	24	- Process food by salting, curing and salting; - Process food by fermenta-tion and pickling; - Process food by sugar concentration	Millennium Ocean Star Corporation, Catbalogan City	- Sizing fish and squids; - Cleaning and weighing the fish, and - Process fish	Mismatch work competency performed

***Source:* TESDA Training Regulation Manual, 2016**

What is critical in this scenario was the support of the schools for students in acquiring the right competencies (Waddell et al, 2018). It appears that there was uncertainty on the competencies of these food processing students for they were not able to have their industry-work-immersion in a right and appropriate establishment. Hammond et al (2019) stressed that there is the need to address this circumstance by having a strong, supportive relationships that enable students to take advantage of the productive learning opportunities to maintain a positive developmental trajectory. The skills in TVL strands that these students have chosen must be certainly developed as it required and is expected by most employers to ensure their employability in the future.

On the other hand, the graduating TVL Home Economics students on Bread and Pastries Production, Cookery, and Food and Beverages Servicing Strands had the respective core competencies to be developed and the actual work/functions assigned and conducted during their industry-work-immersion that are reflected in Table 19.

For graduating TVL students who specialized in Bread and Pastries Production had their industry-work-immersion in the bakeshop in Catbalogan

Table 19

The Core Competencies to be Developed and the Actual Work/ Functions Assigned and Conducted During the Industry Work Immersion By and Among the Graduating Home Economics TVL Strand Students

TVL Strands	№ of Students Immersed	**Core Competencies to be Developed	Industry Partner/s where the TVL student Immersed	Actual Work/ Function Assigned & Conducted	Remarks
Bread and Pastry Production	14	- Prepare and produce bakery products; - Prepare and produce pastry products; - Prepare and present gateaux, tortes, and cakes; - Prepare and display petits fours, and - Present Desserts	Bakeshop Catbalogan City	- Bakes - Decorates cakes; - Makes icing; - Packing bread and pastry products; - Assist in cleaning	The works/jobs engaged or performed were not for the core competencies development
Cookery	21	- Clean and maintain kitchen premises;	Restaurants Catbalogan City	- Assistant cook; - Waiter; Dishwasher - Cleaner	The works/ jobs engaged or performed were not for the core competencies development
	13	- Prepare stocks, sauces and Soups;	Resort Catbalogan City	- Kitchen Staff, and - Cleaner and dishwasher	
	4	- Prepare appetizers; salad sand dressing,	School Canteen Catbalogan City	- Assistant cook, and - Cleaner &	

		sandwiches; - Prepare meat, vegetable, egg, starch, poultry and game, seafood dishes; - Prepare desserts, and - Package and prepare food		dishwasher	
Food and Beverage Services	33	- Prepare the dining room/ restaurant for service; - Welcome guests and take food and beverage orders; - Promote food and beverage products; - Provide food and beverage services to guests; - Provide room services, and - Receive and handle guest concerns	Catering Services, Catbalogan City	- Set-up, perform table skirting, server, scooper, waiter, dishwasher and cleaner	The works/ jobs engaged or performed were not for the core competencies development
Hair Dressing	4	- Perform pre- and post-hair care activities; - Perform basic hair perming; - Perform basic hair coloring - Perform basic hair cutting, and - Perform hair Bleaching	Beauty Saloon, Catbalogan City	- Perform haircut; - Mix medicine for hair treatment, and - Assistant of the Hair-dresser in the saloon	The works/ jobs engaged or performed were related with the core competencies development but insufficient

Wellness Massage	(4)	- Plan the *hilot* wellness program of client/s - Provide pre-service to *hilot* client/s - Apply *hilot* wellness massage techniques - Provide post advice and post- services to *hilot* clients	Beauty Saloon, Catbalogan City	- Perform *hilot* to the client/s, and - Assistant in the saloon, - Cleaner	The works/ jobs engaged or performed were related with the core competencies development but insufficient
Beauty Nail Care Services	(4)	- Perform manicure and pedicure; - Perform hand spa and foot spa	Beauty Saloon Catbalogan City	- Perform manicure and pedicure, and - Cleans the saloon	The works/ jobs engaged or performed were related with the core competencies development but incomplete
Care Giving	19	- Provide care and support infants/ toddlers; - Provide care and support to children; - Foster social, intellectual, creative and emotional development of children, and - Foster the physical development of children;	Samar Provincial Hospital, Catbalogan City	- Take the vital signs of the patients; - Record the results, and - Assist the nurses and patient	The works/ jobs engaged or performed are not relevant with the core competencies to be developed

***Source: TESDA Training Regulation Manual, 2016*

City. The core competencies for this strand were for the students to know more in the baking technology. In other words, the students should have engaged from the measurements of mixtures (flour, water, ingredients and etc.) and the

mixing process which is the critical part of the bread and pastries productions. The core competencies prescribed in the TESDA's Training Methodology is for the students to be able to prepare and produce the different breads, pastries, tortes and desserts. In fact, they are required to present their products at least the desserts they produced.

In baking, as one of the activity revealed by the graduating TVL students in their work-immersion, was an ambiguity as to whether or not they were exposed or capacitated on the core competencies needed for Bread and Pastries-Production strand. Although icing making is one, but this stage is part already of the value-adding. Instead, preparation of the cake was the critical competency in this aspect. Likewise, packing of the bread and pastries were also part of the post-production process. This implies that the core competencies of the students on this particular strand were not developed.

The Cookery students were deployed to the industry-partners like resort, restaurant and school canteen in Catbalogan City where they had their work immersion. Similar to the students in Bread and Pastries-Production, the students in Cookery revealed that they were designated as assistant cook or kitchen staff, cleaners and dishwashers. These works/jobs engaged in by the Cookery students had likewise had an ambiguity on their involvement in cooking.

During the industry-work-immersion, the students should have been capacitated more in the preparation of the dishes as the core competency to be

developed. Although to become a cleaner is related to the function of the cook, but, to engage as waiter is not part of the core competency to be develop in Cookery strand.

On the other hand, the graduating TVL students in Food and Beverages Services strand had their work-immersion in a Catering Services establishment in Catbalogan City. The students in this TVL strand had practiced their knowledge gained from school particularly in setting-up and skirting of tables, server and/or waiter, scooper, dishwasher and cleaner. While the students had completed their work immersion, only half of their core competencies required had been applied.

Setting-up and skirting of tables are related to the dining room or hall preparation, and a server and/or a waiter is also related to providing foods and beverages services to guests, while as scooper, dishwasher and cleaner are functional competencies that are not required in Foods and Beverages Services strand. The result shows that there were lacking core competencies that the graduating TVL students in Foods and Beverages Services strand they should have had practice directly related to their chosen TVL strand during their work immersion. This was mainly attributed to the fact that the said students were not deployed to an appropriate industry partner who completely delivered for the development of the core competencies needed.

It can be analyzed that the competencies on the preparation of the dining

room/restaurant for service; welcoming guests and taking food and beverage orders; promoting food and beverage products; providing food and beverage services to guests; providing room services, and the receiving and handling of guest concerns could only be completely practiced in a hotel and restaurant establishment. In spite of the presence of such establishment in Catbalogan City, the result suggests that the students' work-immersion on Foods and Beverages Services was not properly planned.

The four (4) graduating TVL students who specialized on Hair Dressing had their work immersion in different Saloons in Catbalogan City. They practiced hair cutting; mixing medicine for hair treatment; and became assistants of the Hairdresser expert. Like in other TVL strands aforementioned, the students had only been able to practice a portion of their core competencies to be developed. It was good that they were taught and had practiced the mixing of medicine for hair treatment, but they failed to perform the pre- and post-hair-care activities like the basic hair perming; the basic hair coloring; and hair bleaching. This implies that the core-competencies of the students were not fully developed, especially on the essential hairdressing activities.

Wellness Massage was one of the Home Economics TVL strands chosen by the same graduating students, where their work-immersion was performed in the same saloon. They were assigned to perform hilot or massage to the client/s and as cleaner and assistants in the saloon clinic. Based on the information they revealed, they did not plan the hilot wellness program and not provided the pre-

and post-services to the client/s. This means that the students did not or were not given the opportunity to apply the learning the gained from the classroom. In wellness massage, it is very necessary to provide the pre- and post-services to prepare the mind of the client/s. Similar to Hairdressing, the competency development of the graduating TVL students on Wellness Massage was not complete. This implies that the core competencies of the students on this strand were not well-developed.

Similar students also took Beauty and Nail Care as one of their TVL strands and performed the work immersion in the same saloon. Based on the core-competencies to be developed as prescribed in the TESDA Training Regulations Manual, the students only applied their knowledge gained on manicure and pedicure. They did not practice the hand and foot spa. Instead, they became the cleaner of the saloon every after their daily work immersion. Again, the competency development of the students was incomplete.

There were 19 graduating TVL students who chose the Care Giving strand. As Care Giver, the students are expected to provide care and support infants/toddlers and children, foster social, intellectual, creative, emotional and physical development of children. Having their work immersion in Samar Provincial Hospital in Catbalogan City, the said students were assigned to perform the jobs which were not relevant to the above core-competencies. Instead, they practiced the work assignment of a nurse and at the same time assisted the nurses and the patients. Although assisting the patients was part of

the caregiving roles, taking the vital signs of the patients, and recording the results were off tangent to the work of the Caregiver. This resulted to mismatch in work assignment.

The Industrial Arts Strands include the Electronic Products Assembly Services, Electrical Installation and Maintenance, and Shielded Metal Arc Welding that have core competencies to be developed as shown in Table 20.
The Electronic Product Assembly Servicing was the strand chosen by the 27 graduating TVL students. The 14 students were deployed to the Radio Station in Catbalogan City and the 13 to an Electronic Shop. Being honed as an Electronic Product Assembly Service provider, these students should have developed the core competencies in the assembling of electronic products; service consumer electronic products and systems, and in service industrial electronic modules, products and systems.

Based on the information revealed, the students who had the work immersion in the Radio Station only repaired the power supply and served as assistants probably until the end of the last period of the 80-hours. While the repair of the radio station's power supply can be considered part of the electronic works, being an assistants or an aide is a mismatch job for this strand. However, the 13 EPAS students who had their work-immersion in an electronic shop were able to apply and develop their knowledge gained from the classroom. In the shop, they assembled and disassembled electronic products, and trouble shoot

and repaired electronic appliances. This implies that they completely developed their core competencies as electronic products assembling service providers.

Table 20

The Core Competencies to be Developed and the Actual Work/ Functions Assigned and Conducted During the Industry Work Immersion By and Among the Graduating Industrial Arts TVL Strand Students

TVL Strands	№ of Students Immersed	**Core Competencies to be Developed	Industry Partner/s where the TVL student Immersed	Actual Work/ Function Assigned & Conducted	Remarks
Electronic Product Assembly Servicing	14	- Assemble electronic products; - Service consumer electronic products and	Radio Station Catbalogan City	- Repair power supply; and - Assistant in the station	Insufficient competency development and mismatch
	13	systems, - Service industrial electronic modules, products and systems	Electronic Shop Catbalogan City	- Trouble shoot, repair appliance like TV, and - Assembled and dis-assembled electronic products	Complete Competencies development
Electrical Installation and Maintenance	19	-Perform roughing-in activities wiring and cabling works for single phase distribution power, lighting and auxiliary system; - Install electrical protective	SAMELCO II Catbalogan City	- Wiring, bending, piping PVC, and - Changing meters	Insufficient competency development

		devices for distribution.			
Electrical Installation and Maintenance	18	power, lighting auxiliary, lightning protection and grounding systems; - Install wiring devices of floor and wall mounted outlets, lighting fixtures/ switches, and auxiliary outlets;	Catbalogan Doctor's Hospital, Catbalogan City	- Removing parts of cemented wall, - Install wiring on the wall, floor and mounted outlets	Insufficient competency development
Shielded Metal Arc Welding	15	- Weld carbon steel plates and pipes using SMAW	Welding Shop Catbalogan City	- Joint metals; - Welding steel, and - Helper	Relevant competency development

***Source:* TESDA Training Regulation Manual, 2016**

The 37 graduating TVL students had chosen the Electrical Installation and Maintenance as their specialization, out of whom 19 had their work immersion in the Samar Electric Cooperative II (SAMELCO II) and the 18 at the Catbalogan Doctors' Hospital all in Catbalogan City which under construction. The students who chose this TVL strand were going to develop their core competencies on roughing-in activities; wiring and cabling works for single phase power distribution; lighting and auxiliary system; install electrical protective devices for distribution power, lighting auxiliary, lightning protection and grounding systems, and installation of wiring devices of floor and wall mounted outlets, lighting fixtures/switches, and auxiliary outlets.

However, the results show that these students had an insufficient core competencies development. Out of the above mentioned competencies, those who immersed in SAMELCO II were only able to apply the wiring, bending, piping PVC, and changing meters, while those who immersed in an under construction Catbalogan Doctor's Hospital had engaged in removing the portion of the cemented wall where they installed and mounted the electrical wirings and outlets, respectively; They were not able to apply some of the knowledge they learned from school and thus result, to an insufficient competency development.

Fifteen (15) graduating TVL students had chosen the Shielded Metal Arc Welding (SMAW) strand and did their work immersion in one of the Welding Shops in Catbalogan City. Honing the core competencies for SMAW, the students must have the full knowledge in welding carbon steel plates and pipes using the SMAW. The result shows that these graduating TVL students had applied the same knowledge in their work-immersion and at the same time acted as helpers.

On the other hand, 38 graduating TVL students chose the ICT - Programming .Net Technology that has the core competencies on Programming in HTML5 with JavaScript and CSS3 and in the development of ASP.Net, MVC, 5 Web Applications. Nine (9) of these TVL students had their work-immersion in one of the Computer Shops in Catbalogan City and the 29 in one of the offices in the City of Catbalogan.

The result showed that those who worked in Computer Shop had mainly engaged in encoding, printing, formatting, computer repair and cleaning.

Table 21

The Core Competencies to be Developed and the Actual Work/ Functions Assigned and Conducted During the Industry Work Immersion By and Among the Graduating ICT TVL Strand Students

TVL Strands	№ of Students Immersed	**Core Competencies to be Developed	Industry Partner/s where the TVL student Immersed	Actual Work/ Function Assigned & Conducted	Remarks
Programming .Net Technology	9	- Perform Programming in HTML5 with JavaScript andCSS3 - Develop ASP.Net, MVC,5 Web Applications	Computer Shops Catbalogan City	- Encoding, cleaning, printing, format, computer repair, cleaner	Mismatch Competencies
	29		Government Office, Catbalogan City	- Encoding, Photoshop - Filing documents; - Photocopy documents, printing and cleaning	Mismatch Competencies

***Source:* TESDA Training Regulation Manual, 2016**

Comparing the above functions to the core competencies required, experiences of the students had undergone clearly that there was a job mismatch. Similarly, those who immersed in government offices had engaged in clerical works like encoding, printing and document filing. These suggests that the

classroom learning of the ICT TVL students were not applied and ultimately had not been enhanced the core competencies expected of them.

The results on the technical area of specialization generally imply that the industry work immersion of some graduating TVL were not critically analyzed, planned and properly coordinated with the industry-partners. The results further suggest that some of the industry-partner's experts lack of knowledge on the curricula of the TVL Track resulted to the poor development in the core competencies of the students. In addition, the lack of incentives for industry-experts as their motivator can result to the slow cascading of expertise, hence, resulted to poor services-delivery in developing the core competencies of the graduating TVL students.

Number of Hours. The time duration required of the graduating TVL students for the industry-work immersion is prescribed in Section 6, Department Order № 30 s. 2017 (DepEd, 2017). Within that prescribed period, the students are expected to take the opportunity to apply their classroom learning in the actual work setting.

Table 22 reflects the required number of hours that the graduating TVL students should comply in their industry-work immersion. The data showed a uniform number of days and number of hours per day required, to prepare and produce a work-ready TVL Graduates. The TVL students must spend a total of 80 hours in his/her work immersion in establishments of related industry.

However, for the students on ICT Programming .Net Technology Strand requires 12 days or a total of 96 hours to comply before they exit from their Alma Mater.

Table 22

Time Duration Required of Graduating TVL Students for Industry Work Immersion

TVL Strands	Required Number of Days in Industry Work Immersion	Required Number of Hours per Day	Total Number of Hours Required in Industry/ Work Immersion
Agri Crops Production	10	8	80
Animal (Poultry) Production	10	8	80
Animal (Swine) Production	10	8	80
Beauty and Nail Care Services	10	8	80
Bread and Pastry Production	10	8	80
Care Giving	10	8	80
Cookery	10	8	80
Electrical Installation and Maintenance	10	8	80
Electronics Product Assemble Servicing	10	8	80
Food and Beverages Servicing	10	8	80
Food Processing	10	8	80
Hairdressing	10	8	80
Programming .Net Technology	12	8	96

Continuation

Shielded Metal Arc Welding	10	8	80
Wellness Massage	10	8	80

Source: DepEd Department Order № 30 s. 2017

As mentioned earlier, the TVL curricula emanated from the DepEd Central Office and were just cascaded to schools in different localities. In like manner, the uniform number of hours required for the industry work immersion has been set by the Department of Education as an integral part of the TVL Strands' Curricula as provided in Section 6, Department Order № 30 s. 2017 (DepEd, 2017).

The core competencies of an individual cannot be fully developed within a very short period of time. This has implications on the employability of the TVL students. Technical, communication and interpersonal skills are the essential competencies of the TVL students which are mostly preferred by the employers. Even the Tech-Voc graduate students who are required to undergo in at least 240-Hours industry work immersion still has the difficulty in landing a job.

Assessment of Learning. The industry work immersion of the TVL graduates are not to be assessed as mandated in Section 6, DepEd Department Order № 30 s. 2017. The assessment of the competency and the learning are rated by the industry expert like the manager or immediate supervisor of the establishments who supervised the TVL students in their industry work immersion. This is being done with the use of the standard performance

evaluation tool that reflects knowledge, skills, attitudes and personality (Buted, Felicen and Manzano, 2014), and the TVL Strand Coordinator of the school.

Factors Motivated the TVL Students to Pursue Specialized Strand

Young as they are, Senior High School students could not independently decide yet for themselves. For example, Liang (2016) found the career decision making among young university and vocational school students are significantly affected by prestige. In addition, personal, family and school backgrounds are factors which also affect the career decision-making of young students (Su, Chang, Wu and Liao, 2016). While parents look towards a prestigious career for their children, the lack of financial support to pursue their education and the lack of a career counselor oftentimes allow young TVL students to make a one-sided decision making in their career choice (Olamide and Olawaiye, 2013).

Table23 reflects the various factors that motivated the graduating TVL students to specialize a certain strand. The results showed that the nearness of the school to the respondent's residence/home ranked № 1 among the factors identified. This factor can be explained because of the economic requirements of studying. Primarily, when the student just studies within the community will no longer entail additional expense in fare. The latter basically affects the economic condition of the family.

Egalite (2016) stressed that families oftentimes choose their children's schools by selecting their own community or neighborhood. Family income has a direct impact on a child's academic outcomes. Children tend to leave school

because of lack of allowances (for fare, projects, and meagre contributions the school requires). Bencito (2015) observed that lack of money is one of the

Table 23

Factors Motivated the Graduating TVL Students to Pursue a Specialize Strand

Motivational Factors	Mean Score	Rank
- The school is near to our residence/home	4	1
- The skill learned has high local demand	4.6	2
- I want to work and have an immediate income to help my parent financially	4.7	3
- My parents cannot financially afford to send me to other schools.	5	4
-The field I specialized is my passion/personal choice	5.3	5
- It is the only strand offered by the school where I enrolled.	5.9	6
-It is the choice of my parents.	6	7.5
- It is friends influence.	6	7.5
- Because of its demand in the domestic and international labor market.	6.1	9
- It is peer influence.	7	10

top reasons for the dwindling school enrolment. Most of the students who leaves schooling come from low-income families whose parents are unemployed or have jobs that give them a meagre household income or are employed irregularly.

Ranked № 2 was the factor that the skill I learned has high local demand. This factor manifests the interest and eagerness of the respondents to enter a job locally and in the domestic labor market. The perception of a TVL student who

choose a career based on demands reflects a decision that has positive outlook in life in which a skill-related job can be landed in the future.

The government has pronounced during the 14th Human Resource and Skills Development Conference, that there was a positive employment outlook for TVL track SHS graduates in the Philippines. The government continues to support the demand for semi-skilled TVL and skilled TVET graduates (Baldos, 2016). In addition, Rolfe, Portes, and Sharp (2015) found that Local Government Units are now involved in arranging for industry-partners playing a national and local roles which offer services for individuals who are brought on board through their involvement in wider

economic development and skills work.

I want to work and have an immediate income to help my parents financially, posted a mean score of 4.7 and ranked № 3 among the factors that motivated the graduating TVL students to pursue the specialized strand. This manifests a self-motivation of a certain individual who strives to unchain himself from the bondage of poverty. According to the Asian Development Bank (ADB) Brief, poverty reduction and inclusive economic growth can be achieved by essentially employing young people. Poor workers would like to work longer hours, but only avail of shorter hour, not because they choose it but because they have no other options (ADB, 2018). Rutkowski (2015) reported that the accessibility of regular (fulltime and permanent) jobs is insufficient to vulnerable

workers, especially along rural areas in the Philippines where poverty and high unemployment rates are significantly affecting their life lot.

Rank № 4 is the factor that my parents cannot financially afford to send me to other schools. This is manifestation of a poor graduating TVL student whose ambition in life is to become a baccalaureate degree holder, but only aim to at least finish a TVL strand. These are those who are challenged by the poor economic conditions that their families have and how they have affected their career plan. This implies that the poverty condition of their family becomes a hindrance to achieving education. This is generally correct and only applies to the needy. However, being poor and being left nothing to afford a better life is not yet the end. There are ethical means that can be done, but it requires sacrifices and endurance.

At present, being in poverty is no longer a hindrance in the pursuit of the Education. Every child has dreamed to land in job. Every student can already attain the career he/she planned. The government has exerted its ways and means to implement the "Education for All" which is an inclusive education program for every Filipino. However, the supporting role of the parents will still continue particularly in the acquisition of school supplies, provision of allowances for fare, school projects and contributions. This manifestation that my parents cannot financially afford to send me to other schools can be attributed to the latter reasons. Olamide et al (2013) concluded that lack of

financial support makes impossible for students to pursue their education and qualify them for the jobs of their choice.

This scenario is a huge challenge to every high school student who also experiences similarly. The student must understand why his/her parent has nothing to afford for their education. Instead, many of these students just accept the situation as a challenge for him/her to strive more and further find other avenues to get educated. No one live forever in poverty, if the individual knows how to sacrifice and endure.

Garnering the score of 5.3, the field I specialized is my passion/personal choice and ranked 5th among the factors that motivated the TVL students to choose the strand. This is a manifestation of students who strive to build and sharpen their skill and knowledge. Laguador (2013) stressed that with self-motivated passion and perseverance the students can live with their dreams in the future by bringing them into certainty. Ahmed, Sharif, and Ahmad (2017), found a positive significant relationship between interests in the subject and the career choice decision of the student. Generally, they are linked to both the personal choice and the passion of the student.

It is the only strand offered by the school where I enrolled is the sixth motivator for the student to take a certain TVL strand. This factor is basically not the primary reason for choosing such TVL strand. The students who chose this motivator is left to no choice to make because that is the only TVL offered by the school. With the free education, they can enrol in other schools, if the chosen

TVL strand is not offered in their own school or the nearest school. This manifestation is closely linked to my parents cannot financially afford to send me to other schools and has deeper reason behind.

It is the only strand offered by the school where I enrolled indicates that the students belong to low income family. The low income of the family causes the parents from sending their children to other schools that can give the students the free choice what TVL strand to have. In this situation, the student must likewise be motivated to sacrifice and make do what his school offers. This is because of the lack of the parent's capacity to provide him the needed financial support the student must be challenge to make the impossible to become possible in the pursuit of education and land a job in the future as suggested by Olamide et al (2013). They must not be discouraged of their being poor instead, sacrifice and persevere in order to get off from poverty.

Next to the earlier cited motivators, the students manifested that the TVL strand they chosen was it is the choice of my parents and it is friend's influence. This decision of a student can also be linked to capacity of the parents coupled with the encouragement from a friend who have similar family economic condition. However, Limjuco et al (2018) found nine (9) reasons of parents for choosing certain courses for their children. Although they are considered within the intrinsic motivation of parents, eight of the nine (9) reasons do not fit with the decisions of parents with low income. Oftentimes, the low income parents will

basically decide on (6) for practical reason. It is the only way how they can support their children.

Another is the manifestation of students that Because of its demand in the domestic and international labor market. Domestic and international labor demand is oftentimes the basic information from which students decide for their career path. The motivation of student in this factor could be the skills demand in the labor-market which could be learned from the TVL Tracks. This motivator has probably enabled the students to plan, analyze and decide to choose the TVL strand that provides the needed core competencies demanded by the labor market.

It is peer influence is the tenth and the last factor that influenced the students to choose a certain TVL strand. At their adolescence, students are generally susceptible to peer influence. They learn to cope with social related problems by watching those they interact with. Students at young age tend to associate with peers who share similar behaviors, preferences and attitudes including academic aspiration. Guzman (2017) found that young peers have role during the adolescence of a teenager in developing deep friendship among their peers. Peer pressures encountered in school by graduating senior high school students are generally associated with social belongingness, curiosity, cultural-parenting orientation of parents and education (Moldes, Biton, Gonzaga and Moneva, 2019). With close friendship, the TVL students can be easily influenced by peers.

Lived experiences of Graduating TVL Students during the Immersion Program

Based on the results of the focused group discussion and interview conducted to the key informants there were two major categories where the themes emerged. The first category was on the advantages of the industry-immersion which had four themes as follows: (1) Application of knowledge and skills learned in school; (2) Develop good working habits, attitude and human relationship in the workplace; (3) Acquisition of knowledge and skills in the actual work scenario, (4) Enhance technical knowledge and skills. On the other hand, the second category were on the challenges they encountered in their industry-immersion which has three themes as follows: (1) Immerse in a mismatch industry; (2) Dealing with demanding clients, staff and co-immersionist, and (3) Sacrificing academic subjects.

Advantages of the TVL Students' Industry Immersion

Four (4) themes emerged from the utterances of the TVL key informants. Below are the presentation and discussion of each theme:

Theme 1: Application of knowledge and skills learned in school

Based on the 7 key informants, one of the advantages of industry immersion is the application of knowledge and skills. As shown in their utterances below:

> *"Gin tutdu-an kami ha amon klase paano an pag andam han tuna nga taranuman, paghimo hin mga plots, pananom ngan pag harvest. Gin himo ko ini didto ha akon immersion. Waray na ako makuri-e kay maaram naman ako gidaan".* (Our teacher taught us how to prepare the soil,

make plots, plant and harvest the crops. I was able to apply it in my immersion. I didn't find it difficult because I already knew how to do it. -Agri-Crops Participants)

"An pan limpyo ha lugar kon hain an mga kamanukan ngan paunan-o an pagtubong an gin tutdo ha am ha eskwelahan nga akon nahigamitan ngan gin himo samtang ako nag wowork immersion". (Cleaning the poultry area and feeding the chicks are some of the lessons I learned from the school. I was able to use and do this while I was in immersion. -Animal Production Participant)

"Ha amon klase nahibaro ako kon gin aanu an tama nga pagkuha han vital signs han usa nga tawo. A pag gamit han thermometer usa na halimbawa. Dapat ig surat o ig record kon pira an temperature para diri mahingalimtan. Amo ini an akon gin himo han akon immersion". (In our class I learned how to get the vital signs of a person. Using a thermometer is one way to know the temperature. It is important to write or record the temperature so that it will not be forgotten. I did this during my work immersion. -Caregiving Participant)

"An akon nahibaruan ha skwelahan an importansya han tama nga sanitation ha pag andam han pagkaon, ngan gin gamit ko ini nga akon nahibaruan didto han akon immersion". (The knowledge and skills that I learned in school is the importance proper sanitation in preparing the food. I was able to execute this in the industry immersion. -Cookery Participant)

Gin tudu-an kami ni Sir pag wiring ngan pag install ngan gin apply ko ha akon work immersion". (Our teacher taught us wiring and installation and I applied it in my work immersion.-Electrical Installation and Maintenance Participant)

"Nahibaro ako pag table skirting ha skwelahan ngan gin himo ko iton pag immersion ko". (I learned table skirting in school and I did it in my immersion. -Food and Beverage Services Participant)

"Gin tutdo-an kami ha skwelahan pag welding ngan gin himo ko iton ha akon work immersion". (We were taught in school how to welding and I applied it in my immersion. -Shielded Metal Arc Welding Participant)

Application of knowledge and skills learned in school is one of the themes that emerged among the TVL Graduates. Preparing the soil, making plots, planting and harvesting of plants were applied by the *Agri Crops Production* participant; cleaning the poultry area and feeding the chicks were used by *Animal Production Participant;* recording and assisting the patient were executed by *Caregiving Participant;* proper sanitation was applied by *Cookery Participant;* installing wiring devices of floor and wall mounted outlets were executed by *Electrical Installation and Maintenance Participant;* table skirting was used in catering by *Food and Beverage Services Participant,* and joining metals & welding steel were applied by *Shielded Metal Arc Welding Participant.* These qualitative data implied that the industry immersion is really needed so that learning of students can be applied.

Basically, the main goal and purpose of the students' industry-work-immersion is for them to be able to apply their classroom learning in the actual work setting. The TVL students should take that opportunity of being under the supervision of the industry expert in developing their core competencies to make them employment-ready. With the hope that the industry expert will provide the learners with work- immersion opportunities, hands-on experiences, the work immersion is performed to enhance the students' technical knowledge and skills (DepEd, 2017).

Theme 2: <u>Development of good working habits, attitude and human relationship in the workplace</u>.

Based on the 4 key informants, one of the advantages of industry immersion is the development of good working habits, attitude and human relationship. As shown in their utterances below:

> *"Ha akon pag work imersyon nahibaro ako pakisama han ibaiba nga klase han tawo. Iba-iba liwat an ira mga pamatasan sugad han mga staff ha industry, customers ngan mga ig kasi ko nag iimersyon".* (In my work immersion I learned how to deal with the different types of people. I encountered different types of personalities from the staff in the industry, clients/customers and even my co-immersionist. -Beauty and Nail Care Participant)

> *"Ha akon pag workimersyon nagkamayda ako riyalisasyon kon anu ka importante an oras ha trabaho. Kinahanglan masulod ha tama or advance pa ha oras. An pagsulod nga late nakakaapekto ha trabaho. Halimbawa ha electronic shop gin tatagan kami hin limitado nga panahon pag ayad han appliances ngan kinahanglan matapos namon sano kuhaon han customer. Kon kuhaon han customer nga diri pa ready o waray ko pa kahuman, mag iisog an customer ngan dako an posibilidad nga ig storya niya ha iba an akon kapabayaan ha trabaho ngan pwede ini makaapekto ha electronic shop nga akon gin tatrabahoan".* (In my work Immersion I realized the importance of time. You must be on time or ahead of time to perform your duties and responsibilities effectively. If you're late it can affect your performance. For example in an electronic shop, there is an specific time given to us to finish the repair of a certain appliance, if the customer, gets their appliances in the specific date given to them and I fail to finish the job within the given specific time, the customer will get angry and there is a big possibility that he/she will tell others about our poor performance and it might affect the business industry where I am. -EPAS Participant)

> *"Pinaagi han akon pag work imersyon nahibaro ako kon paunan o an pagpasensya ha customer nga mga demanding. Halimbawa ha mga customer/clients han catering service na ak gin sudlan".(*Through work immersion I learned how to be patient with the demanding customers/clients. For example the customers/clients in the catering Service where I work. -FBS Participant)

> *"Nahibaro ako paano pag dara han customer bisan nag iisog. Kinahanglan ko mag hirot para maiwasan an diri pagkakaintindihay ngan reklamo. Halimbawa ha akon computer shop nga gin trabahoan, nag sala ako pag print, an akon gin himo nangaro ako hin pasaylo ngan gin ayos ko an akon mali nga trabaho".* (I learned how to treat the clients even if they're angry. I need to be extra careful to avoid misunderstanding and complaints. For example, I made a mistake in printing certain document, I asked an apology to the customers and do the task correctly. -Programming .Net Technology Participant)

Development of good working habits, attitude and human relationship in the workplace is one of the themes that emerged among the TVL Graduates. Dealing with different types of personalities was acquired by a *Hairdressing Participant;* importance of time management was realized by *EPAS Participant;* patience was developed by a *Food and Beverage Services Participant* and acknowledging mistakes and asking for an apology was learned by a *Programming .Net Technology Participant.* These qualitative data implied that the immersion experienced by the graduating TVL students contributed to the development/enhancement of good human relationships and the appreciation of the importance of good working habits.

These themes that emerged from the earlier cited qualitative data, the development of good working habit, attitudes, appreciation and respect for work were basically the fourth goal of the industry work immersion. The latter was an avenue to test themselves and apply what they have learned and at the same time got an experience of social interaction in the actual work environment (DepEd, 2017).

Theme 3: <u>Learning and Knowledge Acquisition in the World of Work</u>

Based on the 9 key informants, one of the advantages of industry immersion is the acquisition of learning and additional knowledge about the work. As shown in their utterances below:

> *Nahibaruan ko an tama nga pamaagi han pag tanom ngan an tama nga distansya ha pagtanom. Nahibaro liwat ako han mga techniques ha plant propagation.* (I learn the proper way of planting together with its spacing and the different techniques in plant propagation. -Agri-crop Participant)
>
> *"Natutunan ko kung paano ang tamang pag gamit ng tools at materials at actual na maglandscape at iporma ang mga bato".* (I learn how to use the tools and materials properly, how to landscape, and how to form the rocks. -Agri-crops Participant)
>
> *"Ha work immersion nahibaro ako pag manage han akon time ngan pag schedule han akon trabahoon kon anu an mga dapat unahon ngan pwede ig urhi para waray makarag nga oras ngan maiwasan an pag mamadali pagtraho nga nagriresulta hin diri maupay. Nahibaro gihap ako kon paano an mga castrate ngan pag deworm han mga swine".* (I learned time management and prioritization to avoid rush and poor performance. I also learned how to castrate and deworm the swine. -Animal Production Participant)
>
> *"Nabaruan ko an mga techniques ha manicure ngan pedicure".* (I learned different techniques of manicure and pedicure. -Beauty and Nail Care Services Participant)
>
> *"Nabaruan ko kon gin aanu an pamaagi ngan techniques han pag bake, pag butang icing ha cake, ngan tama nga pamaagi han pagbutang ha surudlan".* (I learn the different techniques in baking, how to put the icing in the cake, and its proper way of packing". -Bread and Pastry Production Participant)
>
> *"Nahibaruan ko kon paano an pagbalyo kuntador ngan anu an gamit han iba-iba na tools."* (I learned how to change the meter and the use of different tools. -EIM Participant)

> *"Akon nahibaruan an pag assemble han satellite ngan an pag load ha decoder".* (I learned how to assemble the satellite and load the decoder. -EPAS Participant)

> *"Nabaruan ko an mga iba-iba nga klase han medisina, paano igmix ngan ig apply ha buhok. Ngan importante nga kitaon anay hin maupay an buhok sano pumuli mag mix ngan ig apply ha buhok para sigurado nga maupay an resulta ngan diri ma damage an buhok".* (I learned the different kinds of medicines for hair, how to mix, and how to apply it. For best results and to avoid damage of hair, it must be examined first to see the hair type of the costumer before you mix and apply medicines in the hair. -Hairdressing Participant)

> *"Nahibaro ngan nakakuha ako hin knowledge kon gin aano an pag handle han problema ha workplace".* (I learned and got an idea how to handle problems in the work place. -Programming Participant)

Acquisition of knowledge and skills in the actual work scenario is one of the themes that emerged among the TVL Graduates. The proper use of tools and other materials and making landscape and forming the rocks were learned by *Agri-Crops Production Participant;* prioritization, castration and deworming were learned by the *Animal Production Swine Participant,* different techniques is manicure and pedicure were acquired by a *Beauty Nail Care Services Participant;* time management, and changing the meter were learned by an *Electrical Installation and Maintenance Participant;* the techniques in baking and icing were acquired by the *Bread and Pastry Participant;* the assembling and loading the decoder transpired in *EPAS Participant,* and the different kinds of medicines to apply in the hair were learned by the *Hairdressing Participant.*

This theme that emerged from the above qualitative data is also one of the objectives of the work immersion. This implied that the industry-partners play

an important role in the sharing of the relevant knowledge and skills of the graduates. Work-immersion is basically an avenue for the graduating TVL students to test themselves and apply what they have learned in the classroom and at the same time the experience in social interaction in the actual work environment (DepEd, 2017).

Theme 4: <u>Technical knowledge and skills enhancement</u>

Based on the 6 key informants, one of the advantages of industry-immersion was it enhanced the students' technical knowledge and skills as shown in their utterances below:

> *"Mas nadugangan an akon nahibabaruan hiunong han pag timangno han poultry house".* (My knowledge and skills were more enhanced specifically on maintaining a poultry house. - Animal Production Participant)
>
> "My knowledge and skills in communication with clients/costumers were nurtured. -Cookery Participant)
>
> *Mas nahibaro ako kon anun tama nga pamaagi han wire installation ngan an importansya han safety practices samtang nag tatrabaro. Kay an trabahon nga related ha kuryente delikado ngan pwede makamatay kon deri sumunod han safety procedures.* (I had improved my knowledge and skills in wiring and installation and I also realized the importance of safety practices. Work-related with electricity is dangerous and can cause death if safety measures were not followed. -EIM Participant)
>
> *"Nadugangan an akon nahibabaruan matungod han tama nga pag kapot, paggamit ngan pag hirot han mga glasswares".* (I gained additional knowledge and skills on the proper handling and the different uses of glasswares. -FBS Participant)
>
> *"Mas na enhance an akon learning han proper nga pagpili han medicines*

> *for hair,ngan nahibaro ako han importansya han tama nga pagpili, ngan pag eksamin han klase han buhok kon pwede pa ba ig rebond o kinahanglan treatment nala".* (My knowledge in proper medicine selection in hair was enhanced and I learned different kinds of medicines in rebonding. I learn also that before you apply medicine you need to look first in the details of the hair. -Hairdressing Participant)

> *"Nag improve an akon nahibabaroan ha welding tungod naexperyensa ko pag-welding hin grills, mga joints nga pundo. Pati gihapon an pag deliver finish products ngan pakipag communicate ha mga customers".* (I had improvement on the welding skills because of my actual experience in welding grills, joints and anchor. And also I enhance my communication on dealing with the clients because I delivered the finished product to the customer. -SMAW Participant)

Enhancing technical knowledge and skills is one of the themes that emerged among the TVL Graduates. Skills in maintaining poultry house were improved according to an *Animal Production Participant;* knowledge and skills in communication with clients/costumers were improved said a *Cookery Participant;* enlightened on the importance of safety practices by an *EIM Participant,* gained additional knowledge and skills on proper handling of and the different uses of glassware by a *FBS Participant* and improved welding skills by a *SMAW Participant.*

Challenges in the Industry Immersion

Three themes emerged from the utterances of the TVL key informants in terms of the challenges encountered by the TVL Graduates in their industry immersion. Below are the presentation and discussion of each theme:

Theme 1: Mismatch Work-assignment and Industry-Immersion

Based on the 7 key informants, immersing in a mismatch industry is one of the challenges they encountered. As shown in their utterances below:

> *"Diri match ha amon strand han industry nga amon gin emersyonan kay imbis electronic shop nangangadto kami ha radio station".* (Our strand was not matched with the industry of immersion because we were supposed to immerse in an electronic shop, but then we were assigned in a radio station. -EPAS participants)

> *"Diri match an industry han amon strand kay wray namon ka practice an gin tutdo ha amon ha school".* (Our place of immersion was not matched with our strand because were not able to apply the knowledge and skills that we learned in school. -Food processing participants)

> *"An gintutdo ha school waray kagamiti kay diri match an industry ha amon strand. An amon didto function dire related ha amon strand".* (The knowledge and skills that we learned in school were not applied because we immersed in an industry which was not suited to our strand. Our function there was not related to our choice strand. -Programming participant)

> *"Diri namon nagagamitan ha immersion an gin tutdo ha amon ha school kay most of the time nanhuhugas la kami ngan nanlilimpyo".* (Were not able to apply the knowledge and skills we learned in school because most of time we washed the kitchen utensils and cleaned the area. -Cookery participants)

> *"Magkaiba an gin tutdo ha school tas han am gin hihimo ha immersion. Example, an pag install ngan wiring ha sulod han balay or building an am maaram pag kadto ha immersion an amon trabaho kanan line man parehas hit pag tataod han kuntador".* (There was a big difference on what we learned in school and our duty in the work immersion. For example, we were taugh t and trained in school for electrical wiring and installation inside the houses or buildings while in our work immersion we were did the job of linemen like putting the meter or changing the meter. -EIM participant)

> *"Ha school an gintutdo ha amon pag assemble ngan disassemble han electronic products ngan service consumer electronic products pagkadto ha immersion, pag operate han radiostation amon trabaho ngan iba pa nga work mayda kalabutan ha radio station".* (In our school we were trained to assemble and disassemble electronic products and service consumer electronic products, but in our work immersion, we were tasked to radio station operation and other work related to radio station. -EPAS participants)

> *"Imbes nga food processing an amon ahibaroan ha school, nahingadto ako han paglainlain han kadagko ngan klase han isda ngan noos. Waray ini katuman kay an ha school kisa ha work immersion nakon.* (Instead of food processing as learned in school for my chosen strand, my experience in work-immersion was an fish and squid sizing. This was an entirely different exposure. -Food processing participants)

Immersing in a mismatch industry and work assignment is one of the themes that emerged among the TVL Graduates. Immersion in a radio station instead of electronic shops as experienced by *EPAS Participants;* instead of processing food my work-experience was in the sizing of fish and squid narrated a *Food Processing Participant*; work-immersion in an industry which was not suited to the strand of *Programming, cited a Participant*; trained for electrical wiring installation, but performed on lineman duties informed an *EIM Participant;* knowledge and skills in communication with clients/costumers were improved said a *Cookery Participant;* enlightened on the importance of safety practices cited an *EIM Participant,* and the function or nature of work was not related to the knowledge and skills acquired in school informed an *EPAS Participant.* These qualitative data implied how the industry-immersion plays an important aspect of the TVL program vis-à-vis role of the School TVL Coordinator in coordinating and collaborating with an appropriate industry

partners who will significantly and meaningful improve the knowledge and the skills of the TVL students to enhance their chance to land in job after graduation.

Mismatch industry and work/job immersion have negative effects in the core competencies development of the TVL students. Going back to the results on the technical area of specialization of the industry-immersion, some students revealed work/job assignments which were not aligned to what they learned from the classroom. For example, Care Giving TVL students were exposed to the function of nurses, while the TVL students in ICT-Programming using .Net Technology had theirs on the functions of an administrative aide.

The cited scenarios have implications to the readiness on the implementation of the TVL Tracks for Senior High School. Lacking with the necessary and appropriate skills, no employer will accept a more half-baked Senior High School graduates who will take on jobs that are neither in accordance in school nor of their personal interest, to what they trained for (Gamboa, 2016). The schools implementing the TVL strands should collaborate with the appropriate industry to ensure that graduates could land in job after completing the requirements of their chosen strand. Thus defeats the purpose of the Program.

Theme 2: <u>Dealing with demanding clients, staff and co-immersionist</u>

Based on the 5 key informants on dealing with demanding clients, staff and co-immersionist is one of the challenges in their industry immersion. As shown in their utterances below:

> *"Nagkaproblema ako han iba na mga customers kay mga demanding. Diri ngani dayon nasusugot an sugo nagiisog. Takay damo akon gin tatrabaho".* (The problems that I encountered in dealing with demanding customers was if I could not work immediately on their order they scolded me. -Cookery participant)

> *"Nagkaproblema ako han gin insulto ako han usa nga technician. Nahiubos ako. Diri masulod-sulod pag trabaho".* (The problem that I encountered in my immersion was when I was insulted by the technician. I felt embarrassed and discouraged to work. -EPAS participant)

> *Nakukurian ako pag adjust kay damo amon gin tatrabaho ngadto mostly pa gud apurado. Diri ngani dayon natatrabaho naiisgan han customer or guest".* (I experienced difficulty in adjusting my work because I had a lot of things to do and most of it needs to be done quickly. If I failed to do it right away the customers got angry. -FBS participant)

> *"Attitude problem of other staff kay malain an pag treat ha am. Diri kami gin aasi kon mayda kami gin papakiana".* (I had a problem with the attitude of some staff in the saloon. They didn't treat us well. If we had questions they didn't bother to answer our queries. -FBS participant)

> *"Nag sasala ngani ako pag photo copy nag isog an customer. Naawod ako".* (If I committed a mistake in my job, copying the documents incorrectly, I was scolded publicly. The customer got mad at me. I was ashamed. -Programming participant)

Dealing with demanding clients, staff and co-immersionists is one of the themes that emerged among the TVL Graduates. Dealing with demanding customers and being scolded was experienced by Cookery participants; being insulted and embarrassed was cited by an *EPAS Participant,* and difficulty of

adjustment on workloads and inconsiderate customer was cited by a *FBS Participant*. These qualitative data implied that the industry immersion played an important role in building the ethical values and the skills on interpersonal relationship of the TVL students.

Again, one of the objectives in exposing TVL students to industry work immersion is for them to be challenged to change their negative practices and attitudes and know how to adjust themselves to the treatments of their co-workers and their clients when in the workplace. This is one of the employability skills or competency that is expected from the work immersionist TVL students for them to professionally grow (despite of just being a SHS graduate) as a worker or employee.

As part of their learning process, the TVL students must learn how to embrace the value of humility, observe and apply positive knowledge and practices in real life situation. In this way, the students are being prepared for the world of work or job. Villena (2017) explained that this helps making an aptly informed TVL student regarding his/her future in relation to their chosen career. While the TVL students have considered dealing with demanding clients, staff and co-immersionist as challenges, these are more advantageous to them because it is from the challenges that they can learn more and become better prepared for the realities of the workplace.

In addition, the experience the students learned from the workplace is one way of learning outside the school, is an opportunity for the TVL students to

exhibit or show their knowledge, skills and personal attributes, especially with the presence of the employers. The challenges encountered by the TVL students were serve as motivation for them to nurture what they have from school and from their work immersion. They gained experiential learning experiences in real work situational analyses and decision-making (Atkinson, 2018)

Theme 3: Sacrificing academic subjects

Based on the 4 key informants sacrificing academic subjects is one of the challenges in their industry of immersion. As shown in their utterances below:

> *"We missed to attend classes because of the schedule due to lack of partner industries. We are excused in attendance but not in quizzes or activities. We need to cope it up at the same time. Although we were given a chance to take the quizzes it's still difficult to answer because sometimes we don't have time to study our lesson because we are having an immersion".* (Cookery Participant)

> *"Mayda mga times nga diri kami nakakaattend han amon klase ha academic subjects kay aadto kami ha immersion".* (There are times that we missed to attend classes in our academic subjects because we are having an immersion. -EIM Participant)

> *"Absent kami ha amon academic kay work immersion namon. Excuse la kami ha attendance pero ha quizzes dire. Depende nala ha teacher kon tatagan kami hin chance nga makag quiz after han amon immersion."* (We are absent in our classes because we are in the immersion. (We are excused in attendance, but not in the quizzes. It will depend on the teacher if s/he will give me a chance to take the quizzes after our immersion.-EPAS participant)

> *"Absent ha amon klase tungod han schedule han amon work immersion. Surusaliwan kasi kami pagkatapos han iba nga grupo an iba naman nga grupo an ma immersion".* (Sometimes we are absent in our classes because of the schedule in the work immersion. We immerse by group, after one group the other group will be given the chance to have the immersion - SMAW participant)

Sacrificing academic subjects is one of the themes that emerged among the graduating TVL students. Not attending academic subjects because of the schedule of immersion due to lack of partner-industry as cited by a *Cookery Participant;* missed to attend classes because of work immersion as revealed by an *EIM Participant*, and making absences in classes due to work immersion as expressed by *SMAW Participant.* These qualitative data implied that academic classes of the students are affected due to their absences as a result of the conflict of schedule while on their work-immersion.

Sacrificing academic classes is one of the challenges experienced by the graduating TVL student during their work-immersion. This situation indicates that there has been no proper planning, as for this case, which resulted to probably cutting classes and ultimately to absenteeism from the sacrificed class. Elis (2016) was able to get the perceptions of both the teachers and students on the aspect of absenteeism. This malpractice in schooling among the students significantly affects their learning performance and grade. Céspedes et al (2018) found that absenteeism can reduce up to 43.8% of the students' academic performance. Balkıs, Arslan, and Duru (2016) clarified that student absenteeism is not related to academic self-perception, attitudes towards teacher and school, goal valuation and motivation/self-regulation but, positively related with academic achievement.

Sacrificing academic classes among the graduating TVL students may be linked with the latter. This was a finding of Balkis et al (2016). The primary cause of such practice was the intention of the students to have their work immersion that has conflicting schedule with their remaining subjects. Taylor III (2012) explained that cutting classes harms the grades of the students practicing it. However, Richmond et al (2015) found that students who have 2-week immersion have significantly higher academic performance than those who engaged in the traditional 16-week immersion.

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A. Summary

The following were the findings based on the data collected and on the analyses performed in this study:

1) There were 768 graduating TVL Senior High School students in seven (7) secondary schools in Catbalogan City Division during the SY 2018-2019. 263 of them who participated in this study comprised of 45 per cent males and 55 per cent females. Those with ages ranging 17 to 19 years old comprised of 75 per cent while the 20 years old and above were 25 per cent. The females were younger in age with a mean age of 18.64±1.44 while the males had mean age of 19.36±2.11. The few number of these graduating TVL students were under-aged.

2) These graduating TVL SHS student-respondents/participants were enrolled in the 15 TVL strands with specialization in Agri-Crops Production (ACP) (3 per cent), Animal Production (AP) Swine and Poultry (2 per cent), Beauty and Nail Care/Wellness Massage/ Hairdressing (BaNC/WM/HD) (2 per cent), Bread and Pastry/Cookery/Food and Beverages Servicing (BaP/CK/FBS) (32 per cent), Care Giving (CG) (7 per cent), Computer Programming .Net Technology (CPNT) (15 per cent), Electrical Installation and Maintenance (EIM) (14 per cent), Electronics Product Assemble Servicing (EPAS) (10 per cent), Food

Processing (FP) (9 per cent), and Shielded Metal Arc Welding (SMAW) (6 per cent).

3) As to the result of their competency examinations, 69 per cent of the 263 TVL students got the Second Level National Certification (NC II); 3 per cent in ACP; 2 per cent AP; 32 per cent BaP/CK/FBS; 7 per cent on CG; 12 per cent in EIM; 7 per cent in FP, and 6 per cent in SMAW. The 31 per cent of the TVL students failed to attend the competency examination due to lack of money for payment of assessment fees.

4) There were seven (7) secondary schools in the Catbalogan City Division that offered varying number of curricula on specific strand. Three (3) TVL curricula were offered in Catbalogan City Agri Industrial School (CCAIS), Catbalogan National Comprehensive High School (CNCHS) had four (4), Silanga National High School (SNHS) had five (5), Guinsorongan National high School (GNHS) offers six (6) curricula and one (1) curriculum were offered in Antonio G. Tuazon National high School (AGTNHS), Pangdan National High School (PNHS) and Samar National School (SNS). The duration of instructional delivery of each curriculum varied from the least of 160 Hours to 640 Hours. TVL curricula for Senior High School students were developed at DepEd Central Office and cascaded to the different secondary schools in the country.

5) There were eighteen (18) teachers with different fields of specialization who were hired to deliver the TVL curricula in Catbalogan City Division. All of them were Baccalaureate Degree holders; 61 per cent (11) of them were LET

passers; 6 per cent (1) were Electrical Engineer; 22 per cent (4) were NC-II holders; 11 per cent (2) of them attained the Level I Training Methodology (TM-I) competency certificate from TESDA. The teachers who handled Agri-crops and animal production, EIM, SMAW, EPAS had experiences in actual industry immersion, while the others did not. 22 per cent (4) of these teachers had one year teaching experience; 44 per cent (8) had 2-year; 28 per cent (5) had 3-year, and 6 per cent (1) has 15-year teaching experience.

6) All the schools had facilities (class and laboratory rooms), tools and equipment which varied in numbers depending on the minimum requirements set by the TESDA for every TVL strand. The utilization capacities of the facilities were generally dependent on the number of enrollees per strand, and were compliant to the minimum requirement. The school facilities were uniformly utilized for two hours, one hour classroom instructions, and one hour laboratories/shops. The available tools and equipment of schools were mostly not compliant with the minimum standards in terms of numbers and were similarly utilized at one hour practicum session daily.

7) The Industry Immersion of the graduating TVL SHS students had their core competencies to be developed as set in the TESDA Training Regulation Manuals. The TVL Students in Agri-crops and Animal Productions had applied their classroom learning and developed core competencies in the farm-school outside of Catbalogan City, while the others had it in some establishments within the city proper for a period of 80-hour per strand. The core-competencies

development exposure of the TVL students in EPAS, EIM, SMAW, Bread and Pastries Production, Cookery, Food and Beverage Servicing, Wellness Massage, Hairdressing, Beauty and Nail Care can be characterized by some relevant work/job assignment, but still insufficient and lacked on hands-on competence. Meanwhile, the students on Food Processing, Care Giving and Computer Programming with .Net Technology had mismatch industry in job immersion. TVL students' learning assessments were conducted by the industry experts.

8) The factors that motivated the students to choose a certain TVL Strand were ranked according to the strength of their perception in this order as: 1) The school is near to our residence/home; 2) The skill learned has high local demand; 3) I want to work and have an immediate income to help my parent financially; 4) My parents cannot financially afford to send me to other schools; 5) The field I specialized is my passion/personal choice; 6) It is the only strand offered by the school where I enrolled; 7) It is the choice of my parents; 8) It is friends' influence; 9) Because of its demand in the domestic and international labor market, and 10) It is peer influence.

9) The lived experiences of the graduating TVL SHS students' industry immersion revealed some advantages and challenges that respectively emerged into four (4) and three (3) themes. The emerged advantages of industry immersion were along the: 1) Application of knowledge and skills learned in school; 2) Development of good working habits, attitude and human relationship in the workplace; 3) Learning and knowledge-acquisition in the world of work,

and 4) Technical knowledge and skills enhancement. The challenges experienced by the students were: 1) Mismatch work assignment and industry immersion; 2) Dealing with demanding clients, staff and co-immersionist, and 3) Sacrificing academic subjects.

Conclusions

Based on the results and findings of this study, this researcher concludes that:

1) The graduating TVL students in Catbalogan City Division generally belonged to poor families who were motivated to take the TVL strands, some of whom were not able to take the competency examination due to incapacity to pay while others strived to pass the NC II hoping to land in a job to help their respective parents financially after their graduation;

2) The Secondary Schools in Catbalogan City were not yet prepared in the implementation of the TVL Tracks being not compliant to the minimum requirements on tools, equipment and materials for practicum use, and lack of industry partners who could significantly and meaningfully complement for the full development of the students' core competencies as set and required for different TVL strand by the DepEd and the TESDA;

3) The competencies and skills of most graduating TVL SHS students were not well-developed being deficient in their exposure that led to their

incapacitated on the work requirements of their respectively specialized TVL strands and also due to the very short duration of industry immersion;

4) Most TVL Teachers were not very much committed to the skills and competencies development of the graduating TVL students who allowed the deployment and assignment of the same students to works not related to the core competencies set in training regulation of TESDA on their TVL chosen strand. Likewise, the industry partners in Catbalogan City similarly had poor commitment for they did not totally expose and train the students on the skills and core competencies required for certain TVL strand;

5) Except for Agri-fishery strand, all the TVL curricula offered could not boost the development of the primary industry of the locality;

6) The curriculum development and implementation of TVL Track was not planned well;

7) The schedules for industry immersion were not properly planned and coordinated which led the graduating TVL students to sacrifice their attendance in other academic subjects; and

8) In spite of unpreparedness, the TVL Track implementation was haphazardly done in the locality in compliance with the directives from the higher authorities.

Recommendations

Based on the problems and issues noted from the results of this study, this researcher hereby recommends the following program interventions:

1) While TVL Track is meant to provide the poor students the opportunity to land in a job through the free education, if the government is serious enough to reduce inequalities in the society, the competency examination of the TESDA should also be administered free of charge to give an opportunity to every poor student to acquire eligibility for the job in-line with their specialization;

2) DepEd must resolve the issue on unpreparedness in the implementation of the TVL Track by appropriating and allocating sufficient funds for the acquisition of tools, equipment and materials sufficiently needed for knowledge and skills development of TVL students during practicum sessions as needed and desired in alignment of the local, regional, national and international job opportunities.

3) The TVL Coordinators must inform the industry partners and request, if not require, for the full development of the students' core competencies by fully exposing them to the works required for different TVL strands and maximize coordination and linkages ensuring, that these be reduced in a Memorandum of Agreement (MOA) defining the industry partners, school and the students' responsibilities to maximize relevant and meaningful exposure that shall lead to job-landing or employment of the TVL students.

4) A revisit on the 80-hour duration for industry immersion be looked into modifying it to be sufficient enough to develop the core competencies on the work required for the respectively specialized TVL strands, and reorienting the educational partners what needs to be addressed in each and translating these need/s to TVL Track curricula to a functional industry immersion that will lead to the benefits not only to the school and their students, but the industry partners, as well.

5) The success of the TVL Track implementation generally depends on the teachers and school-heads' commitment in developing the skills and competencies of the TVL students to become a functional contributor to the progress of the country, and the need to strengthen their commitment to their roles and responsibilities they pledged to fulfill to the country's call.

6) To ensure the core competencies development of students, the TVL teachers and the schools TVL coordinators must supervise the work immersion of the students and see to it that they are assigned to the work opportunities that are aligned to the core competencies required of their specialized TVL strand;

7) To strengthen the commitment of industry partners on their role in TVL Track implementation, the government through the DepEd must develop an intervening policy that will serve as their external motivator in fully developing the TVL students' core competencies during the work immersion. Most probably an incentive for the industry expert who trains the students in their work immersion is very necessary; providing with an honorarium and the partners'

incentive may be as tax levy that they can use to improve their tools and equipment to revitalize their business to the needs of the TVL program of the DepEd.

8) Most of the developed TVL curricula do not promote local primary industry development and likewise, the progress of the locality. Therefore, the educational planners should develop a TVL curriculum that will promote local resources' utilization for the development of the local primary and allied industries. TVL Curricula development should be decentralized to ensure that its content and purpose are geared towards local progress, primarily eventually leading to the global arena.

9) The school TVL Coordinators and the teachers must schedule the industry immersion program of students after the completion of all the academic and core subjects to avoid conflict of schedule and for the TVL students not to sacrifice their attendance in other academic subjects; and

10. Finally, in the revisit of the TVL Curricula preparation, the participation of the planners, of the school heads, the teachers and the industry partners be had along with the Local Government Unit (LGU) representatives to acquaint the group of the local resources and LGU blueprint of development.

REFERENCES

Abulencia, Arthur S. (2015). The Unraveling of K-12 Program as an Education Reform in the Philippines, *SIPATAHOENAN: South-East Asian Journal for Youth, Sports & Health Education,* Vol. 1 (2). October 2015, pp. 229-240.

Acosta, Imee C. and Acosta, Alexander S. (2016). Teachers' Perceptions on Senior High School Readiness of Higher Education Institutions in the Philippines, *Universal Journal of Educational Research* 4(10): 2435-2450, 2016 DOI: 10.13189/ujer.2016.041024

ADB (2018). *Youth employment key to poverty reduction,* Asian Development Bank Brief, The Manila Times, February 18 2018 retrieved from https://www.manilatimes.net

Agero, Alma D. and Bonotan, Amelia M. (2016), Academe-Industry Partnership: Basis for Enhanced Learning Guide in the New Science General Education Course, *Asia Pacific Journal of Multidisciplinary Research*, Vol. 4, No. 4, November 2016, pp. 96-102

Ahmed, Kazi Afaq; Sharif, Nimra and Ahmad, Nawaz (2017), factors Influencing Students' Career Choices: Empirical Evidence from Business Students, *Journal of Southeast Asian Research* Vol. 2017 (2017), Article ID 718849, 15 pages DOI: 10.5171/2017.718849

Aid, Asutralian (2018). *Work Immersion: Real World Experience at Senior High*, The Asia Foundation. http://hdl.handle.net/11540/8971.

Alejandre, Cathleen Kay A., Carandang, Jhustine May B., Catena1, Rizalyn D., Deomampo, Ivy Ann Marsha R., Magpantay, Angelica R., Punzalan, Jean Mary C., Manongsong, Jiexel and Patena, Annalie D. (2015), Career Mismatch of Financial and Management Accounting Graduates in One Asian University, Asia Pacific Journal of Academic Research in Business Administration, Vol. 1 No. 1, April 2015, pp. 41-47

Alvi, Mohsin Hassan (2016). A Manual for Selecting Sampling Techniques in Research, MPRA Paper No. 70218, 23 March 2016, 57 pages

Aquino, Anania B. and Balilla, Leolanda A. (2015). Pre-Service Teachers' Licensure Examination Plans and Content Knowledge Asia Pacific Journal of Education, Arts and Sciences, Vol. 2 no. 2, April 2015, pp. 110-116 E-ISSN 2362-8030

APEC (2017). APEC Project HRD 02 2015: Global Competencies and Economic Integration: Final Report, Asia-Pacific Economic Cooperation. APEC Human Resources Development Working Group December 2017, 27 pages

Arayata, Ma. Cristina (2018). Senior high school grads job-ready: Deped, January 22, 2018 retrieved from https://www.pna.gov.ph.

Atkinson, Georgina (2016). Work-based integrated learning and work-integrated learning: fostering engagement with employers, National Center for Vocational Education Research, 2016, 23 pages ISBN 978 1925173 598

Australian Aid and Asia Foundation-Philippines (2019), Work Immersion: Real World Experience at Senior High, Coalition for Change Reform Story No. 8, 11 pages

Badoz, Rosalinda Dimapilis (2016). Employment Outlook for Senior High School Graduates of TVET Track, Speech in the 14th Human Resources and Skills Development Conference, online March 25, 2016, accessed from http://dole.gov.ph

Balkis, Murat; Arslan, Gomen and Duru, Erdinc (2016), The School Absenteeism among High School Student Contributing Factors, Educational Sciences: Theory & Practice, 16 (6), December 2016, pp. 1819-1831 DOI 10.12738/estp.2016.6.0125

Bencito, John Paulo (2015). CHED: College not for everyone, The Manila Standard, August 10, 2015 accessed from http://manilastandardtoday.com

Berger, Jean-Louis; Girardet, celine; Vaudroz, Cynthia and Crahay, Marcel (2018). Teaching Experience, Teachers' Beliefs, and Self-Reported Classroom Management Practices: A Coherent Network, SAGE Open (January-March) 2018: 1-12 DOI: 10.1177/2158244017754119

Bernarte, Racidon P. (2014). Academe-Industry Partnership in the Philippines: Nature, benefits, and Problems, Asia Pacific Higher Education Research Journal, Volume 1 No. 1.

Blazar, David and Kraft, Matthew A. (2017), Teacher and Teaching Effects on Students' attitudes and Behaviors, Educational Evaluation for Policy Analysis, 2017 March; 39(1): 146-170 doi;10.3102/0162373716670260.

Buchanan, John; Wheelahan, Leesa and Yu, Serena (2018). Increasing young people's adaptability and mobility: From competency approach and twenty-first century skills to capabilities and vocational streams, pp. 125-159 in Akiko Sakamoto and

Johnny Sung (Eds) Skills and the Future of Work Strategies for inclusive growth in Asia and the Pacific, International Labour Organization, 2018.

Buted, Dexter R., Felicen, Sevillia S. Manzano, Abigail I. (2014). A Correlation Study between Student Performance in Food and Beverage Services Course and Internship in F&B Department of Hospitality Business, International Journal of Academic Research in Business and Social Sciences June 2014, Vol. 4, No. 6 ISSN: 2222-6990

Caballero, Florencio R. and Cabahug, ruth G. (2015). The K to 12 Senior High School Technical-Vocational Livelihood Track is not at All Ready for Implementation. JPAIR Institutional Research, [S.I], v. 5, n. 1, June 2015, pp. 110-126 ISSN 2244-1816 available at http://philair.ph/publication

Canezo, Victor Jr. C. (2016). Awareness, Preparedness and Needs of the K to 12 Senior High School Modeling Implementation, International Journal of Education and Research Vol. 4 No. 7, July 2016, pp. 32-334 ISSN: 2411-5681

Cespedes, Raquel Chafloque; Horna, Aristides Vara; Odar, Dennis Lopez; Huaranca, Ines Santi; Rosillo, Alberto Diaz and Gonzales, Zaida Asencios (2018). Absenteeism, Presentism and Academic Performance in Students from Peruvian Universities, Propositos y Representaciones, Ene-Jun. 2018, Vol. 6, No. 1: pp. 109-133 http://dx.doi.org/10.20511/pyr2018.v6n1.177

Chetty, R., Friedman, J. N. and Rockoff, J. E. (2014). Measuring the Impacts of Teachers I: Evaluating Bias in Teacher Value-Added Estimates. American Economic Review, 2014; 104(9): 2593-2632

CHED (2008). Memorandum Order No. 14, Series of 2008, Policies and Standards for Bachelor of Science Agriculture (BSA). Program, Commission on Higher Education, 46 pages

Clayton, Janine Austin and Tannenbaum, Cara (2016). Reporting Sex, Gender, or Both in Clinical Research?, Journal of the American Medical Association, November 8, 2016 Volume 316, Number 18: 1863-1864

Cocal, Christopher J. Marcellano, Gerturudes (2017). Challenges of the K-12 Program Implementation in the Public Elementary Schools of Pangasinan, Philippines, International Journal of Multidisciplinary Research and Development, Volume 4; Issue 7; July 2017; Page no. 141-147 Online ISSN: 2349-4182

Cohen, D. K. (2011). Teaching and its predicaments. Cambridge, MA: Harvard University Press.

Curran, Thomas; Hill, Andrew P.; Appleton, Paul R.; Vallerand, Robert J. and Standage, Martyn (2015). The psychology of passion: A meta-analytical review of a decade of research on intrapersonal outcomes, Motiv Emot, 07 June 2015, pp. DOI: 10.1007/s11031-015-9503-0

Daggett, Willard R. (2010). Preparing Students for Their Technological Future, International Center for Leadership in Education, May 2010, 13 pages

DepEd (2016). Department Order No. 3, s. 2016 - Hiring of Guidelines for Senior High School (SHS) Teaching Positions Effective School Year (SY) 2016-2017, Department of Education, 21 January 2016, 32 pages

DepEd Department Order No. 51, 2017, Amended Qualification Standards for Senior High School Teaching Positions in the Technical-Vocational-Livelihood Track and Other Clarifications on the Hiring Guidelines, Department of Education, Pasig, Metro Manila

DepEd (2019). Technology and Livelihood Education (TLE) and Technical-Vocational-Livelihood (TVL) Track Curriculum, Department of Education retrieved online on March June 22, 2019 from https://www.deped.gov.ph

Edukasyon.ph (2019). Technical-Vocational-Livelihood (TVL) Track retrieved online on June 29, 2019 from https://www.edukasyon.ph

Eeuwijk, Peter van and Angehrn, Zuzanna (2017), How to Conduct a Focus Group Discussion (FgD) Methodological Manual, Swiss Tropical and Public Health Institute/Swiss TP, November 2017, 16 pages

Egalite, Anna J. (2016). How family background influences students achieving: Can schools narrow the gap? Education Nest, 16(2).

Elis, Jhemson C. (2016). Effects of absenteeism to the Learning Performance of Fourth Year Students of one National High School in Batangas City, Philippines, Asia Pacific Journal of Education, Arts and Sciences, Vol. 3 No. 3, July 2016, pp. 86-93 E-ISSN 2362-8030

Fioriello, Patricia (2019). 10 Things You Should Know About K to 12 Implementation in Different Countries, Critical Issues in Education retrieved from https://drpfconsults.com

Fischer, Hans E., Boone, William J. and Neumann, Knut (2014). Quantitative Research Designs and Approaches, 83 pages retrieved at https://www.researchgate.net/publication/266323766

Fitzsimons, Patrick (2018). Human Capital Theory and Education in Michael A Peters (Ed) Encyclopedia of Educational Philosophy and Theory, 2017th Edition

Formosa, Paul (2011). A Life Without Affects and Passions: Kant on the Duty of Apathy, Pahhesia No. 13, pp.96-111

Gamboa, Rey (2016). K-12 and skills mismatch, March 28, 2016 retrieved from https://www.philstar.com/business

Gestiada, Geleena; Nazareno, Allen and Villanueva, Ranzivelle Marianne Roxas (2017). Development of a Senior High School Career Decision Tool Based on Social Cognitive Career Theory, Philippine Journal of Science, 146 (4): 445-455, December 2017, ISSN 0031-7683

Green, Francis (2016). Skills Demand, Training and Skills Mismatch: A Review of Key Concepts, Theory and Evidence, Future of Skills & Lifelong Learning Evidence Review, Foresight, Government Office for Science, August 2016, 33 pages

Gualiza, Manilyn R., Naelga, Sofia C. and Blanco, Jennefer P. (2017). Teachers' Qualification, Facilities and Competencies of the Grade 7 Students in Technology Livelihood Education of San Vicente National High School: Basis for Intervention Program, The Turkish Online Journal of Design, Art and Communication TOJDAC December 2017 (Special Edition), pages 1299-1334 DOI No: 10.7456/1070DSE/105

Guzman, Maria R. T. de (2017). Friendship, peer influence, and peer pressure during the teen years, University of Nebraska-Lincoln Extension, Institute of Agriculture and Natural Resources retrieved from http://extension.unl.edu

Hammond, Linda Darling; Flook, Lisa; Harvey, Channa Cook; Barron, Brigid and Osher, David (2019): Implications for educational practice of the science of learning and development, Applied Developmental Science, pp. 1-44 DOI: 10.1080/10888691.2018.1537791

Horn, Thelma S. (2019). Competence Motivation Theory in Robert C. Eklund and Gershon Tenenbaum (Eds.). Encyclopedia of Sport and Exercise Psychology, DOI: http://dx.doi.org/10.4135/9781483332222.n70

Humal, Katrin (2013). Education-occupation mismatch and its effect on unemployment in Sweden, Lund University, 31 May 2013, 33 pages

ILO (2016). Skills for the Future, Background Note for the Special Plenary Debate, supplements the Report of the Director-General to the 16th Asia-Pacific Regional Meeting, International Labor Organization, Geneva, 2016, 11 pages

ILO (2017). Decent Work Country Diagnostics: Philippines 2017, International Labour Organization, Country Office for the Philippines October 2017, 180 pages

Ishola, Ajibola Abdulrahamon; Adeleye, Samuel Toyin and Tanimola, Funmi Adeola (2018). Impact of educational, Professional Qualification and Years of Experience on Accountants' Job Performance, Journal of Accounting and Financial Management ISSN 2504-8856 Vol. 4 No. 1 2018

JICA (2017). Data Collection Survey on Industrial Human Resource Development in the Philippines: Final Report, Japan International Cooperation Agency, February 2017, 248 pages

K12Philippines (2015). What is K-12's Technical-Vocational-Livelihood Track? Retrieved from http://k12philippines.com

Keogh, John J.; Maguire, Theresa and O'Donoghue, John (2015). Graduate Work-Readiness in the 21st century, Higher Education in Transformation Conference, Dublin, Ireland, 2015, pp. 385-395

Kielmann, Karina; cataldo, Fabian and Seeley, Janet (2012). Introduction to Qualitative Research Methodology: A Training Manual, Department for International Development (DfID), December 2012, 83 pages

Kini, Tara and Podolsky Anne (2016). Teaching Experience and Teacher effectiveness, American Educator, Fall June 2016, 6 pages

Komakech, Robert Agwot and Osuu, John Robert (2014). Students' Absenteeism: A Silent Killer of Universal Secondary Education (Use) in Uganda, International Journal of Education and Research Vol. 2 No. 10 October 2014, pp. 417-436.

Laguador, Jake M. (2013). Developing Students' Attitude Leading Towards a Life-changing Career, Educational Research International, Vol. 1 No. 3 June 2013, pp. 28-33 ISSN-L: 2307-3713, ISSN: 2307-3721

Lau, Poh Li; Baranovich, Diana-Lea, Leong, Kwan Eu (2018). Enhancing work readiness: A review on career development of adolescents in Malaysia. International Journal of Education, Psychology and Counseling, 3(8), 13-20.

Liang, Yuan (2016), Career Decision Making Among Young Generations in China, A Master's Thesis submitted to the Kent State University College of Education, Health, and Human Services, Fall 2016, 177 pages

Limjuco, Renan P., Diamante, Roberto T., Laya, Mona L., Canda, danilo M., Dayon, Charlie A., Hontiveros, Luzviminda C., Pioc, Zarina Christine L. and Fabros, Minerva T. (2018). Career Choice of students: Basis for Curricular Offering of senior High Schools in Region XI, September 2018, 10 pages

Macha, Wilson; Mackie, Christopher and Magaziner, Jessica (2018) Education in the Philippines, Education system Profile, World Education News and Review (WENR), March 6, 2018 retrieved at https://wenr.wes.org

Magno, Carlo (2011). Analysis of the Basic Education of the Philippines: Implications for the K to 12 education Program. SEAMEO INNOTECH and AUSAID, October 19, 2011, 32 pages

Makuloval, Aimzhan Tulegenovna; Alimzhanova, Gaukhar Mukhtashevna; Bekturganova, Zhanar Mustafaevna;Umirzakova, Zaure Asetovna; Makulova, Laura Tulegenovna and Karymbayeva, Kulzinat Meirambaevna (2015). Theory and Practice of Competency-Based approach in Education, International Education Studies; Vol. 8, No. 8; July 28, 2015, pp. 183-192 doi: 10.5539/ies.v8n8p183

Mohammad, Nhelbourne K. (2016). The Perception of the Parents and Students on the Implementation of K-12 Basic Education Proagram in the Philippines,

International Conference on Education (IECO) Proceeding, Vol. 1, July 2016, pp. 481-503 ISBN: 978-602-6988-21-8

Moldes, Vangie M., Biton, Cherry Lyn L., Gonzaga, Divine Jean and Moneva, Jerald C. (2019), studnts, Peer Pressure and their Academic Performance in School International Journal of Scientific and research Publications, Volume 9, Issue 1, January 2019, pp. 300-312 ISSN 2250-3153

Moya, Jose Roland A. (2018). Job-skills Mismatch in the Philippines and the advent of Industry 4.0, Employers' Confederation of the Philippines, 60 pages

Naelga, Sofia C. and Blane, Aelyn R. (2017). Identification of the Technical-Vocational Track Strands to be Implemented for Senior High Schools at the District of Claveria-1, Claveria, Misamis Oriental, Mindanao, Philippines, 9000, The Turkish Online Journal of Design, Art and communication TOJDAC April 2017 Special Edition, pp. 535-543.

Noche, Yen Kyla H., Guinto, Monique Bridget P., Paulo, Dune Myra Ellis M., and Sahagun, Charlene M. (2017). The Views of Twelve (12) Companies in Makati City on Hiring Senior High School Graduates, International Conference on Law, Business, Education and Corporate Social Responsibility (LBECSR-17) Jan. 23-24, 2017 Manila (Philippines), pp.151-155

Ocampo, Dina S. (2014). The K to 12 Curriculum, Department of Education, January 30, 2014, 18 pages

Okabe, Masayoshi (2013), Where does Philippine Education Go?: The K to 12 Program and Reform of Philippine Basic Education, Institute of developing Economies (IDE) Discussion Paper Series No. 425, August 2013

Olamide, Salami Olufunmilayo and Olawaiye, Salami Oluwaseunlawaiye (2013). The Factors Determining the Choice of Career Among Secondary School Students, The International Journal of Engineering and Science (IJES), Volume 2, Issue 6, 18 June 2013, pp. 33-44 ISSN(e): 2319-1813 ISSN (p): 2319-1805

Orale, Roland L. (2012). Redirecting Academe-Industry Partnership for Countryside Development, The Countryside Development Research Journal, An official peer-reviewed journal published by Samar State University

Orbeta, Aniceto Jr. C., Lagarto, Marites B., Ortiz, Ma., Danica Aisa P. and Potested, Maropsil V. (2018), Senior High School and the Labor Market: Perspectives of Grade 12 Students and Human Resource Officers, Discussion Paper Series No. 2018-49 Philippine Institute of Development Studies, December 2018, 78 pages

Pajares, Glenn G.; Yadao, Marilou; Bongcales, Marietta; Avenido, Jessica; Roda, Luzviminda; Foronda, Jojit; Villeta, Ricky and Susada, Jesse (2018). The Sectoral and Skills Mismatch between the Senior High School Program and the Top In-DEmand Jobs and Projected In-demand Jobs in the Province of Cebu, Philippines, Journal of Arts, Science & Commerce, Vol. IX, Issue 2, April 2018, pp. 187-199 DOI: 10.18843/rwjasc/v9i2/24

Palafox, Quennie Ann J., Lorenzo, Teresita P. and Palafox, Levy J. (2018). Perceptions of the Senior High School Students on their Employability Skills, Presented at the

DLSU Research Congress 2018 De La Salle University, Manila, Philippines June 20 to 22, 2018, 6 pages

Pascuala, Nancy T. (2014). Factors Affecting High School Students' Career Preference: A Basis for Career Planning Program, International Journal of Sciences: Basic and Applied Research, Volume 16, No.1, pp.1-14

PASEI (2016). Job Skills Mismatched may hit the Philippine Growth, Philippine Association of Service Exporters, Inc. February 23, 2016 retrieved from https://www.pasei.com

Pilar, John Gerlad Arbias (2017). Technical-Vocational Students' Reading Competence and Technical Skills in Iloilo City, Philippines, Asia Pacific Journal of Multidisciplinary Research, Vol. 5, No. 2, May 2017, 24-29 E-ISSN 2350-8442

Pourjamal Ghouyjagh, Hakime; Sotoudehnama, Elaheh and Faghih, Esmail (2017) On the impact of teaching experience on EFL instructors' self-assessment of their instructional effectiveness, Iranian Journal of English for Academic Purposes ISSN: 2476-3187 IJEAP, 20/12/2017 vol. 6 issue 1, pp. 50-70

PSA (2019). Employment rate in January 2018 is estimated at 94.8 percent, Reference Number: 2019-037, March 7, 2019 Philippine Statistics Authority retrieved from https://psa.gov.ph

Richmond, Aaron S., Murphy, Bridget C., Curl, Layton S. and Broussard, Kristin A. (2015), The Effect of Immersion Scheduling on Academic Performance and Students' Ratings of Instructors, Teaching of Psychology, Volume: 42 Issue: 1, January 1, 2015, page(s): 26-33 https://doi.org/10.1177/0098628314562675

Riddle, Dorothy I. (2018). Resilience and Work Life Success, Service-Growth Consultants Inc, September 2018, 8 pages

Rihova, Hana (2016). Using Labor Market Information: Guide to Anticipating and Matching Skills and Jobs, Volume 1, European Training Foundation/ European Centre for the Development of Vocational Training International Labour Office, 2016, 128 pages ISBN 978-92-9157-642-5 doi:10.2816/597770

Rivera, Rodrigo C. (2018). Curriculum Development and K-12 Challenges in the Philippines: A Reflexive Case Analysis towards Redesigning Language and Literature Education in College, The International Academic Forum (IAFOR) International Conference on Education - Hawaii 2018 Official Conference Proceedings, 16 pages.

Robertson, Tony and Watts, Eleanor (2016). The importance of age, sex and place in understanding socioeconomic inequalities in allostatic load: Evidence from the scottish health Survey (2008-2011), BMC Public Health (2016) 16:126DOI 10.1186/016-2796-4

Rodriguez, Ruth R. (2017). DOLE Position on K to 12 Work Immersion Program: Protection for SHS Students on K to 12 Work Immersion Program, DOLE-Bureau of Local Employment

Rolfe, Healther; Portes, Jonathan and Sharp, Nathan Hudson (2015). Local authority schemes supporting people towards work, National Institute for Social and Economic Research, January 2015.

Rutkowski, Jan J. (2015). Employment and Poverty in the Philippines, Philippine Social Protection Note, The World Band and Australian Aid, Technical Report No. 9, December 2015, 11 pages

Sarmiento, Danilo H. and Orale, Ronald L. (2016). Senior High School Curriculum in the Philippines, USA, and Japan, Journal of Academic Research 01(3), pp. 12-23

Sarvi, Jouko; Munger, Fredi and Pillay, Hitendra (2015), Transitions to K-12 Education Systems: Experiences from Five Case Countries, Asian Development Bank, Mandaluyong City, Philippines, 74 pages accessed from https://www.adb.org

SEAMEO INNOTECH (2016), K to 12 in Southeast Asia: Benchmarking for Excellence, SEAMEO IINOTECH Research Updates, 4 pages

Singh, Ajay S. and Masuku,, Micah B. (2014). Sampling Techniques and Determination of Sample Size in Applied Statistics Research: An Overview, International Journal of Economics, Commerce and Management, Vol. II, Issue 11, Nov. 2014, pp. 1-22 ISSN 2348 0386

Su, Ming-Shang; Chang, Ta-Chun; Wu, Chin-Chang and Liao, Chin-Wen (2016). Factors Affecting the Student Career Decision-Making of Junior High School students in Central Taiwan Area, International Journal of Information and Education Technology, Vol. 6, No. 11, November 2016 pp. 843-850 DOI: 10.7763/IJIET.2016.V6.803

Spehar, Ivan; Forest, Jacques and Stenseng, Frode (2016), Passion for Work, Job Satisfaction, and the Mediating Role of Belongingness, Scandinavian Journal of Organizational Psychology 8 (1) May 2016, pp 17-25

Sung, Johnny (2018). Business model, skills intensity and job quality for inclusive society, pp. 24-40 in Akiko Sakamoto and Johnny Sung (Eds) Skills and the Future of Work Strategies for inclusive growth in Asia and the Pacific, International Labour Organization, 2018

Taherdoost, hamed (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research, International Journal of Academic research in Management (IJARM(, Vol. 5, No. 3, 2016, Page: 28-36,

Tannenbaum, Cara; Greaves, lorraine and Graham, Ian D. (2016). Why sex and gender matter in implementation research, BMC Medical research Methodology (2016) 16:145, pp. 1-9 DOI 10.1186/s12874--16-0247-7

Taylor, Lewis A. III (2012). Cutting Class harms Grades, Decision Sciences Journal of Innovative Education, Volume 10 Number 1 January 2012, pp. 49-61

TESDA (2011). Trainers Methodology ™ Level I (Trainer/Assessor), Training Regulations, May 2011, Technical Education and Skills Development Authority, East Service Road, South Superhighway, Taguig City, Metro Manila

TESDA (2016). Philippine TVET Qualification and certification System, technical Education and Skills Development Authority

TESDA (2018), Reviewing the Philippines' Top Industries: Skilled Labor Force Made the Country Best for Investments, labor Market Intelligence Report, issue No. 2, Series of 2018, July 2018, 30 pages

Tsang, Siny; Royse, Colin F. and Terkawi, Abdullah Sulieman (2017), Guidelines for developing, translating, and validating a questionnaire in perioperative and pain medicine, Saudi Journal of Anaesthesia, 2017 May; 11(Suppl 1): s80-S89 doi: 10.4103/sja.SJA_203_17

UNESCO-ILL (2017). Lifelong Learning in Transformation: Promising Practices in Southeast Asia (Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste and Vietnam), UIL Publications Series on Lifelong Learning Policies and Strategies No. 4 - Rika Yorozu, Editor, UNESCO Institute for Lifelong Learning 2017, 62 pages

Vallerand, Robert J. and Verner-Filion, J. (2013). Making people's life most worth living: On the importance of passion for positive psychology, Terapia Psicologica, 31, 35-48.

Vallerand, Robert J., Paquet, Y., Philippe, F. L., and Charest, J. (2010). On the role of passion for work in burnout: A process model, Journal of Personality, Vol. 78, pp. 289-312.

Villena, Wynxzylden Malabag (2017). Guiding our senior high-school students on their career path, Business Mirror, February 2, 2017 retrieved from https://businessmirror.com.ph

Vomberg, Arnd, Homburg, Christian and Bornemann, Torsten (2015). Talented peopleand strong brands: The contribution of human capital and brand equity to

firm value, Strategic Management Journal, 36(13). December 2015, pp. 2122-2131 doi: 10.1002/smj.2328

Waddell, Kerry; Gauvin, Francois-Pierre and Mattison, Cristina A. (2018). Rapid synthesis: Fostering K-12 students' global competencies, Hamilton: McMaster health Forum. Forum+, 1 April 2018 ISSN 2292-7999 (online)

World Bank (2018). Philippine Economic Update: Investing in the Future, Macroeconomics, Trade and Investment Global Practice - East Asia and Pacific Region, April 2018, 63 pages

Yin, Michelle; Condell, Larry; Ogut, Burhan and Cronen, Stephanie (2018). Teacher Effectiveness in Adult Education: The Importance of Teacher Background Qualifications for Student Learning, American Institutes for Research pages 1-40.

APPENDICES

Appendix 1

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City

We Innovate. We Build. We Serve.

JAS-ANZ
AJA REGISTRARS ISO 9001:2008 Acc. No.: M2700903PM
Certificate No.: AJA17.1013

March 15, 2019

DEPED DIVISION CATBALOGAN CITY
RECEIVED
No. 1106 DATE 3/15/19
BY. [illegible]
RECORD'S SECTION

CARMELINO P. BERNADAS, Ph.D., CESO VI
City Schools Division Superintendent
Department of Education
Division of Catbalogan City

Sir:

Greetings!

The undersigned is a Doctorate student of Samar State University under the Graduate Studies Program in Doctor of Philosophy in Educational Management (PhD-EM), who is currently conducting a Dissertation entitled "***Competencies of TVL Senior High School Graduating Students***". In line with this, I would like to ask permission from your authority to utilize the following schools under your supervision whose TVL students are my target participants of my mentioned study.

In consonance to this, the researcher needs 263 G12 TVL students, 24 students from AGTNHS, 14 students from CCAIS, 23 students from CNCHS, 83 students from GNHS, 6 students from PNHS, 38 students from SNS, and 75 students from SNHS. Schools with their respective Principals and School Heads, as follows:

Antonio G. Tuazon National High School - **Mr. RHODMANRICK V.ROMA**-*School Head*
Catbalogan City Agro-Industrial School - **Mr. ARCHIE N. FABILLAR** - *Principal I*
Catbalogan National Comprehensive High School - **Mr. ROLEX S. JAKOSALEM** - *School Head*
Guinsorongan National High School - **Mr. AYLMER M. ARELLON** - *Principal IV*
Pangdan National High School - **Mr. ALICIO C. JAMIN** - *School Head*
Samar National School - **Ms. RUTH D. CABANGANAN** - *Principal IV*
Silanga National High School - **Mr. RHUM O. BERNATE**–*Principal I*

Attached herewith is my survey questionnaire that will be used in the data gathering. The result of which will be instrumental in the improvement of TVL Track in Catbalogan City Division for policy development and redirection. Furthermore, I would like to ask permission to administer the instrument on March 18-22, 2019 on the named respective schools.

I am hoping for your affirmative response on this matter. Thank you very much Sir and More Power.

Respectfully yours,

JANICE R. MANICANE
Post-Graduate Student-Researcher

Noted:

ESTEBAN A. MALINDOG, JR., Ph. D.
Dean, College of Graduate Studies

APPROVED:

CARMELINO P. BERNADAS, Ph.D., CESO VI
Catbalogan City Schools Division Superintendent

Republic of the Philippines
DEPARTMENT OF EDUCATION
Regional Office No. VIII (Eastern Visayas)
SCHOOLS DIVISION OF CATBALOGAN CITY
Catbalogan City

March 15, 2019

JANICE R. MANICANE
Post-Graduate Researcher
Samar State University
Catbalogan City

Dear Ms. Manicane,

Greetings!

This is in consonance with your letter received by this Office dated March 15, 2019 requesting permission to visit the secondary schools to gather data from the SHS students and school heads for your dissertation entitled **"Competencies of TVL Senior High School Graduates".**

Please be informed that permission to visit the is granted, on condition that 1) this Office will be provided with a research brief specifying the data collection procedures, timeline, and participants involvement; 2) the identified sample will be properly informed of the activity; 3) data collection shall be done during the respondents' vacant period; 4) the data that will be gathered shall be treated with utmost confidentiality; and 5) this Office shall be provided with a copy of the results of the study.

Thank you and hoping for compliance of the above-mentioned conditions.

Very truly yours,

CARMELINO P. BERNADAS, Ph.D., CESO VI
Schools Division Superintendent

RELEASED
NO. 1210 DATE 3/26/19
BY:
RECORD'S SECTION

2nd Floor, Lachoo Bldg., Del Rosario St.
Email: depedcatbalogan@deped.gov.ph
Facebook Page: DepEd Catbalogan City Division
Catbalogan City
Telefax: (055) 251-3196

Appendix 2

Computation for the Identification of Number of Respondents per Stratum

Steps in Proportionate Stratified Random Sampling:

1. Compute for the sample size using Yamane's formula $n=N/(1+Ne^2)$, where n represents the sample size, N for population size, and e as margin of error set at 0.05, as common to educational researches.

   Given: N = 768

   $n =768/(1+768)*0.05^2)$
   $n=768/(1+768*0.0025)$
   $n=768/(1+1.92)$
   $n=768/2.92$
   $n=263$

2. Compute for the multiplier proportion(p) by dividing the sample size (n) with population size (N)

   $p=263/768$
   $p= 0.342$

3. Multiply the proportion value 0.342 to the population size (N) in each stratum to find the sample size (n) from each stratum.

	N	n
AGTNHS	69*0.342	24
CCAIS	40*0.342	14
CNCHS	66*0.342	23
GNHS	243*0.342	83
PNHS	19*0.342	6
SNS	111*0.342	38
SNHS	220*0.342	75
TOTAL	**768**	**263**

Appendix 3

SURVEY QUESTIONNAIRE

Dear respondents:

May I respectfully request your spare time and cooperation to respond to some questions concerning your profile, competencies and actual experiences in your work emersion from your chosen TVL Strand/s. The researcher would like to inform you that your responses on this questionnaire will be used in the formulation of plans and programs for the enhancement of the TVL Track. Rest assured that all information that you will reveal on this questionnaire will be treated with utmost confidentiality.

I. RESPONDENT'S PROFILE

1. Name of Respondent (Optional): _____

2. Age: _____ 3. Sex: ___ Male ___ Female

4. TVL Strand/s Chosen or Specialized (Please check your specialized TVL strand)

- ☐ Housekeeping
- ☐ Bread and Pastries Making
- ☐ Consumer Electronic Servicing
- ☐ Electrical Installation & Maintenance
- ☐ Food and Beverage
- ☐ Fish Processing
- ☐ Computer Programming
- ☐ Agro-Crops Production
- ☐ Electronic Product Assembly Servicing
- ☐ Cookery
- ☐ Dressmaking
- ☐ Food Processing
- ☐ Beauty Nail Care
- ☐ S. M. A. W.
- ☐ Care Giving
- ☐ Animal Production
- ☐ Wellness Massage

5. NC II Certification (if there is any) Yes _____ Where taken? _____
If no, have you taken NCII Assessment? _____ No. of times taken _____

Part II. What factor/s that motivated you to choose the TVL strand/s? (Kindly put number in the box: **1:** as the most influential to **10**: with least influence on your studies)

- ☐ The school is near to our residence/home.
- ☐ The skills learned has high local demand.
- ☐ I want to work and have an immediate income to help my parent financially.
- ☐ My parents cannot financially afford to send me to other schools.
- ☐ The field I specialized is my passion (or I really wanted).
- ☐ It is the choice of my parents.
- ☐ Because of its demand in the domestic and international labor market.
- ☐ It is the only strand offered by the school where I enrolled.
- ☐ It is peer influence.
- ☐ It is friend/s influence.

Others, please specify _____

Part III – Industry Work Immersion

1. Specialization: _____
   Did you have experienced Work Immersion? _____ Yes _____ No
   If Yes, what establishment/industry? _____
   Where? _____
   Nature of work: _____

2. No. of hours of Work Immersion: _____ days _____ months_____

3. While in the industry immersion, have you experience mentoring/coaching?
   _____ Yes _____ No , If yes, from whom?
   _____ Teacher / Coordinator
   _____ Industry Supervisor
   _____ Others, please specify

4. Assessment of Learning:

Is there an assessment conducted after training? _____ Yes _____ No

If Yes, who conducted the assessment?

_____ Trainer

_____ TESDA Assessor

_____ Others please specify

_____

Signature

THANK YOU FOR YOUR COOPERATION
AND
GOD BLESS YOU!!!

JANICE R. MANICANE
Student-Researcher

Appendix 4

TRAINING REGULATION ON Agriculture Crops Production (NC II)
(source: tesda.gov.ph)

LIST OF TOOLS, EQUIPMENT AND MATERIALS

AGRICULTURAL CROPS PRODUCTION NC II

Recommended list of tools, equipment and materials for the training of 25 trainees for Agricultural Crops Production NC II

TOOLS		EQUIPMENT		MATERIALS	
QTY.		QTY		QTY.	
25 pcs.	• Budding knife	5 units	• Soil moisture and pH meter	25 pcs.	• Petri dish
12 pcs.	• Bolo	5 units	• Wheel barrow	25 pcs.	• Calculator
5 pcs.	• Basin	1 unit	• Comb-tooth harrow*	5 units	• Puncher
10 pcs.	• Broomstick	1 unit	• Hand tractor*	100 pcs.	• Seedling tray with different holes
25 pcs.	• Pail-12Li.	5 units	• Knapsack sprayer	10 m.	• Agri bag/plastics
Cutting tools		5 units	• Hand sprayer	1000 pcs.	• PE bag with different sizes
5 pcs.	○ Pruning saw	1 unit	• Power sprayer	10 sacks	• Growing media (50 kg.)
5 pcs.	○ Hedge shear	2 units	• Grass cutter*	1 bot.	• Rooting hormone
5 pcs.	○ Kitchen knife	5 units	• Overhead sprinkler	25 pcs.	• Basket
5 pcs.	○ Cutter	5 units	• Sprinkler mist	20 m.	• Fish net
5 pcs.	○ Pliers	5 units	• Button dripper	5 pcs.	• Strainer
25 pcs.	○ Pruning shears	1 unit	• LCD/Overhead projector	10 kilos	• Plastic sheet

Digging tools		1 unit	• Post harvest treatment equipment*	10 kilos	• Fertilizers
5 pcs.	○ Steel bar	1 unit	• Desktop computer/laptop	1 kilo	• Flower inducer
5 pcs.	○ Pick mattock	25 units	• PPE	2 pcs.	• Board marker
5 pcs.	○ Hole digger			1 unit	• White board
5 pcs.	○ Garden hoe			1 pc.	• Eraser
5 pcs.	○ Shovel			1 bot.	• Pesticides
Crates				1 roll	• Rope
25 pcs.	○ Wooden crates			1 box	• Rubber band
25 pcs.	○ Plastic crates			5 units	• Seed box
25 pcs.	○ Styro crates			100 pcs.	• Seedlings assorted
Harvesting tools				1 box	• Detergent soap
25 pcs.	○ Scythe			1 bundle	• Bamboo stick
13 pcs.	○ Harvesting pole			1 ream	• Bond paper
2 pcs.	○ Ladder			1 box	• Clips
25 pcs.	○ Hand trowel			1 set	• First aid supplies
25 pcs.	• Hard Hat			5 pcs.	• Permanent pens
2 pcs.	• Measuring cups			1 roll	• Mulching materials
12 pcs.	• Sprinklers			1 roll	• String
1 pc.	• tools cabinet			1 roll	• Plastic twine
1 pc.	• Plow			5 pcs.	• Brush
25 pcs.	• Scissors			1 pc.	• Measuring tape
5 pcs.	• Rake			5 pcs.	• Meter stick
1 unit	• Soil auger			2 pcs.	• Sharpening stone

CERTIFICATE OF ORIGINALITY

This is to certify that the research paper with the following specifics has been checked originality using the TURNITIN platform.

Title: COMPETENCIES OF GRADUATING TVL SENIOR HIGH SCHOOL STUDENTS
Proponent/s : JANICE R. MANICANE
Program: Doctor of Philosophy (Ph.D.), major in Educational Management
Date of Submission of **TURNITIN:** May 17, 2019
Originality Percentage: 15% (with Attached Result)

This is to further certify that all pertinent sources from which ideas and extracts have been taken were duly acknowledge and cited. As it is, the research is free from any plagiarism and may be eligible for possible publication in any reputable peer reviewed and refereed journal.

Processed by

Anabelle T. Acaso
Research Assistant

COMPETENCIES OF GRADUATING TVL STUDENTS

IN CATBALOGAN CITY DIVISION

By: Janice R. Manicane

Submission date: 24-Jan-2020 01:34PM (UTC+0800)

Submission ID:1245756022

File Name: TVL_ Competencies.docx (261.36K)

Word count: 32416

Character count: 176511

tvl competencies

ORIGINALITY REPORT

15%	11%	2%	10%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.econstor.eu Internet Source	1%
2	hrmars.com Internet Source	<1%
3	tesda.gov.ph Internet Source	<1%
4	Submitted to Manuel S. Enverga University Student Paper	<1%
5	www.apjmr.com Internet Source	<1%
6	uruae.org Internet Source	<1%
7	Submitted to Our Lady of Fatima University Student Paper	<1%
8	Submitted to Polytechnic University of the Philippines - Sta. Mesa Student Paper	<1%
9	medwelljournals.com	

We Innovate. We Build. We Serve.

Republic of the Philippines
SAMAR STATE UNIVERSITY
Catbalogan City

Certificate No.: AJA17.1013

CERTIFICATION

This is to CERTIFY that the Dissertation of Janice R. Manicane entitled, "**Competencies of Graduating TVL Senior High School Students**", has undergone editing by the undersigned.

This Certification is issued for whatever legal purpose it serves the requesting party.

Issued this 20th of May 2019 at Catbalogan City

DEBORAH T. MARCO, Ph.D.
Part Time Professor
SSU

CURRICULUM VITAE

CURRICULUM VITAE

PERSONAL BACKGROUND

Name	:	JANICE REBATO-MANICANE
Home Address	:	V&G Sto. Niño San Andres, Catbalogan City, Samar
Place of Birth:		Las Navas Northern Samar
Date of Birth	:	June 26, 1985
Religion	:	Roman Catholic
Civil Status	:	Married
Present Position	:	SST- III
Office Address	:	Samar National School San Francisco St. Catbalogan City, Samar
Eligibility	:	Licensed Professional Teacher (LPT)
Husband	:	Reynaldo T. Manicane
Children	:	Princess Jhareyn R. Manicane, 10 Queenie Margarette R. Manicane, 9 Precious Jewel R. Manicane, 6

EDUCATIONAL BACKGROUND

Post-Graduate	:	Doctor of Philosophy (Ph.D.) Major in Educational Management Samar State University Catbalogan City, Samar 2016-2019
Graduate	:	Master in Education (MEd) – THE Samar State University Catbalogan City, Samar 2012-2014

College	:	Bachelor of Secondary Education Major in TLE Samar State University Catbalogan City, Samar 2004-2008
Secondary	:	Wright National High School (WNHS) Paranas, Samar 1998-2002
Elementary	:	Pabanog Elementary School Pabanog Paranas, Samar 1992-1998

WORK EXPERIENCE

Secondary School Teacher III
Samar National School
Catbalogan City, Samar

Secondary School Teacher I-II
Bioso Integrated School
Bioso Zumarraga, Samar

Secondary School Teacher
St. Mary's College of Catbalogan
Catbalogan City, Samar

Secretary
Samar Chamber of Commerce and Industry (SCCI)
Catbalogan City, Samar

"But seek first the kingdom of God and his righteousness, and all these things shall be added unto you". Matthew 6:33

To God be all the glory!

LIST OF TABLES

LIST OF TABLES

LIST OF FIGURES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF APPENDICES