



Technical-Vocational-Livelihood Track Teachers on Students' National Certificate Performance

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ABSTRACT

The study determined the relationship of Technical-Vocational-Livelihood track teachers' profile and performance on the students' National Certificate performance in the Division of Bulacan during the school year 2018-2019. Using the descriptive correlational design of research with 63 TVL track teachers and 429 senior high school students in 15 public secondary schools offering TVL strands, the study revealed the following findings: a highly significant correlation existed between age and educational attainment of the TVL track teachers and students' performance in Technical Education and Skills Development Authority NC; however, no significant correlation existed between sex of the TVL teachers and students' performance in TESDA NC. Also, a highly significant relationship existed between TVL Track teachers' performance on Classroom Observation Tool ratings and trainings and seminars attended by the teachers and the students' performance in TESDA NC; on the other hand, a significant relationship existed between TVL track teachers' performance on Individual Performance Commitment and Review Form ratings and winnings in competitions and students' performance in TESDA NC.

Introduction

In the field of education, learning has been one of the oldest endeavors every individual wants to achieve for the full development and progress of the nation. Now, it has been considered education as a part of the development of every person to become better, smarter, and stronger.

However, content and modes of training could be different for various fields and experience of it is a "plus" for teachers to make lessons authentic. Authenticity of the content and training would then help in applying these lessons in real life situations effectively and efficiently.

Students are acquiring skills from the concept up to the application. They will be equipped with the necessary skills if they personally do it. For this reason, the Department of Education keeps pushing for more students to acquire skills to better prepare them for life in the workforce. It is important to acquire the necessary knowledge and skills to have a successful life. Teachers must concentrate on the self-development of students. They play an essential role in shaping the future of students.

Technical-Vocational-Livelihood track teachers were advised to hone their technical vocational skills aside from the usual seminars and training where their potential can be further enhanced. Quality teachers are the most crucial factor that affects the quality of education. TVL students must be trained to become skillful individuals to work through their own experience with the help of their TVL track teachers.

In an increasingly competitive world, education will continue to become increasingly prevalent. As stated by Pilar (2017), the Philippines aims to become the next newly industrialized country. As a result, there is a desire for the education sector to develop individuals that are proficient in technology and capable of acquiring ideas, seeing patterns, and solving non-routine issues. Students at technical-vocational schools play significant roles in contributing to the country's economic growth, and most contract workers abroad are technically trained.

Guevarra (2017) stated that education has grown to be the wellspring of man's ever-changing desires for development. Highly competent workers can help enhance Filipino production locally as well as globally. This means that education is more than simply theories; it is also about utilizing skills to innovate, improve, and advance in their job, particularly to prepare each student to be internationally competitive in specialized skills, expertise, and competence.

The purpose of technical-vocational education training is to provide students with information, perspectives, and real-world abilities for long-term growth. The training of technical-vocational education students is centered on the creation of commodities and services that are beneficial not only to themselves but also to society. It argues that acquiring lifelong practical skills necessitates effective and efficient teaching methodologies, proper evaluation methods, and the use of standard instructional materials, tools, machinery, and equipment to assure the creation of what is needed graduates with practical skills. Other demands involve instructional guides and the accessibility of licensed experienced teachers. The teacher needs to properly plan his lesson by carefully selecting the lesson objectives, establishing ways to encourage learners to participate in the learning process in a more responsible manner, selecting appropriate teaching strategies, appropriate supervision strategies, and determining appropriate assessment strategies (Tumba & Shuaibu, 2016).

The TVL track is the most popular option for our Senior High School curriculum. Here are some of the reasons: 1) Obviously, employment. Once the children complete a certain TVL strand, they will be prepared with abilities that will allow them to get hired as soon as they complete two years of Senior High School. The bulk of the skills provided are highly marketable outside the country and fetch substantial incomes. This explains why individuals have become more engaged in skill training; 2) Students are familiar with business at a young age. If you want to succeed, start early. The work immersion program is one of TVL's curriculum elements, where students learn and hone their abilities in a real-world job setting. Here, students will encounter challenges as well as learn how to engage with clients and coworkers; 3) More chances to sell their abilities. They would develop skills like entrepreneurship and more because of being able to connect with different industries, clients, and fellow workers. Not only would they learn how to sell, but they would also learn how to appropriately value their efforts and abilities. 4) Having skills in college is advantageous. There are still some people who would prefer a better education, even if not everyone can attend college. Possessing college-level abilities, particularly those that are relevant, is a big benefit. It's like practicing well before starting college and impressing them in the classroom. Demonstrating your culinary abilities or dressmaking expertise might become helpful eventually, even if your college subject is rather different from your senior high school course. The TVL track is a good way to increase your employment chances. Since it is available in public schools, it has become a more cost-effective choice. The TVL track provides students with on-the-job experience through its immersion program, which also has industry connections and offers practical, hands-on skills (Gayatin & Maravilla, 2018).

Personal qualities discovered during Chambers' (2002) research include a commitment to supporting students in applying what they've learned to the current world while using innovative approaches such as hands-on teaching approaches.

ICT is simply one of the areas of specialization provided by the TVL strand. Mehra and Newa (2009) explained that the technologies are electronic and computerized devices and associated human interactive materials that make it possible for the user to employ them for a wide range of teaching and learning processes. In addition to personal use around the world, educational systems are under increasing pressure to use the new Information and Communication Technologies to teach students the knowledge and skills they need in the twenty-first century with the emerging new technology.

TVL aims to provide students with practical skills for projects related to their livelihood. As stated by Lamar et al. (2017) states that the TVL track provides students with the necessary skills and abilities to succeed in their future careers. TVL is a course that senior high school students may opt to take if they want to start working as soon as they graduate, since it helps them become prepared for the workforce. With Agri-Fishery Arts, Home Economics, ICT (Information and Communications Technology), and Industrial Arts, TVL offers the most strands. One benefit of choosing the TVL strand is that students can earn a National Certificate based on their area of specialty after completing Grades 11 and 12. Even though they were still in school, they were able to gain job experience throughout their immersion. Finally, the firm where they completed their immersion may have already hired them as a worker right after they graduate.

Agri-Fishery Arts is one of TVL's strands that specializes on horticulture. Based on the study of Urbano (2017), horticulture is one of the specializations that demands techniques in and out of the classroom that meet the needs of today's learners. These approaches demand learners to participate in tasks or projects that entail creating, problem-solving, making decisions, or putting effort into activities. Learners gain knowledge by working independently and collectively, and the teacher plays an important role in helping them do this.

It is a matter of the skills and commitment acquired by the students from their TVL track teachers to be the basis of their future career, especially after passing the NC II and NC III. TVL high school students in Bulacan acquired skills through the help of their passionate TVL teachers who are competent facilitator. This study desires to evaluate and help improve the skills of students through their TVL track teachers to enable them to pass and receive the National Certificate that makes them be competent skilled workers. With these in mind, the researcher would attempt to study the TVL track teachers on students' National Certificate performance.

Statement of the Problem

The study aimed to determine the relationship of Technical-Vocational- Livelihood track teachers on students' National Certificate performance in the Division of Bulacan during the school year 2018-2019.

Specifically, the study sought answers the following questions.

1. How may the profile of the TVL track teachers be described in terms of:

1.1 age;

1.2 sex; and

1.3 educational attainment?

2. How may the performance of TVL track teachers be described in terms of:

2.1 IPCRF rating;

2.2 COT rating;

2.3 winnings; and

2.4 trainings and seminars?

3. How may the TVL strand specialization of the students be described in terms of:

3.1 Shielded Metal Arc Welding;

3.2 Electrical Installation and Maintenance;

3.3 Bread and Pastry Production;

3.4 Food and Beverages Services;

3.5 Cookery;

3.6 Food Processing;

3.7 Animation; and

3.8 Agri-Fishery Arts?

4. How may the TVL students' performance be described in terms of:

4.1 National Certificate II; and

4.2 National Certificate III?

5. Is there a significant relationship among the profile and performance of TVL track teachers on students' National Certificate performance?

6. What are the best practices of the TVL teachers towards enhancing the skills of the students?

Hypothesis

The study was guided by the hypothesis that there is no significant relationship among the profile and performance of Technical-Vocational-Livelihood track teachers on students' National Certificate performance.

Conceptual Framework

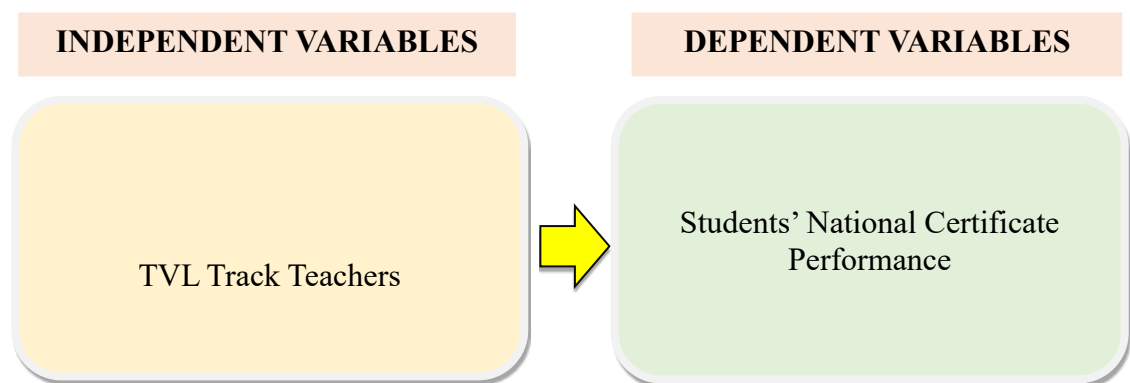


Figure 1. Paradigm of the Study

METHODOLOGY

This chapter discusses the methods and procedure of the study. This includes the research design, data gathering tools and techniques, sampling procedures and data analysis scheme.

Research Design

The descriptive-correlational research design was applied to determine the relationship of TVL track teachers' profile and performance on senior high school students' national certificate.

Through a survey method, the responses of the teachers and students were obtained and analyzed.

This study verified data using the descriptive correlational method. The Descriptive correlational method studied had the same basic property of avoiding any direct changes in the environment of the study (Reference.Com, 2019).

Data Gathering Techniques

The instrument for data gathering used in this study was a set of questionnaires that were divided into three parts.

The researcher sought first permission from the Schools Division Superintendent for the conduct of the study.

Part one of this instrument was meant to acquire participants' professional and demographic data. TVL track teachers were asked to provide information about different demographic variables such as gender, age, and educational attainment.

Part two of the questionnaire was based on their IPCRF rating, COT rating, training, and seminars. Aside from these, the researcher asked for pertinent information on their winnings to support the contention of TVL track teachers on their performance.

Part three was the survey questionnaires for TVL track teachers and senior high school students' participants, which had a great source of information.

The last part of the gathering of data was the interpretation of data coming from the responses answered by the TVL teachers and senior high school students.

Sampling Procedures

In this study, a researcher used common sampling strategies, namely purposive sampling.

Sixty-three (63) teachers' participants from the different schools in Division of Bulacan were selected for this study. The participants were selected based on two criteria: if the respondents were TVL track teachers and second, if they were regular/permanent teachers at a public school.

Afterward, they were asked to answer the survey questionnaire. The student respondents for the study were the clients of the TVL track teachers, whatever specialization it may be.

According to Black (2010), purposive sampling was a non-probability sampling method, and it occurs when "elements selected for the sample were chosen by the judgment of the researcher. Researchers often believed that they could obtain a representative sample by using a sound judgment, which results in saving time and money.

Originally, the plan was to cover at least 20 secondary-public schools in the Division of Bulacan, but during the conduct of the research, it was discovered that only 15 public secondary schools underwent assessment of NC to qualify as respondents to this study.

The following table shows the population studied coming from the 15 senior high schools in Division of Bulacan.

Data Analysis Scheme

The data that was collected is presented on tables. To ensure accuracy and reliability in the analysis and interpretation of data, statistical tools were used.

Pearson chi-square was employed to determine if the teachers' profile and performance had significant position association or correlation on students' performance in TESDA NC.

The researcher was interpreting the answers from the questionnaires of the respondents. This serves as a concrete guide for the conclusions and findings sought.

Thus, the task of the researcher was to interpret these and sum it up into cohesive, logical, and reliable information that would, in turn, have a direct answer to the problems it looked for.

RESULTS AND DISCUSSIONS

This chapter presents the presentation, analysis, and interpretation of data collected and the results of the statistical treatment employed in this study to investigate the relationship of Technical-Vocational-Livelihood (TVL) track teachers on the students' National Certificate (NC) performance.

Demographic Profile of TVL Teachers as to Age, Sex, and Educational Attainment

The researcher presented the TVL teachers in terms of age and sex, which was assumed to have a significant effect on the performance of the students; meanwhile, educational attainment has no significant effect on it.

Age

Age is one of the most important characteristics in understanding the level of maturity of an individual. It is defined as the length of time a person has lived. The general assumption is that as age goes up, experiences and knowledge go up too. It is necessary to examine the age of the TVL track teachers, which can be considered as one of the intervening variables that can affect the performance of TVL students.

Table 2 presents the frequency distribution, percentage, and rank of the TVL teachers' respondents in terms of age expressed in number of years.

Table 2. TVL Teachers' Demographic Profile as to Age.

Age	Frequency	Percentage	Rank
50 – 59	3	4.77	4
40 – 49	13	20.63	3
30 – 39	30	47.62	1
20 – 29	17	26.98	2
Total	63	100.00	

As to age, 47.62 percent or 30 of the teacher-respondents were in the age bracket of 30 – 39 years of age; 17 teacher-respondents belonged to the age bracket of 20 – 29 years of age; 13 TVL teachers belonged to the 40 – 49 years of age while three respondents were in their 50 – 59 years of age.

These imply that the greater numbers of teachers teaching in the senior high school of the respondent schools are in their middle years with more experience than their younger teachers, while almost five percent are only in their senior years.

This is supported by Martin & Smith (1990), as cited in Alufohai & Ibhafidon (2015), middle aged teachers were perceived by learners to be more effective in classroom organization, competence, and communication.

Sex

Sex is also one of the variables that have considerable effects on individuals' performance. It is the range of physical, biological, mental, and behavioral characteristics differentiating between male and female population.

Table 3 presents the demographic profile of TVL teachers as to sex.

Table 3. TVL Teachers' Demographic Profile as to Sex.

Sex	Frequency	Percentage	Rank
Male	27	43.00	2
Female	36	57.00	1
Total	63	100.00	

As to sex, 43 percent (e.g. 27 out of 63) are male respondents; while 57 percent (e.g. 36 out of 63) are female respondents. Because of the teacher's biological orientation or sex, females outnumbered the males by a ratio of 3:4 (e.g., for every 3 males there are 4 females). Usually, as often observed in the organizational structure of teachers, female teachers outnumber males in the Basic Education Curriculum regardless of age.

This implied that most teachers are females, and, by nature, they are loving, caring, and understanding. The school is an extension of their home, where the students feel the care and concern of a mother. The attention given by the female teachers to their students is unique in a sense that they are almost treating their students as their own child.

Based on the study conducted by Kardia and Wright (2004), as cited in Dionisio (2017), teachers influence student's life more than their parents. It may be very tough to degree coaching and not possible to choose the excellent of coaching primarily based totally on gender. A male teacher or a female teacher may be similarly good. Gender has nothing to do with teaching. Asking who is better between a male and a female teacher is like asking who a better parent between a mother and father is. So, each are same and may manual numerous college students to a vibrant future.

Educational Attainment

Teachers' commitment to education does not stop; it is a journey to continue to grow professionally. It is a continuous process which should not be taken for granted. Education is very important for every individual to succeed in life.

Table 4 presents the TVL teachers' demographic in terms of educational attainment.

Table 4. TVL Teachers' Demographic Profile as to Educational Attainment

Degree	Frequency	Percentage	Rank
Ph.D./Ed.D.	3	4.76	3
Masters	29	46.03	2
Bachelor's	31	49.21	1
Total	63	100.00	

As to the TVL teachers' educational attainment, almost half of them (e.g. 31 out of 63) or 49.21 percent of them were bachelor's degree holders, while there were only a few (e.g. 3 out of 63) or 4.76% of the teachers pursued graduate studies leading to Ph. D or Ed. D degrees.

Results of the study implied that the TVL teachers were recruited without completing the required master's degree to be able to teach at the senior high school level, but nonetheless, their expertise was highly considered as a qualification.

The Center for Learning Environment (2017) stated that modern society expects teachers to provide excellent educational and learning experiences. Teachers must have extensive knowledge and abilities in both teaching and assessment practice with the goal to satisfy the standards and prerequisites of quality education. Teacher learning is a constant process that helps teachers improve their teaching abilities, grasp new knowledge, and acquire new competencies, all of which help students learn better. Effective teacher-learning and professional development are critical for student success.

In addition, Sta. Ana (2015) mentioned in her study that having a higher educational certification through advanced or higher studies results in better preparation for teachers. The government requires teachers to possess a master's degree in the field in which they teach. It is expected that master's and doctoral studies, as well as short-term local and international training programs, will raise the level of teaching and research capabilities to a competitive level.

Performance of the TVL Track Teachers

The performance of the Technical-Vocational-Livelihood track teachers were measured through the following instruments: Individual Performance and Commitment Review Form (IPCRF), Classroom Observation Tool (COT), winnings in contests and trainings and seminars attended.

Individual Performance and Commitment Review Form

The individual Performance and Commitment Review Form has the goal of recognizing, improving, and enhancing the performance of public-school teachers to influence the delivery of excellent education in various public schools. The DepEd has adopted a performance monitoring system for public school teachers for three years in a row. This comprises many important outcome areas; a set of objectives as targets for teachers, a schedule for completing each, a weight score, a performance indicator, and the current assessment, which includes the teacher's rating areas.

Table 5 presents the performance of TVL track teachers based on the IPCRF.

Table 5. TVL Teachers Performance as to IPCRF

Rating	Frequency	Percentage	Rank
Outstanding	5	7.94	2
Very Satisfactory	54	85.71	1
Satisfactory	4	6.35	3
Unsatisfactory	0	0.00	
Poor	0	0.00	
Total	63	100.00	

As to the teachers' performance as to the IPCRF rating, 85.71 percent (e.g., 54 out of 63 of the respondents obtained a "very satisfactory rating"; while only 6.35 percent (e.g. 4 out of 63) got a "satisfactory" rating. Thus, most number for the respondents obtained a "very satisfactory" rating.

Thus, the results implied that the rating of teachers in terms of IPCRF is mostly very satisfactory. Each teacher's competencies promoted organizational values and help achieved schools' goals. This also implied that most of the teachers were responsible and ready to exert their time and efforts to ensure the success of their respective schools. Teachers must evaluate their performance throughout the course of the academic year. They must participate actively in the teaching-learning process for the purpose of achieving better results for the students (Guro Ako, 2018).

Classroom Observation Tool

Classroom Observation Tool aims to improve the teachers' performance through different parameters in achieving quality education. The Department of Education recognizes that teachers play a crucial role in upgrading the quality of teaching and learning process for their students.

Table 6 presents the performance of the TVL teachers as to the classroom observation.

Table 6. TVL Teachers Performance as to COT

Rating	Frequency	Percentage	Rank
7.0	6	9.52	4
6.0	20	31.75	2

5.0	11	17.46	3
4.0	26	41.27	1
3.0	0	0	5
Total	63	100.00	

As to the TVL teachers COT rating, more than one-third of the teachers, or 41.27 percent (e.g. 26 out of 63) of them obtained a “4.0” rating, while only 9.52 percent (e.g. 6 out of 63) got a “7.0” rating, which is the highest that can be obtained.

Results implied that most of the respondents obtained a rating of “4.0” in their teaching performance based on the assessment of their superiors, such as head teacher, master teacher and principal in the classroom observation tool (COT). But if summed up, the total population over the rating of 4.0 is less than sixty percent, meaning that they are still efficient and effective at teaching properly.

Teachers are expected to be observed four times a year, or once each quarter. The classroom observation tools will be used to verify results. According to Step on Quality (2015), class observation is a strategy for assessing the efficacy of teacher-student interactions, such as support for emotions, classroom management, and educational assistance.

Winnings

Winnings of students in every competition are winnings as well for teachers because they are their coaches. Teachers gave their extra time and effort to coach and support their students for them to win. If they create a competitive environment in their respective schools, they can create a more competitive environment in the future, even in other schools.

Table 7 presents the performance of TVL teachers in interschool competitions.

Table 7. TVL Teachers Performance in Interschool Competitions

Level	Frequency	Percentage	Rank
National	4	6.35	4
Regional	5	7.94	3
Division	14	22.22	2
School	40	63.49	1
Total	63	100.00	

As to their performances in interschool competitions, 63.49 % (e.g. 40 out of 63) of the teachers were winners in the school competitions, while only 6.35 % of them (e.g. 4 out of 63) had participated and won in the national level competitions. Also, more than one-third of the teachers or 22.22% of them had participated and won in the division level contests.

Thus, results implied that the teachers were capable and competitive in their respective fields of specialization. The competition leads schools to concentrate on the retention of effective teachers to ensure the quality of education given to the students.

Malipot (2018) stated that Leonor Briones, the secretary of the Department of Education, praised the Philippine delegation of educators and children who won prizes at a recent international youth Olympiad conducted in South Korea. Principal IV of Tondo High School and concerned MYIA President Sonny Valenzuela declared that innovation fairs and expos at the school, division, regional, and national levels will revolutionize and accelerate the rise of product development, as well as contribute to the nation's economic growth and creation of employment.

Trainings and Seminars Attended

Training and seminars are created by schools to equip their teachers to perform effectively according to their assigned task. The teachers are necessary to have these training and seminars to improve the quality of teaching and to keep updated on modern instructional devices. It is also necessary for the continuous development of every teacher in any field.

Table 8 presents the level of competence of TVL teachers as to trainings and seminars attended as to the level of competence.

Table 8. Level of Competence of TVL Teachers as to Trainings and Seminars Attended

Level	Frequency	Percentage	Rank
National/TM	23	36.51	2
Regional	25	39.68	1
Division	6	9.52	4
School	9	14.29	3
Total	63	100.00	

As to trainings and seminars attended as to the level of competence, 39.68% (e.g. 25 out of 63) of the teachers had attended regional trainings and seminars closely followed by 36.52% of them (e.g. 23 out of 63) had attended national trainings and seminars and or trainers' methodology; while only 9.52% of them (e.g. 6 out of 63) had attended division trainings and seminars. It can be observed that they acquired their competencies as TVL teachers through the various trainings and seminars they attended not only within their respective schools but more so on a high level of trainings and seminars.

Thus, the results implied that most of the teachers had attended regional and national training and seminars and trainer's methodology. Suffice to say that the TVL track teachers were competent, capable, and qualified to teach in their respective areas of specialization.

Felipe (2013) noted that the Department of Education wants to ensure that every teacher becomes both efficient and effective. To prepare all teachers for globalization, several training and seminar programs are being offered across the nation. These include seminars on values formation, orientation on the K-12 curriculum, innovative methods and techniques in teaching, and training on information and communication technology.

Technical-Vocational-Livelihood Specialization of Senior High School Students

Based on the K-12 Curriculum, high school education consists of two parts: the Junior High School and the Senior High School. In Senior High School, Technical-Vocational- Livelihood track has several specializations; the students may choose from one to suit their interest. It is designed to offer college students a job-preparation that they may want within the future.

Table 9 presents the TVL specialization which the respondent students who participated in the survey ranging from Shielded Metal Arc Welding (SMAW), Electrical Installation and Maintenance (EIM), Bread and Pastry Production (BPP), Food and Beverages Services (FBS), Cookery, Food Processing (FP), Animation, and Agri-Fishery Arts (AFA).

Table 9. TVL Specialization of Senior High School Students

Specialization	Frequency (f)	Percentage (%)
Shielded Metal Arc Welding (SMAW)	2	0.5
Electrical Installation and Maintenance (EIM)	4	0.9
Bread and Pastry Production (BPP)	92	21.4
Food and Beverages Services (FBS)	189	44.1
Cookery	37	8.6

Food Processing (FP)	6	1.4
Animation	63	14.7
Agri-Fishery Arts (AFA)	36	8.4
Total	429	100.00

The table presents the Technical-Vocational-Livelihood (TVL) specialization of senior high school students who participated in the survey. Accordingly, results show that most of the students or 44.1% (e.g., 189 out of 429) specialized in Food and Beverage Services, followed by 21.4% of the students (e.g., 92 out of 429) specialized in Bread and Pastry Production; while the least number of them specialized in Shielded Metal Arc Welding (e.g., 2 out of 429) and Electrical Installation and Maintenance (e.g., 4 out of 429). The rest of the students had specializations in Animation (e.g., 63 out of 429); Cookery (e.g., 37 out of 429); Agri-fishery Arts (e.g., 36 out of 429); and Food Processing (e.g., 6 out of 429).

The results implied that the TVL track of the senior high school had various specializations that cater to the interests and inclinations of the students. The number of senior high school students who took FBS and BBP was more because they may easily apply in practical situation. It may also improve their economic condition through the application of what they have learned by selling food. On the other hand, EIM and SMAW were less due to less school offered of those and mostly their students did not undergo with TESDA assessment because of fee to be paid.

After two years of senior high school TVL students will have earned employable skills and will thus be eligible to work. Based on the study of Gayatin & Maravilla (2018), the TVL track offers industry collaborations through its immersion program, which gives students real-world exposure in the workplace while also teaching practical, hands-on skills. They would take up skills like entrepreneurship and more, where they would learn how to appropriately value their labor and abilities in addition to knowing how to market. It's a practical way to secure employment more quickly. Most of the talents provided have extremely high market value and are highly employable outside of the nation.

Performance of Senior High School Students in the TESDA National Certificate

TVL track is very useful for Filipino students because it is not only preparing senior high school students for collegiate studies but will also make them able to work already after passing the assessment of TESDA. The student would receive a National Certificate if they passed the assessment.

Table 10 presents the performance of senior high school students in the TESDA National Certification (NC) assessment.

Table 10. National Certification by TVL Track of Senior High School Students

Specialization	National Certification (NC)	Frequency (f)	Percentage (%)
Shielded Metal Arc Welding	NC II	2	0.5
Electrical Installation and Maintenance	NC II	4	0.9
Bakery and Pastry Production	NC II	92	21.4
Food and Beverage Services	NC II	189	44.1
Cookery	NC II	37	8.6
Food Processing	NC II	6	1.4
Animation	NC III	63	14.7

Agri-Fishery Arts	NC II	36	8.4
Total		429	100.00

Accordingly, results show that most of the students, or 44.1% (e.g., 189 out of 429) were NC II holders in Food and Beverages Services, followed by 21.4% of the students (e.g., 92 out of 429) who were NC II holders in Bread and Pastry Production while the least number of them were NC II holders in Shielded Metal Arc Welding (e.g., 2 out of 429) and Electrical Installation and Maintenance (e.g., 4 out of 429). The rest of the students were NC III holders in Animation (e.g., 63 out of 429), incidentally the only NC III certification; NC II holders in Cookery (e.g., 37 out of 429); NC II holders in Agri-fishery Arts (e.g., 36 out of 429); and NC II holders in Food Processing (e.g., 6 out of 429). Suffice to say that the TVL track of senior high school had various specializations that cater to the interests and inclinations of the students.

The results implied that the skills and commitment acquired by the students from their TVL track teachers is the basis of their future career, especially after passing the NC II and NC III. Not all students will be able to go to college because of financial problems, so if they pass the assessment and receive National Certificate, they are able to seek a job after graduation in the senior high school. Thus, the TVL skills obtained by senior high school students were varied, relevant and practical based on their individual interests and inclinations.

Having a TESDA National Certificate is highly beneficial. It gives quality assurance to its graduates in terms of knowledge, skills, attitudes, and values competencies among the middle skilled occupations. The certificate will strengthen the fact that the student has been thoroughly assessed through a series of demonstrations, observations with oral questioning, written tests, interviews, third party reports, portfolios, and work projects (Pressreader, 2017).

Relationship among the TVL Track Teachers' Profile and the Senior High School Students' Performance in the TESDA National Certification

TVL track teachers' profiles such as age, sex and educational attainment is important in determining if it has a relationship to the senior high school students' performance in TESDA NC, Pearson chi-square between two variables was employed. Table 11 presents the relationship among the TVL track teachers' profile in terms of age, sex and educational attainment and senior high school students' performance in TESDA National Certification.

Table 11. Relationship among the TVL Track Teachers' Profile and SHS Students' TESDA NC

TVL Track Teachers' Profile		Students' Performance in TESDA NC
Age	Pearson chi-square	22.554**
	df	3
	Sig. (2-tailed)	0.000
Sex	Pearson chi-square	1.014 ns
	df	1
	Sig. (2-tailed)	0.906
Educational Attainment	Pearson chi-square	12.237**
	df	2
	Sig. (2-tailed)	0.002

Legend: ** - highly significant

*- significant

ns - not significant

As shown in the table, the teachers' profiles as to age, sex, and educational attainment and SHS students' performance in the TESDA NC were tested for association or correlation. Accordingly, the Pearson chi-square revealed that there was a highly significant positive association or correlation between teachers' demographic profile in terms of "age" and students' performance in TESDA NC (e.g., $\chi^2(2, 429) = 22.554, p < .005$); however, there was no significant association or correlation exists between teachers' demographic profile in terms of "sex" and students' performance in TESDA NC (e.g., $\chi^2(1, 429) = p > .05$); on the contrary, there was a highly significant positive association or correlation between the teachers' demographic profile in terms of "educational attainment" and students' performance in TESDA NC (e.g., $\chi^2(2, 429) = 12.237, p < .005$).

It is interesting to note that among the three descriptors of teachers' profiles, age had the most significant bearing or correlation with the students' performance in the national certification. As such, the teaching skills developed among teachers through time were passed on to their students based on the latter's passing the NC II or NC III assessment.

Thus, the results implied that teachers' age and educational attainment were related with the students' performance in the national certification while the teachers' biological orientation or sex had no bearing or relation to the students' performance in the national certification.

Alufohai & Ibhafidon (2015), revealed in his study that students' academic achievement is significantly influenced by teachers' age, whereas teachers' gender did not have a significant influence on students' academic achievement.

On the other hand, Torres, (2018) found on his study that the teachers were desirous to grow professionally and seriously considered the benefits stored for them if they completed their studies. Education does not stop in man's life journey. It is very important tool for everyone to succeed in life and get something different. It helps a lot in lessening difficulties in life. Educators with advanced degrees in education were more likely to exhibit positive teaching behaviors. Knowledge gained throughout the education period and enables every individual to be confident in their life.

Relationship among the TVL Track Teachers' Performance and the Senior High School Students' TESDA National Certification

TVL track teachers' performance such as IPCRF rating, COT rating, winnings and trainings and seminars are important in determining if it has relationship to the senior high school students' performance in TESDA NC, Pearson chi-square between two variables was employed.

Table 12 presents the relationship among the TVL track teachers' performance in terms of IPCRF rating, COT rating, winnings and trainings and seminars and senior high school students' performance in TESDA National Certification.

Table 12. Relationship among the TVL Track Teachers' Performance and SHS Students' TESDA NC

TVL Track Teachers' Performance		Students' Performance in TESDA NC
IPCRF Rating	Pearson chi-square	6.136*
	df	2
	Sig. (2-tailed)	0.047
COT Rating	Pearson chi-square	19.890**
	df	3
	Sig. (2-tailed)	0.000
Winnings	Pearson chi-square	11.580*
	df	3
	Sig. (2-tailed)	0.009
Trainings and Seminars	Pearson chi-square	74.440**
	df	3
	Sig. (2-tailed)	0.000

Legend: ** highly significant

* significant

As such, the teachers' performance as to IPCRF rating, COT rating, wins as teacher-coaches, and trainings and seminars attended and the students' performance in the TESDA NC were tested for association or correlation. Accordingly, results of the Pearson chi-square revealed that there was a significant position association or correlation between teachers' performance in terms of their "IPCRF rating" and students' performance in TESDA NC (e.g., $\chi^2(2, 429) = 6.136, p < .05$); there was a highly significant positive association or correlation between teachers' performance in terms of their "COT rating" and students' performance in TESDA NC (e.g., $\chi^2(3, 429) = 19.890, p < .005$); there was a significant positive association or correlation between teachers' performance in terms of "winnings in interschool competitions" and students' performance in TESDA NC (e.g., $\chi^2(3, 429) = 11.580, p < .005$); and there was a highly significant positive association or correlation between teachers' performance in terms of their "training and seminars" attended and students' performance in TESDA NC (e.g., $\chi^2(3, 429) = 74.440, p < .005$).

It is interesting to note that among the four indicators of teachers' performance, the trainings and seminars attended by teachers have the most significant bearing or correlation with the students' performance in the national certification. As such, the TVL skills acquired by the teachers during trainings and seminars were passed on and acquired by their students based on the latter's passing rate in the NC II or NC III assessment.

Thus, the results implied that teachers' IPCRF rating, COT rating, winnings, and trainings and seminars attended were related to the students' performance in the national certification.

According to Enosalay (2018), teacher's overall IPCRF-based teaching performance is very satisfactory. However, the learner's achievements were attained with a reasonable performance. This suggests further that there is a substantial correlation between the two variables—teaching effectiveness and students' academic progress. The IPCRF is a useful instrument for evaluating teacher's performance as teachers, according to many responses.

Meanwhile, Sartin et al., (2011), as cited in Hofer (2016) stated that the evaluations from classroom observations were reliable indicators of instructional effectiveness. The instructional coaching abilities needed to conduct in-depth conversations regarding teaching practices are often absent from principals. Principals who refrained from utilizing the new assessment method frequently said that it was too labor-intensive considering the other district programs that their school was concurrently implementing.

Felipe (2013) revealed in his study that attending seminars and training sessions may assist educators enhance teaching-learning situations, establish a positive learning environment, stay updated with technological advancements in the classroom, and motivate them to become better educators in the contemporary world. It was supported by the study of Torres, (2018) which showed that many teachers prioritized training and seminars. Even the school administration is unable to provide a free cost for that because they have invested their own money and time in attending the seminars and trainings. School administrators implement seminars, workshops, and in-service training to ensure that teachers have the necessary skills to carry out the activities that have been delegated to them. Training is essential for an individual's ongoing development in any sector as well as for giving them the confidence they need.

Best Practices of TVL Teachers to Enhance the Skills of the Students

Being an effective TVL teacher requires creative and innovative teaching strategies to meet students' needs. Teachers are using a combination of best practices and teaching strategies because every student is unique. It is a challenge for them to make their classroom a dynamic and motivational environment for students.

Table 13 presents the different strategies and approaches employed by TVL track teachers to enhance transfer of learning and acquisition of knowledge and skills among the SHS students.

Table 13. Best Teaching Practices of TVL Teachers

Best Practices	Frequency (f)	Percentage (%)
Using hands-on activities individually or by group.	28	44.44
Providing ICT-based classroom instruction	12	19.05
Employing differentiated instruction to sustain and optimize students' interest and learning.	10	15.87
Relating the lessons to real life, practical situations	5	7.95
Regularly monitoring and guiding the students	4	6.35
Appreciating the efforts and skills of the students	2	3.17
Using peer tutoring when necessary	2	3.17
Total	63	100.00

Accordingly, 44.44% (e.g., 28 out of 63) of the teachers use hands-on activities individually or by group; 19.05% (e.g., 12 out of 63) of them provide ICT-based classroom instruction; 15.87% (e.g., 10 out of 63) of the teachers use differentiated instruction to sustain and optimize students' interest and learning; 7.95% (e.g., 5 out of 63) of them relate the lessons to real life, practical situations; 6.35% (e.g., 4 out of 63) of them regularly monitor and guide the students; 3.17% (e.g., 2 out of 63) of the teachers encourage their students by appreciating their efforts and skills; and similarly, 3.17% (e.g., 2 out of 63), the last but not the least, employing peer tutoring when necessary.

The results show that the teachers used various pedagogical practices to optimize the students' acquisition of knowledge and skills to equip them for practical applications as well as prepare them for the national certification assessment. In consideration of the fact that they are handling

Technical-Vocational-Livelihood courses for the senior high school students, it is therefore a must that classroom instruction should be enriched with hands-on activities, ICT-based, differentiated, and relevant day-to-day, real-life situations.

Thus, successful teaching occurs when it is effectively designed such that the learner's activities and experiences are linked to more relevant ideas. Nowadays, a frequent technique for facilitating student learning is cooperative learning, which focuses on group activities. It helps students comprehend, consolidate, and retain more information. It enhances students' devotion to their studies while also enhancing their self-esteem and worth. The instructor employs a variety of activities that highlight linkages between information learnt to provide fresh perspectives and meaning that may be applied to improve student performance (Scribd Inc., 2016).

Learning Gained by TVL Students from their TVL Teachers

Students who receive words of encouragement from a teacher are significantly more likely to continue their education. Teachers' goal is to impart as much knowledge as possible to prepare the students for their future career. They are influential by nature and often take advantage of opportunities to teach boldly for the benefits of their students.

Table 14 presents the learning gained by TVL students from their passionate and dedicated TVL teachers.

Table 14. Learning Gained by TVL students from their TVL Teachers

What is the important learning that you gained from your TVL teacher?	Frequency (f)	Percentage (%)
improved knowledge and skills	149	34.73
had professionalism attitude	62	14.45
motivated and study hard to reach goal	55	12.82
be confident and never give up	49	11.42
be responsible	35	8.16
be passionate and be patient	29	6.76
knowing the importance of work	18	4.20
be resourceful and be creative	10	2.33
be helpful	8	1.86
techniques on how to work easily	5	1.17
love and enjoy work	5	1.17
listen and follow the instructions	2	0.47
learn on how to earn extra money	2	0.47
TOTAL	429	100.00

As shown, almost one-thirds or 34.73% (e.g., 149 out of 429) of the students improved their knowledge and skills through their competent teachers; 14.45% (e.g., 62 out of 429) of them had gained professionalism attitude; 12.82% (e.g., 55 out of 429) of the students were motivated and studied hard to reach goal; 11.42% (e.g., 49 out of 429) of them now have confident and they were never give up; 8.16% (e.g., 35 out of 429) of them became responsible; 6.76% (e.g., 29 out of 429) of students learned to be passionate and be patient; 4.20% (e.g., 18 out of 429) of them knew the importance of work; 2.33% (e.g., 10 out of 429) of them learned to be resourceful and be creative; 1.86% (e.g., 8 out of 429) of them became helpful; 1.17% (e.g., 5 out of 429) of them learned techniques on how to work easily; 1.17% (e.g., 5 out of 429) of them learned to love and enjoy work; 0.47% (e.g., 2 out of 429) of them learned to listen and follow the instructions; and lastly, 0.47% (e.g., 2 out of 429) of the students learned on how to earn extra money.

These affirmations from the students implied that teachers are best motivators to make them perform passionately and to do their tasks and activities with love and willingness.

Thus, that the TVL track teachers were instruments to the students' performance in the TESDA assessment as based on their National Certificates.

Teachers should create an open and trustworthy relationship with their students. Students learn more than simply information and facts; they also develop skills and attitudes. The learner integrates new information to existing concepts and learns how to use it realistically (Prozesky, 2000).

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter includes the presentation of the data and results of the quantitative and qualitative discourse and comprehensively addresses the concerns of the study. It involves the summary or findings, conclusions, and recommendations.

Findings

This study aimed to determine the relationship among the profile and performance of TVL track teachers on students' National Certificate performance in the Division of Bulacan during the school year 2018-2019. The study was conducted among the fifteen public secondary schools in the Division of Bulacan offering different tracks on Technical-Vocational-Livelihood as required in the K-12 Curriculum for senior high school students.

Guided by the procedures described in the preceding chapters, the answers to the problems raised in this study were ascertained and summarized as follows. Results of the study revealed that the greater number of respondents is in their 30 – 39 years of age; mostly females; and a greater are holders of a bachelor's degree only.

As to the performance of the TVL track teachers in terms of the IPCRF, more than most of the respondents obtained a rating of "very satisfactory"; as to COT respondents obtained of "4". The results further revealed that most winnings were on the interschool competitions; and while trainings and seminars were conducted mostly in the division and national levels.

On the performance of the senior high school students, results revealed that 189 students' holders of NC II in FBS and only 63 students were holders of NC III in Animation; specializations of senior high school students were mostly in FBS, BPP, and Animation.

Results in the relationship among TVL track teachers' profile and performance and the senior high school students' performance in the TESDA NC a "highly significant" on age and educational attainment; however, "no significant" relationship exist between teachers' "sex" and students' performance in the TESDA NC. A "highly significant" relationship exists between COT rating and trainings and seminars attended.

Results of the study further revealed that the TVL track teachers employed various teaching strategies to enhance the skills of the senior high school students. Prominent among them is "using hands-on activities individually or by group.

Conclusions

Based on the findings of the study, the following conclusions were drawn: There is a "highly significant" correlation between TVL track teachers' age and educational attainment and students' performance in the TESDA national certification; however, no significant correlation exists between teachers' sex and students' performance in the TESDA NC.

A "highly significant" correlation exists between TVL track teachers' performance in COT and trainings and seminars attended and students' performance in TESDA NC; meanwhile, there was a "significant" correlation exist between TVL track teachers' performance in IPRCF ratings and winnings and students' performance in the TESDA NC.

Furthermore, TVL track teachers employ various teaching strategies to enhance the skills of the senior high school students for them to qualify and become holders of the TESDA NC.

Recommendations

After analysis of the results and conclusions has been made, the following recommendations are suggested:

1. The Department of Education, TESDA and Non-Government Organizations may sign a Memorandum of Agreement to provide budget allocation to encourage all students to take NC assessment.
2. The school may find ways to acquire the necessary materials and equipment for the effective transfer of learning among students.
3. TVL track teachers may enrich their teaching strategies through attending seminars and trainings especially in trainers' methodology to augment the TVL skills of students.
4. TVL teachers may enroll in graduate studies for professional growth and development.
5. For future researchers, a comparative study among the different strands of senior high school be conducted to determine the impact of teachers' qualifications on students' level of competencies in their respective SHS strands.

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