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## THE PERCEIVED IMPACT OF TVL-ICT SENIOR HIGH SCHOOL WORK IMMERSION PROGRAM ON MIDDLE-LEVEL EMPLOYMENT READINESS AND TERTIARY EDUCATION PREPARATION

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### Keywords:

Work Immersion, TVL-ICT Strand, Work and College Readiness, Technical and Soft Skills, Gender Disparity

### Cite this paper:

Chummani, W., Galima, J., Mina, J. (2025). The Perceived Impact of TVL-ICT Senior High School Work Immersion Program on Middle-Level Employment Readiness and Tertiary Education Preparation. *Student Journal of Technology and Educational Research*, Vol. 2(1), 150-161  
<https://doi.org/10.65141/sjter.v2i1n12>

### Abstract

The purpose of this study was to assess the perceived impact of work immersion in the Technical-Vocational-Livelihood (TVL) Information and Communications Technology (ICT) strand on senior high school students' work readiness and college readiness in the Philippines.

The researchers surveyed Grade 12 TVL-ICT students at Echague National High School. The study revealed that work immersion improves technical skills, including hardware assembly, software installation, and adherence to occupational health and safety practices. It also enhances students' tool setup, market knowledge, and entrepreneurial competencies. Moreover, it fosters self-improvement, career planning, and the ability to generate business ideas. However, there are still areas for growth and development, particularly in understanding customer value and connecting senior high learning to college programs. Students become more motivated and informed as they go through the work immersion process, helping them make wiser choices regarding their college programs and career paths.

The research also uncovered gender differences, with male students demonstrating greater confidence, technical proficiency, and motivation in hands-on training compared to their female counterparts. This highlights the need for more inclusive strategies to enhance female participation and ensure equal learning opportunities.

It is recommended to strengthen partnerships between schools and industry, promote innovation-oriented training, implement mentorship programs, and address gender disparities. If these mechanisms are enhanced, work immersion can more effectively equip learners for success in their chosen paths.

## INTRODUCTION

This study investigates the influence of the Technical-Vocational-Livelihood (TVL) - Information and Communications Technology (ICT) strand's work immersion program on the readiness of senior high school students for middle-level employment and their preparation

for tertiary education in the Philippines. In response to globalization and the rapid technological advancements shaping labor market demands, this research explores how hands-on work immersion experiences affect students' confidence, skill acquisition, and future academic or career decision-making.

Employing a mixed-methods approach, the study examines students' perceptions of their immersion experiences and evaluates whether these effectively prepare them for either immediate employment or further studies. It also analyzes how the outcomes of work immersion may differ based on demographic variables, particularly sex.

Work immersion is a core component of the K to 12 curriculum, requiring students to complete 80 hours of supervised, real-world work exposure. This allows them to apply theoretical knowledge, develop both soft and technical skills, and gain insight into professional standards and workplace expectations. The program is designed to align educational outcomes with the needs of both industry and higher education institutions, thereby enhancing students' readiness for work and higher learning.

Previous research has highlighted the benefits of work immersion, including improved competence, work ethics, conflict resolution skills, and greater confidence in transitioning into the workforce. This study builds upon these findings and aims to provide meaningful insights for educational policymakers and curriculum developers to further enhance the design and implementation of work immersion programs in support of students' career goals and national workforce development.

Work immersion, as defined in the Senior High School (SHS) curriculum, consists of 80 hours of practical experience or work simulation undertaken by Grade 11 and 12 students. This experience is conducted in actual workplaces such as offices, factories, retail stores, or ongoing projects, under the supervision of both the school and the partner organization's designated personnel. The aim is to enhance the competencies provided by the school and to expose students to authentic work environments.

While comparable to college-level internships and on-the-job training programs, SHS work immersion differs in scope, duration, and the level of responsibility students can assume. Consequently, much of the existing literature on practical training references on-the-job training models. Nonetheless, work immersion plays a critical role in bridging academic preparation and real-world employment experiences.

According to Ronda (2018), the Department of Education (DepEd) relies heavily on its strong partnerships with the Philippine Chamber of Commerce and Industry (PCCI) and other key industry stakeholders to implement work immersion programs effectively. DepEd recognizes work immersion as a vital component of the SHS curriculum that can be delivered in various formats and durations, depending on the needs of the students and the industry involved.

## **Statement of the Problem**

This study aimed to determine the perceived impact of the TVL-ICT work immersion program on Middle-Level Employment Readiness and Tertiary Education Preparation of selected Grade 12 Senior High School students at Echague National High School. Specifically, it seeks to answer the following questions:

1. What is the demographic profile of TVL-ICT graduates in terms of their sex?
2. What is the perceived impact of work immersion on the enhancement of students' readiness for middle-level employment in terms of:
  - a. knowledge; and
  - b. skills?
3. What is the perceived impact of the TVL-ICT work immersion program on the tertiary preparations in terms of:
  - a. motivation; and
  - b. Program selection?
4. What is the difference in the perceived impact of the TVL-ICT work immersion program on middle-level employment readiness and tertiary preparations when the respondents are grouped according to their sex?

## **METHODS**

### **Research Design**

The researchers employed descriptive, comparative, and correlational research methods to analyze the demographic profiles of TVL-ICT graduates and to assess the impact of work immersion on their readiness for middle-level employment and tertiary education. The study examined differences in work immersion outcomes based on demographic variables, particularly sex, and explored the relationship between work immersion experiences and program selection. Structured surveys and statistical analyses were utilized to generate insights into how work immersion influenced the graduates' knowledge, skills, motivation, and educational or career choices.

### **Respondents and Locale of the Study**

The study was conducted among twenty-three (23) Grade 12 TVL-ICT students from Echague National High School who participated in the work immersion program. A stratified random sampling technique was employed to select respondents, ensuring representation across various specializations.

### **Research Instrument**

The researchers adopted a survey questionnaire to collect data regarding the profile of the respondents, as well as their perceived impact of work immersion on their employment readiness and tertiary education preparation.

### **Data Gathering Procedure and Analysis**

Prior to conducting the study, the researchers sought approval from their research adviser. Upon receiving approval, a formal letter was prepared and submitted to the school principal to request access to the list of student graduates relevant to the study. Once the

necessary permissions were granted, the researchers proceeded to design an online survey using Google Forms to facilitate data collection.

To collect data, the researchers utilized Google Forms and disseminated the link via the students' group chat. This method was selected due to the students' familiarity with digital communication platforms, which made the process both convenient and accessible. The use of Google Forms facilitated organized and efficient data gathering, while the group chat platform ensured wide and timely participation.

In the analysis of the data gathered, mean was used to describe the profile of the respondents, as well as their perceived impact of work immersion on their employment readiness and tertiary education preparation. Independent samples t-test was employed to determine the differences in the perceived impact of work immersion when the respondents are grouped according to their profile.

## RESULTS AND DISCUSSION

### Profile of the Respondents

Table 1 illustrates the distribution of respondents by sex, highlighting a significant difference in frequency between male and female participants. The majority of respondents are male, while only a small portion are female, indicating an imbalance in representation within the study. This disparity may have implications for how findings apply across different groups.

**Table 1. Profile of the Respondents**

Sex	Frequency (n=23)	Percent
Male	19	82.69
Female	4	17.39

### Perceived Impact of Work Immersion on Middle-Level Employment Readiness

Table 2 presents the perceived impact of work immersion on the employment readiness of the respondents, particularly on the development of necessary skills crucial for employment. As gleaned from the table, the respondents strongly agree that the work immersion program has developed and strengthened their competencies and skills crucial for technical tasks such as assembling hardware, creating bootable devices, and preparing installers.

They also strongly agree that their exposure to work immersion helped them identify areas for self-improvement, personal development, and growth. Moreover, it enabled them to align their entrepreneurial competencies (PECs) with their intended business or career paths.

The respondents further agree that work immersion guided them in creating a plan of action to ensure the success of their chosen careers. It also enhanced their ability to generate new business ideas in computer system servicing using various techniques and encouraged exploration of opportunities based on their characteristics. Additionally, they strongly agreed that the program helped them recognize business opportunities arising from irritants, trends,

and emerging needs. Lastly, they affirmed that the immersion experience allowed them to apply creativity and innovation in developing marketable products within their field.

**Table 2. Perceived Impact of Work Immersion on Skill Development for Employment Readiness**

Indicator	Mean	Qualitative Description
<b>Skills</b>		
1. Develop and strengthen personal competencies and skills (PECs) needed in computer system servicing	4.57	Strongly Agree
2. Identify areas for improvement, develop and growth through my exposure work immersion	4.35	Strongly Agree
3. Align one's PECs according to my business/career choice through my exposure to work immersion	4.48	Strongly Agree
4. Create plan of action that ensures success of my business/career choice through my exposure to work immersion	4.22	Strongly Agree
5. Create new business ideas in computer system servicing by using various techniques through my exposure to work immersion	4.39	Strongly Agree
6. Explore ways of generating Business ideas from one's own characteristics through my exposure to work immersion	4.30	Strongly Agree
7. Generate business idea using product from irritants, trends, and emerging needs through my exposure to work immersion	4.39	Strongly Agree
8. Apply creativity and innovative techniques to develop marketable product through my exposure to work immersion	4.04	Strongly Agree

**Table 3. Perceived Impact of Work Immersion on Knowledge Improvement for Employment Readiness**

Indicator	Mean	Qualitative Description
1. Identify the players/competitors within the town through my exposure to work immersion	4.48	Strongly Agree
2. Identify the different products/services available in the market through my exposure to work immersion	4.30	Strongly Agree
3. Develop a product/service in computer system servicing through my exposure to work immersion	4.57	Strongly Agree
4. Identify what is of "value " to the customer through my exposure to work immersion	4.17	Agree
5. Explain what makes a product unique and competitive through my exposure to work immersion	4.41	Strongly Agree
6. Assess my work through my exposure to work immersion	4.44	Strongly Agree

Table 3 emphasizes how work immersion strengthens students' knowledge essential for middle-level employment. Respondents strongly agree that the program enhanced their ability to identify local competitors and understand the range of products and services in the computer servicing market. They also demonstrated high confidence in developing relevant products or services, as well as in selecting appropriate tools and materials for specific tasks. Moreover, they reported strong skills in explaining what makes a product unique and competitive, and in assessing their performance.

However, while most indicators were rated highly, a relatively lower agreement was observed in identifying customer value, suggesting that students may need further development in understanding client-centered perspectives. Overall, the findings suggest that work immersion effectively enhances students' practical and technical knowledge.

### Perceived Impact of Work Immersion on Tertiary Education Preparation

**Table 4. Perceived Impact of Work Immersion on Motivation for Tertiary Education**

Indicator	Mean	Qualitative Description
1. I participated actively in work immersion activities as a sign of my work motivation in my pre-college courses	4.65	Strongly Agree
2. I am motivated in my pre-college courses	4.52	Strongly Agree
3. I showed my passion & dedication principles learned during work immersion	4.22	Strongly Agree
4. I am highly motivated in experiencing relevant training in an actual work area as part of college course	4.48	Strongly Agree
5. I am highly motivated to see myself in future as a competent professional in my pre-college courses	4.57	Strongly Agree

Table 4 shows that work immersion plays a crucial role in inspiring students to pursue higher education. They actively participated in immersion activities, demonstrating a strong sense of motivation and enthusiasm for their pre-college courses. Applying theories in real work settings made learning more meaningful, helping them gain job-relevant training and develop essential career-related skills. Students envisioned themselves as future professionals, strengthening their confidence in their abilities. They also excelled in communication, teamwork, and practical skills, further preparing them for their academic and career journeys. Overall, work immersion fostered a positive mindset, boosting students' motivation and readiness for tertiary education.

**Table 5. Perceived Impact of Work Immersion on Choosing a Program in Tertiary Education**

Indicator	Mean	Qualitative Description
1. I clearly understand what course to enroll in college	4.17	Agree
2. I am aware of expectations concerning my pre-college course	4.30	Strongly Agree
3. I am aware of proper way of applying ethical principles dealing with the requirements of pre-college course	4.44	Strongly Agree
4. I am aware of how I will apply my knowledge and skills in performing college course related activities	4.22	Strongly Agree
5. I am aware of importance and application of what I learned in senior high school concerning my pre-college course	4.04	Strongly Agree

Table 5 highlights how work immersion plays a key role in helping students prepare for college, particularly in selecting a program that aligns with their skills and interests. Students expressed strong confidence in creating portfolios to highlight their competencies, showing readiness for academic and career opportunities. Ethical awareness was also highly valued, reflecting their understanding of professional responsibilities. However, some students felt less assured about connecting their senior high school learning to their chosen college program, indicating a need for better guidance in this area. Overall, work immersion helps students grasp program expectations and equips them for the challenges of higher education.

**Difference in the Perceived Impact of Work Immersion on Middle-Level Employment Readiness**

**Table 6. Difference in the Perceived Impact of Work Immersion on Skill Development for Employment Readiness in terms of Sex**

Skill Development for Employment Readiness	Male	Female	t-value	P-value
1. Develop and strengthen personal competencies and skills (PECs) needed in computer system servicing through my exposure to work immersion	4.58	4.50	0.24	0.81
2. Align one's PECs according to my business/career choice through my exposure to work immersion	4.63	3.75	2.20*	0.04
3. Explore ways to generating Business ideas from one's own characteristics through my exposure to work immersion	4.42	3.75	1.53	0.14

4. Generate business idea using product innovation from irritants, trends and emerging needs through my exposure to work immersion	4.53	3.75	2.10*	0.05
5. Store inputted data in storage media according to Requirements through my exposure to work immersion	4.42	4.00	0.99	0.34
6. Obtain tools, equipment and testing devices, needed to carry out installation work in accordance with established procedures and check for correct operation and safety through my exposure to work immersion	4.42	3.50	2.47*	0.02
7. Assembled computer hardware in accordance with established procedures and system requirements through my exposure to work immersion	4.47	4.25	0.51	0.62
8. Perform BIOS configuration in accordance with hardware requirements through my exposure to work immersion	4.42	3.50	2.08*	0.05

Table 6 highlights notable differences in how work immersion influences employment readiness based on sex. Male students consistently reported stronger skill development, particularly in aligning their entrepreneurial competencies with career choices and generating business ideas through innovation. They also demonstrated higher proficiency in technical tasks such as obtaining tools, equipment, and configuring systems. These findings suggest that males perceive greater benefits from work immersion in these areas, indicating potential disparities in how students experience and apply their learning.

**Table 7. Difference in the Perceived Impact of Work Immersion on Knowledge Improvement for Employment Readiness in terms of Sex**

<b>Knowledge Improvement for Employment Readiness</b>	<b>Male</b>	<b>Female</b>	<b>t-value</b>	<b>P-value</b>
1. Recognize and understand the market in computer system servicing through my exposure to work immersion.	4.53	4.75	-0.61	0.55
2. Explain what makes a product unique and competitive through my exposure to work immersion	4.33	4.75	-1.03	0.32
3. Identify the necessary network materials in accordance with established procedures and check against system requirements through my exposure to work immersion	4.37	4.50	-0.40	0.69
4. Install network cable and cable raceways in accordance with established procedures and installation requirements through my exposure to work immersion	4.37	4.25	0.24	0.81

5. Identify the different products/services available in the market through my exposure to work immersion	4.21	4.75	-1.43	0.17
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The findings in Table 7 suggest that work immersion has an equal impact on knowledge related to middle-level employment readiness for both male and female students. While there are slight variations in scores between the sexes, these differences are minimal and not statistically significant. This indicates that the program effectively prepares all students for employment, regardless of sex, ensuring equal opportunities for skill development and career readiness.

### **Difference in the Perceived Impact of Work Immersion on Tertiary Education Preparation**

**Table 8. Difference in the Perceived Impact of Work Immersion on Motivation for Tertiary Education**

<b>Motivation for Tertiary Education</b>	<b>Male</b>	<b>Female</b>	<b>t-value</b>	<b>p-value</b>
1. I participated actively in work immersion activities as a sign of my motivation in my preferred college course (PCC)	4.74	4.25	1.93	0.07
2. I am motivated in my PCC	4.53	4.50	0.08	0.94
3. I am highly motivated in experiencing relevant training in an actual work area as part of college course	4.68	3.50	4.37*	0.01
4. I can show good attitudes, work habits, and an appreciation for work related to my PCC	4.21	4.75	-1.60	0.13
5. I am highly motivated to see myself in future as a competent	4.53	4.00	1.48	0.15
6. I can demonstrate practical and relevant skills under guidance of my work immersion teacher	4.58	4.75	-0.61	0.55

The results in Table 8 indicate that male respondents are significantly more motivated than females when it comes to hands-on work training as part of their college preparation. This strong difference suggests that males are more inclined toward practical learning experiences. However, in other aspects such as active participation, skill demonstration, and applying theories, motivation levels are comparable between both genders. Overall, while males show a greater enthusiasm for direct work training, other areas of motivation remain balanced across students.

**Table 9. Difference in the Perceived Impact of Work Immersion on Choosing Program in Tertiary Education**

<b>Impact on Choosing Program in Tertiary Education</b>	<b>Male</b>	<b>Female</b>	<b>t-value</b>	<b>p-value</b>
1. I clearly understand what course to enroll in college	4.21	4.00	0.48	0.63
2. I am aware of expectations concerning my PCC	4.21	4.75	-1.43	0.17
3. I am aware of importance and application of what I learned in senior high school concerning my PCC	3.95	4.50	-1.33	0.20
4. I am aware of learning environment related to my college course	4.16	4.50	-0.72	0.48
5. I am aware of proper way of applying ethical principles dealing with the requirements of my CC	4.53	4.00	1.34	0.20

Table 9 shows that work immersion impacts male and female students similarly in terms of preparing for their chosen college programs. Both genders demonstrated a good understanding of their intended courses, with no statistically significant differences in their responses. While females showed slightly higher awareness in areas such as program expectations, learning environment, and the relevance of senior high school learning, these differences were not significant. Overall, the data suggest that work immersion supports tertiary preparation equally for both sexes.

### **CONCLUSIONS AND FUTURE WORKS**

The study highlights the significant role of work immersion in enhancing the employment readiness and academic preparedness of TVL-ICT senior high school students. Overall, the findings indicate that students highly value their work immersion experience, particularly in developing technical competencies, entrepreneurial skills, and personal growth. Participants strongly agreed that immersion activities enabled them to perform complex technical tasks, align their competencies with future career goals, and generate innovative business ideas.

Work immersion was also found to be instrumental in shaping students' motivation and readiness for tertiary education. By participating in real-world work settings, students gained meaningful experiences that deepened their understanding of workplace expectations, strengthened their communication and collaboration skills, and reinforced their desire to pursue professional goals.

Sex-based differences emerged in some areas of the study. Male students reported stronger outcomes in technical skills development, entrepreneurial alignment, and motivation for hands-on learning. However, knowledge acquisition and tertiary preparation were found

to be equally supported across both genders, indicating that work immersion provides inclusive opportunities for all students, regardless of sex.

It is recommended to strengthen partnerships between schools and industry, promote innovation-oriented training, implement mentorship programs, and address gender disparities.

## **ACKNOWLEDGMENT**

First and foremost, the researchers would like to express their sincere gratitude and duty to all the individuals who have contributed to this study. The researchers would not have come this far without their enthusiastic leadership, unwavering assistance, collaboration, and support.

The researchers humbly express deepest gratitude to **Almighty God**, whose divine guidance, wisdom, and blessings have been the source of strength and perseverance throughout this endeavor.

Also, to the research adviser, **Mr. Christian Lloyd D. Taguba**, the researchers would like to express sincere appreciation for all his invaluable guidance, support, and constructive feedback throughout this research journey.

To **Dr. Nikki Joyce C. Curan**, for her patience and support throughout this research. Her expertise, insightful feedback, and encouragement have played a crucial role in shaping this study.

The researchers extend deepest thanks to the research statistician, **Mr. Elizander Fenix Galasi**, for his significant contributions in analyzing the data. His expertise and assistance have been essential in ensuring the accuracy and reliability of this study.

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