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RESEARCH ARTICLE

WORK IMMERSION PERFORMANCE AND CHALLENGES ENCOUNTERED BY TECHNICAL VOCATIONAL LIVELIHOOD GRADUATES IN GENERAL MARIANO ALVAREZ TECHNICAL HIGH SCHOOL

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ABSTRACT

This study investigated the work immersion performance and challenges encountered by Technical Vocational Livelihood (TVL) graduates of General Mariano Alvarez Technical High School for the school year 2024–2025. Utilizing a quantitative descriptive research design, the researchers surveyed 235 graduates and 45 supervisors, employing total enumeration sampling for supervisors and comprehensive coverage for student respondents to ensure inclusivity. Data analysis involved the use of Frequency Distribution, Weighted Mean, Standard Deviation, Kruskal-Wallis, Mann-Whitney, and Spearman rho statistical tests. Results revealed that the majority of TVL graduates were aged 18–20, with an equal distribution of males and females and balanced representation across specializations. Most supervisors were males aged 21–25, held college degrees, had 1–5 years of experience managing immersion programs, and attended 1–3 relevant trainings in the past five years. Both students and supervisors rated the opportunity to enhance technical skills through hands-on practice, effective communication, and teamwork as areas of very high strength. However, both groups identified complying with industry quality standards, adapting to

changes in responsibilities, building professional relationships, and managing time and deadlines as significant challenges. Statistically significant differences in performance and challenges were observed based on demographic variables such as age, sex, immersion type, years of experience, and training. Strong positive correlations were found between immersion performance and the extent of challenges encountered, indicating that higher performance was closely linked to greater recognition of and engagement with workplace challenges. The findings underscored the importance of targeted support and ongoing skills training in boosting technical, adaptive, and professional readiness, thereby preparing TVL graduates for successful employment in real-world environments.

Keywords: *adaptability, challenges, performance, supervisors, technical skills*

INTRODUCTION

Technical and Vocational Education and Training (TVET) plays a significant role globally in preparing learners with the practical knowledge, technical competencies, and workplace skills needed to participate effectively in changing labor markets. However, TVET systems in many countries continue to experience challenges in aligning educational programs with evolving industry requirements. Skill mismatches, limited workplace exposure, inadequate practical training, and weak school-industry linkages can affect learners' readiness for employment. These concerns are particularly evident in low- and middle-income countries, where TVET institutions face increasing pressure to respond to globalization, technological advancement, demographic changes, and changing labor-market demands. International organizations such as the World Bank, International Labour Organization, and UNESCO have emphasized the need to strengthen TVET systems through closer collaboration between educational institutions and industries. Countries such as Germany and South Korea demonstrate how structured school-industry partnerships and workplace-based training can strengthen students' transition from education to employment. In Germany, for example, the

dual training system combines classroom-based learning with practical experience in enterprises, allowing learners to develop both theoretical knowledge and occupational competencies. Similarly, South Korea emphasizes collaboration between vocational schools and industries to provide training that reflects contemporary workplace requirements. These international practices demonstrate the importance of integrating academic instruction with authentic workplace experiences to improve workforce preparedness.

In the Philippine context, Technical-Vocational-Livelihood (TVL) is an important component of the Senior High School program that provides learners with practical and technical competencies for employment, entrepreneurship, and further education. The TVL track includes specializations in areas such as agriculture, home economics, information and communications technology, and industrial arts. The development of academe-industry partnerships has likewise become an important strategy for strengthening the connection between education and employment. In the Philippine education system, work-based learning provides students opportunities to apply classroom-acquired knowledge and skills in actual or simulated workplace environments. The Department of Education mandates work immersion as a component of the Senior High School curriculum. Under DepEd Order No. 30, Series of 2017, work immersion is intended to provide learners with practical experience in professional settings and enable them to apply competencies acquired in their chosen fields of specialization. It also seeks to strengthen the alignment between academic learning and industry requirements, thereby preparing learners for future employment.

Despite this national policy direction, the implementation of TVL work immersion continues to encounter challenges. Studies have identified concerns involving mismatched skills and work assignments, limited workplace experience, communication difficulties, time-management concerns, inadequate resources, and insufficient industry exposure. In rural and less industrialized areas, schools may also experience difficulty securing appropriate partner institutions, while inadequate coordination between teachers and industry supervisors may result in inconsistent guidance and assessment. Furthermore, when students are assigned to

workplaces that do not correspond to their specialization, the intended learning outcomes of work immersion may not be fully achieved. Recent Philippine research likewise highlights the importance of strengthening academe-industry partnerships to improve the quality of technical and vocational education.

At the local level, General Mariano Alvarez Technical High School (GMATHS) in General Mariano Alvarez, Cavite provides a relevant setting for examining these concerns. GMATHS is identified in the existing study context as an ISO-certified technical and vocational school and a pioneer in implementing the TVL track among senior high schools in the municipality. The school deploys an average of 400 Senior High School students annually for work immersion and continues to establish partnerships with external stakeholders to provide relevant workplace experiences. Since 2016, GMATHS has offered various TVL specializations under Industrial Arts and Home Economics, including Shielded Metal Arc Welding, Automotive, Mechatronics, Carpentry, Broadband Installation, Electrical Installation and Maintenance, Hairdressing, Food and Beverages, Fashion Design, and Cookery. Learners in these specializations undergo a 320-hour work immersion program under the mentorship of industry professionals, with approximately five to ten industry partners available for each specialization.

The local implementation of work immersion at GMATHS demonstrates promising outcomes but also warrants closer examination. Based on the existing account, approximately three out of ten students assigned to partner industries receive job offers from their supervisors, suggesting potential benefits of workplace exposure and school-industry collaboration. Students and teachers have also been reported to demonstrate satisfaction, knowledge, confidence, and preparedness in relation to the Senior High School curriculum. Nevertheless, students continue to encounter challenges during their immersion experiences. Evidence from a related Philippine setting indicates concerns involving resources, workplace conditions, and the execution of acquired skills, while other findings suggest that students may transform workplace difficulties into opportunities for developing self-discipline, positive

attitudes, commitment to service, and personal growth.

Despite the continued implementation of work immersion under the K–12 curriculum, an important research gap remains concerning the actual performance and post-immersion outcomes of TVL graduates. Existing studies have generally focused on students' experiences during Senior High School work immersion rather than examining how immersion-related challenges influence graduates' subsequent employment, skill utilization, and career development. There is also limited empirical evidence specifically examining TVL graduates according to their specialization and considering the perspectives of industry partners regarding graduates' preparedness and workplace performance.

Therefore, this study seeks to examine the performance of Technical-Vocational-Livelihood graduates during and following their work immersion experience, identify the institutional, logistical, and instructional challenges they encountered, and determine how these challenges relate to their post-graduation employment and utilization of acquired skills. By focusing on the experiences and outcomes of TVL graduates, the study may provide evidence for strengthening work immersion implementation, improving school-industry partnerships, and enhancing the relevance of technical-vocational education. The findings may further contribute to institutional and policy-level recommendations for the Department of Education and partner institutions in improving the quality, responsiveness, and employment relevance of Senior High School work immersion programs.

Theoretical Framework

The study is based on David Kolb's Experiential Learning Theory (Kolb, 2015; 1984) and the Expectancy-Value Theory (Eccles & Wigfield, 2002).

Experiential Learning Theory asserts that learning is a process in which knowledge is generated through the transformation of experience. It highlights four phases: concrete experience, introspective observation, abstract conception, and active exploration. Experiential Learning Theory advocates that Technical-Vocational Livelihood students

acquire knowledge most effectively through experiential learning in authentic work settings. Their performance during work immersion is influenced by their ability to reflect on activities, utilize academic knowledge, and adjust to job problems. This theory substantiates the assessment of performance as a consequence of applied learning, positioning it as fundamental to evaluate the conversion of immersion experiences into skill enhancement and professional advancement.

The Expectancy-Value Theory proposed by Eccles and Wigfield elucidates motivation as a product of two principal factors: the individual's anticipated success and the significance attributed to the job. It also examines how perceived obstacles such as stress, insufficient support, or incompatible placements can diminish motivation and performance. Expectancy-Value Theory elucidates the impact of problems such as inadequate supervision, workplace adaptation, and time constraints on students' motivation during immersion. If students regard these obstacles as insurmountable or the immersion experience as lacking in value, their engagement and performance may deteriorate. This theory offers a framework to comprehend the psychological and contextual elements that affect TVL students' reactions to immersion challenges.

The study is grounded in David Kolb's Experiential Learning Theory (ELT) and Eccles and Wigfield's Expectancy-Value Theory. ELT posits that learning is a cyclical process involving concrete experience, reflective observation, abstract conceptualization, and active experimentation, emphasizing the importance of real-world experiences in skill acquisition. In the context of work immersion, this theory underscores the significance of students engaging in practical work settings to enhance their competencies. Complementing this, the Expectancy-Value Theory suggests that individuals' motivation is influenced by their expectations of success and the value they place on the task. Applied to the study, this theory examines how students' perceptions of the relevance and potential outcomes of their work immersion experiences affect their engagement and performance. By integrating these frameworks, the study aims to assess how experiential learning opportunities and students'

motivational beliefs impact the effectiveness of work immersion programs in preparing TVL graduates for the workforce.

Conceptual Framework

A conceptual framework serves as the foundation of a research study, illustrating the relationship between variables and guiding the direction of the investigation. It presents a visual or narrative explanation of how the researcher conceptualizes the linkages among the key concepts, theories, and constructs relevant to the study. By organizing ideas in a logical and systematic manner, the conceptual framework helps clarify the focus of the research, supports the formulation of hypotheses, and provides a structure for data analysis and interpretation. Ultimately, it bridges theory and practice, ensuring that the study is grounded in established knowledge while addressing specific research objectives.

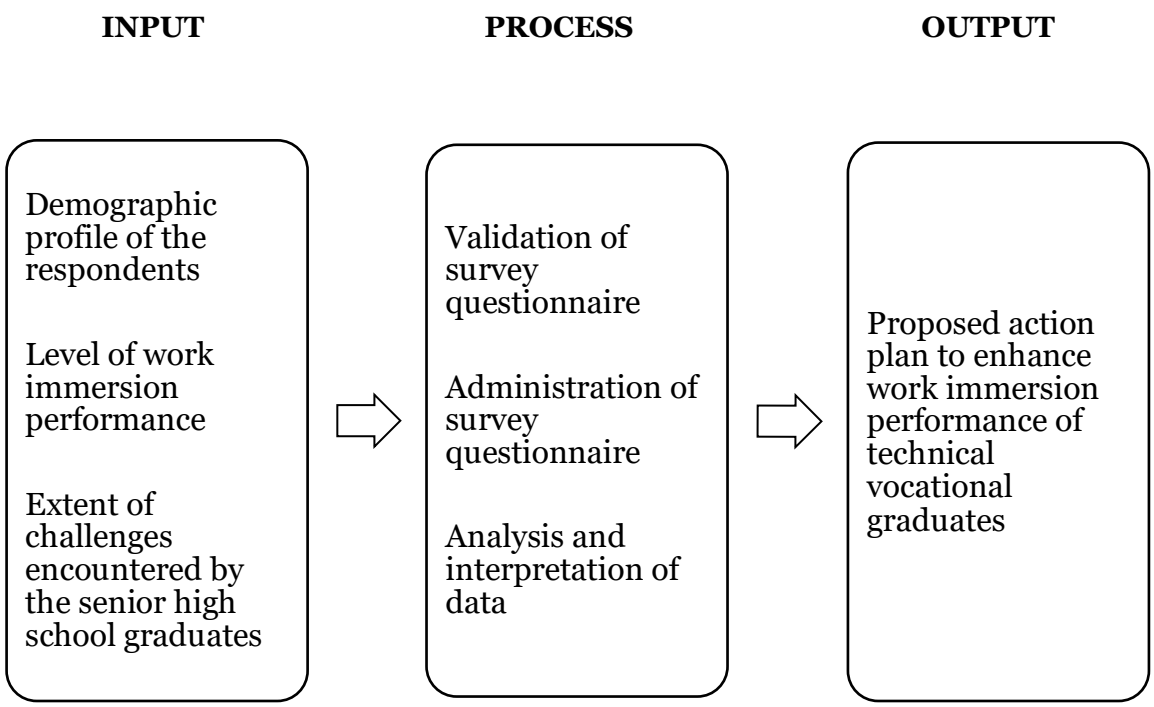


Figure 1. Research Paradigm of the Study

The graphic delineates a methodical framework for assessing and enhancing the work immersion performance of Technical Vocational Livelihood graduates. The process

commences with the collection of fundamental data, encompassing the demographic characteristics of respondents, their performance levels throughout immersion, and the magnitude of problems encountered. The second phase emphasizes the execution of research, including the validation of the survey instrument, its administration to respondents, and the analysis of results to derive significant insights. These findings then guide the third phase, which entails formulating a proposed action plan designed to improve the efficacy of work immersion programs. This organized progression guarantees that the research transitions coherently from data acquisition to evidence-based suggestions, finally enhancing results for Technical Vocational Livelihood students.

Scope and Delimitations of the Study

This study examined the performance of Technical Vocational Livelihood graduates in General Mariano Alvarez Technical High School, who have completed their work immersion in the school year 2024-2025.

This study focused on evaluating the work immersion performance and identifying the challenges encountered by Technical Vocational Livelihood graduates at General Mariano Alvarez Technical High School. It aimed to assess how effectively the work immersion program prepares students for real-world employment by examining their performance during immersion and the obstacles they face. The research involved TVL graduates from the school, utilizing both quantitative and qualitative methods to gather comprehensive data on their experiences.

It covered the performance assessment of the Work Immersion students done by the Partner Institution Supervisor based on the DepEd prescribed Work Immersion performance appraisal tool. Also, it attempted to determine the challenges that students encounter throughout the duration of their work immersion, in relation to their time management skills, ability to adapt to the work culture, and their relevant skills. It did not cover challenges related to socio-economic factors.

The study was limited to TVL graduates from General Mariano Alvarez Technical High School who participated in the work immersion program during the academic year 2023–2024. It did not include students from other educational institutions or those who did not undergo the work immersion component. The study focused on the students' performance and the challenges they encountered, excluding other factors such as post-graduation employment outcomes or long-term career success. Additionally, the research did not delve into the perspectives of industry partners or employers involved in the immersion program.

Significance of the Study

The results of this study shall be significant for a wide range of educational stakeholders, namely:

Technical Vocational Livelihood Graduates. It provides empirical insights into the effectiveness of work immersion programs in preparing students for the workforce. By identifying specific obstacles faced during immersion, such as skill mismatches and inadequate resources, the research informs curriculum development, enabling educators to tailor programs that better align with industry demands.

School Administrators. The action plan to be produced in this research is devised through fact-finding methods and could be a credible basis for intervention programs. The issues that could be identified can assist in policy-making and future program proposals.

Work Immersion Teachers and Coordinators/Focal Persons. The study can provide evidence-based recommendations that can serve as a reference for pedagogical decisions. With the awareness of the challenges encountered by students, WI teachers can design instructional plans that can address these needs to help students reach their full potential.

Work Immersion Partner Institutions and Supervisors. As representatives of their company, the action plan to be proposed will benefit them. Reflections from the study can facilitate man pooling and selection as work immersion gives them access to potential manpower. It will also

help them build stronger relationships with the academe, which could enhance their institution's image in the community.

Future Work Immersion Students. The results will provide an overview of the challenges that they may encounter and can prepare them for what is ahead of them.

Future Researchers. This paper seeks to contribute to and study relevant literature on the challenges encountered by Technical Vocational and Livelihood (TVL) work immersion students.

The findings and theories in the discussion could be valid references for similar undertakings.

Definition of Terms

To clarify the concepts and variables that are frequently used in the study, the following terms have been technically and operationally defined:

Adjustment to the Workplace Environment. The capacity of Technical Vocational and Livelihood (TVL) students to acclimate to the physical, social, and cultural environments of the business during work immersion, encompassing an understanding of routines, conventions, and expectations.

Adaptability and Problem-Solving. Students' skills to adapt to unforeseen circumstances and employ logical reasoning or initiative to address workplace problems during immersion.

Career. It refers to a job or position the learners desire to achieve, or the field that they want to pursue.

Career Readiness. Refers to the preparation of a learner to transition from school to the workforce. This encompasses their skills, knowledge, and relevant personal attributes.

Communication and Collaboration. The proficiency of students in articulating ideas clearly,

engaging in active listening, and collaborating effectively with supervisors, colleagues, and peers at the immersion site.

Challenges Encountered. The specific difficulties or obstacles encountered by Technical Vocational and Livelihood (TVL) students during work immersion, which may influence their performance, learning results, or overall experience.

Industry-Related Skills. The array of technical skills mandated by the host industry that students are anticipated to exhibit or cultivate throughout their immersion, contingent upon their specialization.

Partner Institutions. Refers to public or private institutions or organizations that willingly entered into an agreement with any of the DepEd or Non-DepEd offices and/or schools to lend their expertise and resources, without monetary requirements from both (DepEd Order No.30, 2017, p.2)

Partnership. Refers to the relationship between the partner institution and the school or any office of DepEd that responds to the needs of the K to 12 Program, formalized through a Memorandum of Agreement. (DepEd Order No.30, 2017, p.2)

Specialization. The specific vocational field or strand selected by the student within the Technical Vocational and Livelihood (TVL) track, which dictates the character of their training and immersion placement.

Supervisors. Individuals from the host industry or educational institution responsible for overseeing, guiding, and assessing students' performance during work immersion.

Support and Supervision. The extent of support, guidance, and supervision afforded to students by educational staff and industry collaborators throughout the immersion phase.

Technical Skill Application. The degree to which students may utilize the practical abilities acquired in school for real-world jobs and operations throughout their immersion.

Time and Stress Management. The capacity of students to organize their calendars, adhere to deadlines, and withstand pressure or exhaustion throughout the immersion experience.

Work Attitude and Professionalism. The exhibition of suitable professional conduct, encompassing timeliness, accountability, respectfulness, and ethical behavior during immersion.

Work Immersion. A systematic educational experience enabling Technical Vocational and Livelihood (TVL) students to participate in real work settings pertinent to their field of study, designed to augment their skills and equip them for employment.

Work Immersion Coordinator is also known as the school partnership focal person authorized to seek partnerships between DepEd and Institutions (DepEd Order 40, s.2015)

Work Immersion Industry Placement. The designated company, organization, or institution where the student is tasked with performing duties and acquiring practical experience throughout the immersion time.

Work Immersion Partner Institution Supervisor. Supervisor serves as the counterpart of the WI Teacher, identified in the Memorandum of Agreement as a representative of the institution in forging partnership with DepEd (DepEd Order No.30, 2017, p.2).

Work Immersion Performance. The comprehensive efficacy and caliber of a student's engagement in work immersion, assessed via their technical output, conduct, and capacity to fulfill workplace standards.

LITERATURE REVIEW

Work Immersion

Work immersion in the Philippine Senior High School curriculum is a work simulation course where students use their knowledge and abilities in the workplace setting. It is a K to

12 program completion requirement that is meant to enhance students' abilities and skills to equip them either for higher education or for job.

Among the main features of Work Immersion program are: 1) work simulation, in which students must actively participate in a workplace setting; 2) the application of competencies acquired, in which students move from theoretical knowledge to practical work situations; and 3) the supervision of the students' performance to be done by a school-designated Work Immersion Teacher and a designated partner institution supervisor, whose name is indicated in a legally binding document that details the terms and conditions of the partnership between the school and the partner institution (DepEd Order No. 30, s.2017).

Work immersion helps students to move theoretical knowledge acquired in the classroom to practical work experiences. This practical knowledge lets them see mostly the uses of their lessons in the classroom and gives them a clear understanding of how different theories and ideas operate when actualized. A narrative study to investigate the before, during, and after work immersion experiences of senior high school students from a local science high school has been done; the findings showed that the learning process acquired from work immersion benefited students for personal development (Ador et al., 2023).

Pérez and Estrada (2021) showed that immersion experiences allowed students to examine and rebuild their identity, therefore improving their confidence in negotiating unknown environments and contexts. Johnson (2020) backed the same idea; his research revealed that short-term immersion programs greatly improved students' intercultural competence, a quality quite relevant for workplace adaptation.

Martinez et al. (2020) found that short-term intensive immersion courses significantly enhanced students' preparedness for real-world professional environments. These programs allowed learners to experience the pace and expectations of the workplace within a condensed timeframe. As a result, students developed adaptability, critical thinking, and confidence in handling job-related tasks. The study emphasized that even brief but focused immersion

experiences could bridge the gap between academic learning and industry demands. This suggests that well-structured short-term immersions can be just as impactful as longer programs in shaping career readiness.

Reyes and Dela Cruz (2022) highlighted the importance of the Philippines' implementation of the Senior High School work immersion program in preparing students for employment. Their research showed that immersion experiences helped learners apply theoretical knowledge in practical settings, enhancing both technical and soft skills. Students reported improvements in communication, time management, and workplace etiquette, which are crucial for employability. The program also exposed them to various career paths, allowing for more informed decisions about their future. Overall, the study concluded that work immersion is a vital component of the K–12 curriculum in fostering job readiness among Filipino youth.

Work immersion performance

Work immersion performance includes the demonstration of technical expertise, professionalism, and adaptability in tasks relevant to their specialization. Robust performance is evidenced by students' proficiency in communication, collaboration with supervisors and colleagues, and problem-solving in business environments. This performance not only corroborates classroom learning but also equips students for future work by familiarizing them with real job demands and expectations. Assessing immersion success enables educators and industry collaborators to enhance training methodologies for improved student growth.

Rodriguez (2019, as cited in Espinueva 2023) asserted that students enhance their technical knowledge and skills, appreciate the importance of applying classroom concepts, and are better prepared post-graduation to address employment, entrepreneurial, or further educational challenges. He contended that students acquire practical and pertinent skills in the industry under the guidance of professionals and specialists. It enhances their technical expertise and skills, acknowledges the importance of implementing the concepts and ideas

acquired in class, and prepares them more effectively for the demands and challenges of employment, entrepreneurship, or further education after graduation.

Building on this, Agluba (2023) analyzed the academic achievement of grade 9 Technology and Livelihood Education students to develop a placement strategy for incoming grade 10 pupils. It also disclosed the pupils' interests in several technical-vocational and academic disciplines. The findings indicated a robust foundation in occupational competencies among grade 9 pupils. Their performance demonstrates a comprehensive mastery of both the practical and theoretical dimensions of their selected expertise, be it in culinary arts, automotive technology, Information and Communication Technology, or other Technical-Vocational Livelihood strands. This competency level signifies that the curriculum and instruction at this stage are successfully providing students with necessary skills. It also signifies preparedness for more sophisticated training or immersive experiences in practical environments. The findings underscore the significance of early technical education in developing confident and competent learners.

In addition, Garcia and Yazon (2023) discovered that senior high school students believed their technical skills were adequately aligned with the demands of the work immersion program. This alignment indicates that students perceived themselves as competent in executing activities and responsibilities anticipated in actual industry environments. The study underscores the curriculum's efficacy in equipping learners for practical application of their skills. This indicates that students can transfer from academic settings to professional environments with negligible skill deficiencies. These findings underscore the significance of work immersion as a conduit between education and employment preparedness.

Moreover, Carada et al. (2022) assessed the impact of manifestations on the perceived talents and employability of senior high school graduates. This study surveyed 324 senior high school graduates from San Pablo City, Laguna, Philippines. A study revealed that senior high

school graduates from San Pablo City demonstrated a high degree of technical capabilities, which substantially impacted their perceived employability. The multiple regression analysis of the study indicated technical skill as a significant predictor of work preparedness among the respondents. These findings highlight the necessity of augmenting technical training in senior high school curricula to improve graduates' employment opportunities.

Jackson and Wilton (2021, quoted in Anajao, Intano, and Sumaoy, 2025) assert that professionalism, which includes respect, accountability, and ethical behavior, is essential for cultivating effective workplace relationships in WIL environments. Their examination of Australian WIL programs revealed that industry partners really appreciate students who exhibit courteous conduct and accountability, along with the standards of TVL immersion programs.

Origenes (2024) discovered that Grade 12 Humanities and Social Sciences (HUMSS) students demonstrated proficiency in cultivating excellent work habits during their immersion program. They exhibited commendable work-related skills and overall competence, signifying robust readiness for professional settings. Supervisors observed that pupils excelled in interpersonal interactions, demonstrating exceptional human relations abilities. The findings indicate that the existing immersion program cultivates both technical and social skills vital for future employment.

Pequit and Samson (2024) discovered that senior high school graduates exhibited adequate levels of knowledge, abilities, and attitudes throughout their work immersion experience. This signifies pupils were sufficiently equipped to fulfill fundamental job expectations and obligations. Their performance demonstrates the efficacy of the existing curriculum in cultivating essential competencies. The analysis indicates potential for enhancement in several areas to achieve superior standards of excellence. Enhancing practical training and the development of soft skills could significantly improve students' employability and preparedness for future professions.

Gamage (2023) asserts that clear and effective communication is essential for improving client satisfaction in hospitality environments. Effective communication by staff enhances guests' feelings of being heard, valued, and respected, so elevating their whole experience. As a result, Misunderstandings are reduced, resulting in more efficient processes and diminished service errors. Moreover, trust is established by continuous, honest, and compassionate interactions between personnel and clients. Effective communication cultivates loyalty and promotes repeat patronage, establishing it as a fundamental element of effective hospitality management.

Similarly, Fajaryati et al. (2020) assert that communication skills are vital for articulating ideas effectively and fostering robust relationships in the workplace. They facilitate efficient collaboration among individuals, coworkers, clients, and supervisors in many professional environments. Effective communication cultivates reciprocal understanding, mitigates tensions, and improves collaboration. In dynamic settings, the capacity for active listening and appropriate response is essential for sustaining productivity. Enhancing both verbal and written communication abilities prepares workers to fulfill employment requirements and adjust to various workplace situations.

In the same vein, the study by Roble (2021) delineates the socio-demographic profile of Technical-Vocational and Livelihood senior high school students in a private institution in the Philippines, focusing on their competency levels, work immersion performance, and employer expectations on competencies established by regulatory bodies. Research indicated that students possess a strong confidence in engaging effectively with classmates, supervisors, and clients in professional environments. Their self-evaluation demonstrates robust interpersonal skills, which are crucial for success in any professional setting.

Furthermore, Cabile Jr. (2024) discovered that students attained a highly satisfactory evaluation in both communication and teamwork during their work immersion in the new normal. This signifies learners could articulate their thoughts properly and communicate

efficiently with colleagues and supervisors in a professional environment. The results indicate that, despite the difficulties associated with the transition in learning modalities, students preserved robust interpersonal and collaborative skills. These qualities are crucial for professional success and demonstrate students' adaptability to changing educational and industry requirements.

On the other hand, Salanguste (2025) indicated that Senior High School graduates' speaking proficiency signifying 'Basic Proficiency,' which does not meet the competency standards established by BPO businesses. The results suggested that, overall, the respondents did not possess the requisite speaking abilities to be considered prepared for employment in the BPO sector, as evidenced by their performance in the speech assessment and the standard established by BPO organizations.

Dzia-Uddin et al. (2025) discovered that the majority of industry stakeholders highlighted that the hotel sector's work environment necessitates the capacity to confront various problems and circumstances on a regular basis. Analytical thinking and excellent problem-solving are considered essential competencies in the hospitality industry. Employees must accurately identify guest concerns, formulate suitable action plans, make informed decisions, and conduct follow-ups to ensure guest satisfaction. While these abilities may be less essential for TVET graduates, they are nonetheless invaluable for their professional development and enduring success.

Similarly, Maniram (2022) discovered that professionals frequently encounter unforeseen obstacles, including service interruptions, staffing shortages, and operational hindrances that necessitate prompt resolution. Such circumstances necessitate prompt and tactical solutions to uphold efficiency and client happiness. Consequently, graduates must possess robust problem-solving skills to assess challenges and formulate effective solutions. Decision-making abilities are crucial, allowing individuals to select the optimal course of action under duress and to contribute significantly to workplace success.

Meanwhile, Seledio-Cielo and Niez (2023) examined the personality traits and employability abilities of grade 12 student interns and their implications for an improved school immersion program. The research employed a mixed-methods approach, integrating both qualitative and quantitative data collection techniques. The findings indicated that the grade 12 student interns predominantly exhibited favorable personality characteristics, including elevated levels of extraversion, agreeableness, and conscientiousness. Although students demonstrate proficiency in several facets of job immersion, domains such as problem-solving and adaptability necessitate enhancement. These abilities are crucial for managing unforeseen obstacles and adapting to evolving employment environments. Insufficient exposure to real-world situations may impede students from properly cultivating these competencies. Enhancing these areas can improve their overall preparedness for employment and sustained career success.

In addition, Alawin-Ligwang (2025) discovered that SHS-TVL students from Kabugao Agro-Industrial High School shown significant competence and flexibility throughout their work immersion, suggesting their capacity to effectively use technical abilities in practical settings. This indicates that the school's curriculum and training programs effectively equip students for industry requirements. Nonetheless, the study also pinpointed areas for enhancement, like the uniformity of supervision and the congruence of activities with students' expertise. These observations underscore the necessity of ongoing program evaluation to guarantee that work immersion aligns with student requirements and employer expectations.

On the other hand, Obregton et al. (2023) discovered that although students in the TVL Cookery program at Mabolo National High School had fundamental entrepreneurial competencies, their commitment to work contracts and propensity for risk-taking were significantly deficient. The findings indicate that students may have difficulties with long-term responsibility and decision-making in unpredictable situations, attributes crucial for entrepreneurial success. The report underscores a deficiency in the cultivation of essential soft

skills that enhance technical training. Targeted interventions in these areas could improve students' overall preparedness for job and entrepreneurial endeavors.

Finally, Durante (2025) discovered that Senior High School graduates had highly satisfactory levels of adaptability during their work immersion and in their present career. This signifies students successfully adapted to diverse tasks, work environments, and schedules, an essential characteristic for workforce preparedness. Their capacity to transition between tasks and adapt to evolving needs demonstrates robust preparation during the immersion program. These findings underscore the necessity of enhancing adaptable abilities within the curriculum to align with changing market demands.

Career Readiness of Technical Vocational Livelihood Graduates

Career readiness among Technical Vocational Livelihood graduates is a critical area of study, as it directly influences their ability to transition successfully into the workforce. Research indicates that Technical Vocational Livelihood students often face challenges in acquiring essential employability skills, such as effective communication, adaptability, and technical proficiency, which are vital in the evolving job market. For instance, a study assessing the readiness of Technical Vocational Livelihood students from Simpucan National High School found that while students demonstrated preparedness in personal, social, communication, and technical skills, certain areas required further development to enhance their employability.

Bauyot and Loquias (2024) described in a case study the experiences and difficulties of Filipino senior high school graduates who entered the labor force rather than seeking higher education. It was shown that Filipino senior high school graduates suffered in their employability because of a lack of job experience and absence of work background. Though there is a discrepancy between their obtained skills and their job title, the K to 12 curricula effectively improved senior high school graduates with soft skills and technical skills, which allowed them to excellently perform at work.

The case study underlined once more that poverty is the primary driver for Filipino senior high school graduates to seek employment. Considering most especially that many have no access to college scholarships and educational help, so graduates decided to give the family's urgent needs top priority. All in all, this information supports the need to evaluate the K-12 curriculum's career preparation elements to enable senior high school graduates to fulfill their full potential in employment.

Several businesses are said to have been reluctant to hire senior high school graduates due to concerns about their readiness for the workplace upon the completion of the early batches of senior high school graduates in the country; a study found that most senior high school graduates would rather continue their education. Starting in 2018, the Philippine Institute for Development Studies (PIDS) said its study revealed senior high school graduates struggled to fit into the labor market; 22 of 26 businesses polled believed they were unprepared for employment (Añago, 2021).

Magallanes (2022) looked at the correlation between student involvement and work readiness and found that those with paid work experience had higher technical focus and were better problem-solvers because their work experience had enhanced these specific skills necessary in the workplace. This indicates how work immersion or internship experience harnesses industry-related skills before employment.

A study found the patterns and difficulties high school students in Cebu encounter in career selection. The findings indicate that many students pick jobs that fit their family's needs. Sometimes they look for work on Facebook, LinkedIn, Twitter, and MySpace; they also use technology to do that or select a career that suits their skills. Most of the students lack motivation and are not deliberate in their career choices; many of them only choose out of necessity. Many students base their choice on practicality; for those who cannot choose, the parents get to decide on their behalf.

Dalangin (2023) found that the graduate qualities, workplace readiness, and student

employability were evaluated as the foundation for conceptualizing a career development strategy. The study found a notable link between employability and workplace readiness. Therefore, the greater the degree of workplace readiness, the greater the degree of students' employability.

Dela Cruz (2023) examined senior high school graduates' employability in the Technical-Vocational Livelihood track from batches 2018, 2019, and 2020. It was found that while 91 (31.1%) were unemployed despite having gone to college, lacked experience, and had family issues, most graduates, or 202 (68.9%), were working in service and sales sectors.

According to Masong and Barillo (2022), their tracer study looked at Pagadian City Technical Vocational track graduates with National Certificates II already in hand. They were questioned on their opinions on employability, their pre-work preparations, and how their teachers helped them hone their skills. Five themes emerged from the qualitative research: Career path as a childhood dream and passion, competent and experienced mentors, and positive working attitudes. It clarifies why both the work immersion supervisor and the specialization teacher are vital in getting the kid ready for employability.

Elizarde (2024) tried to grasp the viewpoints and experiences of students undergoing work immersion as well as their decision-making process regarding career path selection. Factors affecting students' choices to pursue their career paths were found by means of exhaustive research. The study found a notable link between students' opinions of work immersion and their preferred career paths after graduation.

Challenges encountered

While work immersion provides valuable real-world experience for Technical Vocational Livelihood students, its effectiveness is often hindered by several challenges. Students may struggle to adjust to unfamiliar workplace environments that differ significantly from the routines and culture of school and home, leading to a form of culture shock compounded by the pressure of meeting professional standards and deadlines.

According to Razote (2024), among these challenges are adjusting to a new environment, handling workloads, acquiring new knowledge, coping with criticism, and developing professional networks; time management, balancing academic obligations with immersion criteria, and coping with workplace stress are also included.

Time management becomes a critical hurdle as students transition from structured academic schedules to more fluid and demanding work routines, requiring discipline and motivation to avoid burnout. Additionally, the acquisition of practical and specialized skills may be compromised if the training is poorly structured or lacks adequate support. In this context, the role of partner institutions becomes vital in guiding students, providing mentorship, and ensuring that the immersion experience fosters both competence and confidence in the workplace. Poor learning environments for practical training and experience can also impede skill proficiency growth in work immersion.

Anca (2024) suggested the involvement of work immersion partner institution supervisors in developing a school's framework for work immersion for more focused learning results, particularly connected to career readiness.

The study by Monis (2024) indicated that skills misalignment constituted a major challenge for Tech-Voc senior high school students throughout their job immersion. A multitude of participants indicated that they were allocated duties outside their area of expertise, thus constraining their capacity to utilize and develop their acquired skills. This disconnection between classroom instruction and real-world tasks resulted in irritation and a feeling of underutilization. Consequently, students encountered difficulties in acquiring pertinent industry experience that would facilitate their future jobs. These findings highlight the necessity for a more contextualized TVL work immersion program that guarantees alignment between students' competencies and their designated duties.

Similarly, Mahaguay and Mahaguay (2020) discovered that restricted access to work immersion sites impeded adequate oversight and assistance for students during their training.

In the absence of regular visits from school professionals, pupils received insufficient direction and feedback, adversely impacting their learning experience and performance. Furthermore, numerous students were allocated assignments that were incongruent with their academic specialization, resulting in lost opportunities to utilize pertinent abilities. The discrepancy between training and specialization diminished the efficacy of the immersion program in equipping students for their desired career trajectories.

Consistent with these findings, Necio's (2022) study examined the challenges faced by partners and work immersion students, along with their level of satisfaction. Respondents in work immersion encountered several challenges: the geographical distance to immersion sites, misalignment of assigned tasks with expectations, unapproachable supervisors and employees, lack of correspondence between immersion venues and preferred courses, and insufficient facilities at certain immersion locations.

Flores and Dela Cruz (2025) examined various career trajectories and cultivated essential abilities such as communication, problem-solving, and professionalism, so equipping them for future employment. Research indicated that Grade 12 students at Narvacan National Central High School encountered numerous difficulties during their job immersion program. Numerous individuals encountered difficulties in acclimating to unfamiliar work situations, which adversely impacted their confidence and performance. Resource constraints and discrepancies between allocated jobs and their academic disciplines also presented challenges. These challenges assessed their capacity to manage time, maintain organization, and react to practical needs.

Likewise, Razote (2024) identified several challenges faced by students, including adaptation to a new environment, managing workloads, acquiring new knowledge, dealing with criticism, and establishing professional networks. Additionally, time management, balancing academic responsibilities with immersion requirements, and managing workplace stress were also noted. Furthermore, pupils' attendance and punctuality were emphasized.

Communication skills continue to be a barrier for the majority of vocational major students.

Prado and Motus (2024) discovered that time management conflict was a persistent issue for Senior High School students during their job immersion, as numerous individuals found it difficult to reconcile academic obligations with immersion activities. Students frequently encountered scheduling conflicts, resulting in stress and diminished productivity. Inadequate time management adversely impacted their capacity to adhere to deadlines and operate effectively in the workplace. The challenging setting exacerbated these issues, as students faced elevated expectations, rapid operations, and pressure to adjust swiftly. These circumstances assessed their resilience and underscored the necessity for enhanced preparation and assistance prior to engaging in immersion programs.

Meanwhile, Maynigo and Betito (2025) discovered that TVL students encountered challenges in acclimating to the novel dynamics of their internal work immersion setting. The absence of adaptation resulted in unease and reluctance to participate in tasks and team relationships. Consequently, collaboration among team members deteriorated, adversely impacting overall group performance and productivity. The study indicated that students frequently lacked the interpersonal skills necessary for effectively managing business relationships. These findings underscore the necessity of equipping students for real-world environments via focused training in adaptation and collaboration.

Difference in the level of work immersion performance

Roble (2021) found that students' gender and socio-economic status did not significantly affect their performance during job immersion, indicating that these demographic elements were not primary predictors of success. The study indicated a significant disparity in performance based on the grouping of students by their academic strand and area of concentration. This signifies that the congruence between a student's academic discipline and the characteristics of their immersion tasks is essential in influencing results. Students whose immersion experiences aligned with their expertise exhibited superior

performance and acquired more pertinent skills. These findings underscore the need of aligning students' work immersion assignments with their academic coursework and professional aspirations.

Tabaosares and Castillo (2024) examined the demographic characteristics and work immersion performance of Grade 12 Senior High School students, considering gender and academic strands. Significantly, males and females exhibited considerable differences in self-assessments, with males assigning themselves higher evaluations than females. No substantial variations were observed in supervisor-rated performance between genders. Pairwise comparisons of self-assessments across strands revealed no significant differences between ABM and HUMSS students; however, STEM students evaluated themselves much higher than both ABM and HUMSS students.

Dela Cruz (2023) investigated the employability of Senior High School graduates in the Technical Vocational and Livelihood Track at Malandag National High School and Alabel National High School from the graduating cohorts in 2018, 2019, and 2020. The majority of graduates are employed, with 202 (68.9%) in service and sales sectors, while 91 (31.1%) remain unemployed despite possessing a college education, lacking experience, and facing familial issues. Employment-related challenges were the predominant difficulties encountered by graduates. The research revealed no notable disparities in employability by sex, geography, strand, or subject of expertise.

Difference in the extent of challenges encountered

Mahaguay and Mahaguay (2020) performed a study on the challenges faced by students throughout their work immersion, focusing on family support, supervisory support, work habits, and competence. The study indicated that the challenges faced by work immersion students in regard to their supervisors are not correlated with their gender; however, work habits and competencies were found to be significant factors. There was no major disparity in the various factors concerning monthly family income.

Asuncion et al. (2023) assessed the challenges and opportunities faced by Senior High School students at St. Paul University Surigao across various subject areas. The study aimed to address the following inquiries: (1) the demographic profile of the respondents; (2) the degree of challenges and opportunities experienced by TVL SHS students in online learning across subject areas, specifically regarding the use of online classes, Quipper as a learning management system, and the four stations of Paulinian ReFlex. The notable disparity in the magnitude of problems and possibilities faced by pupils when categorized by profile. No substantial difference was observed in the obstacles faced by TVL students when categorized by profile factors, except in the context of online classes.

Peñarendonda (2023) discovered that, despite the obstacles encountered by students during work immersion, including resource limitations, workplace constraints, and hurdles in skill execution, these factors did not substantially impact their overall performance. The calculated p-value revealed no statistical correlation between the students' skill levels and the problems faced. This indicates that students successfully preserved their technical, interpersonal, entrepreneurial, and behavioral competencies despite external challenges. The results underscore the tenacity and adaptability of TVL students in managing immersion experiences throughout the pandemic.

Work immersion performance and the extent of challenges encountered

Razote et al. (2024) examined student engagement in work immersion and the problems faced in the Technical Vocational and Livelihood Program in Food and Beverages in Zamboanga City. A substantial correlation existed between the degree of student participation and the difficulties encountered by students in the TVL program in food and beverage.

The study by Anabo et al. (2025) identified the challenges and issues faced by senior high school students participating in out-of-campus work immersion programs. A descriptive-correlational research design and a researcher-developed survey questionnaire were employed with 110 senior high school students participating in work immersion outside of campus. The

findings indicated a substantial association between the obstacles and issues faced by out-of-campus senior high school work immersion students, particularly concerning immersion teachers, field supervisors, work ethics, and students' skills and competencies.

RESEARCH QUESTIONS

This study, Work Immersion Performance and Challenges Encountered by Technical Vocational Livelihood Graduates in General Mariano Alvarez Technical High School, determines the work immersion performance and challenges encountered by technical vocational livelihood graduates.

Specifically, it seeks to answer the following:

1. What was the demographic profile of the respondents in terms of:

1.1 For students

1.1.1 age;

1.1.2 sex;

1.1.3 specialization;

1.1.4 type of work immersion industry placement?

1.2 For supervisors

1.2.1 age;

1.2.2 sex;

1.2.3 position;

1.2.4 highest educational attainment;

1.2.5 number of years in handling immersion; and

1.2.6 number of trainings attended in immersion in the recent 5 years?

2. What was the level of work immersion performance of the graduate students as assessed by the two groups of respondents in terms of:

2.1 technical skill application;

2.2 work attitude and professionalism;

2.3 communication and collaboration; and

2.4 adaptability and problem-solving?

3. What was the extent of challenges encountered by the senior graduate students during their work immersion as assessed by the two groups of respondents in terms of:

3.1 industry-related skills;

3.2 adjustment to the workplace environment;

3.3 time and stress management; and

3.4 support and supervision?

4. Was there a significant difference in the level of work immersion performance of the graduate students when grouped according to profile?

5. Was there a significant difference in the extent of challenges encountered by the graduate students as assessed by the students and the supervisors themselves?

6. Was there a significant relationship between the level of work immersion performance and the extent of challenges encountered by the graduate students?

7. Based on the findings, what action plan might be proposed?

Hypotheses

The researcher tested the following null hypotheses:

$H_0$1: There was no significant difference in the level of work immersion performance of the graduate students when grouped according to profile.

$H_0$2: There was no significant difference in the extent of challenges encountered by the graduate students and the supervisors themselves.

$H_0$3: There was no significant relationship between the level of work immersion performance and the extent of challenges encountered by the senior high graduate students.

METHODOLOGY

This presents a comprehensive description of the research methods and techniques employed in the study. It outlines the research design, population and sampling procedures, instrumentation, data collection process, and statistical treatment of data.

Research Design

This study utilized a quantitative descriptive research design to analyze phenomena through numerical data and statistical techniques. This approach relied on quantifiable variables, objective assessment, and reproducible procedures to ensure precision and impartiality. Descriptive research design was appropriate because it allowed for the systematic collection and analysis of data to assess the effectiveness of the work immersion program and to identify the challenges faced by TVL graduates. By employing a quantitative method, the study provided a comprehensive understanding of students' performance and the obstacles encountered during their immersion experiences.

Quantitative descriptive research provided a robust foundation for generating accurate

and reliable results, particularly in studies requiring replicability and generalizability across diverse populations. This method used standardized instruments and statistical tools to mitigate researcher bias and enhance the accuracy of data interpretation. The organized approach enabled replication by other researchers, thereby improving the credibility and consistency of the results.

Population and Sampling Technique

The study population comprised 235 graduates and 45 supervisors. The population consisted of graduates from the Cookery strand with 80 students, followed by Automotive with 67 students and Shielded Metal Arc Welding with 56 students, while Hairdressing and Fashion Design were least with 18 and 14, respectively.

The study utilized a total enumeration sampling strategy for the supervisors and for student-respondents to ensure comprehensive coverage of all eligible respondents. This method was especially useful for gaining comprehensive insights from respondents who had roles, experiences, or traits relevant to the research aims. Total enumeration prioritized contextual relevance and expertise over generalizability, ensuring that the collected data accurately reflected the study's focus, while random sampling ensured equal chance of participation. The research enhanced the validity of its findings by involving supervisors, aligning with its objective to investigate the work performance of students.

Respondents of the Study

The respondents of this study consisted of two groups: students under the Technical Vocational Livelihood Track in General Mariano Alvarez Technical High School for school year 2024–2025 and partner institution supervisors.

The students in this case were graduates who had successfully completed their required hours for work simulation relevant to their field of specialization. The partner

institution supervisors were the students' mentors from the industry. They were the ones assigned to monitor the students' performance and progress in the workplace, and worked hand in hand with the work immersion teacher and coordinator for the development of the students' skills and professional qualities.

The study included 235 graduates and 45 supervisors. The sample size was adequate for conducting meaningful statistical analysis and allowed for the generalization of findings within the educational community. The study employed defined inclusion and exclusion criteria to maintain relevance and data integrity.

Inclusion criteria encompassed graduates of General Mariano Alvarez Technical High School who finished the Technical Vocational Livelihood track to ensure the study concentrated on persons who had received identical institutional training and curriculum.

This facilitated uniform assessment of work immersion performance and obstacles under a common educational framework. Respondents in a structured job immersion program during Senior High School were crucial to the study, as their experiences closely embodied the goals of immersion-based learning. Industry partners or supervisors from industries corresponding to Technical Vocational Livelihood specializations, namely cooking, automotive, Information and Communication Technology, agriculture, and electronics, were incorporated to offer pertinent insights regarding workplace expectations and student performance. Respondents possessing a minimum of three months of post-immersion employment or supervisory experience were chosen to guarantee adequate exposure for evaluating the influence of immersion on job preparation.

Finally, respondents who provided informed consent and agreed to participate in surveys were included to maintain ethical standards and guarantee voluntary, dependable contributions to the research.

Students who failed to finish their work immersion program were eliminated due to their insufficient experience to assess immersion outcomes. Graduates from institutions or

programs outside the Technical Vocational Livelihood track were excluded, as their training and immersion contexts were dissimilar to those of the General Mariano Alvarez Technical High School Technical Vocational Livelihood program. Supervisors from non-technical-vocational industries such as academia, law, or healthcare were excluded to preserve the relevance and alignment with the study's technical-vocational focus.

Respondents who were presently enrolled but had not graduated or finished immersion were eliminated to ensure that only individuals with comprehensive immersion experiences were evaluated. Ultimately, respondents who were either unwilling to participate or unable to furnish valid data owing to memory lapses or incomplete records were removed to preserve the integrity and correctness of the study's conclusions.

Research Instruments

To ensure the trustworthiness and consistency of the findings, the researcher carefully observed the use of appropriate, valid, and reliable research instruments. A validated researcher-made survey questionnaire was utilized to determine the level of work immersion performance and the challenges encountered by TVL graduate students during their work immersion. A modified version of the questionnaire was also administered to partner-institution supervisors to obtain their assessment of the challenges encountered by the students from the workplace perspective.

The principal instrument consisted of an adopted survey questionnaire from Razote et al. (2024) and a researcher-made questionnaire developed to assess the challenges encountered by TVL graduate students during their work immersion. The questionnaire was organized into three parts.

Part 1 gathered the demographic profile of the respondents, including the relevant characteristics needed to describe the participants. Since this part primarily consists of categorical or profile information, the responses were presented using frequency and percentage distributions. No verbal interpretation was applied to this section because the data

were descriptive and categorical in nature.

Part 2 determined the level of work immersion performance of the TVL graduate students using a 4-point Likert scale. The responses were interpreted as 4 – Very High, 3 – High, 2 – Low, and 1 – Very Low. The corresponding mean ranges were 3.25–4.00 = Very High, 2.50–3.24 = High, 1.75–2.49 = Low, and 1.00–1.74 = Very Low. These verbal interpretations were used consistently in Chapter 4 when presenting, analyzing, and discussing the respondents' level of work immersion performance.

Part 3 determined the challenges encountered by the TVL graduate students during their work immersion. A 4-point Likert scale was used, with responses interpreted as 4 – Highly Challenging, 3 – Challenging, 2 – Slightly Challenging, and 1 – Not Challenging. The corresponding mean ranges were 3.25–4.00 = Highly Challenging, 2.50–3.24 = Challenging, 1.75–2.49 = Slightly Challenging, and 1.00–1.74 = Not Challenging. These verbal interpretations were consistently applied in Chapter 4 to describe and discuss the degree to which the identified factors were challenging to the TVL graduate students during their work immersion.

The modified questionnaire administered to partner-institution supervisors likewise used a 4-point Likert scale for assessing the challenges encountered by the students from the supervisors' perspective. The same verbal interpretation was applied: 4 – Highly Challenging, 3 – Challenging, 2 – Slightly Challenging, and 1 – Not Challenging, with mean ranges of 3.25–4.00, 2.50–3.24, 1.75–2.49, and 1.00–1.74, respectively. This consistent interpretation allowed the researcher to present and compare the perceptions of TVL graduates and partner-institution supervisors systematically in Chapter 4.

Scale and Verbal Interpretation

Mean Range	Part 2: Work Immersion Performance	Part 3: Challenges Encountered

3.25–4.00	Very High	Highly Challenging
2.50–3.24	High	Challenging
1.75–2.49	Low	Slightly Challenging
1.00–1.74	Very Low	Not Challenging

Validation and Reliability Testing of the Instrument

The research instrument underwent face and content validation to establish its validity, relevance, clarity, and appropriateness for the study. A panel of three qualified validators was selected based on their professional expertise and direct experience relevant to the research. The panel consisted of the school head, research coordinator, and university research professor. The school head was considered qualified because of his or her administrative experience and direct involvement in the supervision and implementation of Senior High School programs, including work immersion activities. The research coordinator was selected because of his or her experience in research planning, implementation, monitoring, and evaluation of research instruments within the school setting. The university research professor was included because of his or her academic and research expertise, particularly in research methodology, instrument development, and the evaluation of research tools. Their combined expertise provided appropriate perspectives in assessing whether the instrument adequately addressed the study's objectives and constructs.

The validators evaluated each item in terms of clarity, relevance, appropriateness, organization, and comprehensiveness, particularly in measuring the work immersion performance and challenges experienced by TVL graduates. Their comments and recommendations were incorporated into the instrument by revising ambiguous statements, improving the wording of items, and ensuring that the questions were appropriate to the characteristics and experiences of the target respondents. After the necessary revisions were made, the instrument was subjected to pilot testing.

The pilot test was conducted among [insert number] TVL graduates who possessed characteristics comparable to the intended respondents but were excluded from participation in the actual study. The pilot test aimed to determine the clarity, comprehensibility, appropriateness, and consistency of the instrument items before their administration to the actual participants. The respondents completed the revised instrument under conditions similar to those of the main data collection. Their responses were encoded and subjected to Cronbach's alpha reliability analysis to determine the internal consistency of the instrument.

The reliability analysis yielded an overall Cronbach's alpha coefficient of $\alpha = 0.981$, indicating excellent internal consistency. An alpha coefficient of 0.70 or higher was considered acceptable for research purposes. If separate dimensions were included in the instrument, Cronbach's alpha was likewise computed for each dimension to determine whether the items within each component consistently measured the intended construct. The obtained reliability result provided empirical evidence that the instrument demonstrated satisfactory internal consistency and was suitable for use in the main study.

Following the pilot test, items that were identified as unclear, redundant, or requiring further refinement were reviewed and revised before the final administration. Thus, the systematic process of expert validation, pilot testing, and Cronbach's alpha analysis established evidence of the instrument's validity and reliability, thereby strengthening the credibility and trustworthiness of the data to be obtained from the study.

Data Gathering

To begin the data gathering process, the researcher first submitted a formal letter requesting permission to conduct the study to the Schools Division Office (SDO) of Cavite Province. This letter outlined the purpose of the study, its objectives, and the intended respondents, which included graduate students and their respective supervisors. Once the SDO granted approval, the researcher proceeded with obtaining further permissions by sending a similar request letter to the Public Schools District Supervisor, ensuring the study

aligned with district-level educational goals. Finally, a letter was addressed to the school principal requesting permission for the study to be conducted within the school, ensuring all necessary institutional permissions were secured.

Upon receiving approval from the principal, the researcher distributed consent forms to the supervisors who served as respondents for the survey, as well as to the graduate students involved in the study. The consent form informed the respondents about the study's objectives, the voluntary nature of their participation, and how their data would be handled confidentially. The form ensured that all respondents understood their rights and agreed to participate, acknowledging their consent to the use of their responses for the research. This step ensured the ethical integrity of the study and the protection of respondents ' rights throughout the data collection process.

The request letter included copies of the study instruments, university approval, ethical clearance, informed consent forms, and data management protocols, including security, storage, and eventual disposal. Approval was obtained solely from the division relevant to the research.

Upon receiving clearance, the researcher conveyed the study's aims to the respondents and secured their informed consent. Data collection transpired either in person or through internet channels, such as Google Forms, social media, or email. After gathering responses, the researcher systematically organized the data for further study. At each stage of collection, storage, and disposal, stringent rules were enforced to guarantee the confidentiality, integrity, and security of participant data.

Statistical Treatment of Data

To analyze the quantitative data collected in the study, several statistical tools and measures were applied:

Frequency Distribution: Used to measure the distribution of responses of respondents'

demographic profiles.

Weighted Mean: Used to assess responses on the level of work immersion performance and extent of challenges encountered by the senior graduate students during their work immersion.

Standard Deviation: Illustrated the extent to which responses in a dataset deviated from the mean and served as a crucial instrument for analyzing the consistency and variability of data.

Kruskal-Wallis and Mann-Whitney: Used to determine significant differences on the level of work immersion performance and the extent of challenges encountered by the senior graduate students when grouped according to profile.

Spearman rho: Used to assess the relationship between the level of work performance and the extent of challenges encountered by graduate students. Spearman's Rank Correlation was used for ordinal data such as Likert scale responses, measuring the strength and direction of the relationship between two variables based on their ranks.

Ethical Considerations

The researcher complied with the guidelines set forth by the Department of Education through Regional Memorandum No. 228, s. 2020, which emphasizes the importance of ethical standards in conducting research involving students and other education stakeholders. The study also adhered to applicable ethical principles of the American Psychological Association (APA), particularly informed consent, confidentiality, respect for autonomy, beneficence, non-maleficence, justice, and research integrity. Prior to participation, TVL graduates and their supervisors were provided with clear information regarding the study's purpose, procedures, possible risks and benefits, confidentiality measures, and their right to decline or withdraw from the study at any time without penalty.

Moreover, the study complied with Republic Act No. 10173, or the Data Privacy Act of 2012, which protects the fundamental right to privacy while ensuring the responsible processing of personal information. Only data necessary to address the objectives of the study were collected. Personal identifiers were removed or replaced with codes, and respondents' names, contact information, and other identifying details were not included in the research report. The collected information was used strictly for academic research purposes and was not disclosed to unauthorized individuals or organizations.

For data storage and security, electronic research files, including encoded responses, interview records, transcripts, and related documents, were stored in password-protected and access-restricted digital storage. Hard-copy documents, when applicable, were kept in a secure location accessible only to the researcher and authorized research personnel. Data were not transferred to unauthorized persons or used for purposes beyond those explained in the informed consent process.

Finally, research data will be retained only for the period required by the institution and applicable research and data-protection policies. After the prescribed retention period, electronic files will be permanently deleted from storage devices and cloud-based repositories, while printed documents will be securely shredded or otherwise rendered unreadable before disposal. Any other storage media containing identifiable research information will likewise be securely erased or destroyed. These measures ensure that respondents' privacy, confidentiality, dignity, and rights are protected throughout the entire research process—from data collection and storage to final disposal.

FINDINGS

1. The majority of Technical Vocational Livelihood (TVL) graduates were aged 18–20 years, with equal gender distribution and balanced representation from both specializations. Most supervisors were males aged 21–25, held college degrees, had 1–5 years of experience

handling immersion programs, and attended 1–3 trainings in the past five years.

2. Both students and supervisors rated the opportunity to enhance technical skills through hands-on practice as "Very High," achieving the highest mean scores among all areas assessed. Students also highly valued the ability to communicate ideas and concerns, and supervisors highlighted active participation in team meetings. Teamwork and flexibility were identified as top strengths in adaptability and problem-solving by both groups.

3. Both groups considered most industry-related challenges during work immersion as "Challenging." Students found complying with industry quality standards and adapting to changes in responsibilities especially difficult, while supervisors identified building professional relationships as the greatest challenge. Time management and meeting deadlines were also significant challenges for both groups, as was receiving sufficient guidance from supervisors.

4. Statistically significant differences were found in all four performance domains (technical skill, work attitude and professionalism, communication and collaboration, and adaptability and problem-solving) based on students' age, sex, and immersion type, as well as supervisors' age, sex, years of experience, and number of immersion trainings attended.

5. Significant differences were also observed in the extent of challenges encountered during work immersion, as assessed by students and supervisors, across all domains including industry-related skills, workplace adjustment, time and stress management, and support and supervision.

6. There were strong, positive, and statistically significant correlations between immersion performance and the extent of challenges encountered, as assessed by both students and supervisors, across all examined domains. Higher performance was closely linked to greater recognition or experience of challenges.

7. Based on the findings of the study, a Targeted Support and Skills Development Program for

TVL Graduates is proposed as the principal output. The proposed program is designed to address the identified needs and challenges of TVL graduates during and after work immersion, particularly those related to technical competency, workplace adaptability, professional behavior, communication, and employment readiness. The program may include targeted skills enhancement activities, workplace-readiness sessions, mentoring and coaching, industry-based learning opportunities, and support mechanisms that strengthen the transition from school-based learning to actual employment. The proposed output is anchored on the empirical findings of the study and is intended to provide a practical framework that schools and partner industries can use to strengthen the preparation, support, and employability of TVL graduates.

CONCLUSIONS

Based on the findings gathered, the following conclusions were drawn:

1. This demographic profile suggests that the TVL graduate population is predominantly young, diverse, and well-represented across specializations, which may contribute to a dynamic and balanced learning environment. The fact that most supervisors are also relatively young males with moderate experience and recent training indicates that they may bring fresh perspectives and up-to-date knowledge, but might also face challenges related to limited supervisory experience.

2. Hands-on technical practice was consistently rated as the most valuable aspect of the work immersion experience by both students and supervisors, highlighting its importance in skill development. Students placed high importance on the ability to communicate their ideas clearly, while supervisors emphasized the significance of active participation in team discussions. Additionally, both groups identified teamwork and flexibility as key strengths that enhance adaptability and effective problem-solving during immersion.

3. Both students and supervisors identified industry standards, adapting to changes in tasks, building professional relationships, managing time, and receiving adequate supervisory support as challenging aspects of work immersion. These areas often require students to quickly adjust to professional expectations and dynamic work environments, which can be demanding for those with limited experience. Similarly, supervisors may find it challenging to consistently provide guidance and foster a supportive environment, especially when balancing multiple responsibilities or addressing diverse student needs.

4. The statistical significance found in the analysis means that background factors such as age, sex, immersion type, experience, and training are not just randomly related, but actually influence differences in work immersion performance or perceptions among respondents. This suggests that these demographic variables play a meaningful role in shaping how individuals experience, adapt to, and succeed in work immersion programs.

5. Students and supervisors had significantly different perspectives on the challenges faced during work immersion. Students tend to rate the challenges as more severe or frequent compared to supervisors, suggesting a perceptual gap between the two groups. This difference highlights the need for improved communication and understanding to better align expectations and support within the work immersion program.

6. The result is a strong, positive, and statistically significant association, showing that as students and supervisors recognize or face more challenges, their performance ratings also increase. This suggests that engagement with challenges is closely linked to higher self-assessed or observed performance in immersion.

7. The findings provide a sufficient basis for the development of a Targeted Support and Skills Development Program for TVL Graduates as the proposed output of the study. The program responds directly to the performance areas and challenges identified among the graduates and is intended to strengthen their technical competencies, workplace adaptability, professional skills, and readiness for employment. Rather than treating work immersion as

an isolated curricular requirement, the proposed output emphasizes sustained support and skills development through collaboration among the school, graduates, and partner industries. Consequently, the program may serve as a practical intervention and institutional guide for improving the implementation of work immersion and facilitating a more effective transition of TVL graduates from school to the workplace.

RECOMMENDATIONS

Based on the conclusions drawn, the following recommendations were offered:

1. The school head might have provided ongoing mentorship programs and professional development workshops for young and moderately experienced supervisors to strengthen their leadership and supervisory skills, ensuring they were well-equipped to guide a diverse and dynamic group of TVL graduates.

2. TVL teachers might have designed and implemented more hands-on activities, collaborative projects, and real-world communication opportunities within the curriculum to reinforce technical skills, teamwork, and adaptability among students.

3. Supervisors might have established structured check-ins and feedback sessions with students and proactively offered guidance on industry expectations, professional relationship-building, and time management to help students navigate and adjust to workplace demands.

4. TVL teachers might have differentiated instructional strategies and support services to address the varied needs of students, considering factors such as age, sex, and immersion type, to ensure equitable opportunities for success.

5. Students might have actively participated in regular feedback and dialogue with supervisors, expressing any challenges or concerns openly to help bridge the perceptual gap

and foster a more supportive and responsive work immersion environment.

6. Supervisors might have encouraged students to view challenges as opportunities for growth and provided positive reinforcement and constructive feedback to help them develop resilience and improve their performance throughout the immersion experience.

7. The school head might have allocated resources for targeted support programs and specialized skills training for TVL graduates, ensuring continuous program evaluation and adaptation based on feedback and observed outcomes to maximize the effectiveness of work immersion initiatives.

REFERENCES

Ador, et al. (2023) Exploring the work immersion experiences of Grade 12 STEM students in a local science integrated high school: A narrative research. East Asian Journal of Multidisciplinary Research (EAJMR) Vol. 2, No. 7,2023: 3053-3078 DOI: https://doi.org/10.55927/eajmr.v2i7.4989 ISSN-E: 2828-1517 https://journal.formosapublisher.org/index.php/eajmr

Agluba, C. A. (2021). Technical skills and the academic performance of grade 9 technology and livelihood education students: a basis for placement plan . International Journal of Arts, Sciences and Education, 1(3), 56–76. Retrieved from https://www.mail.ijase.org/index.php/ijase/article/view/31

Alawin-Ligwang, M. M. (2025). Work immersion performance of senior high school students: A foundation for enhancing implementation. Journal of Education, Society and Behavioural Science, 38

Anabo, R. O., Nebrida, R. N.., Sison, M. N.., Lopido, J. L. C.., Picardal, B. M.., & Rapada, Jr., V. P. (2025). Challenges and problems encountered by senior high school out-of-campus students in work immersion program . International Journal of Multidisciplinary: Applied Business and Education Research, 6(2), 805-822. https://doi.org/10.11594/ijmaber.06.02.27

Anajao, L. J. L., Intano, J. A., & Sumaoy, R. C. (2025). Industry feedback on work immersion: A qualitative exploration. International Journal of Research and Innovation in Social Science, 9(3). https://dx.doi.org/10.47772/IJRISS.2025.903SEDU0293

Anca, R. (2024). Lived experiences of senior high school focal persons in the

implementation of work immersion program. The Research Probe, 4(2), 112

129. https://doi.org/10.53378/trp.1224.143

Asuncion, M. J. P., Agura, M. J., Sumampong, A. J., Senados, L. M., Ganto, N. J. B., & Condontol, R. H. (2023). Challenges and opportunities encountered by Senior High School students of St. Paul University Surigao in online learning modality across subject areas. International Journal of Science and Management Studies (IJSMS), 6(2), 59. https://doi.org/10.51386/25815946/ijsms-v6i2p108

Bauyot, M. & Loquias, P. (2024) Straight to work: a case study on the

experiences of Filipino k-12 graduates who directly ventured the world of employment. IJERI International Journal of Educational Research and Innovation 2(3) Retrieved:https://www.researchgate.net/publication/383703806_Straight_to_Work_A_Case_Study_on_the_Experiences_of_Filipino_K-12_Graduates_who_Directly_Ventured_the_World_of_Employment

Bertelsmann Stiftung (2022). Roadmap to high quality dual vocational education and training. https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/Euler_Roadmap_VET_engl.pdf

Cabile Jr., D. C.(2024). Implementation of work immersion in the new normal: basis for students' quality performance and satisfaction. International Journal of Multidisciplinary: Applied Business and Education Research.5(3), 925 –938. doi: 10.11594/ijmaber.05.03.16

Dela Cruz, R. A. (2023). Employability of senior high school technical-vocational and livelihood graduates: Basis for human resource management enhancement program. East Asian Journal of Multidisciplinary Research, 2(9), 3877–3892. https://doi.org/10.55927/eajmr.v2i9.5885

Department of Education (DepEd). (2017). DepEd Order No. 30, s. 2017

https://www.deped.gov.ph/2017/06/05/do-30-s-2017-guidelines-for-work

immersion/

Deutschland.de (2025). Facts about the dual vocational training system. https://www.deutschland.de/en/topic/business/how-germanys-dual-vocational-training-system-works

Durante, J. (2025). Work immersion as a predictor to current employment performance of senior high school graduates: base-reference for policy reformulation. Aloysian Interdisciplinary Journal of Social Sciences, Education, and Allied Fields, 1(8), 341-352. https://doi.org/10.5281/zenodo.16926512

Dzia-Uddin, D. N., Che Ngah, H., Anuar @ Mohd Noor, J., & Minghat, A. D. (2025). Developing work-ready TVET hospitality graduates: Key skills for industry success. International Journal of Research and Innovation in Social Science (IJRISS), 9(6), 1595–1604. https://dx.doi.org/10.47772/IJRISS.2025.906000128

Espinueva, T. G., Labrador, V. M. F., Martin, A. S. N., Olanosa, C. J. V., & Santiago, M. J. M. (2023, September 12–14). Effectiveness of virtual work immersion: A descriptive-correlational study among extended senior high school graduates. Proceedings of the 4th Asia Pacific Conference on Industrial Engineering and Operations Management, Ho Chi Minh City, Vietnam. IEOM Society International.

Fajaryati, N., Budiyono, Akhyar, M. & Wiranto (2020). The Employability skills needed to face the demands of work in the future: systematic literature reviews. De Gruyter, Open Eng. 2020; 10: 595–603.

Flores, R. R., & Dela Cruz, R. L. Jr. (2025). Exploring the challenges of work immersion among senior high school learners. International Journal of Research and Innovation in Social Science (IJRISS), 9(4), 2327–2337.

Gamage, A. N. K. K. (2022). Importance of Effective Communication to Minimize Disputes in Construction Projects. Scholars Journal of Engineering and Technology, 10(7), 128–

140.

Garcia, A., & Yazon, A. D. (2020). Work immersion performance, alignment, and employability among senior high school graduates. International Journal of Advanced Research, 8(5), 552–564. https://doi.org/10.21474/IJAR01/10960

Jaime, E. (2023). technical vocational livelihood work immersion, students' employability competencies, and satisfaction: Towards a proposed innovative implementation exemplars. Psychology and Education: A Multidisciplinary Journal, 13(5), 1-12. https://doi.org/10.5281/zenodo.8345217

Mahaguay, K. C. P., & Mahaguay, J. M. (2020). Difficulties encountered by TVL-ICT computer programming students in work immersion. Vicente Madrigal Integrated School. Retrieved from https://www.researchgate.net/publication/346875388_Difficulties_Encountered_By_TVL-ICT_Computer_Programming_Students_in_Work_Immersion

Maniram, R. (2022). Enabling students' critical thinking dispositions in hospitality financial. Journal of Teaching in Travel and Tourism, 22(3), 262–278.

Martinez, R., Lopez, A., & Kim, J. (2019). Perceived impacts of short-term

international courses on students' workplace readiness. Journal of Research in International Education, 18(3), 225-240

Masong, Rovy & Barillo, Efren. (2022). Employability of Technical Vocational Livelihood Senior High School Student Graduates: A Case Study. Journal of Multidisciplinary Studies. 11. 10.62249/jmds.2013.2426.

Maynigo, M. C. A., & Betito, R. D. (2025). Lived experiences of Technical-Vocational-Livelihood (TVL) students in an in-house work immersion program. Psych Educ, 35(3), 265–287. https://doi.org/10.70838/pemj.350305

Mejila, R. M., & Habla, F. A. (2024). Performance and problems encountered by Grade 12 TVL students in work immersion. United International Journal for Research & Technology, 5(6). https://uijrt.com/articles/v5/i6/UIJRTV5I60008.pdf

Monis, C. S. (2024). Work immersion experiences and challenges encountered of tech-voc senior high school students. World Education Connect Multidisciplinary E-Publication, 4(9), 199-205. http://dx.doi.org/110.5281/zenodo.13765199

Necio, R. et al. (2022) Challenges encountered and level of satisfaction of work immersion students and partners: Basis for school policy work immersion plan. International Journal of Multidisciplinary Research and Growth Evaluation. https://www.allmultidisciplinaryjournal.com/uploads/archives/20220822110952_D-22-115.1.pdf

Obregon, K., Largo, J., Aparre, P., Rama, M. & Polinar, M. N. (2023). Personal entrepreneurial competencies of the technical vocational livelihood - cookery students at Mabolo National High School. Psychology and Education: A Multidisciplinary Journal, 11(10), 1-11. https://doi.org/10.5281/zenodo.8221048

Origenes, M. (2024). Work immersion performance of HUMSS-12 of Olongtao National High School Senior High: Basis for school work immersion plan (SWIP) for HUMSS Strand. Psychology and Education: A Multidisciplinary Journal, 18(9), 832-835. https://doi.org/10.5281/zenodo.10963299

Peñarendonda, L. (2023). Work immersion skills of Grade 12 TVL students during the pandemic in Santa Cruz North Cluster, Division of Marinduque: Basis for intervention program. Psych Educ Multidisciplinary Journal, 8(5), 589–604. https://doi.org/10.5281/zenodo.7885160

Pequit, J. B., & Sanson, A. T. Jr. (2024). Students' performances in work immersion in Baliwasan Senior High School: A case study. International Journal of Research and

Scientific Innovation, 11

Peñarendonda, R. (2023) Work immersion skills of grade 12 tvl students during the pandemic in Santa Cruz north cluster, division of Marinduque: Basis for intervention program. Psychology and Education: A Multidisciplinary Journal

Pérez, L., & Estrada, C. (2021). Self-identity development through immersive

learning experiences. Journal of Immersion and Identity, 7(2), 110-125

Prado, J. A., & Motus, R. H. (2024). Lived experiences during work immersion of Senior High School students. IIARI Conference Abstracts, 5(1). Retrieved from https://iiari.org/conference_abstract/lived-experiences-during-work-immersion-of-senior-high-school-students/

Razote, E. B., Lantaka, I. A., & Lantaka, A. A. (2024). Student's engagement, work immersion and challenges in Technical Vocational and Livelihood Program in Food and Beverages. International Journal of Research Publications, 150(1), 968–987. https://doi.org/10.47119/IJRP1001501620246709

Roble, D. M. L. I. (2021). Competency level, employers' expectations and work immersion performance of senior high school technical-vocational and livelihood (TVL) students. Asian Journal on Perspectives in Education, 2(1). https://doi.org/10.63529/ajpe.v2i1.7657

Romero, J. et al (2024). Assessing career readiness among technical vocational home economics graduates: A literature review. Cognizance Journal of Multidisciplinary Studies, Vol.4, Issue.3, March 2024, pg. 195-205

Salanguste, A. B. (2025). Speaking competence of senior high school graduates towards the development and evaluation of job readiness training program for BPO Industry. International Journal of Research and Innovation in Social Science (IJRISS), 9(03),

4032-4043. https://doi.org/https://dx.doi.org/10.47772/IJRISS.2025.90300320

Sales, et al. (2023) Evaluation of senior high school curriculum: perspectives and experiences of students and teachers. International Journal of Curriculum and Instruction, v15 n1 p544-565 2023. https://eric.ed.gov/?q=tracer+study+shs+graduates+philippines&id=EJ1382896

Seledio-Cielo, J., & Niez, R. A. (2023). Personality traits and employability skills of Grade 12 student interns: Basis for enhanced school immersion program. OPSearch: American Journal of Open Research, 2(8). https://doi.org/10.58811/opsearch.v2i8.69