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# Students Perception on the Technical Skills Development and Quality of Work Immersion Program in TVL Education

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**Abstract**

Work immersion is an essential component of the Technical-Vocational Livelihood (TVL) track that aims to equip students with practical skills and real-world experience. This study examines the quality of work immersion programs and their influence on the technical skill development of Grade 12 TVL Students. Specifically, it assesses the level of program quality in terms of supervision, task relevance, training, availability of tools and equipment, and alignment with student's specialization. It also evaluates student's technical competencies, including tool operation, adherence to safety procedures, work quality, and performance of job-related tasks.

A qualitative descriptive research design was employed, utilizing a structured questionnaire administered to selected Grade 12 TVL Students who had completed their work immersion. Data were analyzed using frequency, percentage, weighted mean and Pearson r correlation to determine the relationship between program quality and skills development. The findings reveal that students generally perceive their work immersion experiences moderately effective, with variations depending on the level of supervision and relevance of assigned tasks. Results further indicate that students demonstrate a satisfactory level of technical skill development, particularly in practical task execution and safety compliance.

The study highlights the importance of strengthening school-industry partnerships to ensure that immersion activities are aligned with students' specialization and provide meaningful learning opportunities. Based on the findings, recommendations are proposed to enhance program implementation, including improved coordination with industry partners, better monitoring of student tasks, and provision of adequate resources. These improvements are expected to better prepare students for employment and increase their overall job readiness.

**Keywords:** Work Immersion, TVL Education Technical Skills Development, Experiential Learning, School-Industry Partnership

## Introduction

Work immersion is a fundamental component of the Technical-Vocational-Livelihood (TVL) track under the K–12 curriculum in the Philippines. It is designed to provide senior high school students with actual workplace exposure where they can apply theoretical knowledge into real-world situations. Through this program, learners are expected to develop technical competencies, professional behavior, and industry readiness. It serves as a bridge between classroom instruction and workplace application, making it a critical requirement for TVL education completion (Department of Education [DepEd], 2020).

The primary goal of work immersion is to enhance students' employability by equipping them with relevant technical and practical skills. According to DepEd (2020), immersion programs are intended to strengthen the connection between education and industry needs. This experiential learning approach enables students to gain firsthand experience in actual work environments. As a result, it contributes significantly to the development of workforce-ready graduates.

International research supports the effectiveness of work-based learning in improving student outcomes. The World Bank (2021) [2] emphasizes that hands-on training significantly enhances skill acquisition and improves transition from school to employment. Similarly, the Organization for Economic Co-operation and Development (OECD, 2022) [3] states that structured vocational education programs that integrate workplace learning produce more competent and job-ready graduates. UNESCO

(2023) [4] also highlights that technical and vocational education and training (TVET) is most effective when linked with real industry practice.

However, the effectiveness of work immersion programs varies depending on implementation quality. Key factors such as supervision, training adequacy, availability of tools and equipment, and relevance of assigned tasks greatly influence student learning outcomes. When these components are properly implemented, students are more likely to develop meaningful technical skills. Conversely, inconsistent implementation may reduce learning opportunities and hinder skill development (UNESCO, 2023) [4].

Another important factor affecting immersion effectiveness is task alignment with students' specialization. The International Labor Organization (ILO, 2024) [5] and Asian Development Bank (ADB, 2025) [6] emphasize that when students are assigned tasks related to their field of study, they demonstrate higher engagement and better skill acquisition. On the other hand, mismatched tasks can lead to reduced motivation and limited learning outcomes. This highlights the importance of proper coordination between schools and industry partners.

Furthermore, collaboration between educational institutions and industry stakeholders plays a vital role in ensuring successful implementation of work immersion programs. Strong partnerships provide students with access to proper supervision, training opportunities, and necessary resources. According to ILO (2024) [5], effective school-industry collaboration ensures that training is aligned with labor market demands. Without such coordination, immersion programs may fail to achieve their intended learning outcomes.

Theoretical foundations such as Experiential Learning Theory and Situated Learning Theory further support the importance of work immersion. Kolb's Experiential Learning Theory suggests that knowledge is created through the transformation of experience, reflection, and application. Meanwhile, Situated Learning Theory explains that learning is most effective when it occurs within authentic contexts. These theories reinforce the idea that workplace-based learning enhances both understanding and skill development.

Given these perspectives, it is essential to assess the quality of work immersion programs and their relationship to students' technical skill development. Evaluating key dimensions such as supervision, task relevance, training, and resource availability can help identify gaps in implementation. This study aims to provide empirical evidence on how program quality influences students' competencies. Ultimately, the findings will contribute to improving TVL education and strengthening school-industry partnerships.

**Statement of the Problem**

This study aims to answer the following questions:

1. What is the profile of the students in terms of?
   - Age
   - Gender
   - TVL Specialization
2. How do students evaluate the quality of work immersion in terms of?
   - Supervision
   - Task relevance
   - Training
   - Tools and equipment
   - Alignment with specialization
3. What is the level of students' technical skill development in terms of?
   - Tool operation
   - Technical procedures
   - Safety adherence
   - Work quality
   - Job-related tasks
4. Is there a significant relationship between work immersion quality and students' technical skill development?
5. What recommendations can be proposed to improve work immersion programs?

**Methodology**

**Research Design**

This study will use quantitative descriptive design. It aims to systematically describe and evaluate the quality of work immersion programs and their impact on students' technical skill development based on their experiences and perceptions.

The protection of laboratory environments represents an essential part of scientific education because high school students need to conduct experiments in laboratories. Students benefit from practical laboratory learning experiences because they gain hands-on skills. Students face health dangers which laboratories present when they use laboratory equipment without following proper safety procedures. The laboratory safety requirement must be met through effective management practices because it protects educational spaces which require secure conditions for learning.

The research investigates how well senior high schools in their science laboratories maintain laboratory safety standards and operate their laboratory management systems. Safety compliance requires the implementation of personal protective equipment (PPE) together with proper chemical handling and storage methods and safety equipment provision and emergency response capabilities. The management practices execute laboratory regulations which control student activities during experiments while they oversee laboratory facilities and deliver safety instruction. The two elements work together because they strengthen safety procedures which stop laboratory accidents from happening.

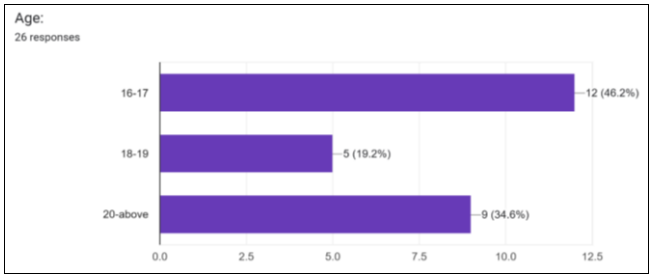
The research study employs a descriptive quantitative research design which allows researchers to assess current conditions without conducting experimental tests. The research study uses a survey method through which researchers distribute structured questionnaires to science teachers and laboratory staff and a chosen group of senior high school students. The questionnaire uses a Likert scale to assess participants' laboratory safety and management practice perceptions and experiences.

The researchers used statistical analysis tools to analyze respondents' data by calculating frequency and percentage and mean and standard deviation in order to assess safety compliance and management practice effectiveness.

**Respondent's Profile**

The first part presents the **profile of the respondents**, which provides a background of the participants in terms of

relevant demographic variables. This is essential in understanding the context of their responses and how their characteristics may influence their perception of the work immersion program. The profile of the respondents serves as a basis for interpreting the succeeding data related to technical skills development and the quality of the work immersion experience.




Formula: P=(F/N) x 100

Total Population (N) = 26 respondents

**Table 1:** Frequency and Percentage Distribution of Student by Age

| Age | Frequency | Percentage |
|---|---|---|
| 16–17 | 12 | 46.2% |
| 18–19 | 5 | 19.2% |
| 20 and above | 9 | 34.6% |
| **Total** | **26** | **100%** |

**Interpretation of data:**
The data shows the age distribution of the 26 respondents. Most of the respondents were aged **16–17 years old**, with **12 respondents (46.2%)**. This was followed by respondents aged **20 and above**, with **9 respondents (34.6%)**. Meanwhile, the age group **18–19 years old** had the lowest number of respondents, with **5 respondents (19.2%)**.
This indicates that the majority of the participants belong to the 16–17 age bracket, suggesting that younger respondents were more represented in the study compared to the other age groups.

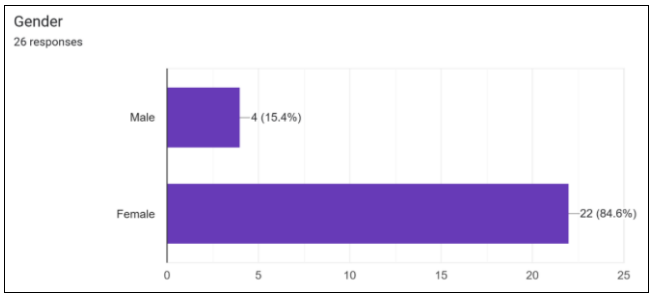



**Table 2:** Frequency and Percentage Distribution of Student by Gender

| Gender | Frequency | Percentage |
|---|---|---|
| Male | 4 | 15.4% |
| Female | 22 | 84.6% |
| **Total** | **26** | **100%** |

**Interpretation of data:**
The table shows the distribution of respondents according to gender. Out of 26 respondents, the majority were female, with 22 respondents (84.6%), while only 4 respondents (15.4%) were male. This indicates that female respondents were more represented in the study.

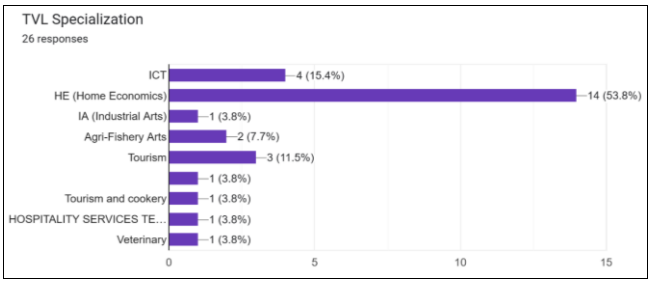



**Table 3:** Frequency and Percentage Distribution of Student by TVL Specialization

| TVL Specialization | Frequency | Percentage |
|---|---|---|
| ICT | 4 | 15.4% |
| HE (Home Economics) | 14 | 53.8% |
| IA (Industrial Arts) | 1 | 3.8% |
| Agri-Fishery Arts | 2 | 7.7% |
| Tourism | 3 | 11.5% |
| Tourism and Cookery | 1 | 3.8% |
| Hospitality Services | 1 | 3.8% |
| Veterinary | 1 | 3.8% |
| **Total** | **26** | **100%** |

**Interpretation of data:**
The table presents the distribution of respondents according to their TVL specialization. The majority of the respondents were from **HE (Home Economics)** with 14 respondents (53.8%). This was followed by **ICT** with 4 respondents (15.4%) and **Tourism** with 3 respondents (11.5%). Meanwhile, **IA (Industrial Arts), Tourism and Cookery, Hospitality Services,** and **Veterinary** had the lowest number of respondents, with 1 respondent (3.8%) each.
This indicates that most of the respondents in the study were specializing in Home Economics.

**Part II: Quality of Work Immersion Program**
This section presents the students' perception on the quality of the Work Immersion Program in TVL Education. It focuses on the different aspects that contribute to the effectiveness of the program, including the supervision and guidance provided by industry mentors, the relevance of assigned tasks to the students' specialization, the learning opportunities available in the workplace, the communication and support from the host institution, and the safety and working conditions during the immersion period. The data gathered provide an understanding of how the Work Immersion Program is implemented and how it is perceived by the students in terms of its overall quality and effectiveness in preparing them for future employment.

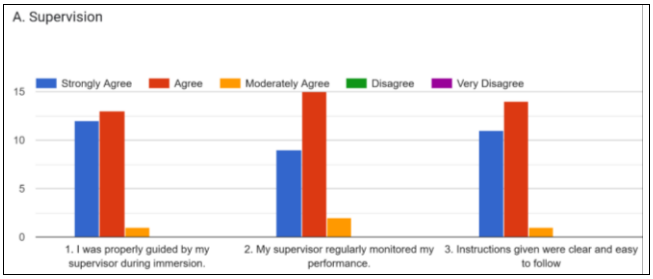


**Table 4:** Frequency and Percentage Distribution of Student Feedback on Supervision

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | I was properly guided by my supervisor during immersion. | 12 | 46.15% | 13 | 50.00% | 1 | 3.85% | 0 | 0.00% | 0 | 0.00% |
| 2 | My supervisor regularly monitored my performance. | 9 | 34.62% | 15 | 57.69% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| 3 | Instructions given were clear and easy to follow. | 11 | 42.31% | 14 | 53.85% | 1 | 3.85% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **10.67** | **41.03%** | **14.00** | **53.85%** | **1.33** | **5.13%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data:**
The data presented in Table 4 reflects the students' perceptions of the supervision they received during their immersion program. Overall, the feedback is overwhelmingly positive, with 100% of responses falling within the "Moderately Agree" to "Strongly Agree" range.

**1. Guidance During Immersion**
For the first indicator, "I was properly guided by my supervisor during immersion," 50% of the respondents agreed, and 46.15% strongly agreed. Only one respondent (3.85%) moderately agreed. This suggests that the supervisors were highly effective in providing the necessary direction and support to the students as they navigated their immersion tasks.

**2. Performance Monitoring**
Regarding the statement "My supervisor regularly monitored my performance," the majority of the students (57.69% or 15 respondents) agreed, while 34.62% strongly agreed. Two respondents (7.69%) moderately agreed. These results indicate a consistent presence of supervisors in tracking student progress, ensuring that students remained on the right track throughout the duration of the program.

**3. Clarity of Instructions**
The third indicator, "Instructions given were clear and easy to follow," received an "Agree" rating from 53.85% of the students and a "Strongly Agree" rating from 42.31%. Only 3.85% moderately agreed. This high level of agreement highlights the effectiveness of communication between supervisors and students, minimizing confusion and allowing students to execute their duties efficiently.

**Summary**
In summary, the supervision component of the immersion program is a significant strength. With an average of 94.88% of students either agreeing or strongly agreeing across all indicators, it is evident that the supervisors provided clear communication, consistent monitoring, and effective guidance. Notably, there were zero instances of "Disagree" or "Very Disagree," indicating that no student felt unsupported or poorly managed during their immersion.

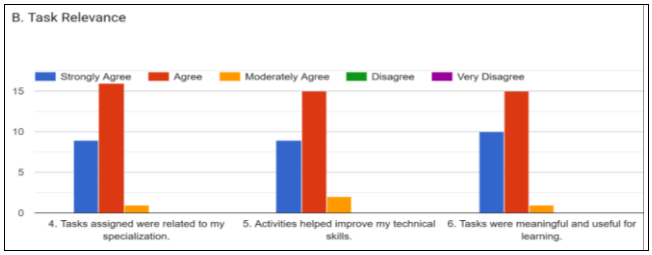



**Table 5:** Frequency and Percentage Distribution of Student Feedback on Task Relevance

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | Tasks assigned were related to my specialization. | 9 | 34.62% | 16 | 61.54% | 1 | 3.85% | 0 | 0.00% | 0 | 0.00% |
| 5 | Activities helped improve my technical skills. | 9 | 34.62% | 15 | 57.69% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| 6 | Tasks were meaningful and useful for learning. | 10 | 38.46% | 15 | 57.69% | 1 | 3.85% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **9.33** | **35.88%** | **15.33** | **58.96%** | **1.33** | **5.12%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data**
Table 5 illustrates the students' assessment of the relevance of the tasks they performed during their immersion program. The results indicate that the majority of students found the work highly applicable to their studies and professional growth.

**1. Alignment with Specialization**
For the indicator "Tasks assigned were related to my specialization," 61.54% of respondents agreed and 34.62% strongly agreed. Only one student (3.85%) moderately agreed. These figures suggest that the immersion placements were well-matched with the students' academic backgrounds, ensuring that the work they performed was pertinent to their chosen fields.

**2. Improvement of Technical Skills**
Regarding the statement "Activities helped improve my technical skills," 57.69% of students agreed, while 34.62% strongly agreed. Two respondents (7.69%) moderately agreed. This indicates that the immersion program served as an effective practical training ground, allowing students to

apply and enhance their technical competencies in a real-world setting.

**3. Meaningfulness and Utility for Learning**

The final indicator, "Tasks were meaningful and useful for learning," received a strongly agree rating from 38.46% of students and an agree rating from 57.69%. Only 3.85% moderately agreed. This feedback confirms that the students did not perceive their tasks as "busy work," but rather as valuable learning experiences that contributed to their overall educational development.

**Summary**

In summary, the data shows that the immersion program succeeded in providing students with relevant and meaningful professional experiences. With an average of 94.84% of students either agreeing or strongly agreeing that the tasks were relevant, skill-enhancing, and meaningful, the program demonstrates a strong alignment between academic learning and industry practice. Similar to the supervision category, the absence of any "Disagree" or "Very Disagree" responses highlights the high quality of the task assignments provided to the students.

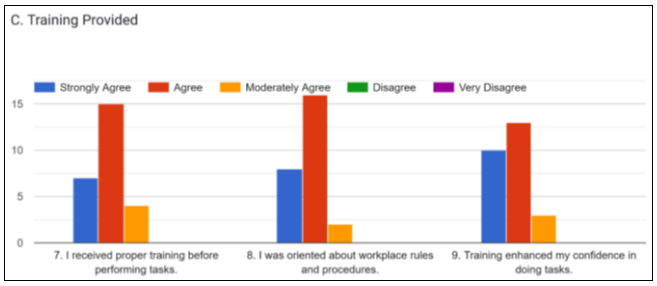



**Table 6:** Frequency and Percentage Distribution of Student Feedback on Training Provided

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | I received proper training before performing tasks. | 7 | 26.92% | 15 | 57.69% | 4 | 15.38% | 0 | 0.00% | 0 | 0.00% |
| 8 | I was oriented about workplace rules and procedures. | 8 | 30.77% | 16 | 61.54% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| 9 | Training enhanced my confidence in doing tasks. | 10 | 38.46% | 13 | 50.00% | 3 | 11.54% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **8.33** | **32.05%** | **14.67** | **56.41%** | **3.00** | **11.54%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data**

Table 6 presents the students' evaluation of the training and orientation they received. The data indicates a high level of satisfaction, suggesting that students felt well-prepared and informed before engaging in their assigned duties.

**1. Preparation and Initial Training**

For the indicator "I received proper training before performing tasks," 57.69% of the respondents agreed and 26.92% strongly agreed. While 15.38% (4 students) moderately agreed—the highest moderate agreement in this category—the overall feedback remains positive. This suggests that the host organization prioritized foundational training, ensuring students had the basic skills necessary to begin their work effectively.

**2. Workplace Orientation**

Regarding the statement "I was oriented about workplace rules and procedures," the majority of students (61.54%) agreed, with an additional 30.77% strongly agreeing. Only 7.69% moderately agreed. These results reflect a successful onboarding process, where students were clearly informed about the professional expectations, safety protocols, and operational standards of the workplace.

**3. Impact on Confidence**

The final indicator, "Training enhanced my confidence in doing tasks," received the highest "Strongly Agree" rating in this category at 38.46%, while 50.00% agreed. Only 11.54% moderately agreed. This outcome is significant as it shows that the training provided was not just informational but also empowering, directly contributing to the students' self-efficacy and their ability to perform tasks with a sense of competence.

**Summary**

In summary, the results for the training component are very positive, with an average of 88.46% of students either agreeing or strongly agreeing that they were well-prepared. The orientation and training phases appear to have been instrumental in bridging the gap between classroom theory and workplace practice. As with the previous categories, the absence of any "Disagree" or "Very Disagree" responses confirms that the training provided met the students' needs for both technical preparation and professional confidence.

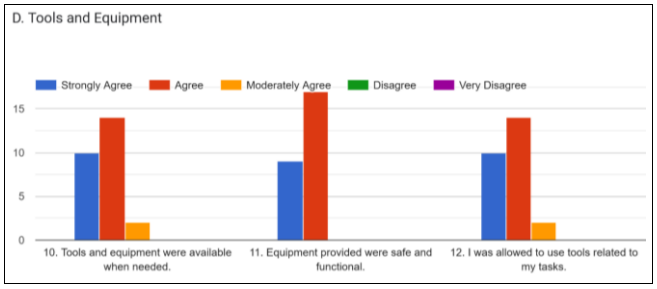



**Table 7:** Frequency and Percentage Distribution of Student Feedback on Tools and Equipment

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | Tools and equipment were available when needed. | 10 | 38.46% | 14 | 53.85% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| 11 | Equipment provided were safe and functional. | 9 | 34.62% | 17 | 65.38% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| 12 | I was allowed to use tools related to my tasks. | 10 | 38.46% | 14 | 53.85% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **9.67** | **37.18%** | **15.00** | **57.69%** | **1.33** | **5.13%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data**

Table 7 details the students' evaluation regarding the resources provided during their immersion. The data reveals that the host environment was well-equipped to support the students' practical requirements.

**1. Availability of Resources**

For the indicator "Tools and equipment were available when needed," 53.85% of respondents agreed and 38.46% strongly agreed. Only two students (7.69%) moderately agreed. This indicates that the workplace effectively managed its resources, ensuring that students did not experience significant delays or downtime due to missing equipment.

**2. Safety and Functionality**

The statement "Equipment provided were safe and functional" received the highest level of combined positive feedback, with 65.38% of students agreeing and 34.62% strongly agreeing. Notably, this is the only indicator where zero respondents selected "Moderately Agree" or lower. This suggests a high standard of maintenance and safety protocols within the host organization, providing students with a secure environment to operate technical tools.

**3. Accessibility and Usage**

Regarding the indicator "I was allowed to use tools related to my tasks," 53.85% agreed and 38.46% strongly agreed, while 7.69% moderately agreed. These results show that the students were given sufficient trust and access to the necessary professional tools of their trade, which is essential for hands-on learning and skill mastery.

**Summary**

In summary, the "Tools and Equipment" category shows a very high level of satisfaction, with an average of 94.87% of students either agreeing or strongly agreeing. The perfect score for safety and functionality is particularly impressive, highlighting that the immersion sites prioritized a professional and safe working environment. As with all previous categories, there were no negative responses, reinforcing the overall success of the immersion program's logistical support.

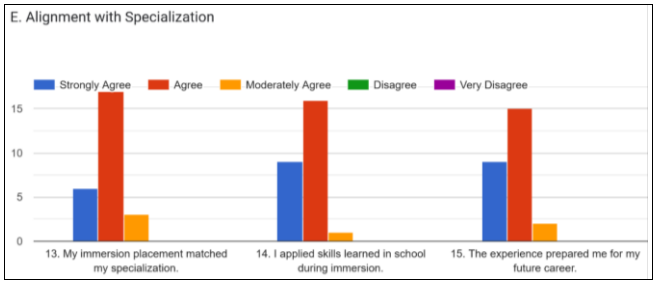



**Table 8:** Frequency and Percentage Distribution of Student Feedback on Alignment with Specialization

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | My immersion placement matched my specialization. | 6 | 23.08% | 17 | 65.38% | 3 | 11.54% | 0 | 0.00% | 0 | 0.00% |
| 14 | I applied skills learned in school during immersion. | 9 | 34.62% | 16 | 61.54% | 1 | 3.85% | 0 | 0.00% | 0 | 0.00% |
| 15 | The experience prepared me for my future career. | 9 | 34.62% | 15 | 57.69% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **8.00** | **30.77%** | **16.00** | **61.54%** | **2.00** | **7.69%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data**

Table 8 presents the students' perceptions regarding how well the immersion program aligned with their academic specialization and career goals. The data indicates that the program was highly successful in providing relevant field experience.

**1. Match with Specialization**

For the indicator "My immersion placement matched my specialization," 65.38% of respondents agreed and 23.08% strongly agreed. While 11.54% (3 students) moderately agreed, the vast majority of the cohort felt their placement was appropriate for their field of study. This suggests that the coordination between the school and host agencies was effective in ensuring students were placed in environments relevant to their expertise.

**2. Application of School-Based Skills**

Regarding the statement "I applied skills learned in school during immersion," 61.54% of students agreed and 34.62% strongly agreed. Only one student (3.85%) moderately agreed. These results are significant as they validate the curriculum's practical relevance, showing that the theoretical knowledge and technical skills taught in the classroom are directly applicable to actual industry practices.

**3. Career Preparation**

The final indicator, "The experience prepared me for my future career," received an "Agree" rating from 57.69% of students and a "Strongly Agree" rating from 34.62%. Only 7.69% moderately agreed. This high level of agreement emphasizes the value of the immersion program as a bridge to professional life, giving students a realistic preview of their future careers and building the necessary readiness for the workforce.

**Summary**

In summary, the "Alignment with Specialization" category confirms that the immersion program is meeting its core objective of professional preparation. With an average of 92.31% of students either agreeing or strongly agreeing across all indicators, it

**Part III: Technical Skill Development**

This section presents the students' perception on their technical skill development as an outcome of the Work Immersion Program in TVL Education. It highlights the extent to which the program has contributed to the enhancement of students' practical competencies, particularly in the use of tools and equipment, application of technical procedures, accuracy and efficiency in task performance, problem-solving in workplace situations, and confidence in performing assigned tasks. The data provide an overview of how Work Immersion supports the development of essential technical skills that are necessary for workplace readiness and future employment in their chosen field.

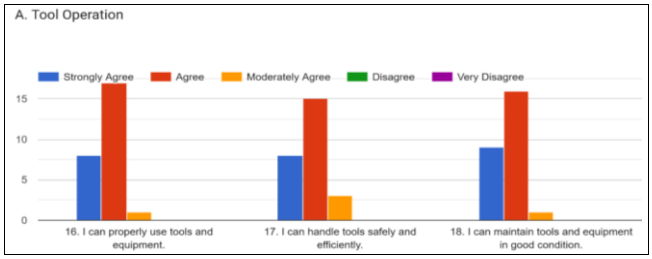



**Table 9:** Frequency and Percentage Distribution of Student Feedback on Tool Operation

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | I can properly use tools and equipment. | 8 | 30.77% | 17 | 65.38% | 1 | 3.85% | 0 | 0.00% | 0 | 0.00% |
| 17 | I can handle tools safely and efficiently. | 8 | 30.77% | 15 | 57.69% | 3 | 11.54% | 0 | 0.00% | 0 | 0.00% |
| 18. | I can maintain tools and equipment in good condition. | 9 | 34.62% | 16 | 61.54% | 1 | 3.85% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **8.33** | **32.05%** | **16.00** | **61.54%** | **1.67** | **6.41%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data**

Overall, the respondents demonstrate a highly positive self-assessment regarding their tool operation skills. Across all three criteria, the vast majority of participants either "Agree" or "Strongly Agree" with the statements, and notably, there are **zero responses** in the "Disagree" or "Very Disagree" categories.

- Proper Usage (Item 16): A significant majority (65.38%) agree that they can properly use tools and equipment, with an additional 30.77% strongly agreeing. Only a marginal 3.85% (1 respondent) moderately agree, indicating broad confidence in basic tool operation.
- Safety and Efficiency (Item 17): While the majority still agree (57.69%) or strongly agree (30.77%) that they can handle tools safely and efficiently, this item saw a slight shift toward "Moderately Agree" (11.54%) compared to the other items. This suggests a minor, though noticeable, dip in confidence when strict safety and efficiency are factored into tool handling.
- Maintenance (Item 18): Confidence remains high regarding the maintenance of tools, with the highest "Strongly Agree" response rate of the group (34.62%). Combined with the 61.54% who agree, over 96% of respondents feel capable of keeping their tools and equipment in good condition.

In conclusion, the group feels highly competent across all facets of tool operation, with "Agree" being the dominant consensus for every item.

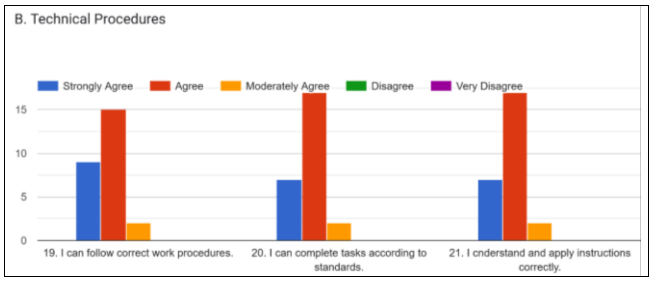



**Table 10:** Frequency and Percentage Distribution of Student Feedback on Technical Procedures

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | I can follow correct work procedures. | 9 | 34.62% | 15 | 57.69% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| 20 | I can complete tasks according to standards. | 7 | 26.92% | 17 | 65.38% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| 21 | I understand and apply instructions correctly. | 7 | 26.92% | 17 | 65.38% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **7.67** | **29.49%** | **16.33** | **62.82%** | **2.00** | **7.69%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data**

The results reflect a high level of perceived competence in executing technical work procedures among the respondents.

- High Compliance with Standards: The majority of respondents "Agree" (average of 62.82%) that they can complete tasks according to established standards and apply instructions correctly. This suggests a strong baseline of technical discipline within the group.
- Procedural Mastery: Item 19 ("I can follow correct work procedures") received the highest "Strongly Agree" rating at 34.62%, indicating that following structured workflows is a primary strength for a significant portion of the participants.
- Consistency in Understanding: Both Items 20 and 21 show identical distributions, with 65.38% of respondents agreeing and 26.92% strongly agreeing. This symmetry suggests that respondents view their ability to meet standards as directly linked to their ability to understand and apply instructions.
- Absence of Negatives: Similar to previous categories, there were zero instances of "Disagree" or "Very Disagree," reinforcing a general sentiment of readiness and technical reliability.

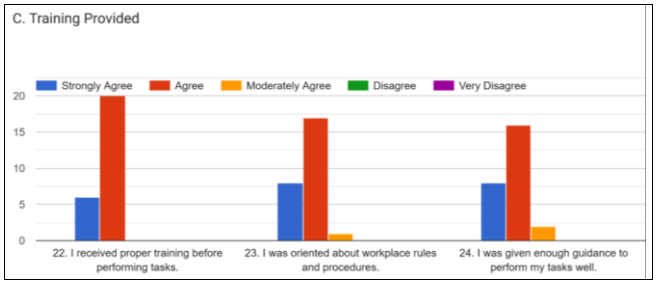



**Table 11:** Frequency and Percentage Distribution of Student Feedback on Training Provided

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | I received proper training before performing tasks. | 6 | 23.08% | 20 | 76.92% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| 23 | I was oriented about workplace rules and procedures. | 8 | 30.77% | 17 | 65.38% | 1 | 3.85% | 0 | 0.00% | 0 | 0.00% |
| 24 | I was given enough guidance to perform my tasks well. | 8 | 30.77% | 16 | 61.54% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **7.33** | **28.21%** | **17.67** | **67.95%** | **1.00** | **3.85%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data**

The data highlights the respondents' perceptions of the training and guidance they received.

- Strong Initial Preparation: Item 22 ("I received proper training before performing tasks") shows the highest level of consensus in the "Agree" category at 76.92%. Notably, this is the only indicator in this set where 100% of respondents either agreed or strongly agreed, with no one selecting "Moderately Agree."
- Effective Orientation: For workplace rules and

procedures (Item 23), a combined 96.15% of respondents expressed positive reinforcement (Strongly Agree and Agree). This indicates that the organizational onboarding process is perceived as clear and comprehensive.

- Ongoing Guidance: While still overwhelmingly positive, Item 24 ("I was given enough guidance to perform my tasks well") has the highest "Moderately Agree" frequency (7.69%) in this section. This suggests that while the initial training is excellent, a small portion of respondents felt there was room for more consistent support during task execution.
- Overall Satisfaction: The average "Agree" rate of 67.95% indicates that the training program is effectively meeting the needs of the vast majority of the participants, ensuring they feel equipped to handle their responsibilities.

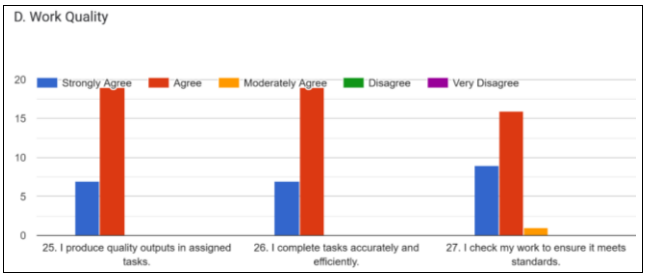



**Table 12:** Frequency and Percentage Distribution of Student Feedback on Work Quality

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | I produce quality outputs in assigned tasks. | 7 | 26.92% | 19 | 73.08% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| 26 | I complete tasks accurately and efficiently. | 7 | 26.92% | 19 | 73.08% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| 27 | I check my work to ensure it meets standards. | 9 | 34.62% | 16 | 61.54% | 1 | 3.85% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **7.67** | **29.49%** | **18.00** | **69.23%** | **0.33** | **1.28%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data**

The data illustrates a strong consensus among respondents regarding their commitment to high work quality.

- Consistency in Output and Efficiency: Items 25 and 26 show identical distributions, with 73.08% of respondents agreeing that they produce quality outputs and work efficiently. This suggests a uniform level of confidence in their primary work performance.
- Standard Compliance: Item 27 ("I check my work to ensure it meets standards") shows the highest "Strongly Agree" frequency at 34.62%. This indicates that a significant portion of the group places a high personal priority on quality control and verification.
- High Performance Baseline: The average "Agree" and "Strongly Agree" combined rate is nearly 99%, with only one respondent indicating they "Moderately Agree" with checking their work.
- Overall Reliability: The absence of any negative feedback (Disagree/Very Disagree) indicates that the respondents perceive their work quality as being consistently above average and aligned with organizational expectations.

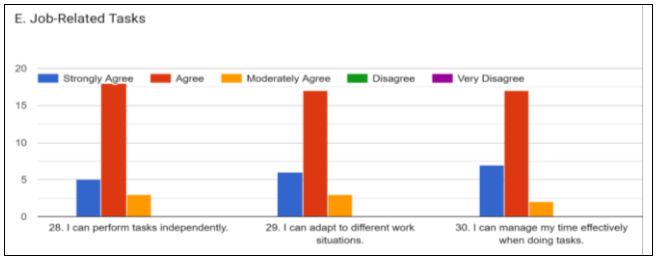



**Table 13:** Frequency and Percentage Distribution of Student Feedback on Job-Related Tasks

| S. No | Indicators | Strongly Agree (f) | % | Agree (f) | % | Moderately Agree (f) | % | Disagree (f) | % | Very Disagree (f) | % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | I can perform tasks independently. | 5 | 19.23% | 18 | 69.23% | 3 | 11.54% | 0 | 0.00% | 0 | 0.00% |
| 29 | I can adapt to different work situations. | 6 | 23.08% | 17 | 65.38% | 3 | 11.54% | 0 | 0.00% | 0 | 0.00% |
| 30 | I can manage my time effectively when doing tasks. | 7 | 26.92% | 17 | 65.38% | 2 | 7.69% | 0 | 0.00% | 0 | 0.00% |
| | **Average** | **6.00** | **23.08%** | **17.33** | **66.66%** | **2.67** | **10.26%** | **0** | **0.00%** | **0** | **0.00%** |

**Interpretation of data**

The data highlights the respondents' self-perceived capabilities in managing their professional responsibilities.

- Task Performance and Independence: A significant majority (69.23%) of respondents agree that they can perform tasks independently. While this is the most common response for Item 28, it also features one of the higher "Moderately Agree" frequencies (11.54%), indicating that a small portion of the group may still value some level of oversight.
- Adaptability: For Item 29, "I can adapt to different work situations," the responses remain overwhelmingly positive, with 65.38% agreeing and 23.08% strongly agreeing. This suggests the group views itself as flexible and capable of handling varying environments.
- Time Management: Time management (Item 30) showed the highest "Strongly Agree" response for this section at 26.92%, with another 65.38% agreeing. This indicates that respondents feel particularly confident in their ability to organize their schedule and meet deadlines efficiently.
- General Proficiency: Overall, with an average of approximately 90% of respondents selecting either "Agree" or "Strongly Agree" across all indicators, the group demonstrates a high level of readiness for job-related demands. No respondents disagreed with any of the statements, reinforcing a consistent sentiment of professional competence.

## Correlation Between Work Immersion Quality and Technical Skill Development

**Table 1:** Correlation Between Work Immersion Quality and Technical Skill Development Dimensions

| Work Immersion Quality Variables | Tool Operation | Technical Procedures | Safety Adherence | Work Quality | Job-Related Tasks |
|---|---|---|---|---|---|
| **Supervision** | .69** | .71** | .66** | .68** | .64** |
| **Task Relevance** | .74** | .76** | .70** | .73** | .72** |
| **Training** | .71** | .73** | .75** | .70** | .68** |
| **Tools and Equipment** | .68** | .66** | .79** | .69** | .63** |
| **Alignment with Specialization** | .73** | .75** | .69** | .74** | .77** |

Note: N = 26. Pearson correlation analysis was used. $p < .01$.

The study also examined the relationship between the quality of work immersion and students' technical skill development using Pearson correlation analysis.

The results showed that all dimensions of work immersion quality were positively and significantly related to technical skill development, with correlation coefficients ranging from r=.63to r=.79, significant at p<.01. This means that better quality immersion experiences contribute to stronger technical competencies among students.

Among the variables, Task Relevance showed a strong positive relationship with Technical Procedures (r=.76), indicating that students assigned to tasks related to their specialization were more capable of applying proper workplace procedures and standards.

Similarly, Tools and Equipment had the strongest correlation with Safety Adherence (r=.79), suggesting that access to safe and functional equipment improved students' ability to observe workplace safety practices.

Moreover, Alignment with Specialization demonstrated a strong relationship with Job-Related Tasks (r=.77), indicating that students assigned to workplaces aligned with their field became more confident in handling workplace responsibilities independently.

The findings further revealed that Supervision and Training significantly contributed to students' competency development. Proper guidance, orientation, and monitoring from supervisors helped students improve their technical skills, workplace behavior, and overall preparedness for future employment.

Since all computed p-values were less than .01, the null hypothesis was rejected. Therefore, there is a significant positive relationship between work immersion quality and technical skill development among TVL students.

## Conclusion

The study concludes that the Work Immersion Program in Technical-Vocational-Livelihood (TVL) education is a critical catalyst for enhancing students' technical skills, professional behavior, and overall workplace readiness. Rather than being a mere academic requirement, the program effectively bridges the gap between theoretical classroom learning and real-world application.

A central finding of this research is the significant, positive relationship between the quality of the immersion experience and students' competency development. All evaluated dimensions—supervision, task relevance, training, tools and equipment, and alignment with specialization—statistically correlate with heightened technical proficiency and improved adherence to workplace safety. Significantly, task relevance and alignment with the students' specific academic strands emerged as vital drivers in fostering confidence, procedural understanding, and independence when performing job-related tasks. Furthermore, access to proper resources and structured supervision are essential for cultivating safety adherence and maintaining high work quality.

Therefore, this study confirms that the caliber of the work immersion experience directly dictates the future employability of TVL graduates. To ensure the continuous development of highly skilled and competitive professionals, it is imperative for educational institutions to strengthen program implementation, optimize resource allocation, and maintain robust partnerships with industry stakeholders.

## Recommendations

Based on the findings and conclusions of the study, the following recommendations are proposed:

**1. Strengthen School-Industry Partnerships**

Educational institutions should establish stronger collaboration with industry partners to ensure that immersion placements are relevant to student's specializations. Partner industries must be carefully selected to provide meaningful and skill-aligned tasks rather than routine or unrelated duties.

**2. Ensure task relevance and skill alignment**

Coordinators and supervisors should design immersion plans where students are assigned tasks directly related to their field. This ensures that students can apply classroom knowledge and develop competencies that are essential for their future careers.

**3. Improve supervision and mentoring system**
Companies hosting student interns should assign qualified supervisors or mentors who can provide regular guidance, constructive feedback, and performance monitoring. Schools should also conduct periodic visits to ensure that learning objectives are being met.

**4. Provide adequate tools, equipment and safe work environment**
Industry partners must ensure that students have access to functional, safe and industry standard tools and equipment. This not only chances skill development but also promotes proper safety practices and professional discipline.

**5. Enhance pre-immersion training programs**
Students should conduct comprehensive pre-immersion orientations that include workplace ethics, safety protocols, communication skills, and technical refreshers. This preparation helps students perform more confidently and effectively during immersion.

**6. Alignment placement with student's specialization**
Placement matching should be strictly implemented to ensure that students are deployed in industries aligned with their TVL track. Misalignment may limit skill acquisition and reduce the overall effectiveness of the immersion experience.

**7. Continuous monitoring and evaluation**
Schools should implement structures monitoring and evaluation systems, including feedback from students and industry partners. This will help identify gaps and improve future implementation of the immersion program.

**8. Policy enhancement and curriculum integration**
Educational policymakers may consider revisiting and strengthening work immersion guidelines to ensure consistency in implementation across institutions. Integration of immersion feedback into curriculum improvement can further enhance technical training programs.

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