

Industry Immersion Performance of Senior High School Learners: A Comparative Assessment

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Abstract: Industry immersion performance reflects how students apply their knowledge, technical abilities, communication skills, professionalism and adaptability in real workplace environment. This study aimed to determine the industry immersion performance of Senior High School (SHS) learners as assessed by industry partners and their advisers in one of the large schools in the Division of Negros Occidental during school year 2025-2026. This study utilized descriptive-comparative research design with one hundred sixty-six (166) respondents. The industry immersion performance in terms of work habits, work skills and social skills of Senior High School learners as assessed by industry partners when grouped according demographic profile was found very satisfactory level. Moreover, the level of industry immersion performance of the learners through portfolio assessment was at a satisfactory level. Furthermore, the significant difference between the level of the industry performance when grouped according to sex and age was found no significant difference. Whereas, a significant difference was found when respondents were grouped according to their track. Lastly, results revealed that there was no significant difference in portfolio grades when grouped according to age. However, a significant difference was found when respondents were grouped according to their sex and track. the study concludes that Senior High School learners possess the necessary competencies, attitudes, and skills needed for industry immersion. Nevertheless, differences across tracks and certain demographic variables indicate the need for continuous enhancement of immersion programs and portfolio preparation to ensure equitable learning opportunities and performance among all learners. It is recommended that greater emphasis be placed on improving portfolio assessment in Senior High School industry immersion. Learners may be guided to consistently produce complete, accurate, well-organized, and reflective portfolios that clearly document their immersion experiences.

Keywords: industry immersion performance, descriptive- comparative research, portfolio assessment.

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Introduction

Educational institutions around the world acknowledge the value of work-based learning in preparing students for the needs of industry and the workforce. Alawin-Ligwang (2025) asserts that work immersion programs help students develop their professionalism, teamwork, communication skills, technical proficiency, and workplace conduct. The report went on to say that immersion experiences improve students' overall academic and professional performance by helping them make the connection between classroom education and real-world applications.

In the Philippines, the Department of Education's (DepEd) required K-12 curriculum includes the Senior High School (SHS) Work Immersion Program. By introducing students to real-world industry settings, it aims to connect classroom instruction with practical working experiences. Students are intended to gain professional behavior, work ethics, communication skills, and technical competence through this curriculum, all of which will help them in their future careers or further study.

The Enhanced Basic Education Act of 2013 (Republic Act No. 10533) established the Work Immersion Program to improve senior high school graduates' employability. It gives students the chance to experience real-world business settings, allowing them to put their theoretical knowledge to use in real-world situations. Despite its goals, a number of studies have found shortcomings in work immersion's execution and results. Even while students show promise during immersion, Macalintal and De Chavez (2020) discovered that there are still gaps in workplace discipline, efficiency, and timeliness.

Thus, this study intended to produce baseline data that may be utilized in creating an enhancement program by looking at SHS learners industry immersion performance as evaluated by industry partners. This program was crucial for enhancing the efficacy of work immersion programs and fortifying the connection between industry expectations and academic preparation. Aligning DepEd curriculum standards with TESDA certification requirements is a significant difficulty for TVL learners. Due to discrepancies between classroom instruction and TESDA competency criteria, many students were not completely prepared for NC II certification, according to research on competency-based TVL evaluation. Students frequently lacked the practical experience and core competency proficiency needed for national examinations.

Additionally, because schools compete for a limited number of industry partners, TVL learners frequently have limited chances for immersion placement. Opportunities for significant industrial exposure are further limited by many sectors' reluctance to accept students who lack sufficient technical preparation or certification preparedness.

Statement of the Problem

The main purpose of the study was to determine the industry immersion performance of Senior High School (SHS) learners as assessed by industry partners and the work immersion advisers in one of the large schools in the Division of Negros Occidental during school year 2025-2026.

Specifically, the study aimed to:

1. What is the level of industry immersion performance in terms of work habits, work skills and social skills of Senior High

School learners assessed by industry partners when taken as whole and when grouped and according to:

- a. Sex,
- b. Age, and
- c. Track

2. What is the level of industry immersion performance of learners through portfolio assessment when taken as a whole and when grouped according to the aforementioned variables?
3. Is there a significant difference in the level of the industry immersion performance, as assessed by industry partners when learners are grouped according to:

- a. Sex ,
- b. Age, and
- c. Track

4. Is there a significant difference in the portfolio assessment performance when learners are grouped according to the aforementioned variables?
5. What enhancement program can be proposed based on the findings of the study?

Theoretical/Conceptual Framework

This study was anchored on the Experiential Learning Theory of David A. Kolb (1984), the Social Learning Theory of Albert Bandura, and Vygotsky's Scaffolding Theory, grounded in his Sociocultural Theory of Cognitive Development.

David A. Kolb's Experiential Learning Theory offers a solid theoretical framework for comprehending how students pick up knowledge and abilities through practical encounters. According to Kolb's (1984) theory, learning is an ongoing process in which experience is transformed into knowledge. This theory states that effective learning happens through a four-stage cycle that includes active experimentation, abstract conceptualization, reflective observation, and tangible experience. Abstract conceptualization is the process of developing concepts or generalizations based on reflection; concrete experience is the act of participating in a novel experience or circumstance; reflective observation is the process of considering and reviewing the experience; and active experimentation is the application of what has been learned to novel situations.

According to Kolb's Experiential Learning Theory, senior high school students can acquire competences in the context of industry immersion by actively engaging in work-related activities. Research on work immersion programs demonstrates that students may apply what they learn in the classroom to real-world tasks, getting hands-on experience that promotes the development of both soft and technical abilities (Flores & Dela Cruz, 2025). Students gradually improve their performance and gain a better knowledge of professional requirements as they participate in workplace duties and communicate with coworkers and superiors. Key soft skills that are necessary for job readiness and a smooth transition into employment or further education, including as communication, teamwork, adaptability, and problem-solving, have been found to be fostered by work immersion (Flores & Dela Cruz, 2025).

Furthermore, portfolio assessment is essential in ensuring that the Kolb cycle is enhanced especially during the process of abstract conceptualization. Portfolio assessment acts as an

organization of the learner's immersion experiences. In the portfolio, the learner organizes his/her experiences including the output produced, activities completed, and reflective thoughts regarding these activities. In this way, through the reflection process, students learn how to organize their concrete workplace experiences into knowledge and learning concept. The process of reflection, analysis of workplace problems, and the summary of learning leads to an abstract thought. This is because through the reflection process, the learner will be able to "conceptualize" the experiences that have been undergone by him/her.

In addition, Bandura's Social Learning Theory highlights that people pick up knowledge through social interaction and observation. In order to internalize workplace standards and modify their conduct appropriately, learners observe supervisors and coworkers, model professional behaviors, and receive feedback during immersion. In addition to improving students' performance at work, this process of social observation and imitation develops professional and interpersonal skills like discipline, cooperation, and adaptability, supporting the growth of well-rounded, career-ready people (McLeod, 2023).

According to Vygotsky's Scaffolding Theory, which is based on his Sociocultural Theory of Cognitive Development, students acquire higher-level skills when they get organized assistance from more experienced people until they are self-sufficient. As students become proficient, this assistance is progressively diminished, enabling them to complete activities independently. The Zone of Proximal Development (ZPD), which describes the difference between what students can accomplish on their own and what they can accomplish with assistance from a more experienced person, is a fundamental idea in this theory (Vygotsky, 1978).

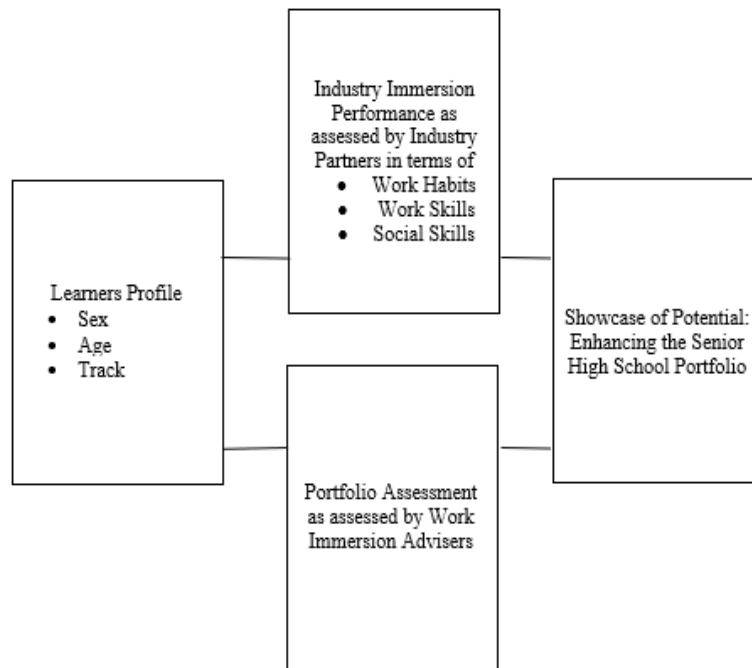
Industry partners serve as the "more knowledgeable others" who offer scaffolding to Senior High School students during industry immersion in TLE (Technical-Livelihood Education). Industry partners assist students in carrying out real-world job duties like cooking, equipment handling, troubleshooting, and customer service through demonstrations, monitoring, feedback, and step-by-step coaching. With the use of this directed support, students can complete tasks that would be challenging for them to do on their own, advancing them toward greater competence within their Zone of Proximal Development. Because scaffolding guarantees that learning is progressively developmental rather than merely observational, industry partners play a critical role. Mentors progressively lessen support as students become more self-assured

and proficient, enabling them to complete tasks on their own. Students' technical proficiency, work habits, and problem-solving skills all crucial components of the TLE curriculum are strengthened by this shift. Consistent mentoring and guided job exposure greatly enhance learners' performance, work preparedness, and skill acquisition, according to studies on work immersion (Ador et al., 2023).

Additionally, industry immersion scaffolding fosters the growth of soft skills like accountability, teamwork, communication, and flexibility. Learners are more equipped to modify their performance and internalize workplace norms when supervisors provide them with guided practice and critical feedback. This methodical guideline guarantees that TLE learning is relevant, useful, and in line with industry standards (Cabasag, 2026).

By integrating these theories, the study demonstrates how industry immersion functions as a social and experiential learning platform, giving students the chance to carry out tasks, integrate knowledge, and develop the hard and soft skills necessary for their professional and personal development. The schematic diagram represented a study on the industry immersion performance of the senior high school learners. The diagram was structured to showcase the different elements of the study, primarily focusing on the respondents' profile, level of industry immersion performance, portfolio assessment and the enhancement program.

The first component of the diagram details the learner's profile in terms of sex, age and track. Second was the industry immersion performance assessed by industry partners in terms of work habits, work skills and social skills. These attributes were viewed as critical technical skills that students need to develop to succeed in their chosen fields. Third was the portfolio assessment as assessed by the learners' advisers. These highlights the key attributes that are essential for learners' success in both academic and workplace environments. These attributes play a significant role in enhancing students' performance during immersion activities while also equipping them with the competencies needed for higher education and employment. And lastly the enhance program entitled Showcase of Potential: Enhancing the Senior High School Portfolio. This suggested that the study was not only descriptive but also aimed to contribute to program development or improvement by using the collected data on industry immersion performance and the portfolio assessment of the senior high school learners.

Figure 1: Schematic Diagram Illustrating the Conceptual Framework of the Study

Methodology

This study employed a descriptive-comparative research design, which was considered appropriate for assessing the industry immersion performance of Senior High School learners. The respondents of the study consisted of 166 Senior High School learners enrolled in the Technical-Vocational-Livelihood (TVL) track, particularly in Cookery and Computer System Servicing (CSS), as well as learners from the Humanities and Social Sciences (HUMSS) strand with electives in Education and Criminology. Data were collected using the Work Immersion Evaluation Form, a standard assessment tool prescribed by the Department of Education (DepEd), which was accomplished and evaluated by the industry partners, and the Work Immersion Portfolio, which was assessed by the work immersion advisers using a rubric-based evaluation. The statistical tools utilized in the analysis of data

included Mean, Standard Deviation, Mann–Whitney U Test, Kruskal–Wallis H-Test, Independent Samples t-Test, and One-Way Analysis of Variance (ANOVA). Furthermore, ethical considerations were strictly observed throughout the conduct of the study. Participation of the respondents was entirely voluntary, and all information gathered was used solely for research purposes while ensuring the confidentiality and privacy of the participants.

Results and Discussions

Level of Industry Immersion Performance of SHS Learners as Assessed by Industry Partners

The second objective of the study was to determine the level of industry immersion performance as assessed by the industry partners, as shown in Table 2.

Table 2: Level of Industry Immersion Performance of SHS Learners as Assessed by Industry Partners

Variables	M	Interpretation	SD
As a Whole	85.33	Very Satisfactory	7.66
Sex			
Male	86.59	Very Satisfactory	4.17
Female	83.98	Satisfactory	10.01
Age			
17 years old and below	86.51	Very Satisfactory	4.98
18years old and above	84.16	Satisfactory	9.51
Track			
TVL Cookery	85.79	Very Satisfactory	8.16
TVL Computer System Servicing	83.55	Satisfactory	7.26
HUMSS (Education)	82.70	Satisfactory	8.71
HUMSS (Criminology)	89.04	Very Satisfactory	1.43

Note: 90-100 - Outstanding, 85 -89 - Very Satisfactory, 80-84 – Satisfactory, 75- 79 – Fairly Satisfactory, and Below 75 - Did Not Meet Expectations

Table 2 presented the level of industry immersion performance of Senior High School (SHS) learners as assessed by industry partners, both in terms of overall results and when grouped according to sex, age, and track. As a whole, the learners' industry immersion performance was interpreted as very satisfactory, with a mean score of 85.33 and a standard deviation of 7.66. This means that the immersive approach taken by the school is adequately preparing the students for the workplace. The average standard deviation, on the other hand, shows there is some variability in terms of performance levels amongst learners, where a few need extra assistance. When grouped according to sex, male learners obtained a higher mean score of 86.59 with a standard deviation of 4.17, which was interpreted as very satisfactory. In contrast, female learners obtained a mean score of 83.98 with a standard deviation of 10.01, which was interpreted as satisfactory. This implies that male students may have higher performance levels during the process of immersion into industrial work, especially in areas that require hands-on skills based on the task allocated. In terms of age, learners aged 17 years old and below obtained a mean score of 86.51 with a standard deviation of 4.98, interpreted as very satisfactory. Meanwhile, learners aged 18 years old and above obtained a lower mean score of 84.16 with a standard deviation of 9.51, interpreted as satisfactory. This indicated that younger learners were better at adapting to a structured immersion learning environment, perhaps as a result of

greater adaptability and motivation or exposure to academic training. Regarding track, learners under HUMSS (Criminology) recorded the highest mean of 89.04 with a standard deviation of 1.43, interpreted as very satisfactory, followed by TVL Cookery with a mean of 85.79 and a standard deviation of 8.16, also interpreted as very satisfactory. On the other hand, TVL Computer System Servicing obtained a mean of 83.55 with a standard deviation of 7.26, while HUMSS (Education) obtained the lowest mean of 82.70 with a standard deviation of 8.71; both were interpreted as satisfactory. Results suggests that HUMMS (Criminology) had strong alignment between immersion tasks and learner preparation, as well as consistent performance among students in this track and TVL Cookery learners were generally well-prepared in practical culinary competencies, although variability suggests differences in skill mastery. However, TVL CSS and HUMMS (Education) learners in these tracks may need further strengthening in workplace readiness skills, particularly in applying theoretical knowledge to actual industry tasks.

Level of Industry Immersion Performance of SHS Learners through Portfolio Assessment

The third objective of the study was to determine the level of industry immersion performance of the learners through portfolio assessment, as presented in Table 3.

Table 3: Level of Industry Immersion Performance of SHS Learners through Portfolio Assessment

Variables	M	Interpretation	SD
As a Whole	83.69	Satisfactory	4.63
Sex			
Male	81.76	Satisfactory	4.44
Female	85.78	Very Satisfactory	3.89
Age			
17 years old and below	84.20	Satisfactory	4.67
18years old and above	83.18	Satisfactory	4.56
Track			
TVL Cookery	83.93	Satisfactory	4.14
TVL Computer System Servicing	80.69	Satisfactory	5.38
HUMSS (Education)	86.97	Very Satisfactory	3.19
HUMSS (Criminology)	82.29	Satisfactory	4.04

Note: 90-100 - Outstanding, 85 -89 - Very Satisfactory, 80-84 – Satisfactory, 75- 79 – Fairly Satisfactory, and Below 75 - Did Not Meet Expectations

Table 3 presented the level of industry immersion performance of SHS learners through portfolio assessment when taken as a whole and when grouped according to sex, age, and track. As a whole the computed mean was 83.69 with the standard deviation of 4.63, the level of portfolio assessment was interpreted as satisfactory. Furthermore, in terms of sex, male learners had the mean of 81.76 with a standard deviation of 4.44 rated as

satisfactory, while female learners with a mean of 85.78 and a standard deviation of 3.89 was rated as very satisfactory. Moreover, in terms of age, both learners aged 17 years old and below had a mean of 84.20, with a standard deviation of 4.67 and those aged 18 years old and above with the mean of 83.18 and a standard deviation of 4.56 were rated as satisfactory. Lastly, in terms of track, learners in HUMSS (Education) had a mean of

86.97 with a standard deviation of 3.19 were rated as very satisfactory, while those in TVL Cookery with the mean of 83.93 and a standard deviation of 4.14, TVL Computer System Servicing with a mean of 80.69 with a standard deviation of 5.38, and HUMSS (Criminology) with a mean of 82.29 and a standard deviation of 4.04 were rated as satisfactory.

Difference in the Level of Industry Immersion Performance When Grouped According to Sex and Age

The fourth objective of the study was to determine the difference in the level of Industry Immersion Performance when grouped according to the respondent's sex and age showed in Table 4.

Table 4: *Difference in the Level of Industry Immersion Performance When Grouped According to Sex and Age*

Variable	U	z	p
Sex	3075.500	-1.206	.228
Age	2874.500	-1.884	.060

Note: difference is significant when $p \leq 0.05$

The results revealed that there was no significant difference in the level of industry immersion performance when grouped according to sex [$U=3075.500$, $p=.228$] and age [$U=2874.500$, $p=.060$], as their p-values are greater than 0.05. This implies that sex and age are not important variables in determining whether students can effectively work during the work immersion process. This is because male and female students, as well as young and old SHS students, are given almost similar chances and exposure in the working environment to ensure their effective performance.

Difference in the Level of Industry Immersion Performance When Grouped

According to Track

The fourth objective of the study was to determine the difference in the level of Industry Immersion Performance when grouped according to the respondent's track showed in Table 5.

Table 5: *Difference in the Level of Industry Immersion Performance When Grouped According to Track*

Variable	H	df	p
Track	21.911*	3	.000

Note: difference is significant when $p \leq 0.05$

However, a significant difference was found when grouped according to track [$H(3) = 21.911$, $p=.000$]. Since the p-value is less than 0.05, the null hypothesis was rejected. This suggests that learners' immersion experiences and performance results may be influenced by the nature and needs of their specific tracks, as the level of industrial immersion performance differed significantly across the several academic tracks.

Difference in the Level of Industry Immersion Performance When Grouped According to Track using Post hoc

Table 6 showed the difference in the level of Industry Immersion Performance when grouped according to track utilizing a post hoc.

Table 6: *Difference in the Level of Industry Immersion Performance When Grouped According to Track using Post hoc*

Post hoc for Immersion Grades (Track)

Track	Test Statistic	Std. Error	Std. Test Statistic	Sig.
TVL Cookery - TVL Computer System Servicing	20.385*	10.248	1.989	.047
TVL Cookery - HUMSS (Education)	20.031*	9.788	2.046	.041
TVL Cookery - HUMSS (Criminology)	-29.354*	10.380	-2.828	.005
TVL Computer System Servicing - HUMSS (Education)	-0.354	11.951	-0.030	.976
TVL Computer System Servicing - HUMSS (Criminology)	-49.740*	12.440	-3.998	.000
HUMSS (Education) - HUMSS (Criminology)	-49.386*	12.064	-4.094	.000

*Note: * $p \leq 0.05$ ** $p \leq 0.01$*

Post hoc analysis revealed that learners in TVL Cookery exhibited a significantly higher level of immersion performance than those in TVL Computer System Servicing ($p=.047$) and HUMSS (Education) ($p=.041$), while learners in HUMSS (Criminology) exhibited a significantly higher level than those in TVL Cookery ($p=.005$), TVL Computer System Servicing ($p=.000$), and HUMSS (Education) ($p=.000$). No significant difference was observed between TVL Computer System Servicing and HUMSS (Education) ($p=.976$). Results indicated that the level of industry immersion performance varies significantly across tracks, with HUMSS (Criminology) generally demonstrating higher performance compared to the other groups. The results also implies that the academic track is an essential component that

impacts the immersion performance, given that a notable difference was seen between the groups. This can be seen by the fact that learners from HUMSS strand (Criminology) have performed higher, along with the good performance by those from TVL Cookery strand.

Difference in the Level of Industry Immersion Performance through

Portfolio Assessment to Sex and Age

The fifth objective of the study was to determine the difference in the level of industry immersion performance through portfolio assessment to sex and age. As shown in Table 7.

Table 7: *Difference in the Level of Portfolio Assessment When Grouped According to Sex and Age.*

Variable	<i>t</i>	<i>df</i>	<i>P</i>
Sex	6.185*	164	.000
Age	1.429	164	.155

Note: difference is significant when $p \leq 0.05$

Table 7 revealed the difference in the level of industry immersion performance through portfolio assessment when respondents were grouped according to their sex and age. The results revealed that there was no significant difference in portfolio grades when grouped according to age [$t(164)=1.429$, $p=.155$], as the p-value is greater than 0.05. This implies that students of all ages have similar abilities to complete the requirements of portfolios if they are given the same directions and rubrics and given the same level of academic assistance. This also shows that portfolio assessment is not age-dependent, but depends on the ability to apply skills effectively. However, a significant difference was found when grouped according to sex [$t(164)=6.185$, $p=.000$], where female learners exhibited a significantly higher level of

portfolio performance than male learners. However, the results showed that there is an important sex difference in portfolio performance in that female learners perform better than male learners. This means that female learners may display better participation in activities such as documentation, organization, and reflective writing.

Difference in the Level of Portfolio Assessment When Grouped According to Track

The fifth objective of the study was to determine the difference in the level of industry immersion performance through portfolio assessment to track. As shown in Table 8.

Table 8: *Difference in the Level of Portfolio Assessment When Grouped According to Track*

Variable	<i>F</i>	<i>df</i>	<i>P</i>
Track	12.743*	3, 162	.000

Note: difference is significant when $p \leq 0.05$

Table 8 showed the differences in the level of portfolio assessment when respondents were grouped according to their track. A significant difference was also observed in the level of portfolio assessment when respondents were grouped according to track $F(3,162) = 12.743$, $p=.000$, as the p-value is less than 0.05; thus, the null hypothesis was rejected. This suggests that students from various tracks performed at different levels in the portfolio assessment. The findings imply that students' capacity to efficiently prepare, arrange, and present portfolio outputs may be influenced by the specifics of each academic program. The variance in portfolio assessment results may have been caused by variations in curriculum requirements, technical competence, writing abilities,

and exposure to practical activities across tracks. Compared to students in other tracks, individuals enrolling in tracks that placed more of an emphasis on documentation, practical exercises, and performance-based outputs might have improved their portfolio preparation abilities.

Difference in the Level of Portfolio Assessment When Grouped According to Track using Post Hoc

The fifth objective of the study was to determine the difference in the level of industry immersion performance through portfolio assessment to track using Post Hoc. As shown in Table 9.

Table 9: Difference in the Level of Portfolio Assessment When Grouped According to Track using Post Hoc

Post hoc for Portfolio Grades (Track)

Variable	Mean Difference	Std. Error	Sig.
TVL Cookery - TVL Computer System Servicing	3.245	0.913	.001*
TVL Cookery - HUMSS (Education)	-3.035	0.872	.001*
TVL Cookery - HUMSS (Criminology)	1.648	0.925	.078
TVL Computer System Servicing - HUMSS (Education)	-6.280	1.065	.000*
TVL Computer System Servicing - HUMSS (Criminology)	-1.596	1.108	.156
HUMSS (Education) - HUMSS (Criminology)	4.684	1.075	.000*

Note: * $p \leq 0.05$ ** $p \leq 0.01$

Table 9 showed the difference in the level of portfolio assessment when the respondents were grouped according to their track utilizing Post Hoc. Post hoc analysis revealed that learners in TVL Cookery exhibited a significantly higher level of portfolio performance than those in TVL Computer System Servicing ($p=0.001$), while learners in HUMSS (Education) exhibited a significantly higher level than those in TVL Cookery ($p=0.001$), TVL Computer System Servicing ($p=0.000$), and HUMSS (Criminology) ($p=0.000$). No significant difference was observed between TVL Cookery and HUMSS (Criminology) ($p=0.078$) as well as between TVL Computer System Servicing and HUMSS (Criminology) ($p=0.156$). Moreover, the considerable variations noted among different strands suggest that there is great dependence on strand specialization and proper curriculum alignment in determining the performance of portfolio tasks. The higher performance of students enrolled in TVL Cookery and HUMSS (Education) strands in particular portfolio tasks suggests that the strands offer better documentation of tasks, better performance results, or more reflective assessments which improve the quality of the portfolio. On the other hand, the low portfolio performance exhibited by students from the TVL Computer System Servicing strand implies problems in documenting technical tasks and reflecting upon them.

Summary of Findings

The analysis of the data obtained from this study revealed the following findings:

1. The level of industry immersion performance in terms of work habits, work skills and social skills of Senior High School learners as assessed by industry partners when grouped according to their sex, age and track results showed that the industry immersion performance of SHS learners was generally at a very satisfactory level, with most groups demonstrating satisfactory to very satisfactory performance across sex, age, and track.
2. The level of industry immersion performance of the learners through portfolio assessment was generally at a satisfactory level, with most groups demonstrating satisfactory performance and selected groups reaching a very satisfactory level across sex, age, and track.
3. The significant difference between the level of the industry performance and the aforementioned variables of the senior high school learners' results revealed that there was no significant difference in industry immersion performance

when grouped according to sex and age. Whereas, a significant difference was found when respondents were grouped according to their track. The results indicated that the level of industry immersion performance varies significantly across tracks, with HUMSS (Criminology) generally demonstrating higher performance compared to the other groups.

4. On the significant difference between the level of the industry immersion performance through portfolio assessment and the aforementioned variables of the senior high school learners, revealed that there was no significant difference in portfolio assessment scores when grouped according to age. However, a significant difference was found when respondents were grouped according to their sex and track. This indicates that the level of portfolio assessment varies significantly across sex and track, with female learners and those in HUMSS (Education) generally demonstrating higher performance compared to other groups.

Conclusions

From the foretasted findings, the following conclusions were drawn:

1. In general, the Senior High School learners showed a very satisfactory performance level in terms of industry immersion performance in work habits, work skills, and social skills, according to their partners from the industry. This implies that these learners successfully fulfilled the criteria required in their industry immersion activities. This suggests that the work immersion program was effective in developing discipline, skill mastery, and social skills among learners through planned exposure and supervision, as well as through the application of classroom lessons in real-life work environments.
2. Learners also had a satisfactory performance level in their portfolio assessments, proving that the majority of students were successful in organizing their learning materials and other necessary immersion documents in an acceptable manner. Some even scored very satisfactory levels of performance, suggesting that they have better documentation abilities. It was noted that the learners possess acceptable documentation and organization skills, which can be due to proper instruction from teachers or the use of rubrics when preparing portfolios, although better performance levels indicate diligence.
3. Consequently, it was found out that there was no statistically significant impact of sex and age on the industry immersion performance of the learners. From this observation, it could be

concluded that learners regardless of their sex and age have the ability to exhibit an equal level of performance when involved in immersion activities. On the other hand, it was found out that the track where learners belonged had an impact on their industry immersion performance, which means that performance varies depending on the strand or specialization of learners. In fact, it was noted that learners belonging to HUMSS (Criminology) performed relatively better compared with those from other strands, and therefore specialization and alignment play important roles in preparing learners for the workplace.

4. In terms of portfolio assessment, the findings showed that age had no significant impact on the learners' portfolio performances, meaning that learners in various age brackets were equally competent in doing the requirements in their portfolios. On the contrary, sex and track had considerable impacts on learners' portfolio assessments. Female learners tended to have relatively higher portfolio assessment scores than male learners, implying that females paid more attention to documentation, organization, and presentation of the output. Similarly, learners who belonged to the HUMSS (Education) track tended to perform better in portfolios than others.

Recommendations

On the bases of the findings and conclusions of the study, the following are hereby recommended:

1. The **students** may be encouraged to improve their immersion performance by always practicing good work ethics, sharpening technical skills, and refining social skills at workplaces. In addition, they could strive to improve their portfolio results by ensuring that they are complete, accurate, well documented, and a true reflection of their immersion experiences. Particular emphasis could be placed on developing writing and organizing skills, especially for those who had poor performance in their portfolios assessments, so that all students can achieve the same level of performance.
2. **Teachers** may provide more structured and consistent guidance in both immersion preparation and portfolio development. This includes teaching students how to properly document experiences, reflect critically on their learning, and organize outputs according to standard rubrics. Teachers could also design learning activities that simulate real workplace scenarios to better prepare students before deployment to industry partners. Continuous feedback and mentoring could also be emphasized to help learners improve their performance throughout the immersion period.
3. **School Heads** may be encouraged to strengthen the monitoring and evaluation of the work immersion program to ensure uniform implementation across all tracks. They could also support teachers through training programs focused on assessment practices, particularly in portfolio evaluation and workplace performance assessment. In addition, strengthening partnerships with the industry partners is essential to ensure that learners are exposed to meaningful and relevant workplace experiences that align with their academic strands.
4. The **Education Program Supervisor Specialist (EPS) in TLE** may review and enhance existing work immersion guidelines to ensure alignment with current industry standards and learner competencies. Providing technical assistance to schools in implementing fair and valid assessment practices is also necessary, particularly in addressing variations in performance across tracks. Regular evaluation of immersion implementation across schools could also be conducted to maintain quality assurance and continuous improvement.
5. **CID Chief** are encouraged to revisit the Senior High School curriculum to further strengthen the alignment between

classroom instruction, immersion activities, and industry requirements. Enhancing portfolio-based learning components and integrating digital documentation and reflective learning tasks will help improve students' assessment performance. This will also ensure that learners from all tracks are equally prepared for workplace demands.

6. **Industry Partners** may continue supporting the development of SHS learners by providing clear orientation, structured supervision, and constructive feedback during immersion. Strengthening collaboration with schools in designing evaluation tools and performance standards will also help ensure consistency in assessing learner performance. Providing mentorship opportunities will further enhance learners' technical and professional skills.
7. **School Administrators** are encouraged to strengthen the implementation and monitoring of Senior High School industry immersion programs by providing continuous support to both teachers and learners. Administrators may establish clear and standardized guidelines for portfolio assessment to ensure fairness, consistency, and quality across all tracks.
8. **Parents** are encouraged to continue supporting the implementation of the work immersion program through funding, resources, and partnerships that enhance student learning experiences. Their active involvement can help improve the quality of immersion training and provide learners with more meaningful exposure to real workplace environments.
9. The **researcher** may further explore factors influencing industry immersion performance, including motivation, learning environment, and instructional strategies. Future studies may also focus on identifying interventions that can enhance both performance and portfolio quality among learners
10. **Future researchers** may conduct similar studies in other schools or regions to validate and expand the findings of this research. They may also consider using qualitative approaches to gain deeper insights into learners' lived experiences during immersion, particularly in understanding how they develop competencies in real workplace settings

References

1. Ador, Z. I., Banaag, H. A. C., Bombio, C. A. M., Consignado, D. N. A., Quinay, M. A. V., & Santos, J. L. C. (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*, 2(7), 3053–3078.
2. Alawin-Ligwang, M. (2025). Work immersion performance of Senior High School students: A foundation for enhancing implementation. *Journal of Education, Society and Behavioural Science*, 38(4), 93–104.
3. Aldrup, K., Carstensen, B., Köller, M. M., & Klusmann, U. (2020). Measuring teachers' social-emotional competence: Development and validation of a situational judgment test. *Frontiers in Psychology*, 11, 892.
4. Arban, J. C., Enad, F., & Pabalan, A. (2024). The Senior High School Technical-Vocational-Livelihood Track: Implementation and Challenges.
5. Asuque, J. R., Pacle, A. J., & Mercado, F. R. (2026). Analyzing the performance evaluation of Senior High School immersion students through a convergent parallel approach.

- International Journal of Sustainability and Advanced Integrated Research*, 2(2), 661–666.
6. Ayryza, Y., & Izzaty, R. E. (2023). No differences of adolescents' hope in terms of developmental phases and gender. *Humaniora*, 14(2), 105–111.
7. Bakhtiyarovna, Y. E. (2019). Portfolio as an assessment tool for individualized instruction. *Достижения науки и образования*, (5(46), 83–84.
8. Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
9. Billett, S. (2020). *Learning in the workplace: Strategies for effective practice*. Routledge.
10. Billett, S. (2020). *Learning in the workplace: Strategies for effective practice*. Routledge.
11. Cabasag, M. S. (2026). Work immersion readiness, performance, and issues of Senior High School students: Basis for pre-deployment plan. *AIDE Interdisciplinary Research Journal*, 15, 251–266.
12. Castulo, N. J., Lansangan, S. M., & Marasigan, A. C. (2024). Strengthening ethical standards: How can Philippine higher education institutions implement CMO 15 s. 2019? *SSRN Electronic Journal*.
13. Chang, H. T., Wu, H. H., & Chang, Y. T. (2023). Evaluating learning outcomes by applying interdisciplinary hands-on learning to advanced technology courses. *Innovative Higher Education*, 48(4), 619–636.
14. Chummani, W. P., Galima, J. E., & Mina, J. F. (2025). The perceived impact of TVL-ICT Senior High School work immersion program on middle-level employment readiness and tertiary education preparation. *Student Journal of Technology and Educational Research*, 2(1), 150–161.
15. Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140.
16. Department of Education. (2016). *K to 12 senior high school curriculum guide: Work immersion*. DepEd Philippines.
17. Department of Education. (2017). *DepEd Order No. 30, s. 2017: Guidelines for work immersion*.
18. Duckworth, A. (2016). *Grit: The power of passion and perseverance*. Scribner.
19. Ferns, S., & Moore, K. (2020). Assessing student outcomes in work-integrated learning. *Asia-Pacific Journal of Cooperative Education*, 21(2), 101–115.
20. 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*.
<https://doi.org/10.47772/IJRISS.2025.90400174>
21. 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.
22. Goleman, D. (2021). *Leadership: The power of emotional intelligence*. More Than Sound LLC.
23. Harris, L. R., Adie, L., & Wyatt-Smith, C. (2022). Learning progression-based assessments: A systematic review of student and teacher uses. *Review of Educational Research*, 92(6), 996–1040.
24. Hu, A., Liu, Q., & Daniel, B. (2025). Digital technologies in authentic assessment in higher education: A systematic literature review and narrative synthesis. *SAGE Open*, 15(3), 21582440251357198.
25. Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*, 40(2), 350–367.
26. Jimenez, A. (2026). Effects of work immersion on the skills acquisition of Senior High School students in public secondary schools. *International Journal of Sustainability and Advanced Integrated Research*, 2(1), 1031–1037.
27. Jung, J., & Li, X. (2024). Perceived employability among master's students in Hong Kong. *Education + Training*, 66(1), 70–88.
28. Kolb, D. A. (2019). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson Education.
29. Lopez, M. R., & Reyes, A. T. (2021). Practical training and performance-based assessment in TVL Cookery students. *Asian Journal of Vocational Education*, 8(3), 66–79.
30. Macalintal, I., & De Chavez, C. (2020). Assessing the Senior High School work immersion with partner industries: Basis for supervisory work plan. *JPAIR Multidisciplinary Research*, 39(1), 112–129.
31. Mayer, R. E. (2024). The past, present, and future of the cognitive theory of multimedia learning. *Educational Psychology Review*, 36(1), 8.
32. Mikkonen, S., Pylväs, L., Rintala, H., Nokelainen, P., & Postareff, L. (2017). Guiding workplace learning in vocational education and training: A literature review. *Empirical Research in Vocational Education and Training*, 9(1), 9.
33. Mohd Zaki, S., Razali, S., Awang Kader, M. A. R., Laton, M. Z., Ishak, M., & Mohd Burhan, N. (2025). Predicting students' performance at higher education institutions using a machine learning approach. *Kybernetes*, 54(11), 6940–6975.
34. Orbeta, A. C., Melad, K. A. M., & Potestad, M. (2021). *Correlates of test performance of 15-year-old students in the Philippines: Evidence from PISA* (PIDS Discussion Paper Series No. 2020-57).
35. Pequit, J. B., & Sanson, A. T. (2024). Students' performances in work immersion in Baliwasan Senior High School: A case study. *International Journal of Research and Scientific Innovation*, 11(7), 576–601.
36. Rodriguez, S. M. (2019). What drives the formation of “valuable” academe-industry partnership: The case of HEIs and companies in CALABARZON. *International Journal of Education*, 4(30), 154–167.

37. Rojas-Osorio A, M., & Alvarez-Risco C, A. (2024). Journal of Applied Learning & Teaching. *JALT*, 7(1), 167.
38. Saluria, R. A., & Mariño, E. M. (2024). Senior high students' level of satisfaction and performance toward work immersion. *Journal of Interdisciplinary Perspectives*, 2(6), 139–146.
39. Santos, J. P., & Reyes, A. L. (2020). Assessing work immersion outcomes among TVL students. *Journal of Technical Vocational Education*, 8(1), 88–102.
40. Santos, L. M., & Villanueva, J. P. (2022). Reflective writing skills and portfolio performance among HUMSS students. *Journal of Humanities and Social Sciences Education*, 12(1), 44–58.
41. Schneider, M., & Preckel, F. (2017). Variables associated with achievement in higher education: A systematic review of meta-analyses. *Psychological Bulletin*, 143(6), 565.
42. Sharma, R., & Mahajan, V. (2021). Workplace communication skills and professional success: A study of vocational learners. *International Journal of Vocational Education and Training*, 5(2), 45–53.
43. Sharma, S. (2025). Developmental psychology: From prenatal growth to late adulthood. *Contemporary Perspectives in Psychology: Theory, Research, and Practice*, 163.
44. Tengco, V. Y. (2025). Policy gaps in SHS work immersion and employability. *International Journal of Research Studies in Education*, 14(14), 197–208.
45. Tinio, J. N. G., Alaya, M. Z., & Bouzebda, S. (2025). Conditional quantile estimation of nonstationary time series: A locally stationary approach with environmental data application. *Journal of Physics: Conference Series*, 3114(1), 012012.
46. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
47. Yorke, M. (2021). Employability in higher education: What it is and what it is not. *Learning and Employability Series*, 1(1), 8–16.
48. Yoshida, Y. M. (2025). Work readiness of senior high school students in the Technical-Vocational-Livelihood track. *International Journal of Pedagogy and Learning Community (IJPLC)*, 2(1), 1-12.