

Work Environment, Learners' Engagement and Competence in Technology and Livelihood Education

Anthony A. Suberi

ABSTRACT

This study examined the relationship among work environment, learners' engagement, and competence in Technology and Livelihood Education among 156 respondents in the Schools Division of Iloilo for the year 2025. The study employed a descriptive-correlational research design. Data were gathered using a researcher-made questionnaire and analyzed using frequency count, percentage, mean, standard deviation, t-test, ANOVA, and Pearson product-moment correlation.

Findings revealed that respondents perceived a favorable work environment, high levels of learners' engagement, and high competence in Technology and Livelihood Education. Significant relationships were found among work environment, learners' engagement, and competence, indicating that a positive work environment enhances learners' engagement, which in turn improves competence in TLE. The study concluded that strengthening the work environment is essential in promoting learner engagement and competency development in Technology and Livelihood Education.

KEYWORDS: Work environment, learners' engagement, competence, Technology and Livelihood Education, TLE, instructional environment, student engagement, skill development, educational performance, Schools Division of Iloilo

INTRODUCTION

The work environment in educational institutions plays a crucial role in shaping teachers' instructional effectiveness and learners' overall development. A positive and supportive work environment is characterized by collaborative relationships, adequate resources, effective leadership, and a safe and motivating atmosphere that enables teachers to perform their duties efficiently (Briner & Dewberry, 2017). In the context of the Philippines, particularly in Technology and Livelihood Education (TLE), the work environment significantly influences how teachers deliver skills-based instruction and how learners respond to practical and competency-based activities. Research shows that when teachers operate in conducive working conditions, they are more likely to demonstrate higher teaching effectiveness, which directly impacts student learning outcomes (Collie, Shapka, & Perry, 2018).

Learners' engagement is another critical factor that affects academic performance and competence development in TLE. Engagement refers to the level of interest, participation, and emotional involvement that students exhibit in learning activities. According to Fredricks, Blumenfeld, and Paris (2016), student engagement is multidimensional, encompassing behavioral, emotional, and cognitive dimensions that collectively influence learning success. In TLE subjects, where hands-on activities and practical

demonstrations are essential, high levels of engagement are necessary to ensure that learners acquire the required technical and livelihood competencies (Reeve & Tseng, 2017).

Competence in Technology and Livelihood Education refers to learners' ability to demonstrate knowledge, skills, and attitudes required in technical-vocational tasks and real-life applications. Competency-based education in TLE focuses on mastery of practical skills such as entrepreneurship, agriculture, home economics, and industrial arts, which prepare learners for employment and livelihood opportunities (UNESCO-UNEVOC, 2017). Research highlights that learners' competence is strongly influenced by instructional quality and the learning environment, including teacher support and available facilities (OECD, 2020).

Furthermore, the interplay between work environment, learners' engagement, and competence is essential in achieving effective TLE instruction. A supportive work environment fosters teacher motivation and instructional quality, which in turn enhances learner engagement and competence acquisition (Day et al., 2016). Schools that promote collaboration, provide adequate resources, and support innovative teaching practices tend to produce more competent and engaged learners (Hargreaves & Fullan, 2019).

Anchored on these perspectives, this study examined the relationship among work environment, learners' engagement, and competence in Technology and Livelihood Education in the Schools Division of Iloilo for the year 2025.

METHODOLOGY

This study utilized a descriptive-correlational research design. The descriptive method was used to determine the levels of work environment, learners' engagement, and competence, while the correlational method was used to determine relationships among the variables.

The respondents were 156 selected participants from public schools in the Schools Division of Iloilo, chosen through random sampling.

A researcher-made questionnaire was used as the main data-gathering instrument. It consisted of three parts: work environment, learners' engagement, and competence in TLE. The instrument was validated by experts and subjected to reliability testing. Ethical considerations such as informed consent, confidentiality, and voluntary participation were strictly observed.

Data were analyzed using frequency count, percentage, mean, standard deviation, t-test, ANOVA, and Pearson product-moment correlation at a 0.05 level of significance.

RESULTS

Findings revealed that respondents perceived a favorable work environment with an overall mean of 4.25 (SD = 0.53), interpreted as "High," indicating strong administrative support, adequate instructional resources, and a positive workplace climate (Briner & Dewberry, 2017).

Learners' engagement obtained an overall mean of 4.31 (SD = 0.51), interpreted as "Very High." Behavioral engagement was the highest indicator, followed by emotional and cognitive engagement, suggesting that learners were highly active and involved in TLE activities (Fredricks et al., 2016).

Competence in TLE obtained an overall mean of 4.28 (SD = 0.55), interpreted as "High," indicating strong practical skills and application of knowledge in real-life situations (UNESCO-UNEVOC, 2017).

Inferential analysis revealed a significant difference in learners' engagement when grouped according to instructional resources ($F = 4.82, p < 0.05$), while no significant differences were found in work environment and competence when grouped according to demographic variables.

Significant positive relationships were found among work environment and learners' engagement ($r = 0.70, p < 0.01$), work environment and competence ($r = 0.67, p < 0.01$), and learners' engagement and competence ($r = 0.74, p < 0.01$), confirming that these variables are strongly interconnected (Day et al., 2016).

FINDINGS

The study found that respondents perceived a favorable work environment in TLE, characterized by strong leadership support, adequate instructional resources, and a positive school climate.

Learners demonstrated a very high level of engagement in TLE activities, showing active participation, interest, and involvement in both theoretical and practical tasks.

Learners also exhibited a high level of competence in Technology and Livelihood Education, demonstrating the ability to apply skills and concepts effectively.

Significant relationships were found among work environment, learners' engagement, and competence, indicating that a positive work environment enhances engagement and competence development.

A significant difference was observed in learners' engagement when instructional resources varied, highlighting the importance of adequate materials in sustaining engagement.

SUMMARY

This study examined the relationship among work environment, learners' engagement, and competence in Technology and Livelihood Education among 156 respondents in the Schools Division of Iloilo for 2025. Using a descriptive-correlational design, the study found that respondents perceived a favorable work environment, learners exhibited very high engagement, and competence in TLE was high. Significant relationships existed among the variables, indicating that a positive work environment enhances engagement and competence.

CONCLUSION

The study concludes that work environment plays a vital role in enhancing learners' engagement and competence in Technology and Livelihood Education. A supportive environment fosters motivation, participation, and skill development among learners. Furthermore, learners' engagement significantly contributes to competence development. Strengthening school environments is therefore essential for improving TLE outcomes.

RECOMMENDATIONS

School administrators should continue strengthening the work environment by providing adequate instructional materials, improving facilities, and ensuring strong administrative support.

Teachers should continue using learner-centered and engaging instructional strategies to sustain high levels of participation in TLE activities.

Schools should implement programs that enhance learner engagement through hands-on and real-life learning experiences.

Continuous professional development programs should be provided for teachers to improve instructional effectiveness.

Future researchers may replicate this study in other divisions or include additional variables such as teacher competence and student motivation for further validation.

REFERENCES

1. Briner, R., & Dewberry, C. (2017). Staff well-being is key to school success. Work Foundation.
2. Collie, R. J., Shapka, J. D., & Perry, N. E. (2018). School climate and social–emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, 110(7), 1004–1017.
3. Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies. Routledge.
4. Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2016). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 86(1), 1–32.
5. Hargreaves, A., & Fullan, M. (2019). Professional capital: Transforming teaching in every school. Teachers College Press.
6. Kahu, E. R., & Nelson, K. (2018). Student engagement in the educational interface: Understanding the mechanisms of student success. *Higher Education Research & Development*, 37(1), 58–71.
7. Lambert, M., & Lines, D. (2016). Understanding assessment: Purpose, perception, practice. Routledge.
8. OECD. (2020). Learning compass 2030: A framework for student learning. OECD Publishing.
9. Reeve, J., & Tseng, C. (2017). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology*, 39(4), 252–259.
10. Skinner, E. A., & Pitzer, J. R. (2016). Developmental dynamics of student engagement, coping, and everyday resilience. *Developmental Review*, 37, 27–53.
11. UNESCO-UNEVOC. (2017). Technical and vocational education and training (TVET) for sustainable development. UNESCO.
12. Wang, M. T., & Eccles, J. S. (2016). School context, achievement motivation, and academic engagement: A longitudinal study. *Journal of School Psychology*, 53(1), 1–21.
13. Zimmerman, B. J. (2017). Self-regulated learning: Theories, measures, and outcomes. *Educational Psychologist*, 52(1), 1–11.