



Technical-Vocational Education and Learner Behavior at Maria Aurora National High School

¹ Jane D. Cailles

Northeastern College, Santiago City

Maria Aurora National High School

Eliseo C. Ronquillo Sr. Memorial National High School

Correspondence: reynon.panginen@deped.gov.ph

Abstract

Technical-Vocational Education (TVE) plays a vital role in preparing learners with practical skills, work ethics, and employability competencies essential for national development. In secondary education, particularly within Technical-Vocational-Livelihood (TVL) tracks, instructional experiences are expected to shape not only learners' technical competencies but also their behavior, attitudes, and values. This qualitative study examined the influence of technical-vocational education on learner behavior at Maria Aurora National High School. Using a qualitative descriptive research design, the study explored teachers' and students' perceptions of how TVE teaching-learning practices affect discipline, responsibility, collaboration, and work-related attitudes. Data were gathered through semi-structured interviews and focus group discussions and analyzed using thematic analysis. Findings revealed that technical-vocational education positively influences learner behavior through hands-on learning experiences, industry-oriented classroom practices, and values-driven instruction. However, challenges such as resource constraints and varying learner motivation were also identified. The study concludes that technical-vocational education contributes significantly to positive learner behavior when supported by appropriate pedagogy, facilities, and teacher guidance. Implications for instructional practice, curriculum development, and school policy are discussed.

Keywords: *technical-vocational education, learner behavior, TVET, secondary education, qualitative study*



1. Introduction

Technical-Vocational Education and Training (TVET) has increasingly gained prominence as an essential component of secondary education, particularly in preparing learners for employment, entrepreneurship, and lifelong skills development. Beyond technical competencies, TVET programs are expected to cultivate positive learner behaviors such as discipline, responsibility, cooperation, and work ethics—qualities that are critical in both workplace and societal contexts. In the Philippine educational system, technical-vocational education in secondary schools aims to address labor market demands while fostering holistic learner development.

Learner behavior is a crucial factor influencing the effectiveness of teaching and learning. Positive behaviors such as active participation, task commitment, and collaboration enhance learning outcomes, while negative behaviors may hinder instructional processes. In technical-vocational settings, learner behavior is closely linked to instructional methods, classroom management, and the nature of hands-on and skills-based activities. Practical tasks require adherence to safety rules, teamwork, and accountability, making TVE an important context for shaping learner behavior.

Despite the recognized importance of technical-vocational education, empirical studies focusing on its influence on learner behavior at the secondary school level remain limited. Much of the existing research emphasizes skills acquisition and employability outcomes, with less attention given to behavioral development within TVE classrooms. Understanding how technical-vocational education shapes learner behavior can provide valuable insights for improving instructional practices and student support mechanisms.

This study was conducted to examine the influence of technical-vocational education on learner behavior at Maria Aurora National High School. By exploring the perspectives of teachers and learners, the study aims to contribute to the growing discourse on the role of TVE in promoting positive learner behavior and holistic education.

2. Objectives of the Study

This study aimed to examine the influence of technical-vocational education on learner behavior at Maria Aurora National High School. Specifically, it sought to:

1. Describe the technical-vocational teaching–learning practices implemented in the school;
2. Examine how technical-vocational education influences learners' behavioral attributes such as discipline, responsibility, and collaboration;
3. Identify challenges affecting learner behavior in technical-vocational classes; and
4. Provide recommendations to enhance learner behavior through effective technical-vocational education practices.

3. Methodology

3.1 Research Design

The study employed a **qualitative descriptive research design** to capture in-depth insights into learner behavior within technical-vocational education settings. This approach was appropriate for

examining participants' lived experiences, perceptions, and interpretations of teaching-learning practices and behavioral outcomes in a natural school context.

3.2 Participants and Research Site

Participants included **technical-vocational teachers and students** enrolled in TVL subjects at Maria Aurora National High School. Teachers were selected based on their involvement in delivering technical-vocational courses, while students were chosen from classes that regularly engaged in hands-on and skills-based activities. **Purposive sampling** was used to ensure that participants had direct experience with the phenomenon under investigation.

3.3 Data Collection

Data were collected through **semi-structured interviews** with teachers and **focus group discussions (FGDs)** with students. The interview guides focused on teaching practices, classroom behavior, student engagement, and perceived behavioral changes associated with TVE participation. All sessions were audio-recorded with consent and transcribed verbatim.

3.4 Data Analysis and Trustworthiness

Data were analyzed using **thematic analysis**. Transcripts were coded and organized into categories, which were later refined into themes. Trustworthiness was ensured through data triangulation, member checking, and peer debriefing.

4. Results

Analysis of the data yielded three major themes describing the influence of technical-vocational education on learner behavior.

Theme 1: Hands-On Learning Fosters Discipline and Responsibility

Participants emphasized that hands-on technical-vocational activities require learners to consistently follow established procedures, observe safety protocols, and complete tasks with accuracy and accountability. In technical-vocational classrooms and workshops, students are expected to handle tools and equipment properly, adhere to safety guidelines, and accomplish tasks according to specified standards. These structured requirements were perceived to cultivate discipline among learners, as they learn to regulate their behavior, follow instructions carefully, and respect rules that are essential for both personal safety and task completion. Such findings align with existing studies which indicate that structured, practice-oriented learning environments promote self-regulation and responsible behavior among learners (Kolb, 1984; Rauner & Maclean, 2008).

Moreover, the emphasis on task accuracy and procedural compliance fosters a strong sense of responsibility among students. Learners become aware that errors or negligence may lead to unsafe conditions or compromised outputs, thereby reinforcing accountability for their actions. Research on technical and vocational education suggests that hands-on learning experiences simulate real workplace conditions, where discipline and responsibility are integral to professional practice (UNESCO, 2015). By engaging learners in authentic tasks that mirror industry expectations, technical-vocational education not only enhances technical competence but also instills behavioral attributes such as discipline, responsibility, and attention to detail, which are critical for employability and lifelong learning.

Responses:

*"Kailangan talaga maging disiplinado ang mga estudyante dahil may safety rules sa workshop."*P14

"Natuto silang maging responsable sa paggamit ng tools at materials." P11

"Kapag may proyekto, alam nilang may pananagutan sila sa output." P7

These responses indicate that practical, skills-based learning environments naturally promote discipline and accountability by embedding behavioral expectations within the learning process itself. In technical-vocational settings, learners are required to adhere to clear procedures, safety regulations, and quality standards in order to successfully complete tasks. As students repeatedly engage in these structured activities, they begin to associate responsible behavior with effective performance, recognizing that discipline and attentiveness are essential not only for meeting instructional requirements but also for ensuring personal and collective safety.

Over time, learners internalize responsible behavior as an integral component of task completion and safety compliance rather than as externally imposed rules. This internalization occurs as students experience the direct consequences of their actions, such as the successful completion of projects or the prevention of accidents through careful practice. Consequently, skills-based learning environments help cultivate self-regulation, accountability, and professional work habits, reinforcing the idea that responsible behavior is fundamental to both learning and future workplace readiness.

Theme 2: Collaborative Tasks Promote Cooperation and Work Ethics

Technical-vocational activities often involve group projects and collaborative tasks that require learners to work together toward shared goals. Participants noted that these experiences foster teamwork and cooperation, as students must coordinate roles, share responsibilities, and support one another to complete assigned tasks successfully. Through collaboration, learners develop communication skills and learn to negotiate ideas, resolve differences, and contribute meaningfully to group outputs, all of which are essential in both educational and workplace settings.

Moreover, collaborative technical-vocational tasks promote respect for others' roles and contributions. Learners come to recognize that each group member plays a specific and valuable part in the completion of a project, encouraging mutual respect and accountability. This shared responsibility helps students appreciate diverse skills and strengths within a team, reinforcing positive social behaviors such as cooperation, empathy and professionalism. As a result, collaborative learning experiences in technical-vocational education not only enhance technical competence but also cultivate interpersonal skills and work ethics critical for future employment.

Responses:

"Natuto silang magtulungan kapag group project." P5

"May teamwork sa paggawa ng outputs." P8

"Naiintindihan nila na mahalaga ang cooperation sa trabaho." P3

These findings suggest that collaborative technical-vocational tasks effectively simulate real workplace conditions, where cooperation, shared responsibility, and adherence to professional standards are essential. By working in groups on practical projects, learners experience situations similar to those encountered in actual work environments, such as coordinating tasks, meeting

deadlines, and ensuring the quality of outputs. This simulation of workplace dynamics helps learners understand the importance of teamwork and collective effort in achieving common goals.

Furthermore, such collaborative experiences reinforce positive work ethics that are critical for future employment. Learners develop habits of cooperation, reliability, and respect for others' contributions as they engage in joint tasks and problem-solving activities. These experiences cultivate attitudes aligned with industry expectations, including accountability, professionalism, and effective communication. As a result, collaborative technical-vocational tasks not only enhance technical skills but also prepare learners for the behavioral and ethical demands of the workplace.

Theme 3: Challenges in Sustaining Positive Learner Behavior

Despite the positive outcomes associated with technical-vocational education, participants identified several challenges that affect learner behavior and the effective implementation of instructional activities. One of the primary concerns raised was the limitation of resources, including inadequate tools, equipment, and materials needed for hands-on tasks. When resources are insufficient or shared among many learners, frustration may arise, leading to decreased focus, off-task behavior, or reduced engagement. These constraints can disrupt the flow of instruction and limit students' opportunities to fully practice and master required skills.

In addition, varying levels of learner motivation and behavioral issues during complex tasks were identified as significant challenges. Some learners exhibited low motivation when activities were perceived as difficult or time-consuming, which sometimes resulted in disengagement or lack of persistence. During complex or demanding tasks, behavioral issues such as impatience, lack of cooperation, or inattentiveness occasionally emerged, particularly among students who struggled with technical skills. These findings suggest that while technical-vocational education has strong potential to foster positive learner behavior, sustained motivation, adequate resources, and consistent teacher guidance are necessary to manage challenges and support productive learning experiences.

Responses:

"Minsan kulang ang kagamitan kaya nagkakaroon ng frustration." P4

"May estudyanteng nawawalan ng gana kapag mahirap ang gawain." P8

"Kailangan ng mas mahigpit na monitoring sa behavior." P1

These responses indicate that environmental and instructional constraints can significantly influence learner behavior in technical-vocational education settings. Limited resources, crowded learning spaces, or insufficient equipment may lead to frustration, reduced engagement, and difficulties in maintaining appropriate behavior, particularly during demanding hands-on tasks. When instructional conditions are less than optimal, learners may struggle to remain focused, cooperative, and motivated, which can affect both individual performance and group dynamics.

Moreover, the findings underscore the importance of adequate resources and continuous teacher guidance in sustaining positive behavioral outcomes. Sufficient tools, materials, and well-organized learning environments enable learners to perform tasks efficiently and with confidence, minimizing disruptions and behavioral issues. At the same time, consistent teacher supervision, clear instructions, and timely feedback help learners manage challenges, develop self-discipline, and adhere to expected standards of conduct. Together, supportive environmental conditions and

sustained instructional guidance create a structured learning context that promotes responsible behavior and productive engagement in technical-vocational education.

5. Discussion

The findings demonstrate that technical-vocational education (TVE) significantly influences learner behavior by fostering discipline, responsibility, cooperation, and positive work ethics. The emphasis on hands-on, skills-based, and performance-oriented learning requires learners to follow procedures, comply with safety standards, manage time effectively, and complete tasks accurately. These expectations naturally cultivate disciplined and responsible behavior, as learners recognize that successful task completion depends on attentiveness, accountability, and adherence to rules. Studies have consistently shown that vocational and technical learning environments promote self-regulation, responsibility, and task commitment because learners experience the direct consequences of their actions in authentic learning contexts (Kolb, 1984; Rauner & Maclean, 2008; UNESCO, 2015). Experiential learning theory further explains that learning through concrete experience, reflection, and application enables learners to internalize both technical competencies and behavioral norms essential for professional practice (Kolb, 1984; Schön, 1983).

Moreover, the collaborative nature of many technical-vocational tasks reinforces cooperation, teamwork, and respect for others' roles, closely mirroring real workplace conditions. Group projects, shared use of tools, and collective problem-solving encourage learners to communicate effectively, coordinate responsibilities, and develop mutual accountability. Research in vocational education highlights that cooperative and project-based learning environments foster social skills, work ethics, and professional attitudes that are critical for employability (Johnson & Johnson, 2009; Prince, 2004; OECD, 2018). Studies further indicate that TVET programs contribute to the development of transferable skills such as collaboration, perseverance, and ethical conduct—that extend beyond technical proficiency (Billett, 2011; Moodie, 2016; Pavlova, 2014). In this sense, technical-vocational education functions not only as skills training but also as a powerful mechanism for shaping learner behavior aligned with labor market and societal expectations.

However, the challenges identified in this study highlight the importance of adequate institutional support and sustained learner motivation to maximize the behavioral benefits of technical-vocational education. Limited resources, insufficient equipment, and overcrowded workshops can constrain hands-on learning opportunities and lead to learner frustration, disengagement, and behavioral issues (OECD, 2018; UNESCO-UNEVOC, 2020). Additionally, varying levels of learner motivation, particularly when tasks are complex or demanding, may affect persistence and behavior if not addressed through appropriate instructional support and guidance. Existing literature emphasizes that institutional investment in facilities, teacher training, and learner support systems is critical for maintaining high-quality TVET programs and positive learner outcomes (ADB, 2019; McGrath et al., 2020). Addressing these structural and motivational challenges is therefore essential to sustaining discipline, responsibility, cooperation, and work ethics among learners and to ensuring that technical-vocational education fulfills its role in holistic learner development.

6. Conclusions

This study concludes that technical-vocational education positively shapes learner behavior at Maria Aurora National High School. Through hands-on learning and collaborative activities, learners develop discipline, responsibility, cooperation, and work-related values. While challenges exist, effective instructional practices and institutional support can enhance the behavioral impact of TVE.

7. Implications of the Study

Educational Implications:

Teachers may strengthen hands-on and collaborative approaches to reinforce positive learner behavior.

Curricular Implications:

Curriculum planners may integrate explicit behavioral and values-based outcomes into technical-vocational programs.

Policy Implications:

School administrators and education policymakers may provide adequate resources and professional development to support effective technical-vocational instruction and learner behavior management.

References

- Asian Development Bank. (2019). *Innovative strategies in technical and vocational education and training for accelerated human resource development in South Asia*. ADB.
- Billett, S. (2011). *Vocational education: Purposes, traditions and prospects*. Springer.
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365–379. <https://doi.org/10.3102/0013189X09339057>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- McGrath, S., Mulder, M., Papier, J., & Stuart, R. (2020). *Handbook of vocational education and training: Developments in the changing world of work*. Springer.
- Moodie, G. (2016). *VET in the tertiary education system*. Springer.
- OECD. (2018). *Seven questions about apprenticeships: Answers from international experience*. OECD Publishing. <https://doi.org/10.1787/9789264306486-en>
- Pavlova, M. (2014). *TVET as an important factor in country economic development*. Springer.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223–231. <https://doi.org/10.1002/j.2168-9830.2004.tb00809.x>
- Rauner, F., & Maclean, R. (Eds.). (2008). *Handbook of technical and vocational education and training research*. Springer.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.
- UNESCO. (2015). *Unleashing the potential: Transforming technical and vocational education and training*. UNESCO Publishing.
- UNESCO-UNEVOC. (2020). *Strategy for TVET (2020–2025)*. UNESCO.
- Winch, C. (2013). *Education, work and social capital: Toward a new conception of vocational education*. Routledge.
- Yorke, M., & Knight, P. (2006). *Embedding employability into the curriculum*. Higher Education Academy.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>

Johnson, D. W., & Johnson, R. T. (2009). *An educational psychology success story: Social interdependence theory and cooperative learning*. *Educational Researcher*, 38(5), 365–379. <https://doi.org/10.3102/0013189X09339057>

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

OECD. (2018). *Seven questions about apprenticeships: Answers from international experience*. OECD Publishing. <https://doi.org/10.1787/9789264306486-en>

Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223–231. <https://doi.org/10.1002/j.2168-9830.2004.tb00809.x>

Rauner, F., & Maclean, R. (Eds.). (2008). *Handbook of technical and vocational education and training research*. Springer. <https://doi.org/10.1007/978-1-4020-8347-9>

UNESCO. (2015). *Unleashing the potential: Transforming technical and vocational education and training*. UNESCO Publishing.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Rauner, F., & Maclean, R. (Eds.). (2008). *Handbook of technical and vocational education and training research*. Springer.

UNESCO. (2015). *Unleashing the potential: Transforming technical and vocational education and training*. UNESCO Publishing.