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Industry Partnership Support and Institutional Learning Resources on Bookkeeping Skills Development in Selected Technical Vocational Institutions in Metro Manila: Inputs to Action Plan

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ABSTRACT

Technical and Vocational Education and Training (TVET) plays a critical role in developing a competent workforce capable of meeting evolving industry demands. This study examined the extent of industry partnership support and institutional learning resources in the development of bookkeeping skills among selected TESDA-accredited Technical Vocational Institutions (TVIs) in Metro Manila. Specifically, it assessed stakeholders' perceptions of industry partnership support and institutional learning resources, determined whether significant differences existed among respondent groups, examined the relationship between the two variables, identified implementation challenges, and developed an action plan to enhance bookkeeping skills development. The study employed a descriptive-correlational research design involving 149 respondents, consisting of Bookkeeping NC III students, trainers, and industry partners selected through purposive sampling. Data were collected using a researcher-developed questionnaire and analyzed using frequency, percentage, weighted mean, one-way analysis of variance (ANOVA), and Pearson product-moment correlation coefficient at the 0.05 level of significance. Findings revealed that both industry partnership support and institutional learning resources were Highly Evident, indicating that the participating TVIs have established effective collaborative mechanisms and adequate instructional resources to support competency-based bookkeeping education. No significant differences were found in the respondents' perceptions across stakeholder groups. Correlation analysis demonstrated a strong positive relationship between industry partnership support and institutional learning resources, suggesting that stronger industry collaboration is associated with improved educational resources for bookkeeping training. Respondents likewise identified operational challenges related to employer communication, career placement, access to updated accounting technologies, and internship opportunities. Based on these findings, a strategic action plan was developed to strengthen industry partnerships, enhance institutional learning resources, and improve bookkeeping skills development. The study provides empirical evidence that sustained industry-academe collaboration and continuous investment in learning resources are essential to improving the quality, relevance, and employability outcomes of TVET bookkeeping programs in the Philippines.

Keywords: Bookkeeping NC III, Industry Partnership Support, Institutional Learning Resources, Technical Vocational Institutions, Action Plan.

INTRODUCTION

Technical and Vocational Education and Training (TVET) plays a significant role in preparing a competent workforce capable of responding to the changing demands of industry and economic development. In the Philippines, the Technical Education and Skills Development Authority (TESDA) serves as the primary agency responsible for promoting competency-based education and training that equips learners with industry-relevant knowledge, technical skills, and workplace values. Among its priority qualifications, Bookkeeping NC III is designed to develop competencies in maintaining financial records, preparing accounting reports, and using computerized accounting systems that are essential in various business and organizational settings. As the accounting profession continues to embrace digital transformation and automation, Technical Vocational Institutions (TVIs) must continuously strengthen the quality of their training programs to ensure that graduates possess the competencies required by modern workplaces.

Industry partnership has become one of the defining characteristics of quality TVET systems worldwide. Strong collaboration between educational institutions and industry provides learners with opportunities for workplace immersion, internship placements, industry-based competency assessment, professional mentoring, and exposure to current accounting practices. These partnerships also enable institutions to obtain valuable employer feedback that informs curriculum improvement and strengthens the alignment between training programs and labor market requirements. Consequently, effective industry-academe collaboration enhances graduate employability by ensuring that learners acquire both technical competencies and practical workplace experience before entering the workforce.

Equally important are institutional learning resources that support competency-based instruction. The availability of updated bookkeeping modules, accounting laboratories, licensed accounting software, computer facilities, internet connectivity, learning management systems, and instructional materials creates an environment conducive to developing technical competence and higher-order problem-solving skills. Modern learning resources not only facilitate effective classroom instruction but also allow learners to simulate real workplace situations, thereby narrowing the gap between theoretical learning and professional practice. In competency-based TVET, institutional resources and industry support complement one another in producing graduates who are better prepared to meet employer expectations.

Despite continuing efforts by TESDA-accredited institutions to strengthen training quality, disparities remain in the implementation of industry partnerships and the provision of institutional learning resources. Some institutions experience challenges in securing sufficient internship opportunities, obtaining timely employer feedback, accessing updated accounting technologies, and maintaining industry-standard instructional facilities. These variations may influence the effectiveness of bookkeeping skills development and ultimately affect graduates' readiness for employment. Addressing these concerns requires empirical evidence on how external industry collaboration and internal institutional resources jointly contribute to competency development within the context of Bookkeeping NC III programs.

Although previous studies have examined industry collaboration, instructional resources, and competency-based education in TVET, limited research has investigated the combined influence of industry partnership support and institutional learning resources on bookkeeping skills development within TESDA-accredited Technical Vocational Institutions in Metro Manila. Moreover, few studies have incorporated the perspectives of multiple stakeholders, including students, trainers, and industry partners, to provide a comprehensive understanding of the implementation of these support mechanisms. This gap highlights the need for further investigation to generate evidence that can inform institutional improvement initiatives and strengthen industry-academe collaboration.

Accordingly, this study examined the extent of industry partnership support and institutional learning resources for bookkeeping skills development in selected TESDA-accredited Technical Vocational Institutions in Metro Manila. Specifically, it assessed stakeholders' perceptions of these support mechanisms, determined whether significant differences existed among respondent groups, examined the relationship between industry partnership support and institutional learning resources, identified implementation challenges, and developed an evidence-based action plan to strengthen bookkeeping education. The findings are expected to contribute to the improvement of TVET policies and practices by providing practical recommendations for TVI administrators, trainers, industry partners, and policymakers committed to enhancing the quality, relevance, and employability outcomes of Bookkeeping NC III programs.

LITERATURE-BASED RESEARCH FRAMEWORK

This study is anchored on an integrated research framework derived from Human Capital Theory (Becker, 1964), Experiential Learning Theory (Kolb, 1984), and the Resource-Based View (RBV) of institutions (Barney, 1991; Wernerfelt, 1984). These theories collectively explain how external institutional support and internal organizational resources contribute to the development of learners' competencies in competency-based technical-vocational education.

Human Capital Theory posits that investments in education, training, and competency development improve individual productivity, employability, and economic value. Within the context of Bookkeeping NC III, industry partnerships provide opportunities for workplace learning, competency assessment, and professional exposure that strengthen learners' knowledge and practical skills.

Experiential Learning Theory emphasizes that meaningful learning occurs through concrete experiences, reflective observation, conceptual understanding, and active application. Accordingly, on-the-job training, workplace immersion, industry seminars, accounting simulations, and employer feedback enable learners to transform theoretical knowledge into professional bookkeeping competencies.

The Resource-Based View explains that institutional resources including qualified trainers, bookkeeping modules, accounting laboratories, computerized accounting software, learning management systems, internet connectivity, and modern instructional facilities represent strategic organizational assets that enhance instructional quality and competency development. Institutions possessing adequate educational resources are better positioned to produce graduates who meet industry standards.

METHODOLOGY

Research Design

This study employed a descriptive-correlational research design to examine the relationship between industry partnership support and institutional learning resources in the development of bookkeeping skills among selected Technical Vocational Institutions (TVIs) in Metro Manila. The descriptive component was used to determine the extent to which industry partnership support and institutional learning resources were evident as perceived by Bookkeeping NC III students, trainers, and industry partners. The correlational component was utilized to determine whether a significant relationship existed between the two variables and to examine differences in stakeholders' perceptions. This design was appropriate because it enabled the researcher to describe existing conditions while investigating the statistical association between the study variables.

Research Locale

The study was conducted in four TESDA-accredited Technical Vocational Institutions (TVIs) in Metro Manila offering the Bookkeeping NC III qualification. These institutions were selected because they actively implement competency-based training programs and maintain partnerships with industry organizations that provide workplace immersion and other training-related support. The selected TVIs also possess the instructional facilities and learning resources necessary to deliver Bookkeeping NC III in accordance with TESDA competency standards.

Participants

The participants consisted of 149 respondents representing three stakeholder groups involved in the implementation of Bookkeeping NC III programs. Specifically, the respondents included 125 Bookkeeping NC III students (83.89%), 19 industry partners (12.75%), and 5 bookkeeping trainers (3.36%). These groups were selected because they possess firsthand knowledge and practical experience regarding industry partnership initiatives and institutional learning resources that support bookkeeping skills development.

A purposive sampling technique was employed to ensure that only respondents who met the study's inclusion criteria participated in the research. Students were required to be officially enrolled in the Bookkeeping NC III program during the conduct of the study. Trainers were selected based on their active involvement in delivering the Bookkeeping NC III curriculum, while industry partners were chosen because they maintained formal training partnerships with the participating institutions and had experience supervising trainees during workplace immersion or related industry-based learning activities.

Research Instruments

Data were collected using a researcher-developed, structured questionnaire designed to assess the extent of industry partnership support and institutional learning resources for bookkeeping skills development in selected TESDA-accredited Technical Vocational Institutions (TVIs). The instrument was developed based on an extensive review of related literature, TESDA competency standards, and the objectives of the study to ensure that all research variables were adequately represented.

Prior to data collection, permission was obtained from the participating organizations. Eligible respondents were identified through coordination with institutional representatives, and informed consent was secured before administering the validated questionnaire. Participation was voluntary, and respondents were assured of the confidentiality and anonymity of their responses. Completed questionnaires were retrieved, checked for completeness, encoded, and subjected to statistical analysis to address the research objectives and serve as the basis for the proposed action plan.

Statistical Treatment

The collected data were analyzed using both descriptive and inferential statistical techniques to address the research objectives. Frequency and percentage distributions were used to describe the respondents' profile. Weighted mean was employed to determine the extent of industry partnership support and institutional learning resources as perceived by the respondents. One-way Analysis of Variance (ANOVA) was used to determine whether significant differences existed among stakeholder groups, while the Pearson product-moment correlation coefficient (Pearson's r) was applied to examine the relationship between industry partnership support and institutional learning resources. All statistical tests were interpreted using a 0.05 level of significance.

RESULTS AND DISCUSSION

Profile of the Respondents

The study involved 149 respondents from four TESDA-accredited Technical Vocational Institutions (TVIs) in Metro Manila. Of the total respondents, 125 (83.89%) were Bookkeeping NC III students, 19 (12.75%) were industry partners, and 5 (3.36%) were bookkeeping trainers. The inclusion of these three stakeholder groups provided diverse perspectives regarding the implementation of industry partnership support and institutional learning resources, thereby enhancing the comprehensiveness and credibility of the findings. The participation of industry partners, trainers, and students enabled the study to capture multiple dimensions of competency-based bookkeeping education and strengthened the validity of the conclusions drawn from the data

Table 1. Profile of the Respondents

Respondent	**f**	**%**
Bookkeeping Students	125	83.89
Trainers / Instructors	5	3.36
Industry Partners	19	12.75
Total	**149**	**100.00**

Industry Partnership Support

The assessment of Industry Partnership Support revealed an overall weighted mean of 4.74, verbally interpreted as Highly Evident. This indicates that the participating Technical Vocational Institutions have established effective collaborations with industry partners to support competency-based bookkeeping education. The consistently high ratings across respondent groups demonstrate that industry-academe partnerships are well institutionalized and are perceived as contributing positively to students' technical competence and workplace readiness.

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Among the indicators, Access to Real Accounting Records Simulation, Training Agreement and Memorandum of Agreement (MOA) Support, and Availability of Industry Assessors obtained the highest composite ratings. These findings suggest that the participating institutions have successfully developed formal mechanisms that allow students to experience authentic bookkeeping practices while ensuring that training activities are aligned with industry standards. Such structured partnerships provide learners with meaningful opportunities to apply classroom knowledge in practical settings, thereby strengthening competency development and enhancing employability.

Conversely, Career Placement Assistance and Exposure to Actual Accounting Systems received relatively lower composite means, although both remained within the Highly Evident category. These findings imply that while institutional partnerships are generally strong, greater attention should be given to strengthening employment facilitation services and expanding students' exposure to current accounting technologies and workplace practices. Enhancing these areas would enable institutions to better prepare graduates for the evolving requirements of the accounting profession.

The findings support previous research emphasizing that effective industry-academe collaboration enhances competency-based learning by providing authentic workplace experiences, employer engagement, and structured internship opportunities. Consistent partnerships allow educational institutions to align their training programs with labor market expectations, thereby improving graduates' technical competence and employment readiness. The positive assessment across all stakeholder groups further demonstrates that collaborative partnerships remain an essential component of quality TVET implementation.

Table 2. Summary on Industry Partnership Support

Criteria	**Bookkeeping Students**		**Trainers / Instructors**		**Industry Partners**		**Composite**	
	WM	**VI**	**WM**	**VI**	**WM**	**WM**	**VI**	**WM**
1. On-the-Job Training / Internship Placements	4.78	HE	4.80	HE	4.84	HE	4.81	HE
2. Industry Expert Talks and Seminars	4.80	HE	4.88	HE	4.74	HE	4.80	HE
3. Access to Real Accounting Records Simulation	4.81	HE	4.90	HE	4.81	HE	4.84	HE
4. Employer Feedback Mechanisms	4.81	HE	4.85	HE	4.74	HE	4.80	HE
5. Training Agreement and MOA Support	4.81	HE	4.93	HE	4.80	HE	4.84	HE
6. Availability of Industry Assessors	4.83	HE	4.83	HE	4.86	HE	4.84	HE
7. Exposure to Actual Accounting Systems	4.65	HE	4.45	HE	4.50	HE	4.53	HE
8. Career Placement Assistance	4.63	HE	4.40	HE	4.43	HE	4.49	HE
Grand Mean	**4.77**	**HE**	**4.76**	**HE**	**4.72**	**HE**	**4.74**	**HE**

Institutional Learning Resources

The assessment of Institutional Learning Resources yielded an overall weighted mean of 4.82, interpreted as Highly Evident, indicating that the participating Technical Vocational Institutions (TVIs) provide adequate instructional resources and learning facilities to support competency-based Bookkeeping NC III training. This finding demonstrates that the institutions have invested in essential educational resources that facilitate the

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acquisition of bookkeeping knowledge, technical competencies, and workplace readiness. The consistently high ratings across students, trainers, and industry partners further suggest a shared perception regarding the adequacy and effectiveness of the instructional environment in supporting quality TVET delivery.

Among the evaluated indicators, Learning Management System (LMS) Use obtained the highest composite weighted mean, followed closely by Printing and Reproduction of Learning Materials, Simulation Laboratories/Accounting Laboratories, Learning Manuals, Internet Connectivity and Digital Tools, and Learning Equipment and Facilities. These results indicate that the participating institutions have effectively integrated digital learning technologies with traditional instructional resources, enabling learners to access competency-based instructional materials through flexible and technology-enhanced learning environments. The high ratings also reflect institutional commitment to providing learners with opportunities to develop practical bookkeeping competencies using resources that simulate authentic workplace conditions.

Although all indicators were rated Highly Evident, Access to Computers and Software and the Availability of Bookkeeping Modules received relatively lower composite means than the other indicators. While these ratings remain favorable, they suggest opportunities for continuous improvement. As accounting practice increasingly relies on computerized accounting systems and cloud-based financial applications, Technical Vocational Institutions should continuously upgrade hardware, maintain licensed accounting software, and regularly revise instructional modules to reflect current accounting standards, technological innovations, and industry practices. Such improvements will further strengthen learners' digital competencies and better prepare them for employment in technology-driven accounting environments.

The findings reinforce previous studies emphasizing that adequate institutional learning resources significantly influence the effectiveness of competency-based education. Modern instructional facilities, updated learning materials, reliable internet connectivity, and digital learning platforms create learning environments that encourage active participation, improve learner engagement, and facilitate the development of practical occupational competencies. These resources enable students to apply theoretical concepts through simulation activities and technology-assisted instruction, thereby strengthening both technical competence and workplace readiness.

Table 3. Summary on Institutional Learning Resources

Criteria	**Bookkeeping Students**		**Trainers / Instructors**		**Industry Partners**		**Composite**	
	WM	**VI**	**WM**	**VI**	**WM**	**WM**	**VI**	**WM**
1. Availability of Bookkeeping Modules	4.56	HE	4.95	HE	4.86	HE	4.79	HE
2. Access to Computers and Software	4.59	HE	4.85	HE	4.89	HE	4.78	HE
3. Simulation Laboratories / Accounting Labs	4.75	HE	4.83	HE	4.91	HE	4.83	HE
4. Learning Manuals	4.77	HE	4.80	HE	4.91	HE	4.83	HE
5. Internet Connectivity and Digital Tools	4.80	HE	4.80	HE	4.89	HE	4.83	HE
6. Learning Management System (LMS) Use	4.80	HE	4.85	HE	4.89	HE	4.85	HE
7. Printing and Reproduction of Learning Materials	4.78	HE	4.80	HE	4.93	HE	4.84	HE
8. Learning Equipment / Facilities	4.79	HE	4.80	HE	4.89	HE	4.83	HE
Grand Mean	**4.73**	**HE**	**4.84**	**HE**	**4.90**	**HE**	**4.82**	**HE**

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Significant Relationship Between Industry Partnership Support and Institutional Learning Resources

One of the major findings of the study was the existence of very strong to perfect positive relationships between industry partnership support and institutional learning resources.

The results further imply that strengthening collaborations with industry partners can improve learning facilities, instructional materials, digital technologies, and other educational resources, while well-developed institutional learning resources likewise enhance the effectiveness of industry-supported training initiatives. Consequently, Technical Vocational Institutions should adopt an integrated approach that simultaneously strengthens industry-academe partnerships and continuously upgrades institutional learning resources to ensure high-quality, competency-based bookkeeping education and improved graduate employability.

The findings were aligned with the research of Santos and Villanueva (2022), which identified dedicated labs as the critical space where industry standards are translated into hands-on competence. The results also reinforce the observations by Hidayat et al. (2023), who concluded that a significant positive relationship exists between the quality of structured industry engagement (OJT and employer feedback) and the overall job readiness of learners in vocational settings. Ultimately, these findings suggest that for Metro Manila TVIs, strengthening industry linkages naturally complements and necessitates the continuous upgrading of internal learning resources to achieve training excellence.

Challenges Encountered

Although respondents generally rated both Industry Partnership Support and Institutional Learning Resources as Highly Evident, they also identified several operational challenges that continue to influence the effectiveness of bookkeeping skills development. These findings indicate that the existence of strong institutional support does not eliminate practical implementation issues. Rather, they highlight areas that require continuous improvement to sustain the quality and relevance of competency-based TVET programs.

The challenges reported by respondents primarily involved communication with industry partners, internship implementation, employer feedback mechanisms, access to updated accounting technologies, availability of instructional resources, and career placement services. Addressing these concerns is essential to strengthening industry-academe collaboration and ensuring that bookkeeping graduates acquire competencies aligned with current workplace expectations.

Despite the positive assessments, respondents reported that several challenges were highly encountered. The most prominent issues included weak communication and coordination between institutions and industry partners, delayed employer feedback on student performance, inadequate job placement or employment assistance after program completion, limited availability of partner companies for internships, and limited exposure to updated accounting systems and technologies. Respondents also identified concerns related to access to realistic accounting records, alignment between assigned workplace tasks and bookkeeping competencies, and the frequency of industry talks and expert engagements.

Table 4. Problems Encountered Relative to Industry Partnership Support

Indicators	Bookkeeping Students		Trainers / Instructors		Industry Partners		Composite	
	WM	VI	WM	VI	WM	VI	WM	VI
1. Limited availability of partner companies for OJT or internship placements.	4.78	HE	4.80	HE	4.89	HE	4.83	HE
2. Misalignment between assigned tasks and actual bookkeeping competencies.	4.80	HE	4.80	HE	4.79	HE	4.80	HE
3. Infrequent conduct of industry talks,	4.77	HE	4.80	HE	4.84	HE	4.80	HE

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seminars, or expert engagements.								
4. Lack of access to real or realistic accounting records for training purposes.	4.78	HE	4.80	HE	4.89	HE	4.82	HE
5. Weak communication and coordination between the institution and industry partners.	4.80	HE	4.80	HE	4.95	HE	4.85	HE
6. Delayed or insufficient feedback from employers regarding student performance.	4.79	HE	4.80	HE	4.95	HE	4.85	HE
7. Limited exposure to updated accounting systems and technologies used in industry.	4.79	HE	4.80	HE	4.89	HE	4.83	HE
8. Inadequate job placement or employment assistance after program completion.	4.82	HE	4.80	HE	4.95	HE	4.85	HE
Overall Weighted Mean	**4.79**	**HE**	**4.80**	**HE**	**4.89**	**HE**	**4.83**	**HE**

The overall assessment of the Problems Encountered Relative to Industry Partnership Support yielded a weighted mean of 4.83, interpreted as Highly Encountered. The findings indicate that although formal partnerships between Technical Vocational Institutions and industry organizations are well established, several operational concerns continue to affect the efficiency and effectiveness of collaborative activities.

Among the identified concerns, weak communication and coordination between institutions and industry partners, delayed or insufficient employer feedback, and inadequate job placement or employment assistance received the highest ratings. These findings suggest that maintaining productive partnerships requires more than formal agreements; it also depends on continuous communication, timely feedback, and coordinated efforts to support students throughout workplace immersion and their transition to employment. When communication channels are inconsistent, opportunities for curriculum enhancement, performance monitoring, and graduate placement may be reduced.

Respondents also reported challenges related to the limited availability of partner companies for internship placements, restricted access to authentic accounting records, limited exposure to updated accounting systems, and misalignment between assigned workplace tasks and bookkeeping competencies. These concerns highlight the need to ensure that workplace learning experiences are directly aligned with the intended learning outcomes of the Bookkeeping NC III qualification. Providing students with authentic accounting tasks and exposure to current industry practices is essential for strengthening competency development and improving workplace readiness.

Overall, the findings emphasize that sustaining effective industry partnerships requires regular consultation with employers, structured feedback systems, periodic evaluation of internship programs, and expanded collaboration with industry organizations. Strengthening these areas will enhance the quality of workplace learning experiences and further improve the employability of Bookkeeping NC III graduates.

Table 5. Problems Encountered Relative to Institutional Learning Resources

Indicators	**Bookkeeping Students**		**Trainers / Instructors**		**Industry Partners**		**Composite**	
	WM	**VI**	**WM**	**VI**	**WM**	**VI**	**WM**	**VI**
1. Insufficient or outdated bookkeeping modules and	4.78	HE	4.80	HE	4.89	HE	4.83	HE

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learning materials.								
2. Limited number of computers and licensed accounting software for student use.	4.80	HE	4.80	HE	4.84	HE	4.81	HE
3. Inadequate simulation laboratories or accounting practice facilities.	4.79	HE	4.80	HE	4.89	HE	4.83	HE
4. Learning manuals lack clarity, relevance, or updated content.	4.79	HE	4.80	HE	4.84	HE	4.81	HE
5. Unstable internet connectivity affecting digital learning activities.	4.78	HE	4.80	HE	4.79	HE	4.79	HE
6. Underutilization or technical issues in the Learning Management System (LMS).	4.79	HE	4.80	HE	4.89	HE	4.83	HE
7. Delays or shortages in printing and reproduction of instructional materials.	4.78	HE	4.80	HE	4.89	HE	4.82	HE
8. Inadequate maintenance or availability of learning equipment and facilities.	4.79	HE	4.80	HE	4.84	HE	4.81	HE
Overall Weighted Mean	**4.79**	**HE**	**4.80**	**HE**	**4.86**	**HE**	**4.82**	**HE**

The assessment of Problems Encountered Relative to Institutional Learning Resources obtained an overall weighted mean of 4.82, interpreted as Highly Encountered. This finding indicates that while respondents generally perceived institutional learning resources as adequate, they likewise recognized several areas that require continuous improvement to maintain instructional quality and support competency-based bookkeeping education.

Among the identified concerns were insufficient or outdated bookkeeping modules, limited availability of computers and licensed accounting software, inadequate simulation laboratories, technical issues in the Learning Management System (LMS), and maintenance of instructional facilities. These issues reflect the continuing challenge of keeping educational resources aligned with technological developments and evolving accounting practices. Since modern bookkeeping increasingly depends on computerized accounting systems and digital financial applications, institutions must regularly update their instructional resources to ensure that learners develop competencies consistent with industry standards.

Although unstable internet connectivity received the lowest rating among the identified concerns, it was still interpreted as Highly Encountered, indicating that reliable internet access remains an important requirement for technology-assisted and blended learning environments. Stable digital infrastructure is particularly important for accessing online learning platforms, completing simulation activities, and using cloud-based accounting applications that have become common in professional accounting practice.

The findings suggest that continuous institutional investment in educational technologies, instructional materials, and facility maintenance remains essential for sustaining high-quality TVET delivery. Regular upgrading of learning resources, expansion of access to industry-standard accounting software, and periodic review of instructional materials can further enhance students' technical competencies and improve their readiness for employment.

Implications for Technical Vocational Institutions

Overall, the findings demonstrate that effective industry partnerships and adequate institutional learning resources work together to support competency-based bookkeeping education. At the same time, the operational challenges identified by respondents indicate opportunities for continuous improvement. Strengthening employer engagement, modernizing instructional resources, and enhancing career support services can help Technical Vocational Institutions further improve graduate readiness and responsiveness to labor market needs.

Acceptability of the Proposed Action Plan

The proposed Bookkeeping Skills Development Enhancement Action Plan was evaluated by the respondents and obtained an overall weighted mean of 4.94, interpreted as Highly Acceptable. This result indicates a strong consensus among students, trainers, and industry partners that the proposed interventions are appropriate, relevant, and feasible for implementation within Technical Vocational Institutions (TVIs). The high level of acceptability demonstrates that the action plan effectively addresses the operational concerns identified in the study while supporting the continuous improvement of competency-based bookkeeping education.

The favorable assessment suggests that the proposed action plan is responsive to the needs of the participating institutions. Its emphasis on strengthening industry partnerships, improving institutional learning resources, enhancing faculty and learner support, and expanding employment-related initiatives reflects the priorities identified throughout the study. By directly addressing gaps in communication with industry partners, employer feedback mechanisms, internship implementation, access to current accounting technologies, and instructional resources, the proposed interventions provide a practical framework for improving bookkeeping skills development.

Furthermore, the high acceptability rating indicates that the recommended activities are viewed as realistic and capable of being integrated into existing institutional programs. The collaborative nature of the proposed strategies encourages shared responsibility among TVI administrators, trainers, industry partners, and other stakeholders in promoting continuous quality improvement. Such collaboration is essential in ensuring that bookkeeping education remains responsive to changes in industry practices and labor market requirements.

The findings also demonstrate that evidence-based planning can contribute significantly to institutional development. Since the proposed action plan was formulated from the empirical findings of the study, it reflects the actual experiences and perceptions of the stakeholders involved in Bookkeeping NC III implementation. Consequently, its adoption may strengthen institutional capacity, improve instructional quality, and enhance graduate employability by ensuring that bookkeeping training remains aligned with current industry standards and competency requirements.

Limitations of the Study

This study was conducted among selected TESDA-accredited Technical Vocational Institutions (TVIs) in Metro Manila offering the Bookkeeping NC III qualification. Therefore, the findings are limited to the participating institutions and may not be generalizable to all TVIs in the Philippines because institutional characteristics, available resources, and industry partnership practices may vary across regions.

The study employed a descriptive-correlational research design to assess industry partnership support and institutional learning resources and to examine the relationship between these variables. While this design provides valuable insights into the associations among the variables, it does not establish causal relationships. Consequently, the findings should be interpreted as evidence of association rather than causation.

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Data were collected using a researcher-developed questionnaire administered to 149 respondents consisting of Bookkeeping NC III students, trainers, and industry partners. Because the study relied on self-reported responses, the findings may have been influenced by the respondents' individual perceptions and experiences. Nevertheless, the inclusion of multiple stakeholder groups provides a broader understanding of bookkeeping skills development within the participating institutions.

Furthermore, the study focused specifically on industry partnership support and institutional learning resources as determinants of bookkeeping skills development. Other factors, such as instructional competence, learner motivation, curriculum implementation, organizational leadership, technological readiness, and graduate employment outcomes, were beyond the scope of this study and were not examined.

Despite these limitations, the study provides valuable empirical evidence regarding industry partnership support and institutional learning resources in selected Technical Vocational Institutions. The findings served as the basis for the proposed action plan and may assist administrators, trainers, industry partners, and policymakers in strengthening competency-based bookkeeping education.

CONCLUSION

Based on the findings of the study, the following conclusions are drawn:

First, the institutions maintain strong collaboration with industry partners through internship placements, seminars, employer feedback, industry assessors, training agreements, and exposure to actual accounting practices that contribute to students' bookkeeping skills development.

Second, the three groups share a common perception that the support mechanisms provided by partner industries are consistently implemented and beneficial to bookkeeping skills development.

Third, the Institutional Learning Resources were showing that technical vocational institutions provide adequate modules, laboratories, software, digital tools, learning manuals, internet connectivity, LMS utilization, and learning facilities that support effective bookkeeping instruction and practical skills enhancement.

Fourth, stronger industry collaboration is associated with better institutional learning resources, thereby contributing to improved bookkeeping skills development among students.

Fifth, there were several challenges relative to Industry Partnership Support that include weak coordination with industry partners, delayed employer feedback, limited exposure to updated accounting systems, and inadequate job placement assistance, indicating the need for continuous strengthening of industry linkages and support systems.

Six, the proposed Action Plan was developed based on the findings of the study and was designed to address the identified gaps and strengthen both industry partnership support and institutional learning resources for bookkeeping skills development.

Finally, the proposed inputs to the Action Plan were assessed as highly acceptable because the recommended programs, strategies, and activities are viewed as appropriate, relevant, and feasible for implementation by the respondents.

RECOMMENDATIONS

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

1. Technical vocational institutions may continue strengthening their partnerships with industries by expanding internship opportunities, sustaining collaborative training programs, and regularly reviewing partnership agreements to ensure alignment with current bookkeeping and accounting industry standards.

2. School administrators, trainers/instructors, and industry partners may maintain their collaborative efforts in implementing bookkeeping skills development programs to preserve the positive and unified perception of stakeholders regarding industry partnership support.

3. Institutions may further enhance institutional learning resources by upgrading accounting laboratories, increasing access to updated accounting software, improving internet connectivity, and providing sufficient digital and printed learning materials for students.

4. Administrators may establish stronger coordination mechanisms with industry partners to improve communication, employer feedback systems, and monitoring of internship and training programs for bookkeeping students.

6. The proposed Action Plan may be adopted and implemented by technical vocational institutions to address the identified challenges and further improve bookkeeping skills development programs through strengthened industry support and enhanced learning resources.

7. Future researchers may conduct similar studies in other regions or educational settings and may include additional variables related to employability, technological adaptation, or curriculum innovation to further enrich the body of knowledge on bookkeeping education and technical vocational training.

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