

Tesda Skills Certification and Career Prospects: The Impact on Employability for BTLED and BTVTED Graduates

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Abstract - This study investigates the demographic profile, the impact of TESDA skill certifications, and thematic input on the curriculum and industrial preparedness of BTLED and BTVTED students. The findings show that the majority of graduates are young, primarily female, single, and work in Pangasinan, with bachelor's degrees as their primary qualification. TESDA credentials showed no significant correlation with employability or career development, suggesting a limited impact within the context of these programs. Thematic analysis emphasizes the need for curricular improvements that focus on industry alignment with TESDA standards, particularly through developed hands-on training, capstone projects, and stronger partnerships with industry stakeholders. While graduates' pedagogical competencies were acknowledged, gaps were identified in the development of industry-specific and soft skills such as adaptability and problem-solving. These findings suggest practical modifications to the curriculum to better correspond with developing industry demands and increase the relevance of TESDA certifications, fostering professional growth and adaptability among graduates.

Keywords – TESDA, Certificate, career, employability, BTLED, BTVTED

INTRODUCTION

A significant component of TESDA's competency-based assessment system, the National Certificate II (NC II) serves as a standard for assessing a person's abilities, knowledge, and attitudes necessary for particular industries or careers. According to Ingeco, L.A., et al. (2019), obtaining this certification guarantees that a person has fulfilled the productivity and quality requirements set by the industry. The relationship that exists between global competitiveness and competency-based assessments highlights the importance of TESDA's role in developing a workforce that satisfies worldwide standards. Because of this, the NC II certification reflects both the industry's need for skilled and qualified professionals as well as an individual's ability.

In similar ways, technical-vocational fields are extremely important for equipping individuals with specific knowledge and abilities needed for a variety of industries. These fields support a wide range of industries and promote

innovation and economic progress. The Bachelor of Technical-Vocational Education (BTVTED) and Bachelor of Technology and Livelihood Education (BTLED) programs play a major role in enabling graduates to become capable technical-vocational educators and pass on their knowledge to the upcoming generation of skilled workers. These courses guarantee that graduates possess the pedagogical abilities required for effective teaching in alongside their subject-matter expertise.

However, the program's efficacy in effectively preparing graduates for employment in their professions deserves careful assessment. Bridging the gap between TESDA's competency-based approach and the BTLED and BTVTED programs is important for ensuring that graduates not only receive certifications but also have the skills required to survive in the ever-changing environment of technical and vocational education. This alignment is essential for developing a workforce that is both adaptive and proficient, able to fulfill the changing demands of various industries.

The Pangasinan State University - Lingayen Campus's College of Education Technical-

Vocational and Livelihood Education Department provides BTLED and BTVTEd programs. These programs aim to give a thorough education that blends theoretical knowledge with practical application. The curricula of study for these programs are aligned with TESDA training standards, namely CMO 78 and 79, series 2017. This alignment guarantees that the curriculum is relevant to current industry norms and practices.

As part of the educational approach in both programs, students must take TESDA examinations relating to their peculiar major fields of expertise while taking their courses. These assessments are an important part of the learning process because they allow students to exhibit their skills and knowledge in real-world situations. Furthermore, the constitution and by-laws of both programs require students to complete at least three National Certificates for BTVTEd and five for BTLED before graduating. This prerequisite, set by program coordinators, is intended not just to provide graduates with additional qualifications, but also to give them a competitive advantage over graduates from other universities providing similar programs.

The implementation of this requirement ensures that graduates have both theoretical knowledge and practical skills recognized by TESDA. This dual emphasis on theory and practice is intended to generate well-rounded graduates ready for the difficulties of the workforce. This study will be done to fully assess the influence of TESDA skills certification on the employability and professional growth of PSU-LC's BTLED and BTVTEd graduates. Through this inquiry, the university hopes to obtain insight into how the TESDA certification procedure improves graduates' professional prospects and positions them advantageously in the labor market. This study will collect data on graduates' employment rates, job satisfaction, and career advancement, as well as employer input on the competencies of TESDA-certified persons.

The findings of this study will give useful information for further improving the BTLED and BTVTEd programs, ensuring that they continue to suit the demands of both students and industry. It will also highlight the vital role that TESDA certificates play in improving graduates' employability and professional development, emphasizing the need of

maintaining high standards in technical-vocational education.

OBJECTIVES OF THE STUDY

The primary purpose of the study was to assess the influence of TESDA certificates on the employability and professional development of BTLED and BTVTEd graduates, as well as to collect employer input on graduates' competencies and job readiness.

MATERIALS AND METHOD

The study utilized a mixed-method research strategy to investigate the research problem, combining quantitative and qualitative methodologies. The primary purpose of the study was to assess the influence of TESDA certificates on the employability and professional development of BTLED and BTVTEd graduates, as well as to collect employer input on graduates' competencies and job readiness.

2.1 Sample and Population

The study's respondents were identified using purposive sampling procedures. The sample included BTLED and BTVTEd graduates from the academic years 2017–2023. The target responders were chosen based on their TESDA credentials and different employment prospects after graduation. Additionally, the survey sought employer comments on the competencies of these graduates. The sample was obtained from graduates of Pangasinan State University, Lingayen Campus.

2.2 Instrumentation and Data Collection Procedure

A systematic questionnaire was used to collect data for the study. The questionnaire was separated into two pieces. The first portion gathered sociodemographic information, including age, gender, TESDA certification, work status, and career development. The second component collected information on the perceived influence of TESDA skills certificates (namely, NC II and higher levels) on graduates' employability and professional advancement.

Curriculum experts and stakeholders examined the questionnaire for content validity after it was designed based on the study's objectives. Adjustments were performed to ensure that the instrument met the study's objectives and adequately captured the important measurement indicators. Data were gathered using a combination of in-person interviews and internet surveys. Face-to-face interviews were done at educational institutions, businesses, and industries that employ BTLED and BTVTED graduates, while online surveys were distributed through easily accessible media such as Facebook Messenger and email. This dual approach ensured that data could be collected effectively while taking into account respondents' locations and convenience.

2.3 The Research Procedure

After receiving the relevant permissions from Pangasinan State University's administration, the questionnaire was delivered to BTLED and BTVTED graduates. Graduates were asked to complete a survey, providing information about their demographics, TESDA certification levels, employment status, and career advancement. Employer feedback was also gathered on the competencies and employment preparedness of graduates with TESDA certifications. To assure the integrity and usefulness of the study's data, designated team members monitored and collected completed questionnaires.

2.4 Data Analysis Measures

For the quantitative data, the researcher used simple frequency counts and percentages to examine the respondents' demographics. To determine the influence of TESDA certifications on employability and professional advancement, frequency counts and percentages were calculated for each certification level. Furthermore, correlation analysis was used to investigate the association between TESDA credentials and career advancement. Employer input on graduates' abilities and work preparation was analyzed using descriptive statistics, with themes and response frequency investigated. The findings were utilized to form conclusions on how TESDA credentials affected employability and professional development.

2.5 Qualitative Data Pre-processing and Analysis Metrics

Data profiling:

The acquired data was evaluated for relevance and quality, ensuring that the material was consistent with the research objectives.

Data cleansing:

The raw data was inspected for gaps, missing values were resolved, and unnecessary evidence had been eliminated to ensure that it was suitable for analysis.

Data transformation:

The data was turned into a format that allowed for easy analysis, including developing responses into standardized formats as needed.

Data Processing and Text Analysis:

To examine qualitative input from employers, data was processed using statistical and linguistic tools to identify important findings. Text analytics were conducted utilizing a machine learning technology, especially a Collocates Graph. This graph depicts the associations between keywords and concepts that occur in close vicinity and was used to investigate the relationship between various competences and job readiness themes. The Collocates Graph offered a fresh analytical way to displaying word associations, which could be useful in linguistic and social research.

This approach helped to find patterns in employer input, offering further information about how TESDA credentials influence the professional development of BTLED and BTEVTED graduates.

RESULTS AND DISCUSSION

Table 1. *Demographic Profile of BTLED and BTVTED Graduates*

Profile	f	Percentage
Age		
20-25	106	70.67%

26-30	39	26.00%	<i>BTTE GFD</i>	1	0.67%
31-35	5	3.33%	<i>BTVTED DT</i>	3	2.00%
Gender			<i>BTVTED ET</i>	3	2.00%
Male	35	23.33%	<i>BTVTED FSM</i>	30	20.00%
Female	113	75.33%	<i>BTVTED GFD</i>	6	4.00%
Non-Binary	1	0.67%	<i>BTLED HE</i>	57	38.00%
Prefer not to say	1	0.67%	Year Graduated		
Civil Status			2017	12	8.00%
Single	131	87.33%	2018	13	8.67%
Married	19	12.67%	2019	10	6.67%
Highest Educational Attainment			2020	13	8.67%
			2021	0	0
Bachelor's Degree	122	81.33%	2022	21	14%
Bachelor's Degree with MA Units	0	0	2023	27	18%
Master's Degree	28	18.67%	2024	54	36%
Master's Degree with EdD/PhD units	0	0			
Doctoral Degree	0	0			
Place of Work					
Within Pangasinan	142	94.67%			
Outside Pangasinan (Philippines)	7	4.67%			
International (Outside Philippines)	1	0.67%			
Program					
BSEd TLE	42	28.00%			
BTTE DT	3	2.00%			
BTTE FSM	5	3.33%			

N=150

Table 1 presents the demographic profile of BTLED and BTVTED graduates, providing a comprehensive overview of their age, gender, civil status, highest educational attainment, place of work, program specialization, and year of graduation. The data reveals that the majority of graduates fall within the 20-25 age bracket, accounting for 106 individuals or 70.67% of the total respondents, followed by the 26-30 age group (39 individuals or 26.00%) and the 31-35 age group (5 individuals or 3.33%). This distribution indicates that the program primarily attracts younger individuals, likely due to its alignment with recent graduates or those early in their professional careers.

In terms of gender, the data highlights a significant gender disparity, with females constituting the majority at 113 individuals or 75.33%. Males represent 35 graduates or 23.33% of the total, while there is a very small representation of non-binary individuals (1 or 0.67%) and those who prefer not to disclose their gender (1 or 0.67%).

This gender imbalance may warrant further investigation into program enrollment and career pathways.

Civil status data shows that the vast majority of graduates are single, with 131 individuals or 87.33% falling into this category. Married graduates account for 19 individuals or 12.67% of the total, while there are no widowed or separated respondents. This indicates that the program is particularly popular among unmarried individuals, which may be related to the age distribution of the respondents.

Regarding highest educational attainment, the majority of graduates hold a Bachelor's Degree, with 122 individuals or 81.33% of the sample. A smaller but significant portion of the graduates have attained a Master's Degree, comprising 28 individuals or 18.67%. There are no respondents with Bachelor's Degrees with MA Units, Master's Degrees with EdD/PhD units, or Doctoral Degrees. This educational attainment profile reflects the program's focus on undergraduate and early graduate-level education, with a notable number of graduates pursuing further studies at the master's level.

The place of work data reveals that the majority of graduates (142 individuals or 94.67%) are employed within Pangasinan, while 7 individuals or 4.67% work outside Pangasinan within the Philippines, and only 1 individual or 0.67% is employed internationally. This indicates a strong regional concentration of employment opportunities among graduates, which may reflect the program's alignment with local industry needs or the preferences of graduates to remain in the region.

In terms of program specialization, the data shows that BTLED HE is the most popular program, with 57 graduates or 38.00% of the total. This is followed by BTVTEd FSM (30 graduates or 20.00%) and BSEd TLE (42 graduates or 28.00%). The remaining programs, including BTTE DT, BTTE FSM, BTTE GFD, BTVTEd DT, BTVTEd ET, and BTVTEd GFD, have smaller representations, ranging from 0.67% to 4.00%. This distribution suggests that certain programs within the BTLED and BTVTEd offerings are more popular among students, which may reflect market demand or program reputation.

The year of graduation data reveals a notable trend, with the highest number of graduates (54 individuals or 36%) having graduated in 2024. This is followed by 2023 (27 individuals or 18%), 2022 (21

individuals or 14%), and 2017 (12 individuals or 8.00%). The years 2020 and 2018 each account for 13 graduates or 8.67%, while 2019 has 10 graduates or 6.67%. Notably, there are no graduates from 2021. This distribution suggests a recent surge in program enrollment and graduation, particularly in the years leading up to 2024. The absence of graduates in 2021 may warrant further investigation to understand any potential disruptions or anomalies in the program's timeline.

Overall, the demographic profile of BTLED and BTVTEd graduates highlights a young, predominantly female graduates with a high proportion of single individuals and a significant number of graduates holding Bachelor's Degrees, with a notable subset having pursued Master's Degrees. The majority of graduates are employed within Pangasinan, and certain programs, such as BTLED HE, are more popular than others. The year of graduation data indicates a recent increase in program participation, particularly in the years leading up to 2024. This profile provides valuable insights into the characteristics of the program's graduates and may inform future program development, outreach strategies, and policy decisions.

A majority of the target consumers belong to the 18–21 age group, indicating that the product appeals mainly to early-college students. In terms of sex, females make up 67.9% (36 individuals) of the target consumers, while males account for 32.1% (17 individuals)—suggesting a stronger interest in the product among female students. Academically, the target consumers are composed of 1st-year BTLED students (I-BTLED) who represent 58.5% (31 individuals), and 2nd-year BTLED students (II-BTLED) making up the remaining 41.5% (22 individuals).

Table 2. *Impact of TESDA Skills Certification*

Variable	Coefficient of Correlation	P	Extent of Relationship
Career Prospects	0.129 <i>ns</i>	0.115	No Correlation
Employability	0.055 <i>ns</i>	0.501	No Correlation

Note: ns not significant, * significant, ** highly significant

Table 2 examines the impact of TESDA skills certifications, particularly the NC II and higher levels, on the employability and professional growth of BTLED and BTVTED graduates. The analysis is based on the coefficient of correlation and the significance level (p-value) for two key variables: career prospects and employability. The results indicate that TESDA skills certifications do not have a statistically significant influence on either career prospects or employability among the graduates.

For the variable career prospects, the coefficient of correlation is 0.129, which is not statistically significant ($p = 0.115$). This suggests that there is no meaningful relationship between holding TESDA skills certifications and the perceived career advancement opportunities of BTLED and BTVTED graduates. Similarly, for the variable employability, the coefficient of correlation is 0.055, which is also not statistically significant ($p = 0.501$). This further reinforces the finding that TESDA certifications do not significantly enhance the employability of graduates in this context.

The lack of correlation between TESDA certifications and these variables may be attributed to several factors. For instance, the specific industries or job markets targeted by BTLED and BTVTED graduates may prioritize other qualifications, such as academic degrees or specialized training, over TESDA certifications. Additionally, the nature of the program itself may already equip graduates with sufficient skills and competencies, reducing the added value of TESDA certifications. It is also possible that the sample population did not perceive TESDA certifications as a critical factor in their career development or job search.

These findings suggest that while TESDA skills certifications are designed to enhance technical competencies and workforce readiness, their impact on the employability and professional growth of BTLED and BTVTED graduates appears to be limited. This raises important questions about the alignment of TESDA certifications with the specific needs and career trajectories of graduates in these programs. Further research could explore alternative factors that influence employability and career prospects, as well as potential strategies to enhance the relevance and impact of TESDA

certifications for this demographic.

Table 3. *Results of Thematic Analysis of Feedback on BTLED and BTVTED Graduates*

Theme	Sub-Theme	Brief Explanation	Significant Statements
Curriculum Development and Alignment	<i>Curriculum Alignment with Industry Needs</i>	Curriculum alignment with TESDA standards is essential for better employability and industry-readiness of graduates.	"The curriculum of BTLED and BTVTED is already good. However, I think they need to align the course more on TESDA's competencies." "For me, modify the curriculum of BTLED and BTVTED that aligns more with integrating technology is necessary so that they can meet the standards of the technical innovations."
	<i>Curriculum Modifications to Improve Alignment</i>	Curriculum modifications could ensure greater alignment with TESDA certifications and industry requirements.	"The BTLED and BTVTED curriculum can be adjusted by expanding On-the-Job Training (OJT), incorporating industry-specific projects, collaborating with industry partners, setting up simulated work environments, and requiring capstone projects to provide students with hands-on experience and

			real-world application of their skills."
	<i>Pedagogical Strengths of Graduates</i>	BTLED and BTVTED graduates are trained in pedagogy, which makes them effective in teaching, but there is room for further specialization.	"BTLED and BTVTED graduates have a deep understanding of teaching methodologies, curriculum development, and assessment techniques." "They are generally strong in practical, technical, and educational skills, there is room for development in areas related to business acumen, industry-specific advancements, and soft skills."
Industry - Readiness and Employer Expectations	<i>Skills Competency and Industry Expectations</i>	Employers expect BTLED and BTVTED graduates to have high-level technical and vocational skills, with some areas for improvement.	"Since we are graduate of BTLED I think the employers are expecting us to excel in technical and vocational sector." "Since BTLED graduates need to have 5 NCII I think they can be flexible to the needs of industry." "I think that employers see BTLED graduates as competent and skilled employee since we have different

			national certificates from TESDA."
	<i>Industry-Specific Training and Career Adaptability</i>	Some graduates may need additional training or adjustments to meet specific industry demands.	"They are generally strong in practical, technical, and educational skills, there is room for development in areas related to business acumen, industry-specific advancements, and soft skills." "Employers may find that their problem-solving skills are theoretical and lack the practical depth needed for complex, fast-paced industry challenges."
	<i>Continuing Education and Industry Collaboration</i>	Employers and institutions should offer continuous training to ensure that graduates stay updated on industry trends.	"I think adding extra course or subject like basic programming is a good adjustment to the program." "The role of TESDA is to elevate learning and skills of the graduates."
Skills Development and Soft Skills	<i>Soft Skills and Collaboration</i>	Emphasis on developing collaboration, adaptability, and soft skills to meet industry demands.	"In BTLED and BTVTED we focus more in skills. So, I think we can incorporate group activities more so that it is not only the skills develop but also the collaboration

			and adaptation of our students because in industry being skilled is not enough, employees also need to have companionship."
	<i>Focus on Values and Soft Skills in the Curriculum</i>	There is an interest in reintegrating values and common sense within the curriculum alongside soft skills training.	"I think that values and common sense should be back on the curriculum first, then incorporating it to the soft skills."
Industry Exposure and Collaboration	<i>Need for Industry Exposure and Practical Training</i>	Emphasis on providing students with more real-world, industry-relevant experience to enhance job-readiness.	"To better align the BTLED and BTVTED programs with industry requirements, adjustments should prioritize increased practical training, industry-relevant projects, and exposure to real-world applications." "Industry partners can collaborate with academic institutions to identify the core competencies and technical skills that are in demand within their specific sectors."
	<i>Collaborative Development</i>	Industry collaboration is necessary to align the	"Industry partners can play a pivotal role in

	<i>of Curriculum</i>	curriculum with both TESDA standards and corporate expectations.	developing the BTLED and BTVTED curricula to ensure alignment with both TESDA standards and corporate requirements."
Certification and Competency	<i>Effectiveness of TESDA Certification</i>	TESDA certification is viewed positively by employers, signaling the practical skills of graduates.	"TESDA certification suggests that the graduate has been trained according to a standardized curriculum, which can be helpful for employers who need employees with consistent skills." "Employers generally regard BTLED and BTVTED graduates as well-rounded professionals with a strong foundation in technical and pedagogical skills."
	<i>Integration of Emerging Technologies and Competencies</i>	The curriculum needs to include rising technologies to keep graduates competitive and adaptable in a fast-evolving market.	"To ensure greater alignment of the BTLED and BTVTED curricula with current TESDA certification standards, the following modifications could be implemented: Incorporate TESDA Competency Standards, Focus on Core

			Competencies, Simulation of Workplace Environments, Capstone Projects."
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The feedback from businesses on the competencies and job capability of BTLED and BTVTED graduates with TESDA certification reveals a multifaceted perspective, highlighting both strengths and areas for improvement. A recurring theme is the importance of curriculum development and alignment with industry needs and TESDA standards. While the current curriculum is viewed positively, businesses emphasize the need for greater alignment with TESDA competencies and the integration of emerging technologies to ensure graduates remain competitive in a rapidly evolving job market. Suggestions for curriculum modifications include expanding On-the-Job Training (OJT), incorporating industry-specific projects, and collaborating with industry partners to create simulated work environments and capstone projects. These adjustments would provide students with hands-on experience and real-world application of their skills, enhancing their industry readiness.

Businesses also acknowledge the pedagogical strengths of BTLED and BTVTED graduates, noting their deep understanding of teaching methodologies, curriculum development, and assessment techniques. However, there is room for further specialization, particularly in areas such as business acumen, industry-specific advancements, and soft skills. Employers expect graduates to excel in the technical and vocational sectors, and the requirement for BTLED graduates to obtain multiple NCII certifications is seen as a significant advantage, making them flexible and adaptable to industry needs. Despite these strengths, some graduates may require additional training to meet specific industry demands, particularly in practical problem-solving skills, which are sometimes perceived as more theoretical than practical.

The development of soft skills and collaboration is another critical area highlighted by businesses. Employers stress the importance of incorporating group activities and values education

into the curriculum to foster teamwork, adaptability, and companionship, which are essential in the workplace. While graduates are generally strong in practical, technical, and educational skills, there is a need to prioritize soft skills alongside technical competencies to ensure holistic professional development.

Industry exposure and collaboration are identified as essential components for enhancing job readiness. Businesses recommend increased practical training, industry-relevant projects, and exposure to real-world applications to better align the curriculum with industry requirements. Collaborative efforts between academic institutions and industry partners are seen as pivotal in identifying core competencies and technical skills in demand, ensuring that the curriculum reflects both TESDA standards and corporate expectations.

Finally, the effectiveness of TESDA certification is widely recognized by employers, who view it as a valuable indicator of practical skills and standardized training. TESDA certifications provide employers with confidence in the consistent skill levels of graduates. However, businesses also emphasize the need for continuous improvement in TESDA programs to incorporate rising technologies and emerging competencies, ensuring that graduates remain adaptable and globally competitive. Integrating digital literacy, industry certifications, and updated content based on employer feedback are suggested strategies to achieve this goal.

While BTLED and BTVTED graduates with TESDA certification are perceived as competent and well-rounded professionals, businesses call for ongoing curriculum adjustments, enhanced soft skills training, and stronger industry collaboration to ensure graduates meet the evolving demands of the workforce. These improvements would further enhance their employability, adaptability, and readiness to excel in diverse industry settings.

Theme	Sub-Themes	Explanation
Industry Alignment	Collaboration with Industry	Establishing partnerships with industry stakeholders ensures the curriculum meets both TESDA and

		corporate requirements, guaranteeing students are prepared for real-world demands.
	<i>Competency-Based Curriculum Design</i>	Aligning curriculum outcomes with TESDA competencies ensures students are equipped with skills directly tied to certification and industry standards.
Practical Training	<i>Hands-On Activities</i>	Increasing opportunities for hands-on training, workshops, and industry-based projects ensures students acquire the necessary practical skills.
	<i>Real-World Applications</i>	Incorporating real-world scenarios and problem-based learning prepares students to address current workplace challenges effectively.
Emerging Technologies	<i>Technology Integration</i>	Updating curricula with emerging technologies like AI, automation, and data analytics ensures students remain competitive in a rapidly evolving job market.
Holistic Development	<i>Soft Skills Integration</i>	Embedding soft skills development, such as collaboration, leadership, and adaptability, alongside technical training ensures well-rounded graduates prepared for modern workplace dynamics.
TESDA Coordination	<i>Institutional Collaboration</i>	Strengthening partnerships with TESDA ensures the curriculum meets updated certification standards and improves the quality of training and assessment processes.

To enhance the BTLED and BTVTED curriculum to better meet TESDA certification standards and industry needs, several key themes and sub-themes emerge from the feedback provided. Industry alignment is a critical focus, with an emphasis on establishing collaboration with industry stakeholders to ensure the curriculum meets both TESDA and corporate requirements. This involves engaging with employers to understand their current and future needs, incorporating industry input on trends and skill demands, and simulating real-world challenges through partnerships. Industry professionals can also serve as mentors, providing students with practical insights and guidance. Additionally, a competency-based curriculum design is essential to align learning outcomes with TESDA competencies and industry standards. This includes competency mapping, integrating TESDA-approved modules, and ensuring that assessments are competency-based, which guarantees that students acquire skills directly tied to certification and real-world demands.

Practical training is another vital area for curriculum enhancement. Increasing opportunities for hands-on activities, such as workshops, laboratory sessions, and industry-based projects, ensures that students develop the necessary practical skills. Extending internships and increasing the hours dedicated to hands-on training further enhances industry exposure. Incorporating real-world applications into the curriculum, such as project-based learning, role-playing, and problem-solving tasks, prepares students to address current workplace challenges effectively. Capstone projects that simulate workplace scenarios and require teamwork and problem-solving are also recommended to bridge the gap between academic training and industry expectations.

The integration of emerging technologies is crucial to keep the curriculum relevant in a rapidly evolving job market. Updating the curriculum with technologies such as AI, automation, IoT, and data analytics ensures that students remain competitive. This can be achieved by embedding new technologies into laboratory setups, offering training on industry-specific software and tools, and collaborating with tech companies for workshops and updated resources. Courses on digital literacy

and emerging technologies should also be included to equip students with the skills needed for modern industries.

Holistic development is another key theme, with a focus on integrating soft skills alongside technical training. Embedding soft skills such as collaboration, leadership, adaptability, and communication into the curriculum ensures that graduates are well-rounded and prepared for modern workplace dynamics. Team-based projects, role-playing, reflective practices, and workshops on leadership and communication are suggested methods to achieve this balance. This approach ensures that students not only excel in technical tasks but also develop the interpersonal skills necessary for professional success.

Finally, TESDA coordination is essential to ensure the curriculum aligns with updated certification standards and improves the quality of training and assessment processes. Strengthening partnerships with TESDA involves integrating TESDA's training regulations into the curriculum, coordinating for on-campus training and assessment, and aligning course content with TESDA's competency standards. Including TESDA-certified trainers in curriculum development and ensuring instructors are trained in updated methodologies further enhances the alignment between academic programs and TESDA certification requirements.

Enhancing the BTLED and BTVTED curriculum to meet TESDA certification standards and industry needs requires a multifaceted approach. This includes fostering industry collaboration, adopting competency-based curriculum design, increasing practical training and real-world applications, integrating emerging technologies, prioritizing holistic development through soft skills training, and strengthening coordination with TESDA. These enhancements will ensure that graduates are not only technically proficient but also adaptable, competitive, and well-prepared to meet the demands of the modern workforce.

CONCLUSION AND RECOMMENDATION

This study emphasizes the need of integrating the BTLED and BTVTED curriculum with TESDA certification standards to improve graduates' employability. The study shows that by

working with business stakeholders and including a competency-based curriculum, students can develop the specific competencies that industries seek. Ensuring curriculum adheres to TESDA standards through competence mapping and the inclusion of TESDA-approved modules and assessments ensures that graduates have industry-relevant skills. These activities will bridge the gap between academic learning and workforce demands, increasing students' job market competitiveness.

Furthermore, the study emphasizes the importance of practical training, real-world applications, and the incorporation of emerging technology. Increasing opportunities for hands-on activities and internships enables students get significant practical experience. Incorporating technology like AI, automation, and IoT guarantees that graduates keep up with current market developments. In addition to technical training, students are prepared for new workplace dynamics by developing soft skills such as cooperation, leadership, and adaptability. Strengthening TESDA coordination and aligning training regulations with the curriculum ensures that certification standards are constantly met, which improves overall educational quality and prepares graduates for success.

The results can be utilized by Pangasinan State University to enhance the BTLED and BTVTED curriculum by aligning it with TESDA certification standards and industry needs, ensuring that graduates acquire the relevant competencies and skills for better employability.

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