Challenges in the Skills Development of Technical Education and Skills Development Authority (TESDA) Trainees

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Abstract — This study examines the challenges faced by TESDA learners at the TESDA-Cordillera State Institute of Technical Education Mountain Province Campus, with a focus on their skills development. Employing a descriptive research methodology, data were collected through a structured survey from 78 learners. The study used a combination of document analysis and survey methodologies to investigate the challenges in skill development faced by TESDA-CSITE MP trainees.

Key findings indicate that the TESDA-CSITE MP trainees' assessment outcomes across four vocational programs show a 98.55% certification rate, underscoring TESDA's training effectiveness. However, issues related to transportation, outdated facilities, and limited access to modern tools were regarded as serious hindrances to competency acquisition.

Findings were consistent across qualifications, sex, and age groups, with no significant differences in perceptions. Recommendations include transportation subsidies, shuttle services, dormitory facilities, and regular facility upgrades to align with industry standards. Addressing these challenges through infrastructure improvements and mobility assistance is crucial for enhancing the competency development and success of TESDA trainees.

Keywords — Skills Development, TESDA, Competency, Challenges, Certification, Qualification

I. Introduction

Background

In today's fast-changing global economy, developing skills is crucial for personal growth and societal progress. As industries shift to knowledge-based economies, gaining the right skills improves employability, adaptability, and economic stability. In the Philippines, the Technical Education and Skills Development Authority (TESDA), established under Republic Act No. 7796, plays a key role in workforce training through its Technical and Vocational Education and Training (TVET) programs.

The Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE-MPC), is an important TESDA-accredited institution dedicated to workforce development. However, it faces challenges like geographic isolation, inadequate infrastructure,

and limited resources, which impact access to quality training and hinder learning outcomes and job preparedness.

This study seeks to assess the challenges encountered by TESDA trainees at CSITE-MPC and propose actionable solutions to enhance training programs. By thoroughly examining the factors influencing skills development, the research aims to contribute to TESDA's goal of providing quality technical education and cultivating a workforce equipped to meet the evolving demands of the labor market.

REVIEW ON LITERATURE

This study explores the challenges encountered by trainees in Technical Education and Skills Development Authority (TESDA) programs, which are vital in boosting employability and driving economic growth in the Philippines. Recognizing and addressing these challenges is crucial to enhancing the accessibility, effectiveness, and relevance of TESDA's training programs to align with industry needs.

Technical and Vocational Education and Training (TVET) systems worldwide encounter similar challenges, including outdated curricula, limited funding, and misalignment with labor market demands. Countries such as Germany, Switzerland, the U.S., Australia, Finland, and the UK face difficulties in keeping training programs industry-relevant, upgrading facilities, and ensuring equal access to vocational education (CEDEFOP, 2020; OECD, 2021; ESFA, 2022). Likewise, the Philippines struggles with financial constraints, inadequate infrastructure, and outdated training programs, affecting the overall effectiveness of TESDA initiatives (TESDA, 2022).

Created under Republic Act No. 7796, TESDA aims to build a competent workforce by offering accessible and high-quality vocational training. The Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE-MPC), a TESDA-accredited institution, encounters obstacles such as remote location, scarce resources, and limited digital access. Research emphasizes the need for infrastructure modernization, technology integration in training, and stronger industry partnerships to enhance workforce preparedness (Pajarillo, 2020; Perez, 2021).

In support of the Sustainable Development Goals (SDGs), TESDA integrates gender equality, technology, and industry partnerships into its programs. However, cultural stereotypes and gender imbalances remain, especially in traditionally male-dominated fields (ILO, 2020). Tackling these challenges through policy reforms, enhanced digital learning, and industry-aligned curriculum improvements is essential to strengthening TESDA's commitment to developing a skilled and inclusive workforce.

Problem Statement

This study aims to discover the challenges in the skills development of Trainees at TESDA-CSITE, MP, and create a policy recommendation. Specifically, it sought answers to the following:

1. What is the level of competence of TESDA trainees in 2023-2024 along with the different qualifications:

    1.1. Construction Sector (Masonry NC I)

    1.2. Tourism Sector (Bread and Pastry Production NC II)

    1.3. Agri-Fishery Sector (Organic Agriculture Production NC II)

    1.4. Electrical and Electronic Sector (Electrical Installation and Maintenance NC II)

2. What is the degree of seriousness of the factors affecting the acquisition of competencies of TESDA- Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) Trainees?

    2.1. Is there a significant difference in the degree of seriousness of the factors affecting the acquisition of competencies of TESDA- Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) Trainees according to qualification, sex, and age?

3. What policy recommendations to address the challenges in the skills development of TESDA trainees?

II. Methodology

This study uses a descriptive research design with surveys and document analysis to examine factors affecting competency acquisition among 78 TESDA-CSITE, MPC trainees. Surveys collected data on qualification, sex, age, and perceived challenges, analyzed using statistical methods (e.g., t-tests, ANOVA), while document analysis provided contextual insights. Data was gathered via Google Forms, group chats, emails, and printed copies for those without digital access.

In compliance with RA 10173, participation was voluntary, with informed consent and anonymity protected. Data was securely stored, with physical copies destroyed and digital records deleted after 12 months. The findings contributed to developing instructional guidelines for TESDA trainees' skills enhancement.

III. Results and Discussion

LEVEL OF COMPETENCE OF TESDA TRAINEES IN 2023-2024 ALONG WITH THE DIFFERENT QUALIFICATIONS

Table 1 shows TESDA-CSITE assessment data, detailing graduates, assessment turnout, and its impact on training effectiveness and absenteeism.

Table 1. Assessment Outcomes of TESDA-Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) trainees

QUALIFICATION	NO. OF GRADUATE	NO. OF ASSESSED	C	NYC	Absent
MASONRY NCI	16	15	15	0	1
ELECTRICAL INSTALLATION AND MAINTENANCE NCII	20	19	19	0	1
BREAD AND PASTRY PRODUCTION NCII	21	16	15	1	5
Organic Agriculture Production NCII	21	19	19	0	2
Total	78	69	68	1	9
Certification Rate (No. of Competent/No. of Assessed):			**98.55%**		

Legend:
C----------Competent
NYC---------Not Yet Competent

TESDA-Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) attained a 98.55% certification rate, with 69 of 78 trainees assessed—68 passed, one was deemed not yet competent, and nine were absent. This underscores the need to tackle challenges related to transportation, distance, and self-confidence.

While theories such as Self-Determination, Social Learning, and Experiential Learning contribute to high success rates, challenges in accessibility, training methods, and resources persist. Issues like limited transportation, outdated facilities, and insufficient internet access hinder skill development. Compliance audit confirmed the program's quality but recommended small improvements. Enhancing infrastructure, transportation, and digital access could improve training results and workforce preparedness.

Degree of Seriousness of the Factors Affecting the Acquisition of Competencies of TESDA – Cordillera State Institute of Technical Education, Mountain Province (CSITE, MPC) Trainees

Table 2 presents the weighted mean scores of factors affecting TESDA-CSITE, MP trainees' competency acquisition, evaluated on a four-point scale. The findings provide key insights into these influencing factors.

Table 2. Overall Degree of Seriousness of the Factors Affecting the Acquisition of Competencies Of TESDA- Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE MPC) Trainees

Factors		Mean	DE
Transportation	Commuting Burden	4.0	VS
	Lack of transportation going to the campus	4.0	VS
Distance	Distances to the nat'l road	4.0	VS
	Inaccessibility of the campus	4.0	VS
Facilities, Tools, Equipment and materials	Outdated or irrelevant resources	3.27	VS
	Quality classrooms and workshops	2.62	S
Training Delivery	Instructor Competence	1.0	NS
	Trainer adaptability to diverse learner needs	1.0	NS
Technology and Internet Access	Access to digital learning tools is limited.	1.32	NS
GRAND MEAN		2.80	S

Legend:

Range	Descriptive Equivalent
4.00-3.26	Very Serious
3.25-2.51	Serious
2.50-1.76	Slightly Serious
1.75-1.00	Not Serious

Transportation and geographic barriers have a significant impact on competency acquisition among TESDA-CSITE, MPC trainees, both being rated as very serious (mean: 4.0). Outdated tools and facilities also pose challenges, with resource availability rated at 3.27 and classroom quality at 2.62. However, instructor competency (mean: 1.0) and digital learning access (mean: 1.32) are not major concerns. With an overall mean of 2.80, these issues require focused solutions. Research by Atchoarena & Delluc (2002) and the World Bank (2013) highlights the crucial role of infrastructure and accessibility in vocational training success.

Degree of seriousness of the Factors Affecting the Acquisition of Competencies of TESDA-Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) Learners According to Qualification

Table 3 illustrates the seriousness of factors affecting competency acquisition among TESDA-CSITE, MPC trainees by qualification. Transportation challenges, including commuting burdens and lack of access to the training center, were rated very serious (mean: 4.0), often leading to absenteeism and reduced participation.

Table 3. Degree of Seriousness of the Factors Affecting the Acquisition of Competencies of TESDA- Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC)Trainees According to Qualification

Factors	Mas NCI		EIM NCII		BPP NCII		OAP NCII	
	Mean	DE	Mean	DE	Mean	DE	Mean	DE
Transportation								

Commuting Burden	4.00	VS	4.00	VS	4.00	VS	4.00	VS
Lack of transportation going to the campus	4.00	VS	4.00	VS	4.00	VS	4.00	VS
Distance of the Campus to Nat'l Road								
Distances to the nat'l road	4.00	VS	4.00	VS	4.00	VS	4.00	VS
Inaccessibi-lity of the campus	4.00	VS	4.00	VS	4.00	VS	4.00	VS
Facilities, tools, equipment and materials								
Outdated or irrelevant resources	2.06	SS	3.1	S	4.00	S	3.62	VS
Quality classrooms and workshops	1.5	NS	2.00	SS	3.43	VS	3.24	S
Training Delivery								
Instructor Competence	1.00	NS	1.00	NS	1.00	NS	1.00	NS
Trainer adaptability to diverse learner needs	1.00	NS	1.00	NS	1.00	NS	1.00	NS
Technology and Internet Access								
Limited access to digital learning tools.	1.69	NS	1.7	NS	1.00	NS	1.00	NS
GRAND MEAN	2.58	S	2.76	S	2.94	S	2.87	S
Computed f-value = .11 (NOT Significant) **CV (0.05, df=32) = 290112** **p-value = .95**								

Legend:

Range	Descriptive Equivalent
4.00-3.26	Very Serious
3.25-2.51	Serious
2.50-1.76	Slightly Serious
1.75-1.00	Not Serious

Transportation and geographic barriers have a significant impact on competency acquisition among TESDA-CSITE, MPC trainees, both being rated as very serious (mean: 4.0). Outdated tools and facilities also pose challenges, with resource availability rated at 3.27 and classroom quality at 2.62. However, instructor competency (mean: 1.0) and digital learning access (mean: 1.32) are not major concerns. With an overall mean of 2.80, these issues require focused solutions. Research by Atchoarena & Delluc (2002) and the World Bank (2013) highlights the crucial role of infrastructure and accessibility in vocational training success.

Training delivery and digital access received low concern ratings (1.0–1.7), suggesting no significant issues with instructor competency or technology. The overall mean (2.58–2.94) categorized these factors as serious. Hypothesis testing (f-value: 0.11, p-value: 0.95) indicated no significant differences in how trainees across qualifications perceived these challenges.

Degree of Seriousness of the Factors Affecting the Acquisition of Competencies of TESDA-Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) Trainees According to Sex

Table 4 shows the seriousness of factors affecting competency acquisition among TESDA-CSITE, Mountain Province learners by sex, highlighting their impact on skill development.

Table 4. Degree of Seriousness of the Factors Affecting the Acquisition of Competencies of TESDA- Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) Trainees According to Sex

FACTORS	Male		Female	
	Mean	DE	Mean	DE
Transportation				
Commuting Burden	4	VS	4	VS
Lack of transportation going to the campus	4	VS	4	VS
Distance of the Campus to Nat'l Road				
Distances to the nat'l road	4	VS	4	VS
Inaccessibility of the campus	4	VS	4	VS
Facilities, tools, equipment and materials				
Outdated or irrelevant resources	2.92	S	3.83	VS
Quality classrooms and workshops	2.19	SS	3.3	VS
Training Delivery				
Instructor Competence	1	NS	1	NS
Trainer adaptability to diverse learner needs	1	NS	1	NS
Technology and Internet Access				
Access to digital learning tools is limited.	1.5.	NS	1.03	NS
GRAND MEAN	2.73	S	2.91	S
Computed t-value = .27 (NOT SIGNIFICANT) **CV (0.05, df=16) = 1.7459** **p-value = .40**				

Legend:

Range	Descriptive Equivalent
4.00-3.26	Very Serious
3.25-2.51	Serious
2.50-1.76	Slightly Serious
1.75-1.00	Not Serious

The severity of factors influencing competency acquisition among TESDA-CSITE MP learners differs by gender. Both male and female learners rated transportation and distance challenges as very serious (mean: 4.0), indicating significant barriers to training access. Female learners perceived outdated resources (3.83) and classroom quality (3.3) as very serious, while male learners rated them as serious (2.92) and slightly serious (2.19), respectively. Training delivery and digital access were not considered major concerns by either group. The overall mean scores (2.73 for males, 2.91 for females) classify these factors as serious. Hypothesis testing (t-value: 0.27, p-value: 0.40) confirmed no significant difference in perceptions, indicating both genders face similar challenges.

Degree of Seriousness of the Factors Affecting the Acquisition of Competencies of TESDA-Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) Trainees According to Age

Table 6 presents the seriousness of factors affecting competency acquisition among TESDA-CSITE, Mountain Province learners by age, analyzed using variance. Transportation and

distance challenges, including commuting burden and inaccessibility, were rated very serious (mean: 4.0) across all age groups, highlighting major barriers to training access and participation.

Table 6. Degree of Seriousness of the Factors Affecting the Acquisition of Competencies of TESDA- Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) Trainees According to Age

Factors	**15-25**		**26-35**		**36-45**		**46-55**	
	Mean	DE	Mean	DE	Mean	DE	Mean	DE
Transportation								
Commuting Burden	4.00	VS	4.00	VS	4.00	VS	4.00	VS
Lack of transportation going to the campus	4.00	VS	4.00	VS	4.00	VS	4.00	VS
Distance of the Campus to Nat'l Road								
Distances to the nat'l road	4.00	VS	4.00	VS	4.00	VS	4.00	VS
Inaccessibility of the campus	4.00	VS	4.00	VS	4.00	VS	4.00	VS
Facilities, tools, equipment and materials								
Outdated or irrelevant resources	3.00	S	3.58	VS	3.5	VS	3.00	S
Quality classrooms and workshops	2.18	SS	3.13	S	2.67	S	300	S
Training Delivery								
Instructor Competence	1.00	NS	1.00	NS	1.00	NS	1.00	NS
Trainer adaptability to diverse learner needs	1.00	NS	1.00	NS	1.00	NS	1.00	NS
Technology and Internet Access								
Access to digital learning tools is limited.	1.49	NS	1.13	NS	1.33	NS	1	NS
GRAND MEAN	2.74	S	2.87	S	2.83	S	2.78	S
Computed f-value = .02 (NOT SIGNIFICANT) **CV (0.05, df=32) = 2.90112** **p- value = 1.00**								

Legend:

Range	Descriptive Equivalent
4.00-3.26	Very Serious
3.25-2.51	Serious
2.50-1.76	Slightly Serious
1.75-1.00	Not Serious

Training delivery and digital access were consistently rated not serious (1.0–1.49). The overall mean (2.74–2.87) classifies competency challenges as serious, with no significant differences across age groups (F-value: 0.02, p-value: 1.00).

Transportation and distance remained major barriers, supported by UNICEF (2019) and Khan et al. (2020). Facility adequacy was a concern (McGuire & Gubbins, 2010), while instructor competency and digital access were not significant issues (Darling-Hammond et al., 2014).

POLICY RECOMMENDATIONS TO ADDRESS THE CHALLENGES IN THE SKILLS DEVELOPMENT OF TESDA TRAINEES

The analysis of recommendations from 78 graduates identifies essential strategies for improving transportation, facilities, and training quality.

Transportation & Accessibility: Learners suggest providing subsidies, shuttle services, and dormitories to alleviate commuting difficulties. Studies indicate that transportation challenges lower attendance (Smith & Brown, 2020), while on-campus housing improves student engagement (Garcia, 2021).

Facility & Equipment Upgrades: Implementing routine assessments of training tools, equipment, and facilities ensures compliance with industry standards. While TESDA's audits verify regulatory adherence, they do not evaluate equipment relevance. A specialized review program can address this gap, keeping training current and effective.

IV. Conclusion

Based on the results and salient findings of the study, the following conclusions were drawn:

1. Majority of the assessed learners are competent but there is a high number of absent during the assessment.
2. Transportation, distance issues, and outdated tools and equipment are seriously affecting the competency acquisition of learners at TESDA—Cordillera State Institute of Technical Education, Mountain Province Campus.
3. The learners consider shuttle services, dormitory establishment, and updating of facilities, tools, and equipment crucial to improving their competency acquisition.

V. Recommendations

Based on the salient findings and conclusion of the study, the following recommendations are offered:

1. TESDA—Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) may conduct further studies to understand absenteeism during the competency assessment.
2. TESDA – Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) should consider establishing shuttle services and dormitories and updating facilities, tools, and equipment.
3. TESDA—Cordillera State Institute of Technical Education, Mountain Province Campus (CSITE, MPC) may consider institutionalizing policies on accessible transportation and accommodation and regular updates and maintenance of training facilities and equipment to keep up with industry standards.

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