PROJECT C-TIP: GEARING UP TLE AND TVL TEACHERS TOWARDS THE IMPROVEMENT OF LEARNERS' INDUSTRIAL SKILLS

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ABSTRACT

Technical and Vocational Education and Training (TVET) plays a crucial role in equipping learners with the practical skills necessary for success in various industries. The effectiveness of instructional plans in TVET, particularly the Technology and Livelihood Education (TLE) and Technical-Vocational-Livelihood (TVL) tracks, is key to learners' preparedness for the workforce. However, challenges persist, including the difficulty in integrating essential competencies and aligning curriculum with the demands of industry standards. This research introduces the Contextualized Teacher's Instructional Plan (C-TIP) as an innovation to address these issues. In Media-Assisted Instruction (MAI), the first and second quarters are congested and focused on basic and common competencies. The core competencies, which are required during TESDA's assessment to obtain a National Certificate, have been neglected and not mastered. C-TIP aligns to basic competencies with core competencies required for TESDA certification, providing learners more time to master critical skills. The study investigates the impact of C-TIP on learner performance, comparing it with MAI. Utilizing a mixed-method research design, 257 learners and 15 teachers from Tangub City National High School participated in the study. Results reveal a significant improvement in learners' performance under C-TIP, with mean scores increasing from "satisfactory" in MAI to "very satisfactory" under C-TIP. The findings suggest that C-TIP offers a more effective framework for developing industry-relevant skills, helping learners better prepare for TESDA assessments and future employment. This study recommends broader adoption of C-TIP, enhanced teacher training through peer coaching and SLAC sessions, and continuous alignment of the curriculum with evolving industry standards.

Keywords: *TLE/TVL contextualized instructional plans, industry skills, learner performance, media-assisted instruction*

Context and Rationale

Technical and Vocational Education and Training (TVET) has become an integral part of modern education systems, providing learners with practical skills and knowledge that are essential for success in various industries. One of the fundamental components of TLE/TVL is the development and implementation of instructional plans, which serve as roadmaps for educators to guide learners towards acquiring industrial skills. Moreover, the effectiveness of instructional plans in TLE/TVL can be assessed by learners' industrial skills performance, which serves as a critical measure of their preparedness for the workforce.

The *DepEd Order No. 67, s. 2012, Guidelines in the Implementation of Technology and Livelihood Education in Public and Private Secondary Schools Article 1 Section 1.1 states that "Tech-Voc-based TLE is designed based on the training regulations (TR) of Technical Education and Skills Development Authority (TESDA). It focuses on technical skills development in any area of specialization that the learners want to pursue". But there are many challenges* faced by the teachers, including difficulties in meeting the learning competencies for a specific week or quarter, providing feedback, and completing the basic, common and core competencies *in implementing the Technical-Vocational and Livelihood (TVL) track and Technical Livelihood Education within the school year.*

With this, the Project C-TIP (Contextualized Teacher's Instructional Plan) provides a standardized framework that ensures consistency in curriculum delivery across all TLE/TVL courses. It focuses on the integration of basic and common competencies to the core competencies from the Training Regulations (TR) of Technical Education and Skills Development Authority (TESDA) that the learners should demonstrate. Through this, learners will have an ample time to master the skills relevant to the industry since there is no time constraint due to numerous weekly competencies from the curriculum guide. These will help the learners acquire the real-life skills needed in the industry especially in today's

advancement. The C-TIP helps teachers align their evaluation methods with the learning objectives and have a clear roadmap for planning their lessons that leads to better-prepared instructional materials and activities.

II. Research Questions

Specifically, this research seeks to answer the following questions:

1. What is the performance of the learners under the media-assisted instructions?
2. What is the performance of the learners under the C-TIP implementation?
3. Is there a significant difference between the existing media-assisted instruction learning plan and the contextualized teacher's instructional plan (C-TIP) implementation?

III. Proposed Innovation, Intervention, and Strategy

Proposed Innovation. The Contextualized Teacher's Instructional Plan (C-TIP) is an educational framework designed for teachers to align their instructional strategies with the specific context and needs of a particular group of learners, subject area, or educational setting. This plan aims to make teaching and learning more relevant, meaningful, and effective by considering the unique characteristics, interests, and learning styles of the learners. The learner's industrial skills will be improved and demonstrated accordingly by integrating the basic and common competencies to the core competencies from the Training Regulations (TR) of Technical Education and Skills Development Authority (TESDA) that also aligns to the curriculum guide.

During the pandemic, the absence of face-to-face classes and practical workshops has posed a significant challenge for TLE and TVL learners, limiting their opportunities to apply theoretical knowledge to real-world scenarios and refine practical skills essential for their chosen fields. On the other hand, C-TIP aims to create a more personalized and engaging

learning experience that prepares learners for both academic and practical challenges they may encounter in their future endeavors.

Intervention and Strategy. During the second quarter of the school year 2023-2024, the program will be implemented. The researcher will conduct School Learning Action Cell (SLAC) sessions in the first phase of intervention with the approval of the School Head in order to help TLE and TVL teachers with the necessary skills and knowledge for C-TIP implementation. Simultaneously, a peer-coaching program is adapted to provide ongoing support and collaboration opportunities among TLE and TVL teachers in crafting the instructional plan. During the second phase, the TLE and TVL teachers submit their contextualized instructional plan to the department head every last week of the month.

After the submission, the continuous monitoring and feedback mechanisms will help facilitate timely adjustments based on student performance and feedback. Additionally, a community engagement strategy will involve local stakeholders, providing real-world context to learning. This streamlined intervention and strategy aims to maximize efficiency and promote a seamless integration of the C-TIP into teaching practices.

IV. Action Research Methods

This study will utilize explanatory sequential mixed-method of research with the aid of questionnaire checklist and supporting interview questions. This design deals primarily with aims, purposes, intentions and plans within the practical constraints of location, time, money and availability of respondents. In other words, the research design links a research purpose or question to an appropriate method of data collection and a set of specific outcomes.

a. Participants and other source of Information

The study's participants are Tangub City National High School's Grade 9-12 teachers and learners. The study's entire population included 15 teachers and 772 learners. The researcher will use a sample size calculator with a 5% margin of error to determine the sample size of the respondents. As a result, 257 learners and 15 teachers will take part in the research. In order to recruit students and teachers to participate in the study, a purposive random sampling technique was used.

b. Data Gathering Methods

The researcher initially requested an endorsement from the School Principal to gather the needed data. When the endorsement from the School Principal was secured and after the experts checked the instrument, the researcher will personally distribute the questionnaire to the respondents. The researcher also sent a formal letter to the respondents containing the rationale of the study, a request for permission to gather data, and an endorsement letter to gather data to the respective learners of Tangub City National High School – Central B District. Upon the approval of the letter and when the endorsement from the School Principal will be secured, a copy of the questionnaire will be attached to a separate letter addressed to the program head to seek for approval for the conduct of the study. Researcher will then gather the data and will be interpreted with correct statistical tools.

c. Ethical Issues

The participants are asked to participate in a research study to be conducted by the researcher. They understood that the research is designed to gather information about in bridging *the gap between traditional academic education and the demands of the ever-evolving job market*. They understand that they will not be paid for their participation. They may

withdraw and discontinue their participation at any time without penalty. If they decline to participate or withdraw from the study, no one at the institution will be told. They understand that the researcher will not identify their name in any reports using information obtained from the questionnaire, and that their confidentiality as a participant in this study will remain secure. They have read and understood the explanation provided and they have been given a copy of the consent form. The researcher will administer the instrument to the respondents. Responses will be tabulated and collated by school for statistical treatment.

d. Data Analysis Plan

This study will utilize the statistical tools to arrive at a correct interpretation of data.

Frequency count and percentage. This was used to determine the performance of the learners under the media-assisted instructions and C-TIP implementation.

T-test of independence. This will be used to test the significant difference between the existing media-assisted instruction learning plan and the C-TIP implementation and the effectiveness of C-TIP for teachers and learners in the teaching and learning process.

V. Results and Discussion

Problem No.1 **What is the performance of the learners under the media-assisted instruction?**

Table 1

Level of Learner's Performance Under the Media-Assisted Instruction (MAI)

Rating	Frequency	Percent	Mean	Description
Outstanding	7	2.72%	3.29	Satisfactory
Very Satisfactory	68	26.46%		
Satisfactory	167	64.98%		
Fair	15	5.84%		
Poor				
Total	**257**	**100.0%**	**3.29**	**Satisfactory**

Table 1 indicates the level of learners' performance under media-assisted instruction. The table revealed that one hundred sixty-seven (167) respondents or 64.98 percent belonged to the level of satisfactory in terms of their practical demonstration performance, followed by sixty-eight (68) respondents or 26.46 percent who belonged to the level of very good, followed by fifteen (15) respondent or 5.84 percent who belonged to the level of fair, and followed by seven (7) respondent or 2.72 percent who belonged to the level of excellent. The grade point average suggests that the students' performance is satisfactory for the reason that the responders have a weighted mean of 3.29 which can be readily supported from the data shown above. It suggests that students belonged to the average level in terms of academic and practical demonstration performance. This implies that learners' performance under media-assisted instruction may have been affected because, during TVL and TLE practical demonstrations, the basics are introduced first through video presentations, which are not applicable to some specializations like Agri-crops and cookery. In these cases, students have to watch videos in the classroom before performing in the field, causing delays in achieving the target skills for the learning competency.

Additionally, the curriculum guide allocates more time for basic and common competencies than for core competencies. As a result, if teachers strictly follow the weekly competencies, it can take longer, and core competencies, which are crucial for TESDA

assessments, may not be met, especially when school, division, regional, or national activities occur. Learners do not have enough time to master the required skills for these competencies within a week.

The current findings are reinforced by the study conducted by Managbanag, M.A & Andal E. (2024), which stated that the video tutorials in terms of its components such as objective, content, and instructions do not significantly related to students baking technical skills performance. Based on the review conducted, the curriculum is congested, and the competencies are overlapping with the other learning areas. Some competencies are unpacked, entrepreneurial competencies are redundant, and ICT competencies are more complex in grades 6 compared to Grades 7 and 8. It also lacks in contact time due to shared time allotment with entrepreneurship. (Duterte, S., et. al, 2019).

Problem No. 2 **What is the performance of the learners under the C-TIP (Contextualized Teacher's Instructional Plan) implementation?**

Table 2

Level of Learners' Performance under the C-TIP Implementation

Rating	Frequency	Percent	Mean	Description
Excellent	102	39.69%	4.38	Very Satisfactory
Very Satisfactory	145	56.42%		
Satisfactory	10	3.89%		
Fair				
Poor				
Total	**257**	**100.0%**	4.38	Very Satisfactory

Table 2 depicts the performance of learners after the implementation of C-TIP. The table revealed that one hundred forty-five (145) respondents or 56.42 percent, had very satisfactory practical skills performance, followed by one hundred two (102) respondents or 39.69 percent, who had excellent practical skills performance, followed by practical skills performance of ten (10) or 3.89 percent. Because the responses have a weighted mean of 4.36, the grade point average implies that the learner's technical skills are very satisfactory, as evidenced by the data presented above. This signifies that learners were able to meet the required skills for the learning competencies within a week or quarter. The contextualization

of the instructional plan, which focused on the core competencies needed for the TESDA assessment, helped with this. The C-TIP, through the effective delivery of the teachers, may have helped learners perform the skills more efficiently, as they were given enough time to master them. This indicates that the intervention significantly improved the learners' industrial skills performance. The findings suggested that student-centered learning experiences significantly enhance educational quality and workforce readiness. The successful implementation of contextualized instructional strategies was linked to improved student engagement and learning outcomes, addressing the specific needs of TVL students (Abdul & Silor, 2024).

Table 3. Description of Ratings

Range	Adjectival Rating
4.500 – 5.000	Outstanding
3.500 – 4.499	Very Satisfactory
2.500 – 3.499	Satisfactory
1.500 – 2.499	Fair
Below 1.499	Poor

Problem No. 3 **Is there a significant difference between the existing media-assisted instruction learning plan and the contextualized teacher's instructional plan (C-TIP) implementation?**

Table 4

Significant difference between the existing media-assisted instruction learning plan and the contextualized teacher's instructional plan (C-TIP) implementation

Variables	N	Mean	Mean Difference (MAI - C-TIP)	SE	t-value	p-value	95% Confidence Interval	Decision
MAI	257	3.2906	-1.0925	0.29	38.0996	<0.0001	[-1.1490, -1.0361]	Ho Rejected
C-TIP	257	4.3832						

Table 4 shows the test of a significant difference between the mean scores of the Media-Assisted Instruction (MAI) which is 3.2906 and Contextualized Teacher's Instructional Plan (C-TIP) which is 4.3832, with a mean difference of -1.0925. The p-value (< 0.0001) indicates

this difference is statistically significant. The confidence interval [-1.1490, -1.0361] supports the reliability of this result. The C-TIP intervention has led to a considerable increase in learners' performance, as evidenced by the higher mean score compared to MAI. This implies that the C-TIP approach is highly effective in improving the specific skills being measured, potentially offering a more impactful method for enhancing students' competencies. Thus, implementing the C-TIP approach could benefit learners by fostering better mastery of the targeted skills.

VI. Conclusions

The research highlights the value of Technical and Vocational Education and Training (TVET), especially in improving learners' industry skills through C-TIP. The C-TIP helps with the problems encountered by teachers, such as meeting the learning competencies for a specific week or quarter. This is because the first and second quarters are congested and focused on basic and common competencies. The core competencies, which are required during TESDA's assessment to obtain a National Certificate, have been neglected and not mastered. In the C-TIP, the first core competency is introduced as early as the first quarter, where the basic and common competencies are incorporated while performing the core competencies. This allows learners more time to focus on and master the practical skills required for that week.

The results show a significant improvement in learners' performance comparing the C-TIP intervention to the current MAI. During the implementation of C-TIP, the learners demonstrated a much better level of competency, with a mean score of 4.38 (very satisfactory) compared to 3.29 (satisfactory) for the MAI. A substantial difference was found in the statistical analysis between the two instructional techniques, indicating that C-TIP provides more support for mastery of the skills needed for acquiring a National Certificate given by TESDA through assessments and readiness for industry.

C-TIP offers a more effective and efficient way to teach technical and vocational skills by providing learners with sufficient time to gain critical skills and enhance their practical performance. Teachers can more effectively align their teaching strategies with the essential skills and learning objectives of the TVET curriculum by utilizing contextualized lesson plans. Therefore, by bridging the conceptual gap between theory and application, the C-TIP method in the TVL and TLE curriculum should assist learners become better prepared for the demands of the industry.

VII. Recommendation

The Contextualized Teacher's Instructional Plan (C-TIP) has demonstrated significant potential to improve TLE and TVL performance among learners. C-TIP addresses the challenges of skill mastery in TLE/TVL tracks by aligning the curriculum more closely to conformity with industry standards and allowing the teachers to focus on key skills. The research findings show that C-TIP enhances learners' performance, as evidenced by the substantial improvement in learners' technical skills compared to traditional media-assisted instruction:

1. The findings of C-TIP suggest that it should be adopted by a wider range of schools in the Division of Tangub City aligning with the TESDA's Training Regulations and ensuring consistency in instructional delivery.
2. School Learning Action Cell (SLAC) sessions and peer coaching should be prioritized to equip teachers with the skills to implement C-TIP effectively.
3. Regular monitoring, and feedback from learners, teachers, and industry stakeholders should be integrated into the C-TIP framework allowing for timely adjustments and ensuring alignment with evolving industry demands.
4. The Department of Education should consider formally integrating C-TIP into the TLE/TVL curriculum. This will standardize technical skill development and help ensure that learners are adequately prepared for TESDA assessments and industry needs.
5. Allocate budget and resources specifically for training programs that focus on contextualization of instructional plan methodologies in TLE and TVL curriculum.
6. Strengthen collaboration with industry parties to ensure that the competencies outlined in C-TIP reflect real-world requirements, making learners more competitive in the job market.

7. Establish a policy for periodic review of the TLE/TVL curriculum, ensuring that C-TIP and related instructional strategies remain current with technological advancements and industry trends.

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