MARIECOR G. LIMPIADO

Crafting Success: Enhancing SHS TVL Students' Performance in Food and Beverage Services through Customized Learning Activity Sheets (CLASs) for TESDA's NCII Assessment

ABSTRACT

The study assesses the effectiveness of customized learning activity sheets for senior high school (SHS) technical-vocational-Livelihood (TVL) students in food and beverage services, specifically preparing for the TESDA NCII Assessment. Using a mixed-methods approach, it reveals a significant positive impact on students' knowledge and skills. Statistical analysis indicates a highly significant improvement in post-assessment scores. Qualitative data highlights improved comprehension and heightened confidence. The study emphasizes the potential of customized sheets as valuable tools for enhancing SHS TVL students' performance, offering practical insights for educators and broader implications for TVL programs.

Keywords:
Customized Learning Activity Sheets, National Certificate II Technical Education and Skills Development Authority (TESDA), Mixed Method

I. INTRODUCTION

In the realm of Technical-Vocational-Livelihood (TVL) education, our study, "Crafting Success," addresses the challenge faced by Senior High School (SHS) students in Food and Beverage Services preparing for the TESDA NCII Assessment. We employ customized learning activity sheets, drawing inspiration from research by Hattie, Bray, McClaskey, and Kolb, emphasizing tailored approaches for enhanced learning outcomes. These sheets integrate real-world scenarios, industry practices, and localized insights to bridge the gap between classroom learning and TESDA standards. "Crafting Success" aims to empower SHS TVL students, offering a transformative pathway to success in the dynamic field of Food and Beverage Services.

Research Questions:

This study aims to determine the effectiveness of customized learning activity sheet improving SHS TVL students' performance and preparation for the TESDA NCII Assessment in Food and Beverage Services. Specifically, it aims to answer the following questions.

1. To what extent do customized learning activity sheets effectively improve the knowledge and skills of SHS TVL students in Food and Beverage Services as measured by pre- and post-assessments, in the context of preparing for TESDA's NCII Assessment?

2. How do SHS TVL students perceive the impact of customized learning activity sheets on their learning experiences and preparation for the TESDA NCII Assessment in Food and Beverage Services?

3. What challenges and barriers are encountered during the development and implementation of customized learning activity sheets, and what strategies can be identified to address these challenges and enhance the effectiveness of this educational tool in improving SHS TVL students' performance and preparation for TESDA NCII Assessment in Food and Beverage Services?

Scope and Limitation of the Study

The study focuses on SHS TVL students specializing in food and beverage services within the Philippines. It examines the effectiveness of customized learning activity sheets in preparing students for TESDA NCII Assessment. The scope includes aspects of the TVL curriculum related to this preparation. The study utilizes a questionnaire to explore students' perceptions, challenges, and strategies associated with the development and implementation of these materials. Monitoring and evaluation involve pre- and post-assessments to measure knowledge and skill improvement. The scope is intentionally narrow to provide a focused examination within the specific context of SHS TVL programs in Food and Beverage Services.

Framework

The Input-Process-Output (IPO) model was utilized to present the conceptual framework of the study

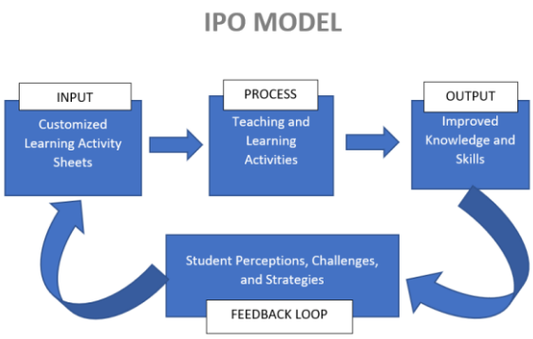

Figure 1. Conceptual Framework of the Study

Figure 1 shows the IPO model, which illustrates a continuous cycle of input, process, output, and feedback with the goal of enhancing SHS TVL students' knowledge and skills in food and beverage services through the use of customized learning activity sheets. The key connection here is that the feedback loop is informed by the outcomes of the process. It collects data on how students are experiencing the process, what challenges they encounter, and how strategies are used to improve it. This feedback loop then feeds back into the process, helping educators refine their teaching methods and the design of the customized sheets for better results.

II. METHODOLOGY

Research Design

The study uses a mixed-methods design, combining qualitative and quantitative data collection and analysis methods. The study will consist of two main phases: the development and implementation of customized learning activity sheets and the evaluation of their impact on students' performance.

Respondents to the study

The research will involve senior high school (SHS) technical-vocational-livelihood (TVL) students specializing in food and beverage services. Teachers responsible for delivering the curriculum will also be involved in the study.

Research Instrument

Phase 1: Development of Customized Learning Activity Sheets

- Collaborative meeting with the teacher to identify specific areas where students need improvement for the TESDA NCII Assessment
- Design and develop customized learning activity sheets tailored to address identified areas for improvement.
- Pilot testing of activity sheets for refinement based on feedback from teachers and students

Data Gathering

Phase 2: Implementation and Evaluation

- Implementation of the customized learning activity sheets in the classroom for a specified period
- Collection of quantitative data through pre- and post-assessments to measure improvements in students' knowledge and skills.
- Collection of qualitative data through focus group discussions and surveys to gather insights into students' perceptions of the effectiveness of the customized learning materials.

Statistical Treatment Data Collection Methods

- Pre- and post-assessments to measure changes in students' performance
- Focus group discussions with students to gather their experiences and perceptions surveys or questionnaires to assess student satisfaction and perceived effectiveness.
- Observations of classroom activities and interactions

Research Ethics Data Analysis

Quantitative data will be analyzed using statistical methods to determine the effectiveness of the customized learning activity sheets. Paired t-tests may be used to compare pre- and post-assessment scores.

Qualitative data from focus group discussions and surveys will be thematically analyzed to identify common themes and insights.

III. RESULTS

This chapter details the results of data collection and analysis and report findings concerning the research questions for this study.

Table 1: Impact of Customized Learning Activity Sheets on Student Knowledge and Skills.

Assessment Phase	Mean Score (out of 48)	Standard Deviation	Improvement in Scores (Post - Pre)	Level of Improvement
Pre-Test	16.29	4.28	26.38	Substantial positive impact on student knowledge and skills
Post-Test	42.67	5.23		

Table 1 shows the significant improvement in student knowledge and skills. The pre-test mean score of 16.29 suggests a relatively low baseline. However, the post-test mean score of 42.67 signifies a substantial positive impact after using customized activity sheets.

Table 2: Test of Significant difference between Pre-test and Post-test as an evidence of the Impact of Customized Learning Activity Sheets on Student Knowledge and Skills

Assessment Phase	Computed t-value	Computed p-value	Description	Decision
Pre-Test Post-Test	40.448	.000	Highly Significant	Reject null hypothesis

Table 2 statistical analysis indicates a "highly significant" difference between pre-test and post-test scores. This result supports the rejection of the null hypothesis, confirming that the customized activity sheets had a significant impact on student knowledge and skills.

Table 3: Student Perceptions of Customized Learning Activity Sheets

Aspect	Student Responses/Feedback
Engagement in Learning	The activity sheets made learning more engaging and interactive.
Clarity in Understanding Course Materials	The sheets helped clarify complex concepts and made studying easier.
Preparation for TESDA NCII Assessment	I feel more confident and better prepared for the TESDA NCII Assessment.

Table 3 students reported increased engagement, enhanced clarity in understanding complex concepts, and improved preparedness for the TESDA NCII Assessment. Their feedback aligns with the positive impact observed in Tables 1 and 2.

Table 4: Challenges and Strategies for Developing and Implementing Activity Sheets

Challenges Identified	Strategies Implemented
Limited resources (e.g., materials, technology)	Seeking external funding, using open educational resources
Diverse student learning styles	Encouraging peer-assisted learning, providing options
Need for ongoing teacher training and support	Organizing regular professional development sessions
Adaptability in sheet design to accommodate needs	Offering customization sections, incorporating feedback

Table 4 challenges, including limited resources, diverse learning styles, teacher training needs, and adaptability, were addressed with strategies like seeking external funding, peer-assisted learning, professional development sessions, and customization options. These strategies contributed to overcoming obstacles and improving the effectiveness of the activity sheets.

Table 5: Variation in Effectiveness Based on Prior Knowledge

Prior Knowledge Level	Effectiveness of Activity Sheets	Observations/ Analysis
Low	significant Improvement	Customized sheets addressed foundational gaps
Moderate	Moderate Improvement	Adaptations focused on specific areas of weakness

High	Minimal Improvement	Adaptations focused on specific areas of weakness

Table 5 categorizes the effectiveness of the activity sheets based on students' prior knowledge levels. It shows that students with low prior knowledge experienced significant improvement, indicating that the customized sheets effectively addressed foundational gaps. Students with moderate prior knowledge showed moderate improvement, indicating that the adaptations in the sheets focused on specific areas of weakness. Students with high prior knowledge demonstrated minimal improvement, suggesting that the sheets required minimal adaptation or intervention because they already possess a strong foundation in the subject matter. There may be limited room for improvement, given their advanced skills.

Table 6: Overall Conclusion and Recommendations

Conclusion	Recommendations
Customized learning activity sheets are effective	Continue using customized learning activity sheets
Positive impact on student performance	Ongoing teacher training and support for effective use
Enhanced student engagement and preparation	Strategies to accommodate varying student needs
Identified challenges and strategies	Consideration of resource allocation for further refinement

Table 6 shows collectively that the customized learning activity sheets had a substantial positive impact on student knowledge and skills. The statistical analysis, student perceptions, and identification of challenges and strategies support the conclusion that these sheets are effective in enhancing the learning experience. The recommendations suggest further refinement and continuous support for their successful implementation.

IV. DISCUSSIONS

The discussion highlights significant positive impacts of customized learning sheets on SHS TVL students' knowledge and skills, supported by a marked increase in post-test scores. Statistical analysis confirmed the sheets' effectiveness, leading to the rejection of the null hypothesis. Student feedback emphasized increased engagement, improved comprehension, and enhanced confidence for the TESDA NCII Assessment. The study also addresses common educational challenges, presenting practical strategies. Beyond this context, it underscores the transformative potential of customized learning materials in education, with broader implications for improving student outcomes.

REFERENCES

Guskey, T. R. (2003). What Works in Professional Development? Phi Delta Kappan, 84(10), 798-804.

Hattie, J. (2009). Visible Learning: A Synthesis of Over 800 Meta- Analyses Relating to Achievement. Routledge.

Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Prentice-Hall.

Biggs, J., & Tang, C. (2011). Teaching for Quality Learning at University: What the Student Does (4th ed.). McGraw-Hill Education.

Deci, E. L., & Rya n, R. M. (1985). Intrinsic Motivation and Self- Determination in Human Behavior. Plenum Press.

Fullan, M. (2007). The New Meaning of Educational Change (4th ed.). Teachers College Press.

Hall, G. E., & Hord, S. M. (2011). Implementing Change: Patterns, Principles, and Potholes (3rd ed.). Pearson.