

ENHANCING PRACTICAL SKILLS IN BEAUTY CARE SERVICES THROUGH MODULAR HANDS-ON ACTIVITIES OF MAXIMA TECHNICAL AND SKILLS TRAINING INSTITUTE INCORPORATED

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Abstract

This study aimed to determine the effectiveness of modular, hands-on activities in enhancing students' practical skills in Beauty Care Services at Maxima Technical and Skills Training Institute, Inc. The research employed a quasi-experimental one-group pre-test and post-test design involving 40 student respondents enrolled in the beauty care course. The study assessed students' performance levels before and after implementing modular, hands-on activities and examined their perceptions of the instructional approach. Data were gathered using performance checklists, survey questionnaires, and open-ended interview questions. Results showed a significant improvement in students' performance scores in the post-test compared to the pre-test, indicating that modular, hands-on activities contributed positively to skill acquisition. Thematic analysis of students' perceptions revealed increased confidence, better skill application, enhanced engagement, and appreciation of flexible and learner-centered instruction. Findings suggest that practical, modular-based instruction is effective in technical-vocational education, particularly in skill-driven fields like beauty care. The study also highlighted a gap in traditional methods that may not provide adequate hands-on experiences. Conclusions drawn supported the integration of experiential and modular approaches in teaching, and other technical-vocational institutions were recommended to adopt similar methods to address the skills gap among trainees. The study contributes to the body of knowledge advocating for innovative, learner-focused instruction that aligns with current workforce demands in local and international beauty care sectors.

Keywords: Modular Instruction, Hands-On Activities, Beauty Care Services, Technical-Vocational Education, Skill Enhancement, Experiential Learning, Competency-Based Training

1. Introduction

The rapid growth and increasing demand for skilled professionals in the beauty care industry, both locally and internationally, underscore the necessity for effective technical-vocational education and training (TVET) programs that equip learners with practical competencies and industry-ready skills (Loso, 2022). In the Philippines, the Department of Education (DepEd) and the Technical Education and Skills Development Authority (TESDA) have recognized the critical role of competency-based, learner-centered instructional strategies in improving the quality of technical-vocational education, particularly in skill-driven disciplines such as Beauty Care Services (Ye et al., 2024). DepEd Order No. 42, s. 2017 emphasizes the enhancement of technical skills through modularized learning, advocating for hands-on activities that enable learners to develop mastery in their chosen fields. Similarly, TESDA's Policies and Guidelines on Competency-Based Training and Assessment (CBTA) underscore the importance of aligning curricula with industry standards and providing experiential learning opportunities that foster skill acquisition and job readiness.

TESDA's Technical Vocational Education and Training (TVET) framework promotes the adoption of modular instruction to accommodate flexible learning pathways that respond to

diverse learner needs and varying industry demands (Nordin & Omar, 2024). This policy is particularly significant in beauty care, where practical skills such as facial treatment, nail care, and hair styling require repeated practice, guided supervision, and real-world application to attain proficiency. The modular approach, with its emphasis on competency-based progression and hands-on exercises, aligns with global trends in TVET that prioritize skills mastery over rote memorization and theoretical knowledge alone. This instructional model supports self-paced learning, allowing trainees to focus on developing specific competencies before advancing, which is essential for effective skills development in beauty care services (Garcia et al., 2025).

Empirical evidence supports the effectiveness of modular, hands-on learning in enhancing practical skills within technical-vocational education. For instance, a study by Njenga (2022) demonstrated that modularized hands-on activities significantly improved the technical competencies and confidence levels of trainees in the Automotive Servicing NC II program. Their findings revealed that learners exposed to structured, modular practical tasks performed better in skills assessments compared to those who received conventional lecture-based instruction (Njenga, 2022). Similarly, the research of Garcia et al. (2020) highlighted the positive impact of modular-based instruction on the practical skills of students enrolled in the Food and Beverage Services NC II program. Their study underscored that modular learning facilitated mastery of specific skill sets, enhanced learner engagement, and improved overall training outcomes (Manalo et al., 2023).

In the realm of beauty care, Delita et al. (2022) investigated the role of experiential and modular learning in developing competencies among trainees in Nail Care Services. The study concluded that hands-on modular activities fostered significant improvements in technical skills, learner motivation, and retention of knowledge. Furthermore, Salazar's research emphasized that modular instruction enabled learners to bridge the gap between theory and practice, preparing them effectively for industry demands (Delita et al., 2022). These findings align with the theoretical foundations of Experiential Learning Theory (Kolb, 1984), which posits that knowledge is constructed through direct experience and reflective practice. The Constructivist Theory (Vygotsky, 1978) also supports this approach by advocating for learner-centered environments where skills are acquired through active engagement and scaffolded learning.

Despite these advancements, challenges remain in traditional technical-vocational programs that often rely heavily on theoretical lectures and insufficient hands-on training. Such methods may inadequately prepare students for the complexities of real-world beauty care tasks, leading to a skills gap and reduced employability. DepEd Memorandum No. 75, s. 2019 explicitly calls for the integration of practical and modular learning methodologies to address these gaps and enhance the competency of TVET graduates. The memorandum stresses that practical activities, when integrated with modular learning, provide learners with authentic experiences that are crucial for mastery and confidence in technical skills. Consequently, adopting modular, hands-on activities within the Beauty Care Services program at institutions like Maxima Technical and Skills Training Institute, Incorporated is not only responsive to policy directives but essential to meeting evolving industry standards.

This study thus seeks to evaluate the effectiveness of modular, hands-on activities in enhancing the practical skills of trainees in Beauty Care Services at Maxima Technical and Skills Training Institute, Incorporated. By employing a quasi-experimental one-group pretest-posttest design, the research aims to provide empirical evidence on whether modular, hands-on instruction leads to measurable improvements in student performance. Additionally, the study explores trainees' perceptions of this instructional approach to assess engagement, motivation, and learner satisfaction. Through this inquiry, the study contributes to the growing body of knowledge advocating for innovative and learner-centered instructional strategies in TVET, particularly within beauty care training programs.

Ultimately, the integration of modular, hands-on activities aligns with the strategic goals of TESDA and DepEd to produce skilled graduates who can competently meet the demands of the local and global beauty care sectors. It supports the development of workforce-ready individuals who possess not only theoretical knowledge but also practical proficiency, adaptability, and confidence. By addressing gaps in current instructional practices, this study offers insights that inform curriculum development, teaching methodologies, and policy implementation within the technical-vocational education landscape, thereby enhancing the quality and relevance of beauty care training in the Philippines.

2. Method

2.1 Research Design

This study employed a quasi-experimental one-group pretest–posttest design to evaluate the effectiveness of modular, hands-on activities in enhancing the practical skills of trainees enrolled in the Beauty Care Services program at Maxima Technical and Skills Training Institute, Incorporated. By assessing participants' competencies before and after the intervention, the design facilitated the measurement of changes attributable to the instructional approach without requiring random assignment or a control group. The intervention consisted of modular learning modules incorporating guided practical exercises aligned with TESDA's Competency-Based Training Standards, which trainees engaged with over a defined instructional period. Pretest and posttest performance assessments were administered using standardized checklists to quantitatively capture skill development, while learners' perceptions were also gathered to provide qualitative insights. Despite inherent limitations in internal validity, this design was appropriate for establishing preliminary evidence on the impact of modular, hands-on instruction in technical-vocational education settings.

2.2 Participants

The respondents of this study consisted of 25 trainees enrolled in the Beauty Care Services NC II program at Maxima Technical and Skills Training Institute, Incorporated, during the academic year 2024–2025. These participants were purposively selected based on their active involvement in acquiring practical competencies relevant to the beauty care industry and their direct exposure to the modular, hands-on instructional intervention. This sampling approach ensured that the study's findings would be grounded in the experiences of learners who were engaged explicitly with the training modules designed to enhance their technical skills. The respondents' demographic characteristics and training backgrounds were considered to contextualize the results within the technical-vocational education framework.

2.3 Instrumentation

The study utilized a researcher-developed performance assessment checklist as the primary instrument to measure the practical skills of trainees in Beauty Care Services, specifically targeting competencies such as facial treatments, nail care, and basic hair services by TESDA's Competency-Based Training Standards for NC II. This checklist, employing a standardized rubric with clearly defined performance indicators, was administered during both pretest and posttest phases to ensure consistent evaluation of skill acquisition. Additionally, a structured survey questionnaire was employed to capture the trainees' perceptions regarding the modular, hands-on instructional approach, focusing on factors such as engagement, clarity, relevance, and confidence gained. Both instruments underwent rigorous validation by a panel of experts in technical-vocational education and beauty care, and a pilot test was conducted to refine their reliability and validity prior to full implementation in the study.

2.4 Data Analysis

The data analysis for this study involved both quantitative and qualitative methods to assess the effectiveness of modular, hands-on activities comprehensively. Quantitative data from the pretest and posttest performance assessments were analyzed using descriptive statistics, including mean and standard deviation, to determine the students' skill levels before and after the intervention. To ascertain the statistical significance of the observed changes, a paired sample t-test was conducted, comparing the pretest and posttest scores. Meanwhile, qualitative data gathered from the trainees' survey responses were subjected to thematic analysis to identify recurring patterns and insights regarding their perceptions of the instructional approach. This mixed-methods analytical framework facilitated a robust evaluation of both the measurable improvements in practical skills and the experiential impact of the modular learning intervention.

3 Results

The study demonstrated a significant improvement in the practical skills of trainees following the implementation of modular, hands-on activities in the Beauty Care Services program at Maxima Technical and Skills Training Institute, Incorporated. The pretest performance scores revealed that learners initially possessed a moderate level of competency, with a mean score of 62.4 (SD = 8.7), indicating basic understanding but limited mastery of key beauty care tasks such as facial treatments, nail care, and hair styling. Following the intervention, the posttest results showed a marked increase in skill proficiency, with a mean score of 84.7 (SD = 6.3). This substantial improvement reflects the positive impact of modular, experiential learning on the trainees' ability to perform industry-aligned beauty care procedures.

Statistical analysis using a paired sample t-test confirmed that the increase in posttest scores was statistically significant ($t(24) = 12.56$, $p < 0.001$), demonstrating that the modular, hands-on instructional approach effectively enhanced the practical competencies of the trainees. This finding supports the assertion that modularized, activity-based learning fosters skill acquisition by providing structured, repetitive practice and real-time feedback, which are essential in technical-vocational education. The reduction in score variability from pretest to posttest also suggests a more consistent mastery of skills among the learners after the intervention, highlighting the approach's potential in standardizing competency development across trainees.

The thematic analysis of the qualitative data further corroborated these quantitative findings, revealing several emergent themes regarding student perceptions of the modular, hands-on activities. Trainees consistently reported increased confidence and motivation because of engaging in practical, self-paced exercises that allowed for immediate application of theoretical knowledge. Many respondents emphasized the clarity and relevance of the modules, noting that the step-by-step guidance and performance tasks aligned closely with real-world beauty care scenarios. Furthermore, learners appreciated the interactive and learner-centered nature of the instruction, which they felt fostered deeper understanding and skill retention. Collectively, these findings underscore the efficacy of modular, hands-on activities not only in improving measurable skills but also in enhancing learner engagement and satisfaction within the Beauty Care Services training context.

4 Discussion

Similar to the results observed among Beauty Care Services trainees at Maxima Technical and Skills Training Institute, Sakdapat (2024) reported significant improvements in the technical competencies of Automotive Servicing NC II students following the implementation of modularized, practical activities. Their study emphasized that structured, hands-on modules enhanced learners' confidence and skill mastery, corroborating the current study's findings that experiential learning fosters both competence and learner motivation in skill-based disciplines.

This consistency across diverse vocational programs underscores the versatility and effectiveness of modular instruction in technical skills development.

Furthermore, the present study's emphasis on learner perceptions and engagement echoes the conclusions of Inderanata and Sukardi (2023), who examined modular learning in the Food and Beverage Services NC II program. Garcia and colleagues found that modular-based, activity-driven instruction not only improved practical skills but also increased learner satisfaction and autonomy. The thematic findings of enhanced confidence, clarity, and relevance in the present study mirror Garcia et al.'s observations, reinforcing the value of learner-centered methodologies that promote active participation and self-paced progression. These corroborations strengthen the argument for modular, hands-on instruction as a best practice within TVET frameworks aimed at preparing job-ready graduates.

In the specific context of beauty care, Wu (2024) investigation into modular learning for Nail Care Services trainees similarly validated the positive impact of hands-on activities on technical skill acquisition and learner motivation. Salazar highlighted that experiential modules effectively bridged the gap between theoretical instruction and practical application, enabling trainees to develop competencies that meet industry standards. The current study's findings of significant performance gains and positive learner feedback resonate with Salazar's conclusions, suggesting that modular, hands-on instruction is particularly suited to beauty care education, where tactile skills and repeated practice are paramount. Collectively, these related studies corroborate the efficacy of modular learning in enhancing practical skills and learner engagement across multiple TVET disciplines, thereby reinforcing the relevance and significance of the present research.

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