

COMMUNITY-BASED DRESSMAKING TRAINING FOR INDIGENOUS WOMEN IN BUKIDNON, PHILIPPINES: AN IMPLEMENTATION AND IMMEDIATE-OUTCOME EVALUATION

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ABSTRACT: Rural Indigenous women often experience restricted access to skills training, productive assets, and market opportunities. This study evaluated the implementation and immediate outcomes of a 275-hour community-based Dressmaking Skills Training Program conducted from June 20 to September 28, 2024, in New Visayas, Don Carlos, Bukidnon, Philippines. A descriptive single-site implementation evaluation was used. The cohort comprised 15 Indigenous women identified through a participatory community needs assessment. The intervention combined TESDA Dressmaking NC II-aligned modules, trainer demonstrations, supervised practice, peer mentoring, performance checklists, finished-product assessment, and basic entrepreneurship orientation. Evidence was drawn from attendance and completion records, trainer observation checklists, participant outputs, and implementation documentation. All 15 enrolled participants completed the program. Program records documented successful completion of pattern drafting, fabric preparation, garment construction, and finishing tasks, culminating in the production and exhibition of finished garments. The partner organization supplied materials and transferred sewing machines and tools to participant pairs, strengthening opportunities for continued practice and peer-based skills diffusion. Material-delivery delays, limited workspace, and power interruptions affected implementation but were managed through schedule adjustments and shared-resource arrangements. The findings support the feasibility of a culturally responsive, competency-based community training model. However, the absence of baseline competency measures, a comparison group, external certification data, and post-training livelihood tracking means that the results should be interpreted as immediate implementation evidence rather than proof of income or employment impact.

Keywords: community-based training; competency-based TVET; dressmaking; Indigenous women; livelihood readiness; program evaluation

INTRODUCTION

Skills exclusion remains closely connected to rural poverty, informal employment, and limited access to productive assets. In the Philippines, Indigenous Peoples recorded the highest poverty incidence among the basic sectors in 2023 at 32.4%, while official small-area estimates continue to show marked inequalities across cities and municipalities [1], [2]. These conditions are not resolved by training alone; they are reinforced by weak market access, inadequate infrastructure, limited capital, and the absence of sustained post-training support [3].

Technical and vocational education and training (TVET) can expand livelihood options when it is inclusive, demand-responsive, and connected to productive work. UNESCO identifies TVET as a mechanism for empowerment, employment, entrepreneurship, and more inclusive economies [4]. The International Labour Organization similarly emphasizes community-based skills development that begins with local economic opportunities and continues through enterprise and employment support rather than ending at course completion [5]. This distinction is important for Indigenous women, for whom domestic responsibilities, mobility constraints, equipment costs, and geographic isolation may limit access to formal training and wage employment.

Dressmaking is suitable for community delivery because core tasks can be practiced locally and can support home-based production, alteration services, and small-scale garment enterprises. Its practical character also aligns with experiential learning, in which competence develops through concrete experience, reflection, conceptual understanding, and repeated experimentation [6]. Reviews of vocational applications of experiential learning likewise emphasize iterative practice and feedback for developing procedural competence [7]. In the Philippine system, TESDA training regulations provide competency standards that can guide

curriculum design, performance tasks, and assessment evidence [8].

Despite these advantages, many community extension reports describe activities, attendance, and culminating outputs without clearly distinguishing implementation success from educational, employment, or poverty-reduction impact. Philippine evidence on livelihood training for Indigenous Peoples highlights participation, sustainability, client impact, and multiplier effects as critical implementation features [9], yet published evaluations of community-based dressmaking programs for Indigenous women in Northern Mindanao remain limited. Consequently, the practical question is not only whether a course can be delivered, but whether its design produces credible immediate evidence of learning and establishes conditions for continued practice and livelihood transition.

The present study evaluated a 275-hour Dressmaking Skills Training Program implemented by the University of Science and Technology of Southern Philippines with the Samdhana Institute in New Visayas, Don Carlos, Bukidnon. It examined: (1) how the program was designed and implemented in response to community needs; (2) what immediate evidence of participation, competency demonstration, and livelihood readiness was documented; (3) what enabling conditions and implementation constraints were observed; and (4) what improvements are required for sustainability and rigorous outcome evaluation. The initiative is consistent with the inclusive livelihood aspirations of AmBisyon Natin 2040 and the Sustainable Development Goals on poverty, education, gender equality, and decent work [10], [11].

MATERIALS AND METHODS

Research design and rationale

The study used a descriptive single-site implementation and immediate-outcome evaluation. This design was appropriate

because the available evidence documented program delivery, completion, performance tasks, outputs, enabling resources, and implementation challenges. It did not include a pre-intervention competency test, a comparison group, standardized income measures, or longitudinal employment data. Accordingly, the analysis assessed feasibility and immediate learning evidence but did not attribute causal effects to the training.

Setting, participants, and needs assessment

The program was conducted in New Visayas, Don Carlos, Bukidnon, from June 20 to September 28, 2024. USTP and the Samdhana Institute conducted consultations, interviews, and focus-group discussions with the community to identify priority livelihood needs. Dressmaking was selected because it could be delivered within the community, practiced at home, and connected to garment production and alteration services. The implemented cohort comprised 15 Indigenous women. The Samdhana Institute coordinated community mobilization and provided materials, equipment, and logistical support.

Intervention

The 275-hour program followed a competency-based modular sequence aligned with Dressmaking NC II. Instruction combined short inputs, trainer demonstrations, guided performance, individualized feedback, peer mentoring, and product-based assessment. Table 1 summarizes the instructional phases and evidence.

Table 1. Structure and evidence of the dressmaking intervention

Phase	Core learning tasks	Program evidence
Needs assessment and orientation	Community consultation; expectations; safety and work values	Needs-assessment notes; participant list
Basic and common competencies	Occupational safety; tools; textile handling; workplace communication	Trainer observation checklist
Pattern drafting	Measurement, design planning, and patterns for basic garments	Completed patterns and corrections
Fabric preparation and cutting	Selection, layout, marking, and cutting	Prepared and cut garment components
Construction, finishing, and enterprise orientation	Machine operation, assembly, alteration, finishing, presentation, and basic costing	Finished garments; culminating exhibit

The intervention was NC II-aligned but the records reviewed did not establish external TESDA certification.

Data sources and analysis

The evaluation used four sources of program evidence: attendance and completion records, trainer observation checklists, completed patterns and garments, and implementation documentation describing partner support and constraints. Descriptive counts were used for enrolment and completion. Documentary evidence was organized into four domains: participation and completion, competency demonstration, livelihood readiness and sustainability, and implementation constraints. No inferential statistics were applied because the design did not include a counterfactual or repeated standardized outcome measure.

Ethical and community safeguards

Publication of evidence from a program involving Indigenous participants requires transparent documentation of voluntary

participation, privacy protection, community authorization, and culturally appropriate consent

RESULTS

Participation and completion

All 15 enrolled participants completed the 275-hour program, producing a cohort completion rate of 100%. This indicates that the schedule, community location, instructional pacing, and partner support were workable for the enrolled group. Completion should nevertheless be interpreted as an implementation indicator; the study did not compare completers with eligible nonparticipants or examine reasons why other community members did not enroll.

Competency demonstration and outputs

Program records documented the completion of performance tasks in pattern drafting, fabric preparation, cutting, sewing, assembly, alteration, and finishing. Participants produced finished garments that were presented during the culmination activity. These outputs provide direct evidence that participants could apply the taught procedures under program conditions. Because numerical rubric scores, inter-rater evidence, and external competency-assessment results were not available, the findings demonstrate immediate task completion rather than independently verified mastery or national certification.

Livelihood readiness, resource transfer, and constraints

Participants expressed plans to use their skills for tailoring and small-scale garment production, and some showed interest in serving as community trainers. The Samdhana Institute transferred sewing machines and tools to pairs of participants from the same locality. This arrangement reduced the immediate equipment barrier and created a basis for shared practice, peer mentoring, and community-level skills diffusion. However, livelihood intention and access to equipment are preparatory conditions; the project had not yet documented enterprise formation, customer demand, sales, income, or employment.

Implementation was affected by delayed materials, limited workspace, and intermittent power supply. The project team responded by adjusting schedules, sharing equipment, and extending practice time. These adaptations enabled completion but also identified operational risks that should be addressed through procurement lead times, equipment-maintenance plans, backup power arrangements, and clearer shared-use rules.

Table 2. Summary of immediate program outcomes

Domain	Observed evidence	Bounded interpretation
Participation	15 enrolled; 15 completed (100%)	Feasible for the enrolled cohort; not evidence of population reach
Learning	Completed patterns, sewing tasks, and finished garments	Immediate performance evidence; no standardized gain score
Livelihood readiness	Plans for tailoring/production; interest in peer training	Intention and perceived usefulness; no income outcome yet
Sustainability resources	Machines and tools transferred to participant pairs	Supports continued practice; requires governance and maintenance
Constraints	Material delays, limited space, power interruptions	Need contingency planning and infrastructure support

DISCUSSION

Why the implementation model was feasible

The combination of extended practice, modular sequencing, demonstrations, corrective feedback, and tangible product outputs provides a plausible explanation for the program's high completion and documented task performance. The intervention moved repeatedly through the experiential cycle: participants performed concrete sewing tasks, received feedback, interpreted errors in measurement or construction, and reapplied improved techniques [6], [7]. Alignment with TESDA competency standards further helped translate broad livelihood goals into observable tasks [8]. The results therefore support the feasibility of the instructional model, although they do not quantify the size of competency gains.

Community ownership and enabling conditions

The needs assessment and local partnership were not peripheral activities; they were central implementation mechanisms. Community consultation increased the relevance of the selected skill, while the partner's provision of fabric, machines, and logistics reduced the costs that commonly prevent participation and continued practice. This pattern is consistent with community-based rural skills approaches that combine local opportunity assessment, training, and post-training support [5], and with Philippine evidence identifying participation, sustainability, client impact, and multiplier effects as core features of livelihood programs for Indigenous Peoples [9]. The pair-based equipment arrangement is potentially valuable because it links physical capital with peer accountability. Its long-term effectiveness, however, depends on transparent scheduling, maintenance responsibilities, replacement funds, and fair access.

From immediate competence to livelihood outcomes

The findings indicate readiness for further practice, not verified economic empowerment. Completed garments and participant intentions establish that the training produced usable immediate outputs, but income generation requires additional conditions: product quality consistency, costing, market information, customer acquisition, production scheduling, access to inputs, and financial management. A stronger next phase should therefore combine technical mentoring with enterprise incubation, local procurement opportunities, market linkage, and formal competency assessment. Tracer evidence at three, six, and twelve months should record active sewing practice, products sold, enterprise formation, employment, income change, equipment use, and barriers to continuation.

Pedagogy, technology-supported follow-up, and learner support

Digital demonstrations, messaging groups, photo-based feedback, and simple costing templates could extend mentoring after face-to-face training, but technology should be added only when it serves a clear pedagogical purpose. Philippine higher-education evidence indicates that educators' pedagogical beliefs shape whether and how technology is integrated into teaching [12]. Among Tech-Voc educators in Northern Mindanao, perceived usefulness, ease of use, facilitating conditions, and behavioral intention influenced instructional-technology use [13]; comparable UTAUT evidence among public-university educators likewise

emphasized performance expectancy, effort expectancy, behavioral intention, and facilitating conditions [14]. For this program, these findings imply that digital follow-up should use low-bandwidth, familiar tools, provide trainer preparation, and ensure device and connectivity support. Technology use was not evaluated in the present cycle and should therefore be treated as a future implementation strategy rather than an observed outcome.

Home-based practice also depends on learner and household conditions. A study of Computer-Aided Designing students in flexible learning found that learner factors and parental guidance were significant predictors of academic performance within that specific technical-learning context [15]. Although the populations and outcomes differ, the result supports the practical value of household encouragement, protected practice time, and shared access to equipment for participants continuing dressmaking at home.

Institutional sustainability and workload

The continuation of community extension cannot rely solely on individual trainer commitment. Faculty commonly balance teaching, research, administration, and extension responsibilities. Phenomenological evidence from Northern Mindanao shows that workload overload, role conflict, and unplanned tasks can compromise teaching quality and well-being [16]. Sustaining the present model therefore requires formal workload recognition, a multi-person training team, planned follow-up schedules, logistics support, and shared monitoring responsibilities between the university, partner organization, local government, and community.

Limitations

The study involved one cohort of 15 participants in a single community. The sample was purposive, and the evaluation relied on program records rather than independently collected outcome data. No baseline or posttest competency scores, comparison group, standardized entrepreneurship measure, external NC II assessment, or longitudinal livelihood data were available. Participant perspectives were summarized in implementation records but were not analyzed as a formal qualitative dataset with verbatim quotations. Social-desirability and implementer-observer bias are therefore possible. These limitations prevent causal claims regarding employment, income, poverty reduction, or empowerment.

Implications for future evaluation

A subsequent cycle should register all eligible applicants, report participant characteristics and attendance, use a validated pretest-posttest performance rubric, employ at least two trained assessors, and document inter-rater agreement. External TESDA assessment should be distinguished from internal course completion. A process evaluation should track instructional fidelity, equipment access, partner contributions, and disruptions. Mixed-method tracer interviews and economic indicators should then determine how skills are converted—or fail to convert—into sustained livelihood outcomes.

CONCLUSION

The 275-hour community-based dressmaking program was successfully delivered to 15 Indigenous women in New Visayas, Don Carlos, Bukidnon. All enrolled participants completed the program, performed the required dressmaking

tasks, and produced finished garments. Participatory needs assessment, extended hands-on instruction, TESDA-aligned competencies, partner-provided materials, and pair-based equipment transfer were the principal strengths of the model. These findings support the program's feasibility and immediate educational value.

The evidence does not yet establish employment, income, enterprise sustainability, or poverty-reduction impact. The next stage should connect participants to certification, mentoring, markets, and enterprise support while implementing a rigorous tracer and outcome-evaluation system. Replication should preserve community co-design and hands-on practice while strengthening ethics documentation, assessment reliability, equipment governance, trainer workload support, and long-term livelihood measurement.

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