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Capacity Building in Cost Determination for Kandaure Toraya Products Among Students with Disabilities: A Community-Based Training Approach

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Abstract

Accurate product costing is a fundamental component of sustainable microenterprise development, particularly for vocational initiatives involving students with disabilities. This community-based training program was designed to strengthen participants' knowledge and practical competencies in calculating the production cost of Kandaure Toraya, a traditional handicraft product developed at Tangmentoe. The program adopted a participatory learning model that integrated interactive lectures, guided demonstrations, practical exercises, and group discussions. Participants were introduced to the identification of direct material costs, direct labor costs, and manufacturing overhead, followed by step-by-step activities to prepare complete cost calculations and establish appropriate selling prices. Learning outcomes were assessed through observations, practical assignments, and comparative evaluations conducted before and after the training sessions. The findings indicated a substantial improvement in participants' understanding of production cost concepts and their ability to perform systematic cost calculations. Students also demonstrated greater confidence in applying pricing strategies that reflected actual production expenses and desired profit margins. Furthermore, the training encouraged entrepreneurial awareness by illustrating the relationship between accurate costing, pricing decisions, and business sustainability. The program highlights the importance of inclusive vocational education that combines financial literacy with practical business skills to enhance the economic independence of students with disabilities. The training model may serve as a reference for similar community empowerment initiatives that seek to strengthen entrepreneurial competencies through contextual and practice-oriented learning.

Keywords: Community service Cost of goods determination, Kandaure Toraya, Students with disabilities, Inclusive vocational education, Entrepreneurship training, Financial literacy, Production cost analysis

Introduction

Entrepreneurship education has become an important component of vocational and community-based learning because it equips individuals with practical competencies that support economic participation and self-reliance. For students with disabilities, entrepreneurial skills are particularly valuable because they create opportunities for independent income generation and reduce barriers to employment. Community service programs that combine vocational training with business education can improve both technical abilities and financial decision-making. One of the essential competencies in small-scale entrepreneurship is the ability to determine the cost of production accurately. Without this knowledge, entrepreneurs may establish selling prices that are either too low to generate profit or too high to remain competitive in the market [1].

Kandaure Toraya is a traditional product that represents local cultural identity while offering economic opportunities for community members. The production process involves the use of

raw materials, manual labor, and supporting resources, all of which contribute to the total production cost. Students who participate in handicraft production often focus on the manufacturing process but pay limited attention to cost calculation. As a result, pricing decisions are frequently based on estimation rather than systematic financial analysis. This condition reduces business efficiency and limits the potential for long-term sustainability.

Community empowerment initiatives have increasingly emphasized the integration of financial literacy into vocational education. Rather than concentrating exclusively on production techniques, training programs are encouraged to introduce participants to basic accounting principles, cost identification, and pricing strategies. Such knowledge enables learners to understand how production expenses influence business performance and profitability. The inclusion of these concepts is especially relevant for students with disabilities because it supports the development of independent entrepreneurial capabilities.

This community service activity was therefore designed to improve participants' understanding of production cost determination for Kandaure Toraya products. The training emphasized practical learning activities that allowed students to identify production cost components, calculate total manufacturing costs, and determine appropriate selling prices. By combining theoretical explanations with hands-on exercises, the program sought to enhance financial competence alongside vocational skills [2].

Theoretical Foundation of Production Cost Determination

Production cost determination refers to the systematic process of identifying and measuring all expenses incurred during the manufacture of a product. Accurate cost information provides the basis for pricing decisions, financial planning, and profitability analysis. In small-scale enterprises, production costs generally consist of three primary components: direct materials, direct labor, and manufacturing overhead. Direct materials represent the raw resources consumed during production, while direct labor includes wages paid to workers directly involved in manufacturing. Manufacturing overhead encompasses indirect expenses such as utilities, equipment depreciation, maintenance, and other supporting operational costs [3].

The calculation of production costs allows entrepreneurs to establish selling prices that cover production expenses while generating reasonable profit margins. If production costs are underestimated, businesses may experience financial losses despite maintaining high sales volumes. Conversely, excessive pricing may reduce customer demand and weaken market competitiveness. Therefore, understanding production costs contributes to both operational efficiency and strategic decision-making.

Educational programs that introduce production cost concepts often employ practical examples to simplify financial calculations. Rather than emphasizing complex accounting procedures, learners are encouraged to classify expenses correctly and perform basic calculations that reflect actual production activities. This approach enables participants with diverse educational backgrounds to develop applicable financial skills without requiring advanced accounting knowledge [4].

Within vocational education, production cost training complements technical craftsmanship by connecting product quality with economic value. Learners gain an appreciation of how resource utilization, labor efficiency, and operational expenses influence business outcomes. Consequently, financial literacy becomes an integral component of entrepreneurship education rather than a separate academic discipline.

Table 1. Components of Production Cost for Kandaure Toraya Products

Production Cost Component	Description	Example in Kandaure Toraya Production
Direct Materials	Raw materials directly used in product manufacturing	Fabric, thread, decorative accessories
Direct Labor	Wages or labor involved in producing the product	Cutting, sewing, assembling, finishing
Manufacturing Overhead	Indirect production expenses	Electricity, equipment maintenance, tools, workspace utilities
Total Production Cost	Sum of all production expenses	Total cost incurred for one production cycle

Inclusive Entrepreneurship Training for Students with Disabilities

Entrepreneurship provides an alternative pathway for students with disabilities to participate actively in economic activities. While vocational education traditionally focuses on technical competencies, the inclusion of business management skills expands employment opportunities beyond conventional labor markets. Inclusive entrepreneurship training promotes independence by encouraging learners to transform practical abilities into sustainable income-generating activities.

Effective training programs recognize that students possess diverse learning characteristics and therefore require flexible instructional strategies. Interactive teaching methods, demonstrations, guided practice, visual learning materials, and collaborative activities improve knowledge acquisition by accommodating different communication and cognitive needs. Practical learning environments also encourage participants to develop confidence through repeated application of newly acquired skills [5].

Financial literacy constitutes one of the most valuable competencies within entrepreneurship education. Learners

who understand production costs, pricing strategies, and simple financial planning are better prepared to manage small businesses successfully. These competencies reduce dependence on external assistance and strengthen participants' capacity to make informed business decisions independently.

Community-based training further enhances learning by connecting educational institutions with local economic resources. Traditional products such as Kandaure Toraya provide authentic learning experiences because participants engage directly with culturally significant products while simultaneously acquiring entrepreneurial knowledge. This combination strengthens both cultural preservation and local economic development.

Production Cost Training for Kandaure Toraya Products

The production process of Kandaure Toraya involves several sequential activities, beginning with material preparation and ending with product completion. Each production stage requires specific resources that contribute to the overall manufacturing cost. Training activities therefore introduced participants to the identification and classification of every expenditure associated with production.

Participants first learned to record direct material expenses, including the quantity and cost of raw materials required for each product unit. The second stage focused on direct labor, where participants estimated the value of labor based on production time and work activities. Finally, participants identified indirect production expenses such as equipment usage, electricity consumption, maintenance, and supporting materials [6].

Following cost identification, learners combined all production expenses to calculate the total manufacturing cost for each product. Facilitators demonstrated how total costs could be divided by production quantity to determine unit production costs. Participants then added an appropriate profit margin to establish selling prices that balanced affordability with business profitability.

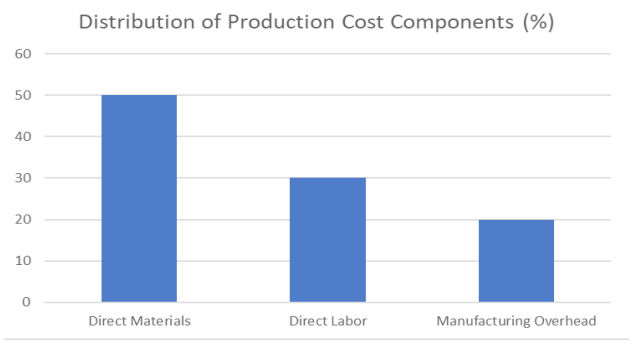

Figure 1 Distribution of Production Cost Components

Practical exercises allowed participants to complete production cost worksheets independently using realistic production scenarios. Continuous guidance ensured that learners understood each calculation step and developed confidence in applying cost determination methods. Through repeated practice, participants became increasingly capable of performing financial calculations without extensive supervision.

Table 2: Participant Competency Before and After Training

Competency Indicator	Before Training	After Training
Understanding production cost concepts	Low	High
Identifying production cost components	Moderate	High
Calculating production costs	Low	High
Determining selling prices	Moderate	High
Confidence in financial decision-making	Low	High

Benefits and Sustainability of the Community Service Program

The community service program generated educational, social, and economic benefits for participating students. Improved knowledge of production cost determination enhanced participants' ability to evaluate business expenses systematically and establish rational selling prices. These competencies contributed to stronger entrepreneurial readiness and increased confidence in managing small-scale business activities.

Beyond financial skills, the program encouraged participants to develop analytical thinking by examining relationships between production resources and product value. Students learned that successful entrepreneurship depends not only on product quality but also on effective financial management. This broader understanding supports more informed decision-making throughout business operations [7].

The sustainability of the program depends on continued practice, periodic mentoring, and collaboration among educational institutions, community organizations, and local stakeholders. Follow-up activities such as advanced entrepreneurship workshops, marketing assistance, and product development training can reinforce the competencies acquired during the initial program. Continuous evaluation also enables instructors to identify learning challenges and refine future training methods [8].

Overall, integrating production cost education with vocational skills represents an effective strategy for empowering students with disabilities. By combining financial literacy, practical learning experiences, and community engagement, similar programs can promote economic independence while preserving local cultural products such as Kandaure Toraya. The approach demonstrates that inclusive entrepreneurship education can contribute meaningfully to both individual empowerment and sustainable community development.

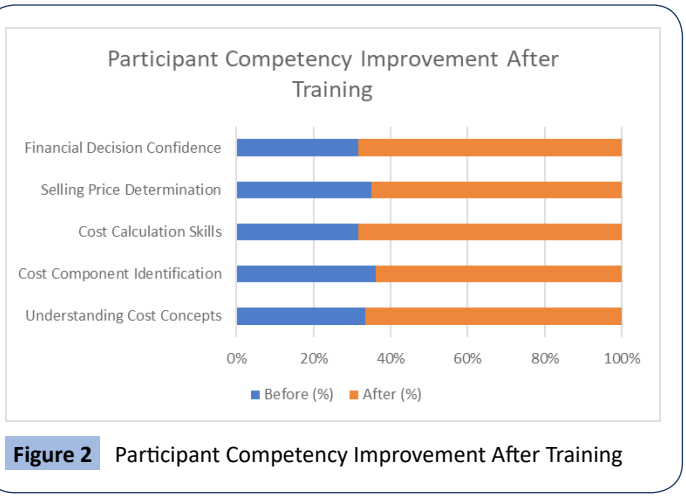

Figure 2 Participant Competency Improvement After Training

Methodology

This community service program employed a participatory training approach to improve the competency of students with disabilities in determining the production cost of Kandaure Toraya products. The activity was conducted through a structured sequence consisting of preparation, implementation, practice, and evaluation. The program targeted students with disabilities who participated in vocational learning activities related to handicraft production. Prior to implementation, the facilitators coordinated with the educational institution to identify participant needs, prepare instructional materials, and develop practical worksheets for cost calculation exercises.

The implementation stage combined interactive lectures with demonstrations and hands-on practice. Participants were introduced to the fundamental concepts of production cost, including direct materials, direct labor, and manufacturing overhead. Facilitators explained each component using simple language and practical examples drawn from the production process of Kandaure Toraya products. Demonstrations illustrated how individual cost elements contribute to the total production cost and how these costs influence the determination of selling prices [9].

Following the theoretical explanation, participants completed guided practical exercises in small groups. Each group identified production resources, classified expenses into appropriate cost categories, calculated the total production cost, and determined the unit cost for each product. Facilitators provided continuous assistance to ensure that participants understood every calculation step and were able to complete the exercises independently.

Program evaluation was conducted using observation, practical performance assessment, and comparative learning evaluation before and after the training sessions. Participants' understanding of production cost concepts, ability to identify cost components, competency in calculating production costs, and confidence in determining selling prices were assessed using structured evaluation sheets. The collected information was analyzed descriptively to evaluate improvements in participants' knowledge and practical skills following the training program.

Final Results

The implementation of the community service program demonstrated positive outcomes in enhancing the financial literacy and entrepreneurial competencies of students with disabilities. Participants showed a clearer understanding of the concept of production cost and successfully distinguished between direct materials, direct labor, and manufacturing overhead during practical exercises. Most participants were able to organize production expenses systematically and complete production cost calculations with minimal assistance by the end of the training [10].

The practical learning approach contributed significantly to participants' confidence in applying cost calculation methods to real production activities. Through repeated exercises and facilitator guidance, students demonstrated improved accuracy in estimating production costs and determining selling prices that reflected actual manufacturing expenses. The use of authentic production scenarios increased participants' engagement and facilitated better comprehension of financial concepts [11].

In addition to technical knowledge, the program strengthened participants' awareness of the relationship between cost management and business sustainability. Students recognized that accurate cost determination supports appropriate pricing decisions, improves financial planning, and contributes to the long-term viability of small-scale enterprises. The collaborative learning environment also promoted communication, teamwork, and problem-solving skills throughout the training process [12].

The community service activity achieved its primary objective of improving participants' competencies in production cost determination while fostering entrepreneurial confidence and practical financial management skills applicable to future income-generating activities.

Conclusion

The community service program successfully enhanced the ability of students with disabilities to determine the production cost of Kandaure Toraya products through a practical and inclusive training approach. By integrating theoretical instruction with guided hands-on exercises, participants developed a stronger understanding of production cost components, improved their calculation skills, and gained greater confidence in establishing appropriate selling prices.

The findings demonstrate that financial literacy can be effectively integrated into vocational education when instructional methods are adapted to participants' learning characteristics. Practical

activities, continuous mentoring, and contextual learning experiences enabled students to connect financial concepts with real production processes, thereby strengthening both entrepreneurial competence and decision-making ability.

Furthermore, the program highlights the importance of combining vocational skills with basic business management knowledge to promote economic independence among students with disabilities. Sustained mentoring, periodic refresher training, and collaboration between educational institutions and community stakeholders are recommended to reinforce the competencies developed during the program. Such initiatives can contribute to the long-term sustainability of inclusive entrepreneurship while supporting the preservation and economic value of local products such as Kandaure Toraya.

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