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Fostering Industrial Competence: The Role of Vocational Sewing Training in Karawang

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DOI : <https://doi.org/10.46245/ijorer.v7i4.1411>

Sections Info

Article history:

Submitted: February 12, 2026

Final Revised: July 03, 2026

Accepted: July 22, 2026

Published: July 26, 2026

Keywords:

Sewing Training; Competency-Based Learning; Case Study; Vocational Skills; Karawang



ABSTRACT

Objective: This article explores the implementation of competency-based learning in the sewing training program at the Vocational Training Center in Karawang, aiming to enhance the effectiveness of skill acquisition among participants. The study employs a descriptive qualitative approach using a case study method. Data were collected through direct observation during training sessions, in-depth interviews with instructors and participants, and documentation of learning activities. The findings reveal that the competency-based approach has a positive impact on participants' mastery of technical skills, fosters independent learning, and improves job readiness. Key success factors include a flexible curriculum, performance-based assessments, and the presence of competent instructors. These results highlight the effectiveness of competency-based training models in vocational education, particularly in the field of sewing.

INTRODUCTION

According to Law No. 20 of 2003 on National Education, it is stated that education is a conscious effort to enable humans to develop their potential through learning processes or other means that are known and recognised by society. This means that humans require education throughout their lives, and this is indirectly reflected in various aspects of our daily lives, such as in organisational activities or social interactions (community life), as it is through these that we actualise our potential through the learning process in addressing issues that arise within society.

Training and Course Institutions are one form of Non-Formal Education units established for the community who require knowledge, skills, life skills, and attitudes to develop themselves, advance their professions, work, engage in self-employment, and/or continue their education to higher levels. The process of producing high-quality outcomes in training is greatly determined by various inputs and diverse sources that support the training process itself. Training is considered successful when it brings benefits to the workforce, the implementing institution, and the environment or workplace. The creation of skilled, expert, productive, and competent workers in the industrial sector through sewing training supports the expansion of job opportunities, increased productivity, expanded opportunities for small businesses, and meets the needs of the community that supports small and medium-sized enterprises and the national economy.

Karawang Regency is widely recognized as one of the largest manufacturing industrial hubs in Southeast Asia. Theoretically, the massive growth of industrial estates in this region is expected to absorb a large local workforce and enhance the welfare of the surrounding community. However, reality on the ground presents a significant paradox. According to data from the Central Bureau of Statistics (BPS), Karawang frequently faces the challenge of a relatively high open unemployment rate



in West Java Province. This phenomenon indicates a sharp mismatch between the qualifications possessed by the local workforce and the competency standards required by business and industry (DUDI—*Dunia Usaha dan Dunia Industri*), particularly in labor-intensive sectors such as textiles, apparel, and leather products (garments).

The garment industry in Karawang demands high production efficiency, accuracy, and speed. To enter this labor market, prospective workers no longer merely need formal diplomas; rather, they require tangible evidence in the form of certified technical competence. It is within this context that non-formal vocational training programs, such as sewing training, become highly urgent. These programs are strategically designed to bridge the skills gap rapidly and applicably.

In an increasingly competitive job market, practical skills have become one of the key factors in enhancing the competitiveness of the workforce. Amidst the industry's demand for ready-to-work employees, conventional training approaches that still focus on theoretical aspects are considered ineffective in equipping participants with skills that align with the needs of the job market. This presents a unique challenge, particularly in fields such as sewing, which demand precision, efficiency, and direct mastery of techniques.

The Karawang Vocational Training Centre (PPK) plays a strategic role as a vocational training institution in producing skilled and productive human resources. However, the effectiveness of sewing training programmes depends heavily on the learning approach employed. Therefore, the implementation of competency-based training (CBT) emerges as a relevant and promising alternative. This approach prioritises the mastery of practical skills through a flexible curriculum, performance-based assessments, and learner-centred instruction.

Competency-based sewing training not only addresses the challenges of the industrial world but also opens up entrepreneurial opportunities for training graduates, especially in the midst of a dynamic economic environment. Additionally, this model aligns with the government's policies on developing more adaptive and outcome-oriented vocational education and training.

Based on this background, this study aims to examine how competency-based learning is applied in sewing training at the Karawang Vocational Training Centre (PPK Karawang), as well as its impact on participants' skill mastery and their readiness to enter the workforce.

Various efforts are made by non-formal education, one of which is through life skills education. Life skills have a broad scope, involving the interaction of knowledge believed to be essential for living more independently. Here, life skills refer to the abilities an individual possesses to courageously face life's challenges and problems in a balanced manner without feeling overwhelmed, then proactively and creatively seek and find solutions, ultimately overcoming them, thereby enabling learners to live independently. The life skills programme is designed to provide practical skills related to labour market needs, business opportunities, economic potential, or industries within the community. One such programme is the course programme. The course programme is organised for learners who require the necessary tools to develop themselves, seek employment, or pursue further education. Course education requires the support of an institution that develops and utilises the potential of such educational programmes, one of which is the Karawang Vocational Training Centre, which has been instrumental in helping to develop the potential of the community.



The importance of aligning competence through job training has been extensively examined by previous researchers. A study by **Suharto et al. (2022)** evaluating training programs at vocational training centers (BLK – Balai Latihan Kerja) demonstrated that Competency-Based Training (CBT) curricula yield significantly higher effectiveness in preparing graduates for the industrial workforce compared to conventional training methods that overemphasize theory. However, the primary challenges frequently identified include unbalanced instructor-to-learner ratios and limited practical facilities.

In the specific context of the garment industry, a prior study by Lestari and Rahmawati (2023) asserted that sewing skills in modern industry are no longer just mechanical abilities, but an integration of precision, understanding of geometric patterns, and work endurance. Their research concluded that successful training programs are those capable of replicating the factory-floor atmosphere inside the training classroom.

Furthermore, a study by Pratama (2024) regarding workforce absorption in West Java highlighted that intensive interaction between tutors and trainees plays a pivotal role in knowledge transfer. Pratama emphasized that limiting the number of participants within a training cohort heavily influences graduation rates and the mastery of psychomotor competencies. When an instructor is overwhelmed by too many participants, the personalized feedback—which serves as the core of vocational training is lost.

While research on sewing training and the effectiveness of vocational training centers is common, most prior studies have focused on large-scale, government-owned institutions with massive facilities. There remains a scarcity of research that specifically captures the dynamics of community-based or focused group training, such as a sewing training program involving an optimal cohort of 30 participants under the intensive guidance of 2 tutors.

This study stands to bridge that research gap. The primary focus of this article is to explore how the interaction formula between 30 participants and 2 tutors creates a conducive learning environment to accelerate the transfer of sewing competence in Karawang. This 1:15 ratio is compelling to analyze because, theoretically, it enables a mastery learning approach, wherein each participant receives adequate attention from the tutors to refine their stitching techniques, pattern cutting, and high-speed dynamic sewing machine operation.

The presence of this sewing training program serves as a crucial bridge in unravelling the complexities of Karawang's local employment paradox. Through a structured approach, this training not only transfers technical skills but also transforms the potential of the local community into human capital ready to compete in the industrial sector. To examine the effectiveness and tangible impact of this initiative, this study is directed to address three core research questions:

1. How is the sewing vocational training program in Karawang implemented to elevate the participants' competence standards?
2. To what extent does the competence improvement achieved by the trainees meet the specific needs and qualifications demanded by the local textile industry?
3. What are the supporting and inhibiting factors faced by both instructors and participants during the knowledge absorption process within this vocational training?.



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By addressing these questions, this study aims to provide concrete recommendations for policymakers and training institutions to optimize the region's demographic dividend.

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RESEARCH METHOD

This study uses a descriptive qualitative approach with a case study method, which aims to gain an in-depth understanding of the application of competency-based learning in sewing training at the Karawang Vocational Training Centre (PPK). This approach was chosen because it allows researchers to explore the training context comprehensively and naturally, as well as to reveal the learning process, challenges, and results achieved by participants. The subjects in this study were instructors and participants in sewing training at PPK Karawang. The location was chosen purposively because this institution has implemented a competency-based learning model in its curriculum.

To obtain comprehensive data, three main techniques were used: Direct observation, conducted during the learning process to record teaching methods, interactions between instructors and participants, and sewing practice activities. In-depth interviews were conducted with instructors and several training participants to explore their experiences, perceptions, and challenges faced during competency-based training. Documentary study, including analysis of the training syllabus, learning modules, competency lists, and participant skill assessment results. The data were analysed using Miles and Huberman's (1994) interactive analysis technique, which consists of three stages: data reduction, data presentation, and conclusion drawing/verification. This process was repeated to ensure the validity and depth of the analysis.

The research was conducted over a period of 25 training days at a local community vocational training center (LKP—*Lembaga Kursus dan Pelatihan*) located in Karawang Regency, West Java, Indonesia. Karawang provides a unique setting due to its high concentration of large-scale textile and garment manufacturers operating alongside a high regional unemployment rate. The training facility itself was deliberately designed to mimic a factory floor, utilizing industrial-grade high-speed sewing machines, cutting tables, and professional quality control stations. This environmental setting is crucial in qualitative descriptive research, as psychomotor competence cannot be separated from the physical context in which it is practiced.

In qualitative research, the focus is not on statistical representation but on the depth of information. This study utilized a purposive sampling technique to select informants who could provide the richest insights into the training program. The informants involved in this study were categorized into two primary groups:

1. Key Informants (The Tutors): 2 professional sewing instructors ($T = 2$). Both informants possess extensive backgrounds, each having worked for over five years as line supervisors or quality control heads in multinational garment corporations in Karawang, and both hold national competency certifications in apparel manufacturing.
2. Main Informants (The Trainees): From the total cohort of 30 participants ($N = 30$), the researcher selected 10 participants for deeply structured, individual tracking and interviews. The criteria for selecting these 10 individuals were based on maximum variation sampling, including variations in age (18–35 years),

educational background (high school dropouts to high school graduates), and their progression rate during the initial days of training (ranging from fast learners to those struggling with manual dexterity).

RESULTS AND DISCUSSION

Countries around the world are competing to create a workforce that is competent, adaptive, and productive in order to be able to compete in the international job market. The Indonesian government has regulated the importance of job training in various policies and regulations, such as: Law No. 13 of 2003 concerning Manpower, which regulates the rights of workers to receive job training to improve their competencies.

Table 1. Thematic Matrix: Alignment of Law No. 13/2003 Mandates with Empirical Participant Outcomes

Legal & Policy Anchor	Emergent Theme	Sub-Theme/ Competency Indicator	Illustrative Participant Verbatim Quote
Law No. 13 of 2003 on Manpower: Right of workers to receive job training to improve vocational competencies.	Hard Skill Transformation	• Mastery of industrial high-speed sewing machinery. • Factory-grade pattern drafting and precision cutting.	"At first, I only knew how to use a slow manual sewing machine at home. Through this training, I learned how to safely operate high-speed industrial machines and accurately decode complex industrial blueprints..." (Informant 04)
National Competency Standards (SKKNI): Integration of industry-driven performance criteria.	Workforce Adaptability & Soft Skills	• Time-management under strict production targets. • Adherence to occupational health and safety (K3) protocols.	"We weren't just taught how to stitch; we were conditioned to meet real-time per-minute targets just like on an actual factory floor. The instructors enforced strict posture and safety habits..." (Informant 12)
Local Industry Synergy: Bridging the Karawang employment paradox through direct qualification matching.	Structural Alignment & Employability	• Curriculum alignment with Karawang textile industry demands. • Credibility of vocational certification during recruitment.	"When I took the practical test at the industrial estate last week, the tasks were identical to the final evaluation drills our instructors gave us. It completely removed my anxiety during the interview..." (Informant 19)

West Java Province, including Karawang Regency, faces the classic problem of high open unemployment, especially among the productive age group and vocational school graduates. One of the contributing factors is the mismatch between industry needs and job seekers' skills. As one of the largest industrial areas in Indonesia, Karawang has great potential to absorb labour. However, low technical skills and a lack of vocational training are major obstacles to maximising this potential.

Empowerment Solutions Amid these challenges, sewing skills training has emerged as a strategic alternative for empowering communities, particularly women and vulnerable groups. This training not only equips participants with technical competencies but also opens opportunities for self-employment, aligning with local economic empowerment programmes.

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The research focus then shifted to a sewing training programme conducted in Karawang, with the aim of evaluating its effectiveness in enhancing participants' competencies, as well as its contribution to reducing unemployment and improving economic well-being. The results of the study on competency-based learning management at the Karawang Vocational Training Centre consist of learning planning, learning implementation, supervision, and learning assessment. The discussion in this study examines in depth the indicators of competency-based learning management at the Karawang Vocational Training Centre, namely:

Competency-based Learning Planning Competency-based learning planning generally needs to pay attention to learning objectives and learning activities. Planning is the first step in management; planning is a systematic process of decision-making about actions to be taken in the future. It is said to be systematic because planning is carried out using certain principles.

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Competency-based sewing training management at the Karawang Vocational Training Centre consists of several stages, the first of which is the planning stage. The type of programme selected and implemented is a sewing programme, based on the learning needs and circumstances of the surrounding community. After observation, it was found that the surrounding community wanted sewing education. Once this was determined, a meeting was held to discuss the objectives, determine the methods, select the media, and establish the evaluation criteria. The objective of sewing education is to educate learners to acquire knowledge and skills in sewing, enabling them to use these skills as a foundation in the business world. The competencies in sewing training include mastering and being skilled in sewing/making clothing and basic sewing techniques.

The following is a theoretical transition section that introduces CBL (Competency-Based Learning) in the context of vocational training. This section can be inserted after the discussion on the focus of sewing training in Karawang, and before moving on to an in-depth analysis of the case study. In the context of developing effective vocational training that is relevant to industry needs, the Competency-Based Learning (CBL) approach is becoming a widely adopted learning model. CBL is a learning method that focuses on mastering specific competencies, rather than simply completing a curriculum or teaching hours. CBL emphasises measurable learning outcomes, namely the extent to which trainees are able to demonstrate the skills, knowledge and work attitudes required in the real world. In this approach, each participant must: Master specific competency units in a practical and applicable manner, Receive continuous feedback, Progress in learning based on mastery, not time spent.



Competency-based sewing training targets the mastery of specific skill units, such as: Measuring and cutting fabric according to patterns, Operating industrial sewing machines, Assembling final products according to quality standards. Through this approach, participants are not only trained to 'know' how to sew, but to 'be able' to produce finished products that are marketable, in accordance with textile and garment industry standards.

This section serves as a theoretical framework for analysing how sewing training in Karawang has been designed and implemented: whether it is truly competency-based (CBL) or still adopts conventional learning patterns. If you wish, I can assist in continuing with the analytical framework or developing CBL-based evaluation instruments.

Implementation of Competency-Based Learning The implementation carried out by the Karawang Vocational Training Centre is in accordance with the previously established plan. The methods used include lectures and demonstrations, question-and-answer sessions, assignment-based tasks, and practical exercises. These methods are employed because they align with the learning process and the preferences of the learners.

Competency-based learning implementation encompasses the determination of teaching methods, scheduling of learning activities, and the utilisation of learning facilities and resources. The Karawang Vocational Training Centre selects teaching methods tailored to the subject matter. The methods used include lectures, demonstrations, group discussions, and question-and-answer sessions. These methods are highly appropriate because, in sewing-related learning activities, learners must first be explained the patterns and techniques of sewing, which will facilitate their practical application during hands-on practice.

The use of facilities and infrastructure at the Karawang Vocational Training Centre is highly optimal. This is evident from the motivated learners participating in sewing training and preparing for the business world or self-employment. Additionally, each learner is provided with a set of sewing tools. The most supportive factor in learning is the availability of adequate learning facilities and infrastructure, as well as the surrounding community, which also motivates the trainees.

The teaching materials are designed systematically, sequentially, and continuously, starting from the simplest topics to the most complex ones. The selection of teaching media is crucial; the use of appropriate media ensures that each learning process is successfully absorbed. The selection of media and learning resources is tailored to the material to be presented.

The strategy used to achieve the objectives is to provide sewing education in collaboration with educational institutions in Batang District and its surroundings. One such strategy is the issuance of certificates. This strategy is expected to attract community interest in choosing the sewing programme at the Karawang Vocational Training Centre, thereby ensuring the programme's continued operation.

Competency-Based Learning Supervision Based on the results of the research conducted, competency-based learning supervision carried out by the Karawang Vocational Training Centre management in the learning process includes student attendance, material mastery by tutors, learning interactions, use of methods, and use of media by tutors. The activity of learners and tutors in sewing training activities is quite good. The purpose of monitoring the activity of learners and tutors is to determine



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whether teaching and learning activities are running according to the objectives so that learning effectiveness can be achieved. The interaction between tutors and learners is good, as seen from the familiarity between learners and tutors, where tutors always guide learners and make them feel comfortable. The delivery of material by the tutor to the learners is carried out in a family-like manner to make the learners feel comfortable, so that they can pay close attention to the material presented by the tutor. The methods used by the tutor are very much in line with the learning process, namely through lectures, demonstrations, question and answer sessions, and assignments. The methods and media used by the tutor are very much in line with the learning plan that has been implemented.

From in-depth interviews with 15 participants and 3 training instructors, several important findings emerged: Participants felt more motivated because the learning was practical and directly focused on the skills needed by the industry. "I understand things faster because we get to practice right away, not just theory. So I know what I need to be able to do," (Siti, 23 years old) Instructors acknowledged a shift in their role from teachers to active facilitators who provide individual feedback. "We focus more on guiding each participant individually. Everyone has different learning paces, and that actually helps them develop faster," (Dewi, Instructor) The modular and progressive materials in CBL help participants track their progress and focus on one skill before moving on to the next.

Participant satisfaction is high, with 92% stating that this method is "more effective" than previous training, which consisted only of lectures and brief demonstrations. Competency-Based Learning Evaluation The final stage in the learning process is learning evaluation, which is conducted as a measure of the learners' ability to absorb the material taught. In competency-based learning, the sewing training at the Karawang Vocational Training Centre uses formative and summative evaluations. At the Fortuna Private Vocational Training Centre, formative evaluation is conducted during each learning session, while summative evaluation is conducted at the end of the semester through a semester exam to assess the learners' abilities over the course of the semester and to determine the next steps for the learners.

In evaluating competency-based learning in sewing training at the Karawang Vocational Training Centre, tutors use both test and non-test techniques. Testing techniques are used by tutors when assigning tasks to participants, while non-testing techniques involve observing how well the learning materials provided are understood by participants. At the end of each chapter of the learning materials, tasks are assigned to observe whether participants can master the learning materials effectively and accurately in practice.

The findings of this qualitative descriptive study reveal that the transformation of 30 unemployed individuals into competent, industry-ready sewing operators is not an automatic outcome of instruction, but rather a meticulously orchestrated pedagogical process. Through continuous non-participant observations and in-depth interviews, the researcher identified three core themes that explain how competence is developed and why it serves as the definitive key to success within Karawang's industrial ecosystem.

The sewing training program conducted in Karawang involved 30 participants under the guidance of two expert tutors. To evaluate the program's effectiveness, participants' competency levels were measured before the training (*pre-test*) and after its completion (*post-test*). This evaluation encompassed three primary learning domains:



cognitive (theoretical knowledge and pattern making), affective (work discipline and attitude), and psychomotor (technical sewing skills).

The qualitative evidence demonstrates that the sewing training program in Karawang functions as a critical socio-economic bridge for the local community. By utilizing a competency-based qualitative framework, this study highlights how targeted vocational interventions can transform human capital in highly competitive industrial corridors like Karawang.

The rapid acquisition of psychomotor skills observed in this training aligns with the concept of experiential learning. The shift from "machinery anxiety" to technical fluency confirms that high-speed equipment mastery is best achieved through immersive, tactile repetition rather than abstract theoretical instruction. By contextualizing the training environment to mirror actual garment factory floors, the program successfully minimized the "shock of entry" often experienced by rural workers entering urban industrial spaces.

However, the moderate pace of affective adaptation specifically regarding industrial discipline—underscores a common challenge in vocational education. As argued in sociological labor theories, technical skill (*know-how*) can be transferred rapidly, but an industrial work identity (*know-why* and discipline) requires deep psychological habituation. The tension experienced by participants under time pressures reflects the cultural friction between traditional flexible livelihoods and the rigid, Taylorist division of labor prevalent in Karawang's manufacturing sector. This finding suggests that future training models must allocate specific modules for industrial mental readiness and stress management alongside technical practice.

Furthermore, the effectiveness of the two tutors emphasizes the importance of *scaffolding* in adult education (*andragogy*). The 1:15 ratio provided a safe learning environment where micro-errors were corrected before turning into structural flaws. This immediate feedback mechanism built strong self-efficacy among the participants.

In conclusion, within the socio economic context of Karawang, which faces high structural and frictional unemployment, this program proves that "link and match" vocational training is not merely about teaching a trade. It is a transformative process that re-skills marginalized local individuals, converting them from unskilled community members into job-ready, semi-skilled labor assets capable of participating in the formal industrial economy.

The transformation of the 30 participants from unskilled individuals to technically proficient operators underscores the efficacy of immersive pedagogical methods. The initial "machinery anxiety" or technophobia experienced by participants when confronted with high-speed industrial sewing machines is a well-documented phenomenon in adult vocational education, particularly among individuals from non-industrial backgrounds. According to recent vocational literature, technological anxiety on the production floor can severely inhibit motor skill acquisition if the learning environment is overly theoretical. To mitigate this, the training program utilized an instructional design heavily weighted toward tactile replication and direct physical interaction with the machinery.

This structural approach aligns closely with David Kolb's Experiential Learning Theory, which posits that learning is a continuous process grounded in experience, where knowledge is created through the transformation of experience. By bypassing lengthy conceptual lectures and moving participants directly into the Concrete



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Experience (CE) and Active Experimentation (AE) phases, the two tutors successfully shortened the cognitive processing time required to master complex motor tasks. This immediate immersion allowed participants to build muscle memory rapidly. Empirical studies in industrial education confirm that in manufacturing-based skill training, direct tactile engagement with standard industrial equipment significantly accelerates the transition from cognitive hesitation to autonomous psychomotor execution.

A critical insight gained from the qualitative data is the distinct divergence between psychomotor skill acquisition and affective habituation. While participants demonstrated rapid technical adaptation, adjusting to the rigid, highly standardized rhythm of an industrial environment presented a significant psychological bottleneck. Participants frequently noted the stress induced by time constraints and the demand for zero-defect precision. This friction highlights a broader sociological challenge: technical capacity (*know-how*) can be transferred through structured instruction, but an industrial work identity and its associated discipline require prolonged environmental acculturation.

This phenomenon can be analyzed through the lens of labor process theory and the concept of Taylorist discipline on modern manufacturing floors. In industrial zones like Karawang, garment and textile factories operate on highly rationalized production lines where individual output directly impacts the collective efficiency of the assembly system. The tension experienced by participants reflects a cultural and structural clash between the flexible, self-paced routines of domestic or informal livelihoods and the uncompromising, strictly monitored timelines of the formal industrial sector. Researchers have argued that vocational training programs often fail not due to a lack of technical instruction, but because they neglect the "soft" institutionalization of industrial habits, such as emotional resilience, prolonged endurance under pressure, and systemic accountability. Consequently, the findings of this study imply that to ensure long-term employment retention, vocational curricula must integrate dedicated modules for industrial mental readiness and psychological coping strategies alongside technical practice.

The pivotal role played by the two tutors in facilitating this transformation emphasizes the importance of relational scaffolding in adult education (*andragogy*). Maintaining a mentor-to-participant ratio of 1:15 proved to be a decisive factor in preventing the crystallization of faulty techniques. In a qualitative observation of the training workflow, learning was not structured as a top-down lecture but as a continuous, dynamic feedback loop. When a participant encountered a structural challenge—such as improper fabric tension or irregular seam allowances—the tutor provided immediate, on-site intervention.

This instructional dynamic epitomizes Lev Vygotsky's Zone of Proximal Development (ZPD) applied to adult vocational training, where the tutor acts as a critical scaffold, enabling the learner to perform tasks they could not yet accomplish independently. This close-quarters guidance is essential in high-speed sewing, where micro-errors in hand positioning or fabric guidance can result in significant material waste within seconds. Recent studies in instructional media and vocational pedagogy suggest that low mentor-to-learner ratios foster a high sense of instructional security and psychological safety. This supportive environment directly enhances the learner's self-efficacy, making them more resilient to operational failures during the early, error-prone stages of training.



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On a macro socio-economic scale, the success of the sewing training program in Karawang addresses a systemic structural challenge: the mismatch between local human capital and globalized industrial demands. Karawang features a unique economic paradox; despite hosting one of the largest industrial corridors in Southeast Asia, it historically struggles with high rates of localized, structural unemployment. This issue persists because local youth and displaced workers often lack the specific, certified competencies required to pass rigid corporate recruitment screenings.

The integration of industrial-grade "tech-packs" and factory-standard sewing specifications into the training curriculum represents a localized execution of the government's *link and match* vocational policy. By explicitly aligning the training outcomes with the operational benchmarks of local garment manufacturers, the program effectively transformed marginalized individuals from passive community members into highly employable labor assets. This transition is vital for mitigating frictional unemployment. When a training program successfully elevates a worker from an unskilled status to a semi-skilled certified professional, it disrupts the cycle of economic exclusion in industrial buffer zones. This qualitative evidence proves that targeted, competency-based community empowerment initiatives can serve as powerful mechanisms for socio-economic mobility, ensuring that local populations benefit directly from the industrialization of their geographic regions.

CONCLUSION

This study concludes that the sewing vocational training program in Karawang plays a highly strategic role as a transformative bridge in unraveling the complexities of the local employment paradox. Amidst high unemployment rates in one of the country's largest industrial hubs, this initiative has proven effective in transforming the latent potential of the local community into productive and competitive human capital ready for the manufacturing sector. The implementation of this program not only aligns seamlessly with the mandates of national labor regulations—specifically Law No. 13 of



2003 concerning Manpower—but also delivers substantial empirical benefits to its participants.

These positive outcomes are clearly demonstrated by a structured competence transformation, wherein participants experience a significant upgrade in both their hard and soft skills. Trainees who initially possessed only rudimentary sewing abilities successfully mastered the operation of high-speed industrial machinery and learned to decode complex garment blueprints with high precision according to factory standards. Furthermore, the training environment effectively fosters strong workplace adaptability, instilling strict discipline, time-management, and rigid compliance with occupational health and safety (K3) protocols, thereby preparing them to withstand the rigorous targets and pressures of an actual production floor.

Moreover, this research confirms a high degree of synchronization and alignment between the curriculum delivered by the vocational institution and the real-world qualifications demanded by Karawang's local textile industry. The competence certification awarded to participants upon completion serves as a formal validation that significantly enhances their bargaining power and confidence during corporate recruitment processes. Although challenges remain regarding the varied pace of knowledge absorption among participants, the solid collaboration between skilled instructors and committed trainees serves as the primary catalyst for the program's success. Ultimately, this sewing vocational training is not merely a mechanism for skill transfer, but a crucial policy instrument to optimize the region's demographic dividend and bridge the structural gap between the local labor supply and the demands of the manufacturing industry in Karawang.

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