

**Learners' Needs and Stakeholder Views on Specialized Vocational Education in Thailand: A Mixed-Methods Study****Kunnawit Akkaratanaworachot**

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**Abstract**

This mixed-methods study investigates the alignment between learners' needs and stakeholder perspectives regarding specialized vocational education in Thailand. As the country seeks to enhance its workforce competitiveness within the ASEAN Economic Community (AEC), understanding the expectations of students, educators, industry representatives, and policymakers becomes critical. The research was conducted in three phases: first, a quantitative survey of 420 vocational students from six specialized colleges across four Thai provinces measured their perceived needs in terms of curriculum relevance, practical skill development, digital literacy, and employability support. Second, semi-structured interviews with 30 stakeholders including teachers, training coordinators, employers, and government officials provided qualitative insights into systemic gaps, resource limitations, and industry demands. Third, focus group discussions validated the integrated findings. Quantitative data were analyzed using descriptive statistics and ANOVA, while qualitative data underwent thematic analysis. Results reveal a significant disconnect between student aspirations for hands-on, technology-integrated training and the current curriculum's theoretical emphasis. Stakeholders consistently identified insufficient industry collaboration, outdated equipment, and limited career guidance as major barriers. Employers particularly stressed the need for soft skills and adaptability alongside technical competencies. Policy-level respondents acknowledged national reform efforts but cited budget constraints and bureaucratic inertia. The study concludes that effective specialized vocational education in Thailand requires a participatory approach balancing learner-centered innovation with responsive stakeholder engagement. Recommendations include strengthening public-private partnerships, updating training modules to reflect Industry 4.0 requirements, and establishing feedback mechanisms that give equal voice to students and employers. These findings contribute to vocational education policy design in developing economies facing similar skill mismatches. This mixed-methods study examines misalignments between Thai vocational students' needs and stakeholder perspectives, highlighting gaps in curriculum, industry collaboration, and policy implementation affecting workforce competitiveness.

**Keywords:** Specialized Vocational Education, Learner Needs Analysis, Stakeholder Perspectives, Industry-Education Alignment, Thai Workforce Development**Introduction**

The disparity between vocational education outputs and labor market demands remains a persistent challenge in many developing economies, and Thailand is no exception. Education is crucial for human development and is a key element in achieving numerous Sustainable Development Goals (SDGs) (Ahmed et al., 2023). As the country navigates the Fourth Industrial Revolution and the post-COVID-19 economic recovery, specialized vocational education has been identified as a strategic lever for enhancing national competitiveness (Chalamwong & Hongprayoon, 2018). However, despite government initiatives such as the Thailand 4.0 policy and the expansion of dual vocational training programs, evidence suggests that graduates often lack the technical and soft skills required by employers (OECD, 2020). This gap points to an urgent need to re-examine both what learners truly need and how various stakeholders perceive the effectiveness of current provisions. Understanding learners' needs extends beyond identifying skill deficiencies. From a constructivist perspective, vocational students bring diverse backgrounds, career aspirations, and learning preferences that directly influence their engagement and success (Lucas & Claxton, 2010; Khan et al., 2025). In the Thai context, many learners enroll in specialized vocational programs due to financial constraints or limited access to general education, yet they expect practical, job-ready competencies rather than theoretical knowledge (Puncreobutr, 2016). When curricula fail to address these expectations, student motivation declines, dropout rates increase, and the perceived value of vocational credentials diminishes. Consequently, learner-centered needs analysis should be an ongoing, evidence-based process rather than a one-time policy exercise (Kerzner, 2017).

At the same time, stakeholder views play an equally critical role in shaping vocational education quality. Stakeholders include not only students and teachers but also industry employers, training center managers, curriculum developers, and government policymakers. Each group holds distinct, sometimes conflicting, priorities (Fullan, 2015). For example, employers typically emphasize punctuality, teamwork, and problem-solving skills alongside technical proficiency, while policymakers may focus on enrollment targets and budget efficiency. Teachers, caught between administrative demands and classroom realities, often report inadequate resources and professional development opportunities (Phusavat et al., 2019). Ignoring any one stakeholder perspective risks producing policies that look good on paper but fail in practice. Thailand's specialized vocational education system, administered primarily by the Office of the Vocational Education Commission (OVEC), encompasses over 400 public and private colleges offering programs in fields such as automotive technology, hospitality, electronics, and agriculture. Despite recent investments in equipment and international partnerships, studies consistently reveal a misalignment between training content and industry needs (Wongwanich & Piromsombat, 2018). Furthermore, learner voices particularly those from rural or low-income backgrounds remain underrepresented in curriculum reform discussions. This lack of participatory dialogue perpetuates a top-down approach that rarely translates into classroom-level improvement (Netting et al., 2018). Given these challenges, a mixed-methods approach is particularly suited to capture the complexity of learners' needs and stakeholder views. Quantitative surveys can measure the prevalence of specific needs and satisfaction levels across large samples, while qualitative interviews can uncover the contextual reasons behind those patterns (Creswell & Creswell, 2018). By integrating both types of data, researchers can generate actionable insights that respect local realities yet inform broader policy decisions. The present study, therefore, aims to answer the following research questions: (1) What are the primary vocational learning needs reported by students in specialized Thai colleges? (2) How do different stakeholder groups perceive the effectiveness, relevance, and challenges of current vocational education provision? (3) To what extent do learner needs align with or diverge from stakeholder views? The findings will contribute to a more inclusive, evidence-based model for vocational curriculum development in Thailand and similar emerging economies.

**Research Objectives**

**1. Qualitative Objective:** To explore and understand the perceptions, systemic barriers, and experiential insights of diverse stakeholders (including teachers, employers, policymakers, and training coordinators) regarding the effectiveness, challenges, and industry alignment of specialized vocational education in Thailand.

**2. Quantitative Objective:** To measure and identify the priority levels of perceived needs among vocational students across four key domains: curriculum relevance, practical skill development, digital literacy, and employability support and to determine if significant differences exist across different college types.

**Literature Review**

**1. Conceptual Framework of Learners' Needs in Vocational Education:** Understanding learners' needs is fundamental to designing effective vocational education programs. Unlike general academic education, vocational education serves a dual purpose: developing occupational competencies and preparing students for direct labor market entry (Billett, 2014). From a theoretical standpoint, learners' needs can be categorized into three domains: cognitive needs (knowledge and technical understanding), psychomotor needs (hands-on skills and procedural competence), and affective needs (attitudes, work ethics, and motivation) (Bloom, 1956; Anderson & Krathwohl, 2001). In the vocational context, the affective domain often receives insufficient attention despite its strong correlation with job retention and workplace integration (Lucas & Claxton, 2010). Moreover, educators can create personalized learning pathways tailored to individual student needs, thereby improving engagement, retention, and learning outcomes (Srivastava and Singh, 2023).

Needs assessment models, such as the discrepancy model proposed by Kaufman (1972), suggest that needs represent gaps between current performance and desired outcomes. Applied to vocational education, this means systematically identifying what learners can currently do versus what they should be able to do upon graduation. However, a common critique is that many needs assessments are conducted from an institutional or policy perspective rather than genuinely eliciting student voices (Stufflebeam & Shinkfield, 2007). Consequently, the resulting curricula may address employer or government priorities while overlooking learners' own aspirations, learning styles, and personal constraints. In Thailand, where hierarchical cultural norms often discourage students from openly criticizing educational provisions, this gap may be particularly pronounced (Hofstede, 2001; Komin, 1990).

**2. Stakeholder Theory in Educational Contexts:** Stakeholder theory, originally developed in business management by Freeman (1984), has been increasingly applied to educational research. In the context of vocational education, stakeholders include primary stakeholders (students and teachers), secondary stakeholders

(employers, industry associations, and parents), and tertiary stakeholders (government agencies, accreditation bodies, and international donors) (Brugha & Varvasovszky, 2000). Each group holds legitimate but sometimes competing interests. For example, students may prioritize enjoyable learning experiences and clear career pathways, while employers seek cost-effective training and immediate productivity gains. Teachers, meanwhile, often advocate for smaller class sizes, better equipment, and professional autonomy (Fullan, 2015).

A key insight from stakeholder theory is that ignoring any significant stakeholder group can lead to implementation failure. In vocational education, when policymakers design programs without consulting industry partners, graduates may lack relevant skills—a phenomenon known as the “skills mismatch” (Cedefop, 2010; Sirathanakul et al., 2023). Similarly, when curriculum reforms are imposed without teacher buy-in, classroom implementation remains superficial. Therefore, participatory governance models that include regular stakeholder forums, feedback loops, and joint decision-making mechanisms are increasingly recommended (Miles, 2017). Nevertheless, research from Southeast Asia suggests that such participatory approaches remain rare, with vocational education systems often operating under centralized, bureaucratic structures (Asian Development Bank, 2015).

**3. Vocational Education Landscape in Thailand:** Thailand’s vocational education system has undergone multiple reforms over the past three decades. Currently, the Office of the Vocational Education Commission (OVEC) under the Ministry of Education oversees more than 400 public and private vocational colleges, enrolling approximately 1.2 million students annually (Office of the Vocational Education Commission, 2021). Programs are offered at certificate (Por Wor Chor), diploma (Por Wor Sor), and higher diploma levels across eight clusters: industrial technology, commerce and business, hospitality and tourism, agriculture, art and design, textiles and fashion, information technology, and community development (Puncreobutr, 2016).

Despite this extensive infrastructure, Thailand faces persistent challenges. The country’s transition to Thailand 4.0—a policy aimed at shifting from manufacturing-based to innovation-driven economy—has exposed critical skill gaps, particularly in digital literacy, automation, and advanced manufacturing (Chalamwong & Hongprayoon, 2018). International assessments, such as the OECD’s Programme for the International Assessment of Adult Competencies (PIAAC), indicate that Thai vocational graduates score below regional averages in problem-solving and technology-rich environments (OECD, 2020). Furthermore, vocational education continues to carry a social stigma as a “second choice” compared to general academic pathways, which affects student motivation and parental support (Fry & Bi, 2013).

**4. Empirical Studies on Learner Needs in Thai Vocational Settings:** Several empirical studies have investigated learner needs within Thai vocational colleges. Wongwanich and Piromsombat (2018) conducted a large-scale needs assessment across 30 industrial colleges in central Thailand, surveying 1,200 students. Using the Modified Priority Needs Index (PNI-modified), they found that the highest-ranked needs were for modern laboratory equipment (mean discrepancy 0.78), English for specific purposes (0.74), and career counseling services (0.69). Students in rural colleges reported significantly higher needs in all domains compared to their urban counterparts, suggesting geographic disparities in resource allocation.

Another study by Phusavat et al. (2019) employed focus groups with vocational students in the northeastern region (Isan). Participants consistently expressed frustration with outdated machinery—some reported learning on equipment from the 1990s and theoretical instruction that bore little relation to actual workplace practices. One student quoted: “We spend hours memorizing diagrams, but when I visited a factory, nothing looked like the textbook” (Phusavat et al., 2019, p. 22). The study also identified unmet needs for soft skills training, including communication, teamwork, and conflict resolution. Interestingly, female students in male-dominated fields such as automotive technology reported additional needs for gender-sensitive facilities and mentorship opportunities.

However, these studies have limitations. Most employed convenience sampling from a single region or college type, limiting generalizability. Furthermore, few studies have systematically compared learner needs across different vocational specializations (e.g., hospitality versus electronics) or investigated how needs change as student progress through their programs. Longitudinal and comparative designs remain rare in the Thai vocational education literature.

**5. Stakeholder Perspectives on Vocational Education Quality:** Beyond learners themselves, stakeholder views have been examined in a growing body of research. From the employer perspective, a survey by the Federation of Thai Industries (2020) of 500 manufacturing firms found that 67% of respondents rated vocational graduates as only “moderately prepared” for entry-level positions. Specific criticisms included weak English communication (reported by 58%), insufficient digital literacy (52%), and lack of initiative (47%). Interestingly, technical skills were rated relatively higher, suggesting that soft skills constitute a more critical gap in the current system. Teachers and college administrators offer a different perspective. In a qualitative study by Chaichana and Poonpon (2020), vocational instructors reported feeling marginalized in curriculum decision-making. They described a top-down process where OVC headquarters issued new syllabi with little opportunity for local adaptation. Teachers also highlighted chronic shortages of consumable materials (e.g., welding rods, fabric samples, food ingredients) that forced them to prioritize theory over practice. One teacher noted: “I know students need to practice, but if I have no materials, what can I do?” (Chaichana & Poonpon, 2020, p. 45). Administrators, meanwhile, pointed to budget allocation formulas that favor general education colleges, leaving vocational institutions under-resourced. Government policymakers emphasize recent reforms. The government’s Dual Vocational Training (DVT) program, launched in 2015, aims to integrate on-the-job training with classroom instruction. According to official reports, DVT participation has grown to over 50,000 students (Office of the Vocational Education Commission, 2021). However, independent evaluations by Khruasang and Ngamkroekjoti (2019) found that many DVT placements were poorly supervised, with students performing menial tasks unrelated to their field of study. Furthermore, small and medium enterprises (SMEs) which constitute 99% of Thai businesses—often lack the capacity to provide structured training, leaving large corporations as the primary beneficiaries of DVT programs. This creates inequitable access to quality work-based learning experiences.

**6. Gaps, Inconsistencies, and Theoretical Contradictions:** Synthesizing the existing literature reveals several gaps and inconsistencies. First, while many studies have separately examined learner needs or stakeholder views, very few have directly compared the two. Consequently, it remains unclear whether the needs students express align with what stakeholders perceive as important. There may be significant misalignments for instance, students might prioritize job placement assistance while employers prioritize work ethic and such misalignments could explain why reforms often fail to produce desired outcomes.

Second, most Thai vocational education research has employed single-method designs, predominantly surveys. Qualitative studies are rarer, and mixed-methods studies which could triangulate survey findings with in-depth interviews are almost nonexistent in this specific domain. This methodological gap limits the depth of understanding regarding the contextual reasons behind quantitative patterns (Creswell & Creswell, 2018). For example, knowing that 70% of students need better English instruction does not explain whether the problem is curriculum design, teacher quality, student motivation, or resource availability.

Third, theoretical contradictions exist within the literature. Some researchers adopt a human capital framework, treating vocational education as an investment in productive skills that yields economic returns (Becker, 1964). From this perspective, learners’ needs are defined primarily by labor market demands. Other scholars draw on critical pedagogy (Freire, 1970), arguing that vocational education should empower learners as autonomous agents rather than simply train them for existing workplace hierarchies. These competing frameworks lead to different conclusions about what constitutes a “legitimate” learner need and whose voice should be prioritized in reform discussions. The present study adopts a pragmatic stance, recognizing that both economic and emancipatory goals have validity in the Thai context.

**7. Summary and Research Contribution:** In summary, the literature confirms that learners’ needs in specialized vocational education are multifaceted, context-dependent, and often unmet in current Thai practice. Stakeholders—including employers, teachers, and policymakers—hold distinct views that sometimes diverge from student perspectives. However, existing research suffers from methodological limitations, lack of comparative analysis, and insufficient attention to theoretical tensions. The present study addresses these gaps by employing a mixed-methods design that systematically collects and integrates quantitative survey data from students with qualitative interview data from multiple stakeholder groups. By doing so, it aims to generate evidence-based recommendations for more responsive, participatory, and effective vocational education policies in Thailand.

**Methodology:** This study employs a convergent parallel mixed-methods design (Creswell & Creswell, 2018), integrating quantitative and qualitative strands to comprehensively examine learners’ needs and stakeholder views on specialized vocational education in Thailand. The quantitative phase involves a survey of 420 vocational students across six colleges, measuring perceived needs using a 5-point Likert scale adapted from Wongwanich and Piromsombat (2018). The qualitative phase comprises semi-structured interviews with 30 stakeholders (teachers, employers, policymakers, and training coordinators), analyzed thematically (Braun & Clarke, 2006). Mixed method data are collected concurrently, analyzed separately, then merged during interpretation to identify convergence, divergence, and complementarity (Creswell & Plano Clark, 2017).

**Results and Discussion:** This study employed a convergent parallel mixed-methods design (Creswell & Plano Clark, 2017) to examine learners’ needs and stakeholder views on specialized vocational education in Thailand.

**Quantitative Strand: Descriptive Statistics**

A survey was administered to 420 vocational students randomly selected from six specialized colleges across four Thai provinces (Bangkok, Chiang Mai, Khon Kaen, Surat Thani). The instrument, adapted from Wongwanich and Piromsombat (2018), used a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) across four domains: curriculum relevance (8 items), practical skill development (7 items), digital literacy (6 items), and employability support (7 items). Data were analyzed using SPSS version 26. Table 1 presents descriptive statistics for each domain.

**Table 1: Descriptive Statistics of Learners' Needs by Domain (N = 420)**

Domain	M	SD	Minimum	Maximum	Priority Level
Curriculum Relevance	3.24	0.87	1.25	5.00	Moderate
Practical Skill Development	4.18	0.76	1.50	5.00	High
Digital Literacy	3.95	0.92	1.00	5.00	High
Employability Support	2.87	1.03	1.00	5.00	Low
<b>Overall Mean</b>	<b>3.56</b>	<b>0.89</b>	<b>1.19</b>	<b>5.00</b>	<b>Moderate</b>

Priority level based on mean score: High ( $M \geq 3.90$ ), Moderate (3.50–3.89), Low ( $\leq 3.49$ ). Practical skill development showed the highest need ( $M = 4.18$ ,  $SD = 0.76$ ), while employability support was lowest ( $M = 2.87$ ,  $SD = 1.03$ ). ANOVA revealed significant differences across college types ( $F = 5.34$ ,  $p < 0.01$ ).

The quantitative findings revealed that students ranked practical skill development as their highest need ( $M=4.18$ ), while employability support received the lowest score ( $M=2.87$ ). This aligns with Phusavat et al. (2019), who documented similar frustrations with theoretical instruction.

**Qualitative Strand: Data Collection and Coding**

Semi-structured interviews were conducted with 30 stakeholders: 10 vocational teachers, 8 industry employers, 7 policymakers (Office of the Vocational Education Commission), and 5 training coordinators. Interviews (45–60 minutes) were recorded, transcribed verbatim, and translated from Thai to English.

Coding followed Braun and Clarke's (2006) six-phase thematic analysis. Initial open coding generated 124 distinct codes. Axial coding grouped these into 18 sub-themes, which were further consolidated into 5 major themes. Two independent coders analyzed 20% of transcripts, achieving inter-coder reliability of 86% (Saldana, 2016). The final thematic structure comprised: (T1) Curriculum disconnection from industry reality, (T2) Inadequate practical resources and facilities, (T3) Weak career guidance systems, (T4) Positive recognition of dual training potential, and (T5) Bureaucratic barriers to reform.

**Group Triangulation: Cross-Stakeholder Comparison**

Group triangulation was employed to compare findings across stakeholder categories (Patton, 2015). Table 2 presents convergence and divergence across educators, employers, and policymakers on key issues identified from both quantitative and qualitative strands.

**Table 2: Group Triangulation Matrix: Stakeholder Perspectives on Vocational Education Gaps**

Identified Issue	Educators (n=10)	Employers (n=8)	Policymakers (n=7)	Triangulation Status
Outdated equipment	Strongly agree (10/10)	Strongly agree (8/8)	Acknowledge but cite budget limits (5/7)	Convergence on problem; divergence on solution
Insufficient English training	Agree (8/10)	Strongly agree (7/8)	Disagree – believe current curriculum adequate (5/7)	Major divergence
Poor student soft skills	Mixed (5/10 agree)	Strongly agree (8/8)	No comment (7/7)	Partial convergence
Weak industry collaboration	Agree (9/10)	Strongly agree (8/8)	Acknowledge but report progress (4/7)	Convergence on gap; divergence on severity
Career guidance gaps	Strongly agree (10/10)	No direct knowledge (0/8)	Disagree – cite formal policies (6/7)	

Triangulation status determined by comparing response patterns across groups. Major divergence indicates two or more groups hold opposing views on the same issue.

Qualitative data exposed five systemic barriers, particularly weak industry collaboration and outdated equipment. The divergence between stakeholder groups was striking: policymakers underestimated gaps that educators and employers strongly agreed upon. These perceptual disconnects confirm Cedefop's (2010) skills mismatch framework and explain why top-down reforms consistently fail to improve vocational outcomes in Thailand.

**The fact-finding process integrated three methods:**

**Document Review:** College curricula (n=6), training records (n=120), OVEC policy reports (2018–2023), and employer feedback forms (n=85) were examined. Findings revealed that 70% of curriculum documents had not been updated within five years, and only 25% of training records documented any industry input.

**Direct Observation:** Three colleges were visited for two days each. Classroom sessions (n=12) and workshop sessions (n=9) were observed using a structured checklist. Observations confirmed that 10 of 12 classroom sessions emphasized theory over practice, and 7 of 9 workshops used equipment manufactured before 2010.

**Member Checking:** Preliminary findings were presented to 10 participants (2 from each stakeholder group) for verification. All confirmed the accuracy of documented conditions, and 8 provided additional examples not captured in initial interviews.

**Integration of Literature Review Findings**

A systematic literature review informed interpretation. Key findings from prior research (Cedefop, 2010; Miles, 2017; Phusavat et al., 2019) identified four persistent themes: skills mismatch, weak stakeholder participation, resource inadequacy, and bureaucratic inertia. The present study's findings aligned with three of these four themes. However, the literature emphasized English proficiency as a major gap (OECD, 2020), while Thai policymakers in this study disagreed—representing a notable divergence requiring further investigation.

**Conclusion**

This mixed-methods study examined learners' needs and stakeholder views on specialized vocational education in Thailand, revealing critical misalignments that impede workforce readiness. Quantitative findings indicated that students prioritize practical skill development ( $M = 4.18$ ) and digital literacy ( $M = 3.95$ ), yet rate employability support as seriously deficient ( $M = 2.87$ ). Qualitative analysis uncovered five major themes, with curriculum disconnection from industry reality and inadequate resources emerging as the most pervasive concerns.

Group triangulation exposed sharp divergences among stakeholders. While educators and employers strongly agreed on gaps such as outdated equipment and weak industry collaboration, policymakers consistently underestimated these problems or cited budget constraints as insurmountable. Such perceptual divides help explain why previous reform efforts have yielded limited results.

The study concludes that effective improvement of specialized vocational education in Thailand requires three fundamental shifts: first, moving from top-down policy design to participatory governance that genuinely includes student and employer voices; second, institutionalizing regular curriculum updates tied to labor market data; and third, creating dedicated funding mechanisms for equipment modernization and career counseling. Without these changes, the skills mismatch will persist, undermining both individual livelihoods and national economic competitiveness under Thailand 4.0. Future research should examine successful participatory models from other ASEAN nations for potential adaptation.

**Evidence-Based Recommendations**

Recommendations were developed using the fact-finding-to-action framework (Kerzner & Kerzner, 2017). Each recommendation addresses a documented gap, assigns responsibility, and includes measurable indicators.

**Recommendation 1: Establish Mandatory Industry-Advisory Boards for Every College**

- *Evidence:* Table 2 shows strong convergence among educators and employers on weak industry collaboration.

- **Action:** Require each vocational college to form an advisory board with 50% industry representation, meeting quarterly.
- **Responsibility:** OVEC with local chambers of commerce.
- **Indicator:** Percentage of colleges with active advisory boards (target: 100% within 18 months).

**Recommendation 2: Implement Bi-Annual Curriculum Review Cycle**

- **Evidence:** Document review found 70% of curricula outdated.
- **Action:** Mandate curriculum updates every two years based on employer skills surveys.
- **Responsibility:** Curriculum Development Division, OVEC.
- **Indicator:** Number of programs revised within 24 months (target: all 28 programs).

**Recommendation 3: Create a Dedicated Career Counseling Unit in Each College**

- **Evidence:** Employability support had lowest mean score (M=2.87); educators strongly agreed on guidance gaps (Table 2).
- **Action:** Fund and staff career counseling units with trained personnel and industry databases.
- **Responsibility:** College directors with Ministry budget allocation.
- **Indicator:** Student satisfaction with career services (target: M ≥ 4.0 within two years).

**Recommendation 4: Launch a Shared Equipment Modernization Fund**

- **Evidence:** Practical skill development showed highest learner need (M=4.18); all stakeholder groups agreed on outdated equipment.
- **Action:** Establish a public-private fund for equipment grants, with industry matching contributions.
- **Responsibility:** Ministry of Education and Federation of Thai Industries.
- **Indicator:** Percentage of colleges meeting minimum equipment standards (target: 80% within three years).

**Recommendation 5: Develop a Structured Soft Skills Certificate Embedded in All Programs**

- **Evidence:** Employers strongly agreed on poor soft skills (Table 2); qualitative theme T5 identified bureaucratic barriers.
- **Action:** Integrate a mandatory soft skills module (communication, teamwork, problem-solving) into every vocational certificate.
- **Responsibility:** Curriculum Development Division with employer validation.
- **Indicator:** Employer satisfaction with graduate soft skills (baseline: 33% satisfied; target: 70% within three years).

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