



Evaluation of the Center of Excellence Vocational High School Program in Mataram City

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<http://dx.doi.org/10.18415/ijmmu.v13i4.7418>

Abstract

The Vocational High School Center of Excellence program is a strategic government policy aimed at transforming vocational education to enhance the relevance of graduates to the needs of the business world and industrial world. However, the effectiveness of the program's implementation requires systematic evaluation, particularly at the regional level. This study aims to evaluate the implementation of the Vocational High School Center of Excellence program in Mataram City, examined through the aspects of planning, execution, supervision, and the achievement of program objectives using a Goal-Oriented Evaluation approach. This research employs a qualitative evaluative approach, with the research subjects consisting of three State Vocational High Schools implementing the Vocational High School Center of Excellence in Mataram City. Data collection techniques include in-depth interviews, observation, and documentation studies. Data analysis was conducted through the stages of data reduction, data display, and conclusion drawing. The results of the research indicate that program planning has referred to the national Vocational High School Center of Excellence policy; however, the involvement of the business world and industrial world in the planning stage is still limited. Program implementation has encouraged industry-based learning and teaching factories, but it is not yet optimal due to limitations in facilities, teacher readiness, and consistency of implementation. Furthermore, program supervision has not been implemented systematically and sustainably. In general, the objectives of the Vocational High School Center of Excellence program in Mataram City have been partially achieved. This research recommends strengthening vocational education management, increasing industrial partnerships, and establishing a goal-oriented monitoring and evaluation system.

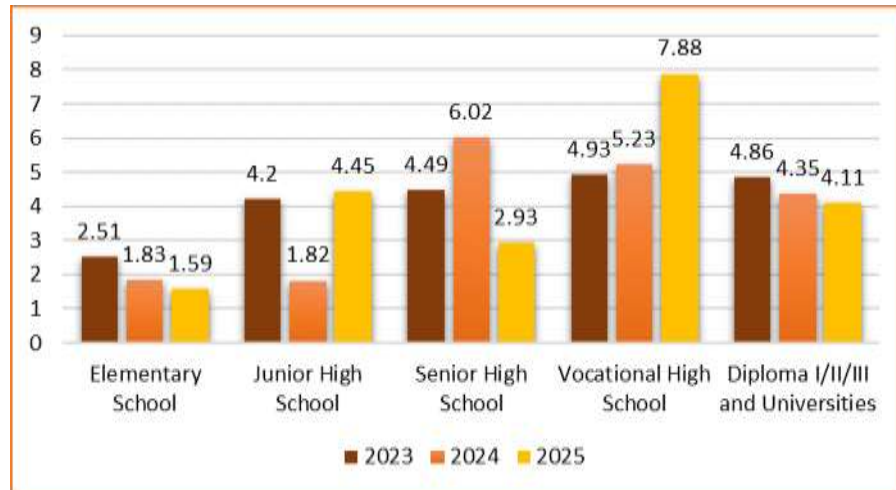
Keywords: *Vocational High School Center of Excellence; Program Evaluation; Goal-Oriented Evaluation*

Introduction

Vocational education is one of the strategic pillars in national human resource development because it is oriented toward the mastery of work skills relevant to the needs of the business world and

industrial world. At the secondary education level, Vocational High Schools are designed to produce graduates who are ready for work, adaptive to technological changes, and competitive in the labor market. This is in line with the mandate of Law Number 20 of 2003 concerning the National Education System, which emphasizes that vocational education aims to prepare students to work in specific fields.

Nevertheless, empirical reality shows that graduates of Vocational High Schools still face serious challenges in entering the world of work. The following figure presents data on the Open Unemployment Rate based on education level for the period of February 2023 to February 2025. The data indicates a significant difference in unemployment rates between education levels, while simultaneously illustrating the labor dynamics in the Province of West Nusa Tenggara over the last three years.



(Source: Official Statistics Report on the Employment Status of West Nusa Tenggara, 2025)

Figure 1. Open Unemployment Rate by Education Level

Data from the Central Statistics Agency shows that the Open Unemployment Rate for Vocational High School graduates is consistently at the highest position compared to graduates of other educational levels. This condition indicates a mismatch between the competencies of Vocational High School graduates and the real needs of the world of work (Badan Pusat Statistik Provinsi NTB, 2025). This phenomenon not only reflects issues regarding the quality of graduates but also indicates systemic weaknesses in the management of vocational education, ranging from planning and execution to program supervision.

Various studies reveal that the low absorption of Vocational High School graduates is influenced by several factors, including curricula that are not yet fully aligned with industrial needs, limited practical facilities and infrastructure, low intensity of partnerships with the business world and industrial world, and sub-optimal competence of vocational teachers in implementing industry-based learning (Raihani, 2024). Furthermore, the management of Vocational High Schools still tends to be oriented toward administrative fulfillment rather than the achievement of strategic vocational education goals.

Responding to these issues, the government, through the Freedom to Learn policy, launched the Vocational High School Center of Excellence program as an effort for comprehensive vocational education transformation. The Vocational High School Center of Excellence program is designed to strengthen the link and match between Vocational High Schools and the industrial world through the strengthening of industry-based curricula, the application of teaching factory learning, enhancing teacher competence, and strengthening school management (Kemendikbudristek, 2021). The Vocational High School Center of Excellence is expected to become a development model capable of producing high-quality and competitive graduates.

Mataram City, as the administrative and economic center of West Nusa Tenggara Province, possesses strategic potential in the development of vocational education. A number of State Vocational High Schools in Mataram City have been designated as implementers of the Vocational High School Center of Excellence program with various expertise fields relevant to regional needs. However, based on initial observations, school reports, and field findings as outlined in this thesis, the implementation of the Vocational High School Center of Excellence program in Mataram City still faces various obstacles. These obstacles include limited industrial involvement in the planning stage, sub-optimal implementation of teaching factory learning, and a weak system of program supervision and evaluation.

These problems indicate that the success of the Vocational High School Center of Excellence program is not only determined by national policy but highly depends on the quality of implementation at the educational unit level. Therefore, a comprehensive program evaluation is required to assess the extent to which the goals of the Vocational High School Center of Excellence program have been achieved and the factors influencing it. Program evaluation is an essential instrument in educational management to provide a basis for decision-making, program improvement, and the enhancement of educational quality (Stufflebeam & Coryn, 2014).

This research utilizes a Goal-Oriented Evaluation approach which focuses on measuring the achievement of program goals as formulated since the planning stage (Tyler, 1949). This approach is considered relevant because the Vocational High School Center of Excellence program has clear objectives, indicators, and targets regarding aspects of planning, execution, and outcomes. The evaluation is conducted by examining the implementation of the Vocational High School Center of Excellence program in Mataram City viewed from educational management functions, namely planning, execution, and supervision, as well as the supporting and inhibiting factors of the program's implementation.

Accordingly, this research is expected to provide a comprehensive overview of the effectiveness of the Vocational High School Center of Excellence program implementation in Mataram City and serve as a reference for stakeholders in efforts to strengthen sustainable vocational education.

Literature Review

Educational Program Evaluation

Educational program evaluation is a crucial element in the educational management system that functions to assess the level of success of a program in achieving predetermined goals. Evaluation is not only understood as the final activity of a program but also as a continuous process aimed at improving, developing, and enhancing the quality of educational program implementation as a whole. The evaluation process is conducted systematically by collecting, analyzing, and interpreting various relevant information to provide a basis for appropriate and objective decision-making (Arikunto & Jabar, 2009).

According to Tyler (1949), evaluation is the process of determining the extent to which educational goals have been achieved through learning activities or program implementation. This view emphasizes that the primary basis of evaluation is the clarity of objectives formulated from the beginning. In contrast to this view, Stufflebeam & Coryn (2014) perceive evaluation as a process of obtaining and providing useful information for decision-making. In this context, evaluation is not only oriented toward the final results but plays a role in all stages of educational program management. Arikunto & Jabar (2009) adds that evaluation has two main functions: a diagnostic function to identify obstacles in program implementation, and a formative function that provides feedback to improve the quality of activity implementation.

Program Evaluation Models

In the world of education, various evaluation models have been developed by experts to obtain a comprehensive overview of program implementation. The CIPP (Context, Input, Process, Product) model developed by Stufflebeam & Coryn (2014) is one of the most comprehensive models as it assesses the program from the planning stage to the impact of results.

Additionally, there is the Countenance model developed by Stake (1967), which emphasizes the comparison between the expected ideal conditions and the actual conditions found in the field. Another model is the Goal-Free Evaluation developed by Scriven (1991), where the evaluator focuses on actual outcomes without being tied to predetermined program goals. However, in the context of this study, the Goal-Oriented Evaluation model is considered the most relevant. This model emphasizes the extent to which program goals have been achieved by comparing the formulated objectives with the implementation results (Tyler, 1949). This model is highly suitable for educational programs that have concrete goal indicators, such as the Vocational High School Center of Excellence Program.

Vocational High School Center of Excellence Program

The Vocational High School Center of Excellence Program is a strategic initiative to strengthen vocational education in Indonesia, aiming to create educational units that are superior, adaptive, and relevant to the needs of the world of work. According to Kemendikbudristek (2021), The Vocational High School Center of Excellence is designed as an industry-based learning model that integrates the curriculum with real-world work practices through the *link and match* approach.

The characteristics of SMK-PK include the strengthening of human resources (HR), learning with a new paradigm, and strategic partnerships with the business and industrial worlds (Setiawan, 2024). Juridically, this program is based on the Decree of the Minister of Education, Culture, Research, and Technology Number 464/M/2021. The main objective of this program is to produce graduates who are absorbed into the workforce or are capable of becoming independent entrepreneurs through vocational education aligned with industrial needs (Kemendikbudristek, 2021).

Educational Management

Educational management is the application of management principles, concepts, and theories in the field of education to achieve goals effectively and efficiently. Sagala (2013) explains that educational management is the process of managing human resources, facilities, and educational activities so that all activities can run in a directed manner. In practice, vocational education management includes three main pillars: planning, implementation, and supervision.

Planning is a crucial initial step as it serves as a guide in directing the entire organizational process. Sagala (2013) emphasizes that educational planning is a systematic process to formulate goals and operational steps according to the needs of the times. In vocational education, planning must be oriented toward industrial needs by involving the business and industrial worlds as strategic partners (Mulyasa, 2013). Mature planning includes the preparation of the Educational Unit Operational Curriculum and HR development aligned with *link and match* principles.

Implementation or actuating is the real-world manifestation of the prepared plans into concrete actions. Terry et al. (2014) define implementation as the process of directing and coordinating all organizational resources to achieve goals. In the Vocational High School Center of Excellence Program, implementation includes the application of project-based learning, the development of teaching factories, and the utilization of technology platforms to improve learning quality. The success of this stage relies heavily on visionary school leadership and the competence of teachers in managing innovative learning (Suryosubroto, 2022).

Supervision serves as a control function to ensure that all program implementation aligns with the policy direction and established goals. Supervision includes process monitoring and result evaluation as a basis for continuous improvement (Novalinda et al., 2020). In the Vocational High School Center of Excellence Program, the supervision mechanism is conducted through periodic evaluations involving assistance from universities to guarantee accountability and program sustainability (Kemendikbudristek, 2021). Through systematic supervision, every obstacle in implementation can be detected early for immediate corrective action.

Research Method

This research utilizes a qualitative approach with an evaluative research type aimed at assessing the achievement of the objectives of the Vocational High School Center of Excellence program in Mataram City. The qualitative approach was chosen because this study seeks to understand in depth the processes of program planning, implementation, and supervision within the real context of educational units. The program evaluation is conducted using the Goal-Oriented Evaluation model, which focuses on measuring the level of achievement of program goals as formulated since the planning stage (Tyler, 1949). This model is considered relevant because the Vocational High School Center of Excellence program has clear objectives, indicators, and targets as stated in national policies and school planning documents.

The research was conducted at three State Vocational High Schools implementing the Vocational High School Center of Excellence program in Mataram City, namely State Vocational High School 3 Mataram and State Vocational High School 5 Mataram. The selection of research locations was based on the schools' status as program recipients and the representation of expertise fields relevant to the needs of the business world and industrial world in Mataram City. The research subjects were determined purposively by considering their direct roles and involvement in program implementation, including school principals, vice principals for curriculum and industrial relations, vocational teachers, and partners from the business world and industrial world.

Data collection was carried out through in-depth interviews, field observations, and documentation studies to obtain comprehensive data and allow for triangulation. Semi-structured interviews were conducted to explore information regarding the program planning process, the implementation of industry-based learning and teaching factories, supervision mechanisms, and the objective achievements of the Vocational High School Center of Excellence program. Field observations were conducted non-participatively to directly observe program implementation in schools, particularly learning practices, the utilization of facilities and infrastructure, and industrial involvement in the learning process. Documentation studies were performed by reviewing program planning and implementation documents, such as School Work Plans, School Activity and Budget Plans, curriculum documents, cooperation agreements with the industrial world, activity reports, and school internal evaluation reports.

The primary instrument in this research is the researcher as a human instrument who plays a role in collecting, interpreting, and analyzing data. To maintain consistency and systematic data collection, the researcher used auxiliary instruments in the form of interview guides, observation sheets, and documentation checklists prepared based on the evaluation indicators of the Vocational High School Center of Excellence program and the Goal-Oriented Evaluation framework. Data analysis was conducted qualitatively using an interactive model that includes the processes of data reduction, data display, and conclusion drawing continuously from the data collection stage to the end of the research (Miles & Huberman, 1994).

Data validity is ensured through the application of source triangulation and technical triangulation by comparing data obtained from various informants and different data collection techniques. Additionally, the researcher performed member checks with informants to ensure the accuracy and

consistency of the data with factual conditions in the field. Through these procedures, it is expected that the evaluation results obtained will have a high level of credibility and reliability as a basis for drawing conclusions and policy recommendations.

Results and Discussion

Planning of the Vocational High School Center of Excellence Program

The planning of the Vocational High School Center of Excellence program in Mataram City is a strategic stage that determines the direction, quality of implementation, and achievement of program goals. Research findings indicate that planning has been conducted by referring to national policies and technical guidelines from the Directorate of Vocational High Schools. Primary documents such as the School Work Plan and the School Activity and Budget Plan have incorporated the direction for industry-based curriculum development, increasing teacher competence, strengthening teaching factory learning, and the procurement of supporting facilities and infrastructure. However, the quality of planning still faces several substantive weaknesses that implicate program effectiveness (Sagala, 2013).

The needs analysis for facilities and infrastructure shows that implementing schools have conducted initial mapping of practical facility conditions, but this has not yet fully referred to industrial standards. Available facilities remain limited, both in terms of quantity and specification; thus, fulfillment is carried out gradually according to budget constraints. This condition indicates that practical learning has the potential to produce competencies that are adaptive to school conditions, rather than transformative according to industrial needs. This aligns with the view of Billet (1996) that vocational education facilities should ideally be designed to simulate real work conditions so that the developed competencies are relevant to the demands of the world of work. These facility limitations subsequently implicate teacher readiness in implementing industry-based learning, as competencies obtained through training cannot always be optimally transferred into classroom practice without the support of adequate facilities (Zaki, 2024).

The link between facilities and teacher competence becomes clearer when schools identify a gap between teacher abilities and the demands of technological developments and industrial work standards. Vocational teachers realize the need for industrial training and internships as a primary requirement because not all teaching staff are prepared for industrial standards. However, teacher competence development remains general, depending on central programs, and is not yet based on individual mapping. This supports the findings of Ramdhani & Adawiyah (2023) that planning for teacher development in Vocational High Schools is often not based on real needs, resulting in low training relevance. The integration between teacher development and the readiness of practical facilities is also not yet optimal; therefore, the transfer of new competencies into learning has not taken place maximally (Sudira, 2012). Consequently, a sustainable competence development system integrated with the readiness of practical facilities has become an urgent need.

The limitations in facilities and teacher competence are also related to stakeholder involvement. Although internal school elements such as principals, vice-principals, heads of expertise programs, and vocational teachers have been consistently involved in planning, the involvement of the business world and industrial world is still limited to formalities, such as curriculum synchronization or the signing of Memoranda of Understanding, without full involvement in formulating goals and success indicators. As a result, the relevance of planning to the needs of the world of work is not yet fully guaranteed. This is consistent with the findings of Ningtias et al. (2025) that Vocational High School industry partnerships in Indonesia are more dominant in the implementation stage compared to strategic planning. Without strategic input from industry, planning tends to be top-down and less reflective of the link and match principle, which is the primary objective of the Vocational High School Center of Excellence program.

Limited involvement of the business world and industrial world impacts the formulation of program goals and objectives. Although the goals of the Vocational High School Center of Excellence program are aligned with national policy namely improving the quality of vocational learning, strengthening links with the business world and industrial world, and increasing graduate work readiness (Kemendikbudristek, 2021). The objectives derived from these goals remain general and have not been formulated into measurable achievement indicators. The lack of synchronization between goals at the school level and objectives at the expertise program level implicates variations in achievement across expertise fields. Bryson (2018) emphasizes that strategic goals must be translated into operational objectives so they can be evaluated objectively; thus, the formulation of objectives based on clear and measurable achievement indicators is essential.

The success indicators used are still dominated by process aspects, such as the implementation of practice and industrial involvement, rather than outcomes like graduate work readiness. This condition reinforces the findings of Sutadji et al. (2021) that limitations in tracer studies cause evaluations of the impact of vocational programs to be unable to illustrate achievement results comprehensively. Without clear indicators, the developed planning documents only function as administrative instruments rather than as program performance control tools (Arikunto & Jabar, 2009).

Planning documents such as the School Work Plan, organizational structures, Standard Operating Procedures, and activity schedules are available but do not yet fully function as a strategic management system. The lack of integration between documents across work units limits the link between the school's strategic goals and program execution at the expertise competency level. Furthermore, document updates are not yet based on evaluation results; thus, the continuous improvement cycle is not running optimally. This weakness is further exacerbated by program budgeting, which remains highly dependent on central funds, while the school's internal contribution is relatively limited. This full dependence on the state budget shows the vulnerability of program sustainability in the event of changes in policy or central funding priorities (Wulandari et al., 2025). Therefore, diversifying funding sources through central-regional synergy and linking the budget with achievement indicators are important steps to guarantee program sustainability.

To provide a comprehensive overview of the planning aspects that have been analyzed, while also demonstrating the interrelationships between planning components that affect the effectiveness of the Vocational High School Center of Excellence program in Mataram City, please refer to the following table:

Table 1. Summary of Planning Evaluation for the Vocational High School Center of Excellence Program

Planning Aspect	Main Findings	Implications/Impact
Needs analysis of facilities and infrastructure	Initial mapping was conducted, but it does not yet fully refer to industrial standards; facilities remain limited and fulfillment is carried out gradually.	Practical learning has the potential to produce competencies that are adaptive to school limitations rather than transformative according to industrial needs.
Teacher needs analysis and competency development	Vocational teacher competence is identified as a key factor; industrial training and internships are planned but still depend on central programs and are not yet based on individual mapping.	Training relevance is low, and the transfer of new competencies into learning is not yet optimal; teacher readiness to meet industrial standards remains limited.
Stakeholder involvement	Internal school elements are consistently involved; involvement of the business world and industrial world	The relevance of planning to the needs of the world of work is not yet fully guaranteed; the link and match

Planning Aspect	Main Findings	Implications/Impact
	is still limited to formalities and is not yet systematic in goal formulation.	principle is not yet optimal.
Program goals and objectives	Goals are aligned with national policy; objectives remain general and are not yet operational.	Lack of synchronization between school goals and expertise program objectives; variations in achievement across expertise fields.
Success indicators	Indicators are still process-oriented; there are no standardized instruments such as tracer studies.	Program achievement evaluation is not yet objective; graduate outcomes are difficult to measure comprehensively.
Planning documents	School Work Plans, Standard Operating Procedures, and organizational structures are available; document functions remain dominant in administrative aspects; updates are not yet based on evaluation results.	Documents do not yet function as managerial instruments; the continuous improvement cycle is not running optimally.
Program budgeting	The budget is prepared in the School Activity and Budget Plan and aid proposals; orientation is on practical facilities and teacher training; high dependence on central funds.	Program sustainability is vulnerable to changes in funding policies; the school's fiscal capacity is not yet independent.

Table 1 above confirms that the planning documents for the Vocational High School Center of Excellence program in Mataram City have met the formal policy aspects through the preparation of School Work Plans, Standard Operating Procedures, and organizational structures that align with national guidelines. Evaluation findings show an initial mapping of facilities and infrastructure, identification of vocational teacher competencies, and the involvement of internal school elements in the planning process. However, several limitations are still visible, such as facility mapping that does not yet refer to industrial standards, teacher training that is not yet based on individual needs, involvement of the business world and industrial world that remains a formality, and goals and achievement indicators that are still normative.

The implications of these findings are that planning tends to produce administrative documents that do not yet fully function as managerial instruments. Practical learning has the potential to only be adaptive to school limitations rather than transformative according to industrial needs; the relevance of teacher training is still low; the link and match principle is not yet optimal; achievements across expertise fields vary; graduate outcomes are difficult to measure comprehensively; and program sustainability still depends on central funding policies.

In the Goal-Oriented Evaluation framework, the evaluation results emphasize that the planning of the Vocational High School Center of Excellence program needs to be substantively strengthened through more systematic industrial needs analysis, the determination of measurable achievement indicators, the strategic involvement of the business world and industrial world in goal formulation, and the development of planning documents based on a continuous evaluation cycle. By strengthening these aspects, planning will not only function as a form of compliance with national policy but also as a strategic foundation capable of directing program implementation consistently and supporting the achievement of vocational education goals that are relevant to the demands of the world of work.

Implementation of the Vocational High School Center of Excellence Program

The implementation of the Vocational High School Center of Excellence program in Mataram City is a critical stage that confirms the extent to which strategic planning can be realized in actual school practices. From an educational management perspective, effective program implementation is characterized by consistency between plans and actions, the ability to adapt to field conditions, and an orientation toward achieving program goals (Mulyasa, 2017). Therefore, the evaluation of implementation does not only assess the execution of activities but also emphasizes alignment with the objectives, targets, and planning components formulated previously.

The fulfillment of facilities and infrastructure is the first aspect demonstrating a direct connection between planning and implementation. Support for facilities from the Vocational High School Center of Excellence program has been utilized to strengthen practical learning, yet the level of adequacy and quality of utilization still varies. This condition confirms that the availability of equipment does not fully guarantee a quality of learning experience equivalent to industrial standards. In other words, the effectiveness of practical facilities is determined not only by the quantity and specification of equipment but also by its integration into learning design, workshop management, and the competence of teachers in facilitating authentic learning experiences (Sudira, 2012). To illustrate the real conditions of practical facilities, the following documentation presents the workshops/laboratories used in the program implementation.



Figure 1. Workshop/Laboratory as a representation of industry-based practical facility fulfillment at the Vocational High School Center of Excellence in Mataram City

The image above does not only show the physical condition of the practical facilities but also confirms that the existence of facilities is an essential foundation for vocational learning. However, without integration into learning designs and workshop management that resembles industry, these facilities risk remaining merely as administrative inputs without producing a substantive impact on graduate quality.

The link between facilities and learning continues into the implementation of the teaching factory. The teaching factory has been adopted as an implementation strategy for the Vocational High School Center of Excellence program, but the maturity of its implementation is still in a transition phase from simulation-based learning toward a sustainable educational production system. This indicates that the goal of providing authentic work experiences has been achieved at the learning process level but has not yet fully developed at the level of an educational production system that consistently produces products or services of economic value (Fauzi et al., 2025). Thus, the success of teaching factory implementation relies heavily on strengthening production unit management, collaborative industrial involvement, and increasing teacher capacity in managing production-based learning.



Figure 2. Teaching factory products as a result of integrating learning with production processes at the Vocational High School Center of Excellence in Mataram City.

The image above shows the tangible results of teaching factory activities, confirming efforts to connect learning with production processes. However, the products generated are still limited in scale, emphasizing the need for strengthening production unit management and industrial involvement so that the teaching factory evolves from a mere pedagogical vehicle into a market-oriented educational production system.

Program implementation also demands the involvement of the business world and industrial world through industrial work practices and strategic partnerships. Research findings show that the involvement of the business world and industrial world has been carried out, but the quality of partnerships remains dominant at the operational level. This pattern shows that student industrial work practice experiences vary and are not yet fully relevant to the learned expertise competencies. In other words, existing partnerships are still transactional, limited to student placement, and have not yet developed into strategic partnerships integrated with learning planning or competency achievement evaluation (Johan et al., 2019).

The connection between planning and implementation is also reflected in the implementation of planning documents. Documents such as the School Work Plan, activity plans, and operational curricula have been used as references, but field implementation often undergoes situational adjustments due to resource limitations and schedule dynamics. This shows that although planning documents function as normative guides, the consistency between plans and implementation has not been fully maintained. Consequently, preparing plans based on risk analysis, measurable performance indicators, and strengthening monitoring mechanisms are prerequisites for planning documents to truly function as strategic instruments for quality control (Fullan, 2016).

The impact of program implementation on teachers and students is a key indicator of implementation success. Teachers have begun to adopt learning approaches that are more contextual, project-based, and oriented toward industrial work processes, although these changes are not yet fully consistent. Meanwhile, students gain more authentic learning experiences, engage in practices resembling real work processes, and develop work attitudes such as discipline and responsibility (Unesco, 2020). However, evidence of impact achievement remains largely qualitative and descriptive, while quantitative indicators such as competency certification or graduate employment absorption have not been systematically documented (Johan et al., 2019).

To provide a comprehensive overview of the analyzed implementation aspects while demonstrating the interrelationships between implementation components that affect the effectiveness of the Vocational High School Center of Excellence program in Mataram City, please refer to the following table:

Table 2. Summary of Implementation Evaluation for the Vocational High School Center of Excellence Program

Implementation Aspect	Main Findings	Implications/Impact
Fulfillment of facilities and infrastructure	Practical facilities are available through program support, but the quality of utilization still varies.	Practical learning does not yet fully reflect industrial standards; student learning experiences are uneven.
Teaching factory implementation	The teaching factory is adopted as a learning strategy but is still in a transition phase.	Pedagogical functions are achieved, but it has not developed as a market-oriented educational production unit.
Stakeholder involvement (Industrial Work Practice & Industry)	Industrial work practice is implemented according to regulations, but partnership quality remains operational.	Student industrial work practice experiences vary; not yet fully relevant to expertise competencies.
Implementation of planning documents	Planning documents are used as references, but implementation undergoes situational adjustments.	Consistency between plans and implementation is not fully maintained; some activities have been reduced.
Impact on teachers and students	Teachers are beginning to adopt project-based and industrial learning; students are more involved in real practices.	Pedagogical changes in teachers are not yet consistent; the impact on students remains qualitative.

Table 2 above confirms that the implementation of the Vocational High School Center of Excellence program in Mataram City has proceeded according to national policy directions, yet its effectiveness still faces several limitations. Evaluation findings show that practical facilities are indeed available thanks to program support, but the quality of their utilization is not uniform, resulting in student learning experiences that do not fully reflect industrial standards. The teaching factory has been adopted as a learning strategy but is still in a transition phase; pedagogical functions are achieved, but it has not developed as a market-oriented educational production unit.

Stakeholder involvement through industrial work practice activities has been implemented according to regulations, but the quality of partnerships with the business world and industrial world remains operational. This results in varied student industrial work practice experiences that are not yet fully relevant to expertise competencies. The implementation of planning documents also shows situational adjustments, so the consistency between plans and implementation is not fully maintained; some activities have undergone reduction. The impact on teachers and students is starting to become visible, with teachers adopting project-based and industrial learning and students being more involved in real practices. However, pedagogical changes in teachers are not yet consistent, and the impact on students remains qualitative.

In the Goal-Oriented Evaluation framework, the results of the implementation evaluation emphasize the need to improve the quality of practical facility utilization to meet industrial standards, strengthen the teaching factory as a market-oriented production unit, and optimize partnerships with the business world and industrial world to be more substantive and relevant to the needs of the world of work. Furthermore, consistency between planning documents and implementation must be maintained through more adaptive monitoring mechanisms, while teacher pedagogical changes must be reinforced with continuous mentoring so that the impact on students can be measured more comprehensively. By strengthening these aspects, the implementation of the Vocational High School Center of Excellence program can evolve from mere administrative compliance into a transformative process that optimally supports the achievement of vocational education goals.

Supervision of the Vocational High School Center of Excellence Program

The supervision of the Vocational High School Center of Excellence program in Mataram City is a management function that plays a strategic role in ensuring the implementation of the program in accordance with the planning and the achievement of predetermined goals. In an educational management perspective, supervision is not only interpreted as an administrative control activity but also as a mechanism for coaching and continuous improvement of program implementation (Sergiovanni et al., 1993). Therefore, supervision in the Vocational High School Center of Excellence program is focused on the integration between planning, implementation, and the achievement of results.

Supervision of the implementation of industry-based learning is the primary focus because this aspect is the core of the Vocational High School Center of Excellence policy. Research results indicate that supervision has been carried out through academic supervision, monitoring of practices in workshops/laboratories, and activity reporting. However, supervision is still predominantly administrative and has not fully been based on measurable vocational learning quality indicators. This condition confirms that supervision has not functioned optimally as a quality assurance mechanism for industry-based learning, so the quality of student learning experiences has not been fully measured (Winarto, 2024).

Within the continuity of the supervision function, the next focus is directed toward the supervision of teaching factory implementation. The teaching factory is positioned as a vehicle for integrating learning with production processes based on industrial standards. Research results show that teaching factory supervision still focuses on the execution of activities and administrative compliance, and has not yet fully assessed the quality of products/services, the sustainability of production units, or industrial involvement in quality assurance. This indicates a gap between policy demands that emphasize link and match and the actual supervision practices in the field (Widiatna et al., 2025).

In alignment with this, supervision also covers the involvement of stakeholders in industrial work practices and partnerships with the business world and industrial world. Findings show that the supervision of industrial work practices has been carried out through coordination with partners, monitoring of implementation, and the collection of activity reports. However, supervision still focuses on administrative aspects and procedural compliance, and has not yet fully assessed the quality of student learning experiences and the quality of industrial mentoring in a standardized manner. Consequently, the quality of industrial work practice experiences among students is not uniform, depending on the variations in the commitment of industrial partners (Nur & Arfandi, 2023).

The next supervision emphasizes the suitability of program implementation with planning. Research results show that supervision has been carried out through the review of work plan documents, activity monitoring, and periodic reporting. However, the focus of supervision is still dominant on the execution of activities according to the schedule and the completeness of reports, and has not yet fully assessed the achievement of goals and the quality of the planned learning process. This condition indicates that supervision has not fully functioned as a performance-based quality control mechanism (Stufflebeam & Coryn, 2014).

In the final part, supervision is directed at the impact of the program on teachers and students as indicators of success. Research results show that impact supervision has been carried out through monitoring of activities and reporting on program results. However, impact measurement is still predominantly descriptive and has not been based on measurable performance indicators. As a result, changes in teacher competence and student achievements have not been systematically documented, making supervision function more as a report of results rather than a basis for program improvement decision-making (Ramdhani & Adawiyah, 2023).

To provide a comprehensive view of how supervision contributes to the improvement of vocational learning quality, as well as to show areas that still require strengthening, please refer to the following table:

Table 3. Summary of Supervision Evaluation for the Vocational High School Center of Excellence Program

Supervision Aspect	Main Findings	Implications/Impact
Implementation of industry-based learning	Supervision is carried out through supervision and monitoring, but it remains predominantly administrative.	The quality of student learning experiences is not fully measured; the quality of vocational learning is not yet guaranteed.
Teaching factory implementation	Supervision focuses on the execution of activities and has not yet assessed the quality of products/services.	The teaching factory risks running as a routine activity without quality control; industrial involvement is not yet optimal.
Stakeholder involvement (Industrial Work Practice & Industry)	Supervision is carried out through reports and coordination, but is more administrative in nature.	The quality of industrial work practice experiences among students is not uniform; the quality of industrial mentoring is not yet standardized.
Suitability of implementation with planning	Supervision emphasizes activity execution and reports but has not yet assessed goal achievement.	Deviations in implementation are not systematically analyzed; planning is less adaptive to implementation dynamics.
Impact of the program on teachers and students	Impact supervision is carried out, but it remains descriptive and is not yet based on measurable indicators.	Changes in teacher competence and student achievements are not systematically documented; supervision results are rarely used as a basis for improvement.

Table 3 above confirms that the academic supervision and monitoring mechanisms of the Vocational High School Center of Excellence program in Mataram City have been implemented through academic supervision, evaluation meetings, and activity reporting. Evaluation findings show that supervision is still oriented toward the execution of activities and the completeness of documents, while vocational learning quality indicators have not been fully used as a basis for assessment. Consequently, the follow-up of supervision results is not yet systematic, and evaluation has not functioned optimally as an instrument for quality improvement.

The implication of these findings is that supervision tends to act as an administrative control rather than a sustainable quality assurance mechanism. This impacts the limited utilization of supervision results for program improvement, as well as the weak link between supervision and the school's internal quality assurance cycle.

In the framework of goal-oriented evaluation, the supervision results emphasize the need for the development of supervision instruments based on vocational learning quality indicators, as well as the integration of supervision results into the school's internal quality assurance cycle. Thus, supervision does not only function as a control mechanism but also as a strategic instrument to ensure consistency between program goals, implementation, and achievements. Strengthening this aspect will make supervision an integral part of the process of improving vocational education quality that is relevant to the needs of the world of work.

Supporting and Inhibiting Factors for Implementation

The implementation of the Vocational High School Center of Excellence program in Mataram City is influenced by various supporting and inhibiting factors that determine the level of program goal achievement. Within the Goal-Oriented Evaluation framework, identifying these factors is essential to understanding the gap between planned goals and the results achieved in the field (Tyler, 1949). Research results indicate that supporting and inhibiting factors do not stand alone but interact with one another in influencing the effectiveness of program implementation.

The primary supporting factor for the implementation of the Vocational High School Center of Excellence program is the presence of clear and directed national policy support. The implementation guidelines for the Vocational High School Center of Excellence published by the Ministry of Education, Culture, Research, and Technology provide a systematic framework for schools to develop industry-based learning, apply teaching factories, and strengthen partnerships with the business world and industrial world (Kemendikbudristek, 2021). The clarity of this policy direction facilitates schools in drafting and executing programs according to established standards.

In addition to policy, the commitment of school leadership is a significant supporting factor. School principals and management teams play a vital role in mobilizing resources, coordinating program execution, and building a school culture that supports industry-based learning. Responsive and adaptive leadership encourages teachers and education personnel to be actively involved in the implementation of the Vocational High School Center of Excellence program.

Another supporting factor is the increasing motivation and awareness of vocational teachers regarding the importance of learning that aligns with the needs of the world of work. Teachers have begun to develop project-based learning and practices that approximate real work situations. Funding support through the Vocational High School Center of Excellence program also contributes to the procurement of learning facilities and the execution of supporting activities, although the amount and scope remain limited.

On the other hand, this research identifies several inhibiting factors affecting the implementation of the Vocational High School Center of Excellence program. The main inhibiting factor is the limited involvement of the business world and industrial world throughout all program stages. Industrial involvement that remains administrative causes the synergy between schools and industry not to be optimally established. As a result, the link and match principle, which forms the basis of the Vocational High School Center of Excellence program, has not been fully realized (Sudira, 2012).

The limitation of practical facilities and infrastructure that align with industrial standards is also a significant obstacle. Practical equipment that is not yet up-to-date and limited production facilities impact the sub-optimal implementation of teaching factories and production-based learning. This condition limits students' learning experiences in facing actual work situations.

Another inhibiting factor is the uneven readiness of human resources, particularly vocational teachers. Teacher training programs are still incidental and have not been followed by continuous assistance. High administrative burdens also reduce the time and focus of teachers in developing innovative industry-based learning. This finding is consistent with the view that the success of vocational education is highly determined by the quality and professionalism of teachers (Sudira, 2012).

Furthermore, the system for supervision and follow-up of program evaluation results has not functioned optimally. Monitoring and evaluation that are not yet based on performance indicators cause supervision results not to be utilized to their full potential as a basis for program improvement. From a

program evaluation perspective, this condition widens the gap between program goals and the results of implementation in the field.

The supporting and inhibiting factors of the Vocational High School Center of Excellence program implementation in Mataram City show that program success requires strong synergy between policy, school leadership, human resource readiness, and industrial partnerships. Within the Goal-Oriented Evaluation framework, strengthening supporting factors and systematic efforts to minimize inhibiting factors are essential prerequisites for increasing the implementation effectiveness of the Vocational High School Center of Excellence program and ensuring the sustainable achievement of program goals.

Conclusions

The evaluation of the Vocational High School Center of Excellence program in Mataram City indicates that the program implementation has provided a positive contribution to improving the quality of vocational learning, yet its effectiveness still faces several limitations. Analysis of the aspects of planning, implementation, and supervision, as well as supporting and inhibiting factors, reveals a gap between the normative goals formulated in the policy and the reality of implementation in the field.

Program planning has referred to national guidelines with a clear policy direction, particularly in industry-based curriculum development, the implementation of teaching factory, and the strengthening of partnerships with the business world and industrial world. However, planning is not yet fully based on a systematic analysis of industrial needs and operational achievement indicators. This confirms the need for planning that is more based on local and regional industrial needs data, as well as the determination of measurable achievement indicators so that planning documents function as effective managerial instruments.

Program implementation shows the application of industry-based learning, teaching factory, and industrial work practices that provide contextual learning experiences for students. Teachers have begun to adopt project-based and practical approaches, while students are more active in production activities. Limitations in practical facilities that meet industrial standards, the uneven readiness of vocational teachers, and involvement of the business world and industrial world that remains administrative limit the effectiveness of implementation. This condition emphasizes the importance of sustainable investment in practical facilities, increasing teacher capacity through continuous training, and strengthening partnership patterns with the business world and industrial world to be more strategic and substantive.

Program supervision has been conducted through academic supervision, evaluation meetings, activity monitoring, and reporting. However, supervision is still predominantly oriented toward the execution of activities and the completeness of documents, and is not yet based on vocational learning quality indicators. The follow-up of supervision results is not yet systematic; therefore, evaluation results have not been maximally utilized as a basis for program improvement. These findings underline the need for developing supervision instruments based on vocational learning quality indicators, as well as integrating supervision results into the school's internal quality assurance cycle so that supervision functions as a quality improvement mechanism rather than merely administrative control.

Supporting factors for program implementation include clear national policy support, school leadership commitment, vocational teacher motivation, and funding support. Conversely, inhibiting factors include the administrative nature of involvement from the business world and industrial world, limited practical facilities, uneven teacher readiness, and the weak performance-indicator-based supervision system. The interaction between these supporting and inhibiting factors determines the level of achievement of program goals. Therefore, strengthening supporting factors through consistent policies,

adaptive school leadership, and continuously maintained teacher motivation needs to be accompanied by systematic efforts to minimize inhibiting factors through facility improvement, strengthening teacher capacity, and optimizing the role of the business world and industrial world.

The Vocational High School Center of Excellence program in Mataram City has great potential to improve the quality of vocational education and graduate work readiness sustainably. Implementation effectiveness can only be achieved if industry-based needs planning is strengthened, teacher competence is continuously improved, the role of the business world and industrial world is optimized throughout all program stages, and the supervision system is developed based on performance indicators integrated with the school's internal quality assurance cycle. By systematically strengthening supporting factors and addressing inhibiting factors, the Vocational High School Center of Excellence program can function as a strategic instrument for improving the quality of vocational education that is relevant to the needs of the world of work.

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