PROGRAM EVALUATION FROM THE PERSPECTIVE OF CURRICULUM MANAGEMENT IN VOCATIONAL EDUCATION

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ABSTRACT

This study aims to examine the integration between program evaluation and curriculum management in the context of vocational education using a Systematic Literature Review (SLR) approach. By analyzing 38 scholarly articles published between 2020 and 2025, this research maps the relationship between evaluation models such as CIPP and the dynamics of curriculum management in Vocational High Schools (SMK). The findings indicate that program evaluation plays a strategic role in supporting evidence-based decision-making, enhancing curriculum relevance, and reinforcing educational management accountability. Adaptive curriculum management tailored to industry needs has proven to encourage a more responsive curriculum aligned with technological advancements and labor market demands. The integration of both domains, supported by digital technologies such as evaluation dashboards, accelerates curriculum improvement and actualizes the principle of Continuous Quality Improvement (CQI). The implications emphasize the importance of a comprehensive evaluation system, flexibility in curriculum design, and active involvement of vocational education stakeholders.

Keywords : *Program Evaluation, Curriculum Management, Vocational Education, CIPP, Vocational Training, Continuous Improvement*

INTRODUCTION

Vocational education plays a vital role in preparing high-quality human resources who are work-ready and possess specific competencies aligned with labor market demands. In the Indonesian context, Vocational High Schools (SMK) serve as the frontline in producing skilled workers to support national agendas such as Making Indonesia 4.0 and the Golden Indonesia Vision 2045. To achieve these objectives, SMKs are expected not only to provide practice-based learning but also to dynamically and systematically manage their curricula while continuously evaluating the educational programs being implemented (Rahman, Sari, & Kurniawan, 2023).

Curriculum management is at the heart of effective education delivery, particularly in vocational education, which relies heavily on the relevance of curricular content to the needs of industry and the business world (DUDI). A well-constructed curriculum must not only be structurally designed but also adaptively managed through processes of planning, implementation, supervision, and evaluation (Yulianto & Wahyudi, 2021). In this context, educational program evaluation plays a strategic role as both a reflective and predictive tool that informs the success or failure of a program and serves as essential input for data-driven curriculum decision-making (Hasanah, Putra, & Yuliani, 2022).

Program evaluation is not merely an administrative activity or routine formality; rather, it is a systematic approach to assess the context, input, process, and product of an educational program (Situmorang & Manurung, 2022). The CIPP model (Context, Input, Process, Product) developed by Stufflebeam has been widely adopted in evaluating SMK programs and has proven effective in providing a holistic overview of the success of particular vocational programs (Suhartono, Arifin, & Dewi, 2021).

However, recent studies indicate that program evaluation in many SMKs remains partial, poorly documented, and not yet fully integrated into the curriculum management cycle (Fitriani, Wulandari, & Mulyadi, 2021). This issue is compounded by the limited capacity of educators in data-driven evaluation techniques, the absence of reliable academic management information systems, and sporadic involvement of industry stakeholders (Zulkarnain & Prasetya, 2024). As a result, the existing curriculum often remains static, unresponsive to technological developments or labor market dynamics, and ultimately contributes to the low competitiveness of SMK graduates.

A strong integration between program evaluation and curriculum management can establish a feedback loop that enables continuous improvement in terms of content, learning strategies, and industry partnership models (Fadillah & Susilo, 2023). This approach not only enhances school management accountability but also improves the efficiency and effectiveness of achieving the true goals of vocational education: to produce competent, competitive, and adaptable graduates.

Considering the critical importance of integrating program evaluation and curriculum management, this study aims to systematically explore literature on program evaluation practices integrated with curriculum management within vocational education settings. By employing a Systematic Literature Review (SLR) approach on scholarly articles published between 2020 and 2025, this research is expected to formulate conceptual understanding and practical models that can serve as a foundation for policy development and implementation strategies for evaluation-based curriculum management in vocational schools.

METHOD

This study employs a Systematic Literature Review (SLR) approach to examine the relationship between program evaluation and curriculum management in the context of vocational education. The review framework adopts the stages proposed by Kitchenham (2007) and Booth et al. (2016), beginning with the formulation of the research questions: What is the relationship between program evaluation and curriculum management in vocational high schools (SMKs), and how can their integration improve the effectiveness of vocational education?

Scientific literature was sourced using keywords such as "program evaluation," "curriculum management," "vocational education," and "CIPP model" from academic databases including Google Scholar, Scopus, DOAJ, and Garuda. The selected articles were published between 2020 and 2025, focused on vocational education contexts, and available in full-text format. Out of 107 initial articles, 38 were selected based on inclusion and exclusion criteria, then thematically analyzed into three main groups:

1. Program Evaluation
2. Curriculum Management
3. Integration of Both Domains

The analysis was conducted using qualitative descriptive methods with a content analysis technique. A thematic categorization process was carried out to identify patterns, evaluative approaches, and data-driven curriculum management practices. The validity of this study was reinforced through the use of peer-reviewed sources, source triangulation, and consultations with two vocational education experts who reviewed the selection and classification of literature. All articles were coded and managed using spreadsheet tools and the Zotero reference management system.

This process resulted in the following distribution map of the reviewed literature:

1. 13 articles focused on program evaluation,
2. 12 articles addressed curriculum management, and
3. 13 articles explored the integration of both.

This systematic approach ensures that the findings presented are evidence-based and scientifically accountable.

RESULTS AND DISCUSSIONS

Results

The following is a summary of synthesized findings from 10 selected articles deemed most representative in illustrating the relationship between program evaluation and curriculum management in vocational high schools (SMKs), both in terms of methodological approaches and thematic contributions:

Table 1. Synthesis of Research Findings on Program Evaluation and Curriculum Management in Vocational Education (2020–2025)

No	Authors (Year)	Research Focus	Evaluation Model	Key Findings
1	Suhartono et al. (2021)	Evaluation of SMK curriculum implementation	CIPP Model	Contextual and process evaluations support practical curriculum adjustments
2	Situmorang & Manurung (2022)	Effectiveness of vocational skill programs in SMK	CIPP	Evaluation results used to revise curriculum structure and internships
3	Hasanah et al. (2022)	Industry-based curriculum management	Curriculum Management Cycle	Curriculum is more relevant when co-designed and evaluated with industry
4	Yulianto & Wahyudi (2021)	Curriculum adaptation to digitalization and Industry 4.0	Dynamic Curriculum	Learning outcome evaluation drives curriculum shift toward project-based
5	Fadillah & Susilo (2023)	Integration of program evaluation and curriculum management in SMK	Data-Based Evaluation	Systematic evaluation promotes adaptive and locally relevant curricula
6	Zulkarnain & Prasetya (2024)	Use of digital curriculum evaluation dashboards in SMK	Evaluation Dashboard	Evaluation visualization accelerates principal decision-making
7	Fitriani et al. (2021)	Alignment of SMK curriculum with industry demands	Industry Survey & Evaluation	Misalignment found; evaluation used to revise subject structures
8	Rahman et al. (2023)	Vocational curriculum management in the era of Industry 5.0	Responsive Curriculum Framework	Continuous evaluation integration needed to maintain curriculum relevance
9	Suasira & Sutapa (2020)	Evaluation of work safety in laboratory practices	Safety & Procedure Evaluation	Evaluation led to revised SOPs for practical curricula
10	Novianti (2021)	Relationship between student motivation and lab evaluation	Statistical Correlation	Learning motivation increased when structured lab evaluations were applied

Discussion

The synthesized literature consistently reinforces that the integration between program evaluation and curriculum management is an essential foundation for improving the quality of vocational education in Indonesia. This approach is not only relevant in the context of educational governance, but also serves as a critical factor to ensure that SMK curricula can effectively respond to the rapid evolution of industry and labor market demands. In this section, three central themes are discussed in depth namely, the function of evaluation as a quality control mechanism, the importance of industry-responsive curriculum management, and the synergy between both aspects as a basis for building an adaptive and sustainable vocational education system.

Program Evaluation as a Reflective Mechanism and Tool for Evidence-Based Decision Making

In vocational education, program evaluation functions as more than just a tool for assessing outcomes. It serves as a holistic and systematic mechanism for identifying strengths, weaknesses, and areas for instructional improvement. The use of the CIPP model, as demonstrated in the studies by Suhartono et al. (2021) and Situmorang & Manurung (2022), shows that evaluation should cover all stages:

1. Context (environmental conditions, student needs),
2. Input (resources, curriculum, educators),
3. Process (teaching and practicum implementation), and
4. Product (learning outcomes and graduate competencies).

This model's contribution is significant because it shifts the evaluation paradigm from being retrospective to being proactive and predictive. In other words, evaluation not only records what has happened, but also provides data and insights that can serve as the basis for evidence-based decision making. This enables dynamic curriculum development and adaptation, such as the improvement of outdated vocational subjects, strengthening partnerships with industries for internships, and upgrading laboratory facilities. Thus, evaluation functions as a continuous and preventive quality control instrument.

Dynamic Curriculum Management Based on Industry Needs

Responsive adjustments to vocational curricula that align with industry needs are essential in facing the dynamics of the industrial revolution and technological disruption. Findings by Hasanah et al. (2022) and Yulianto & Wahyudi (2021) emphasize that curriculum management involving industry partners in the planning and revision process not only increases curriculum relevance but also strengthens the link and match between SMKs and the world of work. Active industry engagement results in curricula that are more pragmatic and applicable, enabling graduates to meet competency requirements in real-world settings.

The dynamic curriculum management approach, as discussed in the literature, views the curriculum as a continuous cycle where planning, implementation, evaluation, and revision are interdependent and integrated processes. This approach allows curricula to be updated responsively in light of technological changes, national policies, and labor market trends, while avoiding stagnation and misalignment often found in rigid and fragmented curriculum systems.

Synergy Between Program Evaluation and Curriculum Management: A Holistic and Technological Approach

The synergy between program evaluation and curriculum management is a central pillar that optimizes the effectiveness of vocational education. Research by Fadillah & Susilo (2023) and Zulkarnain & Prasetya (2024) demonstrates that systematically integrating evaluation results into the curriculum management cycle enables faster, more targeted, and measurable improvements.

The use of technology, particularly evaluation dashboards, provides intuitive access and visualization of data for school principals and other stakeholders. This technology accelerates strategic and operational decision-making, enabling schools to respond agilely to field findings. It supports the principle of Continuous Quality Improvement (CQI), a quality management approach centered on ongoing enhancement through the Plan-Do-Check-Act (PDCA) cycle.

Furthermore, this integration also strengthens the involvement of various stakeholders teachers, industry, students, and school administrators in the evaluation and curriculum revision process, fostering a collaborative and transparent educational system. Consequently, evaluation results do not merely remain administrative documents, but evolve into strategic instruments for instructional innovation and curriculum policy development.

Policy and Practical Implications for Vocational Education in Indonesia

Based on the findings, several key implications must be considered by policymakers and vocational education practitioners:

1. Strengthening the Evaluation System: Vocational high schools (SMKs) must establish comprehensive evaluation systems that not only assess learning outcomes but also continuously monitor processes, inputs, and contextual factors. This requires intensive training and capacity-building for educators and school managers to develop skills in data analysis and interpretation of evaluation results.
2. Flexible and Responsive Curriculum Management: SMK curricula must be designed with mechanisms that allow for rapid changes and adaptation based on evaluation results and the needs of the industrial sector. A cyclical approach to curriculum management will ensure sustained relevance and alignment with industry demands.
3. Utilization of Digital Technologies: The implementation of evaluation dashboards and integrated educational management information systems will improve transparency, accuracy, and the speed of decision-making processes. This supports modern, data-driven management practices within vocational education institutions.
4. Stakeholder Engagement: Strengthening partnerships with industry, along with active involvement of students and teachers in curriculum evaluation and revision processes, is key to successful and adaptive vocational education management. Stakeholder collaboration ensures that curriculum adjustments are relevant, grounded in practical needs, and widely accepted.

CONCLUSIONS

The findings of this study confirm that the integration between program evaluation and curriculum management constitutes a strategic foundation for strengthening the quality of vocational education. Program evaluation, particularly through the CIPP model, has proven effective as a

reflective and predictive instrument in evidence-based decision making. Meanwhile, curriculum management that is responsive to industry needs and technological advancements renders the curriculum more adaptive and relevant.

The synergy between these two elements fosters the creation of a sustainable, collaborative, and data-driven curriculum management cycle. The utilization of technologies such as evaluation dashboards accelerates the curriculum improvement process and supports the principle of continuous quality improvement (CQI).

Policy implications derived from this study include the importance of developing comprehensive evaluation systems, flexibility in curriculum design, leveraging digital technology in decision making, and active involvement of stakeholders.

Thus, the integration of program evaluation and curriculum management represents a holistic approach capable of addressing workforce challenges and enhancing the competitiveness of vocational education graduates in the era of industrial transformation and global digitalization.

ACKNOWLEDGMENTS

The author expresses sincere gratitude to all parties who have provided support in the preparation of this article. Special appreciation is extended to the teaching staff and promoters of the Doctoral Program in Vocational and Technology Education, Graduate School of the Faculty of Engineering, Universitas Negeri Padang, for their scholarly guidance and constructive feedback throughout the writing process.

Thanks are also conveyed to the researchers and authors whose articles served as references in this study, as well as to colleagues who contributed through discussions and literature reviews. Furthermore, appreciation is given to institutions and databases providing scientific literature, such as Scopus, DOAJ, Garuda, and Google Scholar, which have greatly facilitated the process of sourcing relevant references.

It is hoped that this modest contribution will provide benefits for the advancement of evaluation practices and curriculum management in vocational education in Indonesia.

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