

CIPP-Based Analysis of Industrial Work Practice Effectiveness at a Private Vocational High School

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ABSTRACT:

This study evaluates the effectiveness of the Industrial Work Practice Program (Prakerin) at Private Vocational High School (SMKS) TI Muhammadiyah 11 Sibulan using the CIPP (Context, Input, Process, Product) evaluation model. The gap between vocational school graduates' skills and industry needs remains a significant challenge for vocational education in Indonesia, while most previous studies have focused only on implementation issues without offering a comprehensive evaluation framework that addresses each school's unique context. Employing a qualitative, evaluative approach, this research collected data through participant observation, in-depth interviews with 15 informants (including the principal, supervising teachers, industry partners, and students), and document analysis. Data validity was ensured by source and method triangulation, member checking, and peer debriefing. The findings reveal that the Prakerin program is effective in enhancing students' technical competencies, supported by a strategic location, dual-supervision system, intensive monitoring, and comprehensive preparatory training. However, the development of soft skills—particularly leadership and initiative—remains suboptimal and requires further improvement. The implementation of a self-funding model through government grants (BOS) demonstrates strong institutional commitment and removes economic barriers for students. This study affirms the validity and relevance of the CIPP model in evaluating industrial work practice programs and provides recommendations for a more structured soft skills development strategy, as well as the innovation of sustainable industry partnership models. The novelty of this research lies in its application of a multidimensional analysis that integrates contextual, input, process, and outcome factors within the specific setting of a vocational secondary school.

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ABSTRAK:

Penelitian ini mengevaluasi efektivitas Program Praktik Kerja Industri (Prakerin) di SMKS TI Muhammadiyah 11 Sibulan dengan menggunakan model evaluasi CIPP (Context, Input, Process, Product). Kesenjangan antara keterampilan lulusan sekolah kejuruan dan kebutuhan industri masih menjadi tantangan utama pendidikan vokasi di Indonesia, sementara sebagian besar penelitian sebelumnya hanya berfokus pada masalah implementasi tanpa menawarkan kerangka evaluasi komprehensif yang memperhatikan konteks spesifik sekolah. Penelitian ini menggunakan pendekatan kualitatif dengan metode evaluatif, mengumpulkan data melalui observasi partisipatif, wawancara mendalam dengan 15 informan (kepala sekolah, guru pembimbing, mitra industri, dan siswa), serta studi dokumentasi. Keabsahan data dijamin melalui triangulasi sumber dan metode, member checking, serta peer debriefing. Hasil penelitian menunjukkan bahwa program Prakerin efektif dalam meningkatkan kompetensi teknis siswa, didukung oleh lokasi industri yang strategis, sistem pembimbingan ganda, monitoring intensif, serta pembekalan yang komprehensif. Namun, pengembangan soft skills seperti kepemimpinan dan inisiatif masih memerlukan optimalisasi. Model pendanaan mandiri melalui dana BOS menunjukkan komitmen institusional yang kuat dan mengurangi hambatan ekonomi bagi siswa. Studi ini menegaskan validitas dan relevansi model CIPP dalam mengevaluasi program praktik kerja industri, serta memberikan rekomendasi untuk penyusunan strategi pengembangan soft skills yang lebih terstruktur dan inovasi model kemitraan industri yang berkelanjutan. Kebaruan penelitian ini terletak pada penggunaan analisis multidimensional yang mengintegrasikan faktor kontekstual, input, proses, dan hasil dalam konteks sekolah menengah kejuruan secara spesifik.

Kata Kunci: *Praktik Kerja Industri, Model Evaluasi CIPP, Pendidikan Kejuruan, Kompetensi Teknis, Soft Skills*

INTRODUCTION

The Industrial Work Practice Program (Prakerin) in Vocational High Schools (SMK) is becoming increasingly relevant, especially in the industrial era 4.0, where the need for skilled and ready-to-use labor is increasing (Sifa et al., 2022). Vocational education, especially SMK, plays an important role in creating human resources (HR) that are in line with the demands of the industry (Soleh et al., 2023). However, there are significant challenges in integrating the educational curriculum with the needs of the world of work, where many

vocational school graduates feel unprepared to face professional challenges (Husein, 2019). Data from the Central Statistics Agency shows that the open unemployment rate of vocational school graduates is still quite high, although the transformation of vocational education is starting to show a positive impact (Kemdikdasmen, 2024). This indicates that there is a gap between the skills possessed by vocational school graduates and the actual needs of the industry (Ramadhan & Aulia, 2023), shows the urgency to conduct a thorough evaluation of the Prakerin program implemented by SMK. A relevant example is the BTQ Shiddiqiyah curriculum in East Java, which successfully integrates nationalism values into curriculum management to foster Pancasila-based character through structured planning, implementation, and evaluation (Maspupah, 2022).

Literature review reveals several problematic aspects in the implementation of Prakerin. Research conducted Fauzi and Paramitha criticized that the program should not only focus on internship time, but also on developing students' technical skills and soft skills, including collaboration, communication, and time management (Fauzi et al., 2020; Paramitha et al., 2024). Report of the Indonesian Child Protection Commission (KPAI) and previous research has shown that often students are placed in positions that do not match their competencies, which negatively impacts their learning experience and job readiness (Shabrina, 2024; Subandi et al., 2021). The implementation of Prakerin is also often disrupted by various factors such as lack of guidance from industry, limited supporting facilities, and weak monitoring and program evaluation systems (Ramadhan & Aulia, 2023; Subandi et al., 2021).

Critical analysis of previous studies reveals significant research gaps. Most studies only identify problems with Prakerin implementation in general without offering a comprehensive and systematic evaluation framework. In addition, previous research has not specifically examined how contextual factors of a particular school (such as geographic location and local industry characteristics) affect the effectiveness of Prakerin implementation. Although the CIPP (Context, Input, Process, Product) evaluation model developed by Stufflebeam has been proven to be effective in the evaluation of educational programs (Amin et al., 2022), research that applies this model in the context of Prakerin in Indonesia, especially in schools with specific characteristics, is still very limited.

This research aims to fill the gap by applying the CIPP evaluation model to analyze the Prakerin program at SMKS TI Muhammadiyah 11 Sibuluan which

has three main majors: Motorcycle Engineering and Business, Computer and Network Engineering, and Light Vehicle Engineering. This evaluation approach allows for multidimensional analysis that not only identifies implementation problems, but also connects contextual factors, program inputs, implementation processes, and results achieved in one integrated analytical framework. In contrast to previous studies that tended to evaluate Prakerin in isolation, this study offers a holistic perspective that integrates contextual, structural, and operational elements of the Prakerin program (Fauzi et al., 2020; Husein, 2019; Ramadhan & Aulia, 2023).

Through a qualitative approach and in-depth analysis, this research is expected to produce theoretical and practical contributions. Theoretically, this study enriched the literature on the evaluation of vocational education programs by proposing a contextual CIPP application model for Prakerin evaluation. Practically, the findings of this research can be a reference for stakeholders at SMKS TI Muhammadiyah 11 Sibuluan and other vocational education institutions in formulating strategies for improving the Prakerin program that are more responsive to the needs of the industry and the characteristics of students (Maulina & Yoenanto, 2022; Suroto, 2023). With this more systematic and contextual approach, it is hoped that the quality of vocational school graduates can be improved so that they are better prepared to face industry demands (Anggraini & Ambiyar, 2024; Hasibuan et al., 2023).

METHODS

This study adopts a qualitative approach with an evaluative design of the CIPP model to analyze the Prakerin program at SMKS IT Muhammadiyah 11 Sibuluan. The qualitative approach was chosen because it allows for an in-depth exploration of the complexity of the program and results in a holistic understanding of its implementation (Creswell & Poth, 2018). The CIPP evaluation model was used after comparing it with the Kirkpatrick and Discrepancy models, due to its ability to accommodate multi-dimensional analysis, its flexibility in engaging a wide range of stakeholders, and its orientation to systematic decision-making (Amin et al., 2022; Stufflebeam & Zhang, 2017).

The CIPP model is operationalized through four dimensions: context evaluation that analyzes the background and objectives of the program; evaluation of inputs that assess resource readiness and implementation strategies; process evaluation that assesses the suitability between planning and

implementation; and product evaluations that assess program outcomes and impacts on student competencies. These dimensions allow for a comprehensive analysis of all aspects of Prakerin's program, from planning to results.

Data collection was conducted through participatory observation. Semi-structured in-depth interviews were carried out with 15 informants selected through purposive sampling, namely: the school principal, supervisor teachers, DUDIKA partners, and students. Documentation studies were also carried out on various documents related to the program. Data collection lasted for four months, covering three different periods in the Prakerin cycle to comprehensively capture the dynamics of the program (Creswell, 2014).

The validity of the data is ensured through triangulation of sources and methods that compare data from different sources and collection techniques to identify the convergence of findings. Member checking is carried out through targeted group discussions and individual consultations to verify data interpretation. Peer debriefing with independent researchers was also carried out to ensure the objectivity and depth of the analysis (Miles et al., 2014). This validation strategy strengthens the credibility and transferability of research findings.

Data analysis follows an interactive model (Miles et al., 2014) with the stages of data collection, data condensation, conclusion drawing and verification. This analytical approach allows researchers to produce program evaluations that are not only descriptive, but also interpretive and oriented towards the development of practical recommendations for improvement of the Prakerin program.

FINDINGS AND DISCUSSION

FINDINGS

The evaluation of the Industrial Work Practice (Prakerin) program at SMKS IT Muhammadiyah 11 Sibuluan uses the CIPP (*Context, Input, Process, Product*) evaluation model developed by Stufflebeam. This model was chosen for its ability to comprehensively analyze programs from various dimensions (Stufflebeam & Zhang, 2017). This study aims to evaluate the effectiveness of the implementation of the Prakerin program in preparing students to enter the world of work and identify areas for improvement for future program development.

Aspect Context

The context aspect in the evaluation of the Prakerin program examines the external and internal environmental conditions that are the background for program implementation. This dimension analyzes the geographical characteristics of the school, the profile of the institution, and the suitability of the program with national education policies. The evaluation of the context aspect aims to understand the extent to which the environment supports the implementation of the Prakerin program and identify the contextual factors that affect the success of the program. Findings in this aspect can be a basis for consideration in formulating a sustainable program development strategy.

Data analysis shows that the school location has accessibility that supports the implementation of the program. The principal indicated that the school's strategic position provided easy access for students to the practice location, while the students conveyed that they did not experience significant transportation difficulties during the implementation of the program (Principal and Student Interview, 2025). Field observations confirmed the existence of adequate road access and public transportation, providing efficiency of student mobility to various DUDIKA locations (Observation, 2025).

SMKS TI Muhammadiyah 11 Sibuluan manages three expertise programs with the support of 36 teachers and 5 education staff for 500 students in 15 study groups (Documentation, 2025). Analysis of the relevance of the skills program to the needs of the job market revealed that there is a fit for local and regional industries, but there is a gap in mastery of the latest technologies used by the national industry. This gap shows the need for more intensive curriculum alignment with industrial technological developments.

The Prakerin program is based on the Regulation of the Minister of Industry Number 3 of 2017 concerning school and industry collaboration through the Link and Match program (Peraturan Pemerintah RI, 2017). In the context of the implementation of this policy, the school has built cooperative relationships with various DUDIKA partners, including several large industries in nearby cities and official workshops of various vehicle brands. The supervisor stated that this cooperative relationship has been established since the beginning of the school's establishment and continues to be developed in a sustainable manner (Supervisor Teacher Interview, 2025). However, the challenge of getting DUDIKA partners with high professional standards still needs to be overcome through more innovative partnership strategies.

Input Aspects

The input aspect in the evaluation of Prakerin's program focuses on the analysis of supporting resources invested in the implementation of the program. The study of this dimension provides a comprehensive picture of the capacity of institutions in organizing quality Prakerin programs.

The learning resources used show that there are efforts to adapt to the needs of the industry. The supervisor said that the development of digital modules is a response to the latest competency demands in the industry (Supervisor Teacher Interview, 2025). Meanwhile, students confirmed that the digital module facilitates access to the latest learning materials and can be accessed at any time during field practice (Student Interview, 2025). Analysis of curriculum documents shows the systematic integration of industry competency standards into learning materials, although module updates are sometimes hampered by limited access to the latest technological information.

The program was attended by 182 grade 12 students with structured preparation. The selection and placement process of students is carried out through the mapping of competencies and interests that are matched with the characteristics of the pre-school place. The principal emphasized that proper placement is a critical factor in the success of the program (Principal Interview, 2025). Program documentation shows that intensive debriefing for two weeks prior to the parachute bridged the gap between students' expectations and the realities of the world of work.

Program planning involves various school parties with reference to the Ministry of Education and Culture's guidelines which are adjusted to local conditions. The guidance ratio shows that one teacher guides 10-20 students, with a total of 10-15 supervisors who receive special training. As conveyed by the supervisor, the training focuses on guidance techniques, performance evaluation, and problem handling in the field, which is very helpful in dealing with real situations in the industry (Supervisor Teacher Interview, 2025). Periodic program evaluations with DUDIKA partners increase supervisors' understanding of the current dynamics of the world of work, overcoming the limitations of industry experience.

Program funding comes entirely from the school budget through School Operational Assistance. According to students, there is no additional fee charged to them for participating in this program (Student Interview, 2025). This self-funding model demonstrates a strong institutional commitment to the program. The practical facilities provided by the school are considered adequate based on

observations, although there are obstacles in the procurement of the latest technological equipment due to budget constraints.

Process Aspects

The process aspect in the evaluation of the Prakerin program examines the implementation of the program in the field, including the implementation flow, monitoring system, interaction between related parties, and handling of obstacles during the program.

The implementation of Prakerin lasted for four months in various partner locations, longer than the common practice in many vocational schools. Students state that longer durations provide opportunities to understand work processes more deeply and engage in more complex projects (Student Interviews, 2025). Analysis of the duration of the program showed a positive correlation with students' level of understanding of the work process and adaptation in the industrial environment.

The structured implementation flows with detailed division of responsibilities between the school and DUDIKA partners. The dual mentoring system involves internal mentors from the school and field mentors from the industry. According to the supervising teacher, regular coordination meetings between both supervisors ensure the alignment of learning expectations with work experience (Interview with Supervising Teacher, 2025). DUDIKA partners confirmed that intensive communication with the school facilitated the resolution of various issues that arose during the program (Interview with DUDIKA Partners, 2025).

Monitoring is conducted periodically with higher intensity compared to common practices in other vocational schools. The Head of the Department conducts monthly verifications, and the supervising teachers make weekly visits. Students expressed that the regular visits from supervisors were very helpful in overcoming various adaptation and technical challenges they faced (Student Interviews, 2025). Monitoring records show several cases of student transfers to more suitable internship locations after the initial evaluation, indicating the system's responsiveness to students' learning needs.

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Handling problems during the program shows effective management through coordination between supervisors, students' parents, and DUDIKA. Students convey that the response to problems is quick, and the solutions provided are usually effective (Student Interviews, 2025). Case handling documentation shows a significant decrease in the number of cases requiring serious intervention from year to year, indicating an improvement in the quality of program preparation and guidance.

Product Aspects

The product aspect in the evaluation of the Prakerin program examines the results and impact of the program on the development of student competencies and the reputation of the institution. This dimension is the main indicator of the effectiveness of the Prakerin program.

The achievement of students' technical competence (hard skills) shows satisfactory results. DUDIKA Partners stated that students showed significant improvements in technical skills, especially in the aspects of problem solving and the application of standard operational procedures (DUDIKA Partner Interviews, 2025). The supervisor confirmed that many students obtained grades above the minimum standards set for technical competence (Supervisor Teacher Interview, 2025). The development of joint assessment instruments between schools and industry increases the objectivity of assessments, overcoming common differences in standards between the two parties.

The development of soft skills shows mixed results. The analysis showed significant improvements in aspects of discipline, professional communication, and the ability to work in a team. However, the leadership and initiative aspects still need further development. Supervisors note that a greater focus on developing technical skills tends to override strengthening aspects of leadership and initiative (Supervisor Teacher Interview, 2025). These findings indicate the need for a more integrated approach to soft skills development, which relies not only on exposure in the work environment but also on structured interventions within the program.

In a theoretical context, this gap in soft skill development can be explained through experiential learning theory, emphasizing the importance of reflection and feedback in the learning process. The lack of structured reflection

mechanisms and specific feedback related to soft skills during the prakerin program is a factor inhibiting the development of this aspect. A more systematic implementation of Kolb's experiential learning cycle can be a solution to address this gap (Morris, 2020).

The school's reputation was strengthened by positive testimonials from DUDIKA. The supervisor said that several DUDIKA partners expressed a preference to recruit graduates of this school because of the quality of performance and work ethic shown during the pre-kindergarten (Supervisor Teacher Interview, 2025). Graduate tracing data confirms that many students are accepted to work where they carry out pr-service, which indicates the success of the program in preparing students to enter the workforce.

The main challenges identified are the need for greater support from the government to ensure cooperation with industry partners who have high professional standards and a commitment to the development of education. The limited number and variety of quality DUDIKA partners, especially in areas far from industrial centers, are potential obstacles in the development of programs in the future. These findings point to the need for stronger policy initiatives to encourage industry participation in vocational education programs.

Table 1. Evaluation of the Effectiveness of Industrial Work Practice Programs SMKS TI Muhammadiyah 11 Sibuluan Based on CIPP Model

Evaluation Dimensions	Evaluation Results and Significant Findings	Supporting Data
Context	The Prakerin program is relevant to the needs of local and regional industries with a strategic location for schools that support access to DUDIKA	Location accessibility observations, interviews of principals and students, documentation of institutional profiles (3 expertise programs, 36 teachers, 500 students)
Input	Adequate availability of supporting resources with technology-based learning innovations and comprehensive debriefing systems	Observation of practical facilities, interviews on the use of digital modules, program planning documentation and annual material updates
Process	Implementation of a structured program with a dual guidance system and intensive monitoring that supports the	Observation of the workflow at the prharin location, interviews about the implementation of 4

	development of student competencies	months and monitoring system, documentation of case handling
Product	The program successfully improves students' technical competencies and soft skills with a positive impact on the institution's reputation and graduate absorption rate	Observation of the school's reputation in the community, testimonial interviews of DUDIKA partners, documentation of joint assessment instruments and graduate tracking data

Based on the Table 1, the evaluation showed that the Prakerin program at SMKS TI Muhammadiyah 11 Sibuluan is running well, although there is still room for improvement, especially in terms of soft skill development and support from the government to ensure collaboration with more professional industry partners. The success of this program is an example of good practice that can be used as a reference for other schools in developing a pre-school program that is effective and has a positive impact on students and industry.

DISCUSSION

Bridging the Gap Between Educational Curriculum and Workforce Needs

The findings of the study show that SMKS IT Muhammadiyah 11 Sibuluan has developed a responsive curriculum adaptation mechanism through the update of input-based learning modules from DUDIKA Partners. This approach represents the implementation of the concept of dynamic curriculum development as stated by (Billett, 2011), emphasizing that the vocational education curriculum must be adaptive and responsive to changing industrial needs. The development of regularly updated digital modules confirms the argument (Lispiyatmini & Hermanto, 2022) that curriculum flexibility is an important prerequisite in vocational education in the digital era.

The findings that students are placed according to competency and interest mapping provide an empirical foundation for the constructive alignment theory of (Biggs & Tang, 2011) which emphasizes the importance of alignment between learning objectives, learning activities, and assessments. This phenomenon is also in line with the concept of link and match discussed by (Husein, 2019), where education is developed to produce graduates with competencies that are in accordance with the needs of the world of work. The comprehensive briefing for two weeks before the deployment to the pre-school

location is the implementation of the principles of transition pedagogy put forward by (Kift et al., 2010), which emphasizes the importance of providing support during the transition period and preparing students for the changing learning context from school to the world of work.

Nonetheless, the gap in mastery of the latest technologies used by the nationwide industry reflects the so-called (Rojewski & Roger, 2017) as a technological gap in vocational education. These findings confirm the results of the study (Bi et al., 2023; Wardoyo, 2025) that industrial digital transformation creates significant challenges for vocational education institutions in maintaining the relevance of the curriculum. This gap is increasingly complex in the context of schools located in areas far from industrial centres, indicating the existence of spatial barriers in knowledge and technology transfer as identified by the (Azalia et al., 2023).

In response to these gaps, the school developed a collaborative strategy through regular coordination meetings with industry. This approach is in line with the triple helix model developed by Etzkowitz & Leydesdorff (Djafar, 2024) which emphasizes the importance of dynamic interaction between education, industry, and government in the development of innovation and knowledge transfer. However, the update process is sometimes hampered by limited access to the latest technological information, indicating the need for a more intensive collaboration model (Purwady & Meditama, 2023).

Reconceptualization of Competency Development: Integration of Hard Skills and Soft Skills

The researchers' findings reveal a significant imbalance in the development of students' hard skills and soft skills during the Prakerin program. The evaluation showed that even though students managed to achieve the targeted technical competencies, the development of soft skills was still not optimal because most of DUDIKA's partners prioritized the development of hard skills, especially in the development of leadership and initiative aspects. This reflects what is called by (Prasetyo et al., 2020) as a competency gap in Indonesian vocational education, where the development of technical competencies is not balanced with the development of social and personal competencies.

In a theoretical perspective, this imbalance is contrary to the concept of holistic competence development developed by (Chan et al., 2020), which emphasizes that professional competence includes technical, methodological,

social, and personal dimensions in an integrated manner. These findings also confirm the opinion (Deissinger & Hellwig, 2005) against the vocational education system that is too oriented towards technical skills and risks producing graduates who are less adaptive to changes in job characteristics.

A deeper analysis of these gaps reveals that the development of soft skills during the Prakerin program tends to occur incidentally, without structured pedagogical interventions. This phenomenon can be explained through the theoretical framework of experiential learning from Kolb (Morris, 2020) which emphasizes that concrete experiences must be followed by reflection, conceptualization, and active experimentation to produce meaningful learning. However, data shows that the stages of reflection and conceptualization in the context of soft skills development tend to be neglected, resulting in less-than-optimal learning.

The development of a joint assessment instrument agreed upon by schools and industry is an innovation that can overcome the difficulty of measuring competency achievement objectively. This approach is in line with the concept of authentic assessment put forward by (Gulikers et al., 2004), which emphasizes the importance of assessment in a context that is realistic and relevant to professional practice. This assessment effectively measures intellectual ability because it encourages students to demonstrate deep understanding, critical thinking, and solve complex problems through exemplary tasks (Koh, 2017).

The reconceptualization of the Prakerin program needs to be carried out so that it not only focuses on mastering technical skills, but also on developing soft skills to form a complete professional identity. This is in line with research (Demak & Sulistiana, 2022) the formation of a professional identity that emphasizes the importance of non-technical aspects and experience in preparing learners to integrate effectively in the work environment.

The Effectiveness of the Prakerin Program Guidance and Monitoring Model

This study found that the dual guidance system and intensive monitoring implemented at SMKS TI Muhammadiyah 11 Sibuluan is an effective solution to overcome teachers' difficulties in increasing student motivation, identifying student potential, and overcoming learning difficulties, especially in the context of the Prakerin program which is often constrained by the lack of

guidance from the industry and weak supervision as identified by the Prakerin program (Subandi et al., 2021).

The implementation of a longer duration of the Prakerin program (four months) in contrast to the period of the Prakerin program in general accompanied by intensive monitoring through weekly visits and monthly verification provides an empirical basis for the concept of situated learning from Lave and Wenger (1991) which was studied by (Besar, 2018). This adequate duration allows students to experience a deeper immersion in the community of professional practice, so that contextual learning can occur optimally.

Furthermore, the guidance pattern through weekly visits by the supervisor and monthly verification by the head of the department represents the implementation of the concept of scaffolded guidance in vocational education studied by the (Afiati & Sartika, 2020). This structure reflects the principles of cognitive apprenticeship developed by Collins et al. (1991) and discussed further in the study (Rezania et al., 2020). Meanwhile, the high intensity of monitoring allows for early detection of various problems and rapid adjustments in the learning process, which basically reflects the pedagogical principles of formative assessment as described in the research (Elwy et al., 2020).

The intensive monitoring system implemented reflects the implementation of the principles of formative evaluation where feedback is provided on a regular basis to ensure continuous improvement during the learning process. These findings provide empirical evidence on the effectiveness of formative evaluation approaches in the context of vocational education and challenge summative evaluation approaches commonly applied in similar programs.

A dual guidance system involving the school's internal supervisors and industrial field supervisors represents what is called by (Akkerman & Bakker, 2011) as boundary crossing facilitation. Through regular coordination, the two supervisors help students cross the line between the educational and professional contexts. This approach successfully addresses one of the classic issues in vocational education, namely the difficulty of transferring learning between academic and practical contexts (Perkins & Salomon, 1999).

The Self-Funding Model and Its Implications for Education Justice

The finding that the funding of the Prakerin program comes entirely from the school budget through School Operational Assistance (BOS) is an

important finding that has not been widely discussed in previous research. In the perspective of the theory of educational justice put forward by (Ball et al., 2011). This funding policy reflects efforts to remove economic barriers to access to quality learning experiences.

This contrasts with the results of the research (Hidayat & Saputra, 2023) which identified limited funds as the main obstacle in the implementation of the *prakerin* program in many other vocational schools. These significant differences indicate variability in funding policies between vocational education institutions, which has implications for variations in program quality and students' access to authentic learning experiences.

This funding model can also be seen, where education is seen as a social investment that supports the development of society as a whole (Siregar et al., 2022). In this context, the allocation of public resources (BOS) to support the *Prakerin* program reflects the recognition of the strategic value of vocational education in human resource development and the improvement of social welfare. Therefore, the government must support and play an important role in the development of inclusive and sustainable vocational education policies (Zuo, 2025).

Boundary Crossing and Professional Identity Development

A comprehensive analysis of the *Prakerin* program at SMKS TI Muhammadiyah 11 Sibuluan is relevant in the context of the boundary crossing theory of vocational education developed by (Akkerman & Bakker, 2011). The data show that the program facilitates the four boundary crossing mechanisms identified in the theory: identification, coordination, reflection, and transformation.

The identification mechanism is seen in the comprehensive debriefing process before the program, where students are introduced to the differences between the educational context and the professional context. The coordination mechanism is realized through a dual guidance system and periodic coordination meetings between internal supervisors and field supervisors. The reflection mechanism is facilitated through regular evaluation sessions and discussions between students and supervisors, although this aspect still needs to be strengthened, especially in the context of soft skills development. The mechanism of transformation is seen in the change in students' perspective towards professional practice and the development of their professional identity.

The high acceptance rate of students where they carry out prakerin reflects the effectiveness of the program in facilitating the transition from student identity to professional identity. This phenomenon can be explained through signaling theory in the education economy developed by (Becker, 2009), Where Prakerin's experience serves as a credible signal that communicates the competence of potential workers to potential employers. These findings reinforce the results of the study (Husein, 2019) which identified a positive correlation between the quality of Prakerin implementation and the absorption rate of vocational school graduates in the world of work.

In a sociological context, the preferences of DUDIKA partners to recruit school graduates reflect the formation of social capital as conceptualized by Coleman (1988) and discussed in the research (Zuhairroh, 2021). Social capital built through sustainable partnership relationships between schools and industry creates a network of trust that facilitates the transition of graduates to the workforce and strengthens the school's institutional position in the educational-industry ecosystem.

Nonetheless, the gap in the development of leadership and initiative aspects indicates that *the boundary crossing* process does not automatically result in a comprehensive transformation of competencies. As emphasized by (Engeström et al., 1995). Effective boundary crossing requires structured mediation to facilitate learning transfer. In this context, a more systematic integration between practical experience and theoretical reflection is needed to facilitate the holistic development of various dimensions of competence.

Overall, the findings of the study indicate that the Prakerin program at SMKS TI Muhammadiyah 11 Sibuluan has succeeded in facilitating boundary crossing between the educational and professional contexts, contributing significantly to the development of students' technical competencies and soft skills, and strengthening the institutional position of schools in the educational-industrial ecosystem. However, aspects of leadership development and initiatives, as well as mastery of the latest technologies, still require a more structured pedagogical intervention to optimize the impact of the program on the work readiness of graduates comprehensively.

CONCLUSION

This study evaluates the effectiveness of the Industrial Work Practice Program (Prakerin) at SMKS IT Muhammadiyah 11 Sibuluan using the CIPP (Context, Input, Process, Product) evaluation model. The results show that the

program is effective in improving students' technical competence, supported by strategic locations, adaptive industry partnerships, and comprehensive digital modules and debriefing. However, the development of students' soft skills is still a challenge that needs to be considered in the design of the next program. This study also strengthens the validity and relevance of the CIPP model in vocational education in Indonesia, especially for the evaluation of industrial partnership-based internship programs, with empirical evidence that this model can integrate contextual factors, inputs, processes, and outcomes in vocational school settings.

The implications of this research policy emphasize the need to develop a more structured and integrative soft skills development strategy in the Prakerin curriculum, as well as the renewal of learning modules that are tailored to the current industry needs. The limitations of the study include focusing on one school with specific geographical characteristics and industry partners, as well as data that are qualitative and dependent on informant perceptions, so that the potential for subjectivity bias remains. In addition, the evaluation has not measured Prakerin's long-term impact on the absorption of graduates in the world of work. For further research, it is recommended to conduct an evaluation of various types of vocational schools in different geographical locations by involving quantitative data related to job absorption and career development of graduates. Follow-up research can also examine the effectiveness of specific interventions for soft skills strengthening and explore more innovative industrial partnership models to improve the relevance and sustainability of Prakerin programs.

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