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# Evaluation of the Implementation of Merdeka Belajar Using the CIPP Model: A Case Study at SMK Negeri 2 Payakumbuh

Renol Fitria Asdi[1], Ahyanuardi[1], Indra Saputra[1*]

[1] Faculty of Engineering, Universitas Negeri Padang, Padang, Indonesia.

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Corresponding Author:
Indra Saputra
indrasaputra@fpp.unp.ac.id

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**Abstract:** The Merdeka Belajar Curriculum was launched by the Ministry of Education, Culture, Research, and Technology to improve the quality of education in Indonesia. This curriculum is designed to provide flexibility in learning, develop 21st-century skills, and instill the values of the Pancasila Student Profile. However, the implementation of the Merdeka Belajar Curriculum in Vocational High Schools (SMK) faces various challenges, such as limited resources, teacher readiness, and the involvement of the business and industrial sectors. This study aims to evaluate the implementation of the Merdeka Belajar Curriculum at SMK Negeri 2 Payakumbuh using the Context, Input, Process, and Product (CIPP) evaluation model. The evaluation was conducted to understand the application of the curriculum and identify its strengths, weaknesses, and improvement opportunities. This research uses a quantitative method with a structured approach to evaluate the implementation of the Merdeka Belajar Curriculum. Quantitative data were collected through the distribution of questionnaires designed to measure the four components of the Context, Input, Process, and Product (CIPP) evaluation model. The research sample includes teachers, students, and the principal at SMK Negeri 2 Payakumbuh who are involved in the curriculum implementation.. The research instruments consist of questionnaires, interviews, and observations designed to measure the four components of the CIPP model. The results show that the context, input, process, and product components of the Merdeka Belajar Curriculum implementation are generally good. However, the input component requires improvement, particularly regarding resource availability, ongoing teacher training, and strengthening collaboration with the business and industrial sectors. This study recommends that implementing the Merdeka Belajar Curriculum be continued by improving the input aspect through providing adequate resources, intensive teacher training, and strengthening partnerships with the business and industrial sectors to enhance curriculum relevance.

**Keywords:** CIPP evaluation; Merdeka Belajar Curriculum; Vocational education

## Introduction

The rapid global changes driven by technological advancements and digitalization have significantly impacted various sectors, including education. To produce competent human resources who are ready to compete globally, Indonesia's education system must be able to adapt to these changes (Kemendikbud Ristek, 2020). To address this challenge, flexible educational policies are needed, promoting the development of 21st-century skills and character-building based on Pancasila values (Ospankulova et al., 2025). In response, in 2022, the Ministry of Education, Culture, Research, and Technology launched the Merdeka Belajar Curriculum,

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which offers a more flexible approach and gives schools and teachers the freedom to adjust learning strategies to local needs and student characteristics. One of the key elements of this curriculum is the emphasis on character building through the values of the Pancasila Student Profile (Makarim, 2022).

One of the main innovations in the Merdeka Belajar Curriculum is project-based learning (Project-Based Learning/PBL), which allows students to develop critical thinking, creativity, collaboration, and communication skills. PBL offers a more contextual and meaningful learning experience, where students not only learn theory but also practice their knowledge in solving real-world problems (Hsbollah et al., 2022; Smith et al., 2022; Thomas, 2021). However, the implementation of the Merdeka Belajar Curriculum in vocational schools faces several challenges, such as limited facilities, lack of relevant teacher training, and minimal collaboration with businesses and industries. At SMK Negeri 2 Payakumbuh, these have become major obstacles in implementing the curriculum (Rahman, 2022).

Another challenge is the students' adaptation to new learning methods, which require higher independence. Many students find it difficult to understand the concept of project-based learning, especially if teacher guidance is not intensive enough. Additionally, the lack of integration between the curriculum and workforce needs results in learning outcomes that are not yet optimally aligned with industry demands. A comprehensive evaluation of the Merdeka Belajar Curriculum at the vocational school level, particularly in regions such as Payakumbuh, remains limited, even though vocational schools play a crucial role in preparing skilled labor (Asdi, 2024).

To overcome these challenges, the CIPP (Context, Input, Process, and Product) evaluation model developed by Stufflebeam can be used. This model includes four main components: Context to analyze the curriculum's relevance to societal and workforce needs, Input to evaluate resource readiness such as facilities and teacher training, Process to assess the implementation of project-based learning, and Product to measure the curriculum's impact on students' achievements in both technical and non-technical skills (Stufflebeam, 2022).

The CIPP model can provide a comprehensive overview of the implementation of the Merdeka Belajar Curriculum in vocational schools and help identify strengths and weaknesses in each aspect, which can then serve as a basis for improvement. This study aims to fill gaps in the existing literature and provide data-based recommendations to improve the quality of vocational education, especially at SMK Negeri 2 Payakumbuh. By using the CIPP evaluation model, it is hoped that solutions can be found to overcome existing obstacles, such as limited facilities, lack of teacher training, and minimal collaboration with businesses and industries so that this curriculum can be implemented more effectively and relevantly to workforce needs.

This study aims to evaluate the implementation of the Merdeka Belajar Curriculum at SMK Negeri 2 Payakumbuh using the CIPP evaluation model, which includes context, input, process, and product components. This evaluation is expected to provide new insights into the challenges faced by the school, such as limited facilities and teacher training, as well as provide recommendations for improvement. This study also aims to assess the implementation of project-based learning, identify the difficulties faced by students, and evaluate the extent to which the curriculum is relevant to workforce needs. Through this comprehensive evaluation, it is hoped that strengths and weaknesses in curriculum implementation can be identified, and recommendations can be provided to improve its effectiveness and better prepare students for the workforce. The results of this study are also expected to serve as a reference for other schools and help the government in developing better vocational education policies.

## Method

This study employs a quantitative approach with a descriptive research design to evaluate the implementation of the Merdeka Curriculum at SMKN 2 Payakumbuh. The theoretical framework is developed based on elements of validation, reliability, and the results of both quantitative and qualitative data analysis. The quantitative design facilitates the measurement of respondents' achievements across four evaluation components: context, input, process, and product.

Sampling was conducted using the simple random sampling method, ensuring that each individual in the population had an equal chance of being selected. The sample consisted of 66 teachers from SMK N 2 Payakumbuh, drawn from a total population of 193 individuals. Data collection was carried out using a Likert-scale questionnaire with five response options, designed to assess each component of the CIPP (Context, Input, Process, and Product) evaluation model.

The validation process employed Pearson correlation, yielding correlation values for 43 out of 47 items that met the validity criteria, with an r-table value of 0.361. Four invalid items were removed to maintain data quality. Reliability testing using Cronbach's Alpha produced a score of 0.905, which was categorized as very strong. This indicates that the instrument generates

consistent and reliable data suitable for use under various conditions.

Data analysis was performed using descriptive statistics, which included measures such as data count, mean, median, mode, range, minimum value, maximum value, standard deviation, and variance. Quantitative data analysis involved describing the data and assessing respondents' achievement levels across the four components: context, input, process, and product.

## Result and Discussion

*Result*

*Context component*

The context component in this study includes three indicators: the alignment of curriculum objectives with societal needs, policy support for the curriculum, and the relevance of the curriculum to local culture. The presentation of respondents' achievement levels for each item in the context aspect is shown in Table 1.

The alignment of curriculum objectives with societal needs assesses the extent to which the curriculum objectives address societal demands. With a respondent achievement level of 85.66% and an average score of 4.28, this aspect falls into the "Fully Aligned " category. This indicates that the curriculum has been designed in line with societal expectations to equip students with skills and knowledge relevant to the workforce and everyday life.

Policy support facilitating curriculum implementation is also rated as "Fully Aligned," with an achievement level of 81.06% and an average score of 4.05. This includes regulations, policies, and resources provided to support curriculum implementation in schools. These results demonstrate that the government or relevant stakeholders have provided adequate policies to support the implementation of the Merdeka Belajar Curriculum.

The evaluation of the extent to which the curriculum considers local culture shows an achievement level of 82.69% with an average score of 4.13, also categorized as "Fully Aligned." This indicates that the curriculum is designed with consideration of local cultural values, making it relevant to the social and cultural context of the school environment.

**Table 1.** Recapitulation of Respondents' Achievement Levels in the Context Aspect

| No | Statement Item | Respondent Achievement Level | Category |
|---|---|---|---|
| A | Alignment of curriculum objectives with societal needs | 85.66 | Fully Aligned |
| B | Policy support for the curriculum | 81.06 | Fully Aligned |
| C | Curriculum relevance to local culture | 82.69 | Fully Aligned |
| Respondent Achievement Level Context | | 82.69 | Fully Aligned |

Overall, the context dimension demonstrates excellent results, with an average respondent achievement level of 82.69%. All three key points in this dimension are rated as "Fully Aligned," signifying that the curriculum meets societal needs, is supported by adequate policies, and is relevant to local culture.

*Input component*

The input component in this study includes four indicators: the availability of curriculum guidelines, the quality of learning materials, the availability of resources, and teacher training. The presentation of respondents' achievement levels for each item in the input aspect is shown in Table 2.

The Curriculum Guideline Availability aspect assesses the extent to which curriculum guidelines are available to support the learning process. With a respondent achievement level of 84.17% and an average score of 4.21, this aspect falls into the "Fully Aligned " category. This indicates that the necessary curriculum documents or guidelines are available and sufficiently adequate to assist teachers in implementing the Merdeka Curriculum effectively.

**Table 2.** Recapitulation of Respondents' Achievement Levels in the Input Aspect

| No | Statement Item | Respondents' Achievement Level | Category |
|---|---|---|---|
| A | Availability of curriculum guidelines | 84.17 | Fully Aligned |
| B | Quality of learning materials | 83.84 | Fully Aligned |
| C | Availability of resources | 82.32 | Fully Aligned |
| D | Teacher training | 67.42 | Adequately Aligned |
| Respondents' Achievement Level (Input) | | 80.83 | Fully Aligned |

The Learning Material Quality aspect evaluates the quality of the learning materials developed in the curriculum. With an achievement level of 83.84% and an average score of 4.19, this aspect is also categorized as "Fully Aligned." This shows that the learning materials are considered relevant, meet the needs, and align with

established standards to support students' learning processes.

The Resource Availability aspect includes the availability of facilities and other resources, such as teaching materials, laboratories, or technological devices, to support curriculum implementation. With an achievement level of 82.32% and an average score of 4.12, this aspect is rated as “Fully Aligned." This means the resources provided are sufficiently adequate, although there may still be room for improvement in certain areas.

The Teacher Training aspect assesses the quality and quantity of training provided to teachers to support curriculum implementation. With an achievement level of 67.42% and an average score of 3.37, this aspect is categorized as "Adequately Aligned." This indicates that teacher training requires further attention, as it is a critical factor in ensuring the successful implementation of the curriculum.

Overall, the input dimension has an average achievement level of 80.83%, falling into the "Fully Aligned" category. The availability of curriculum guidelines, the quality of learning materials, and the availability of resources have effectively supported curriculum implementation. However, teacher training remains an area requiring particular focus to ensure that teachers possess the necessary competencies to implement the Merdeka Curriculum effectively.

*Process component*

The Process Component in this study includes four indicators: teaching methods aligned with the curriculum, active student participation, teacher feedback to students, and relevant learning activities. The presentation of respondents' achievement levels for each item in the process aspect is shown in Table 3.

**Table 3.** Recapitulation of Respondents' Achievement Levels in the Process Aspect

| No | Statement Item | Respondents' Achievement Level | Category |
|---|---|---|---|
| A | Teaching methods align with the curriculum. | 77.58 | Adequately Aligned |
| B | Active student participation | 82.88 | Fully Aligned |
| C | Teacher feedback to students | 87.47 | Fully Aligned |
| D | Relevant learning activities | 83.94 | Fully Aligned |
| Respondents' Achievement Level (Process) | | 82.98 | Fully Aligned |

The aspect of teaching methods according to the curriculum evaluates how well the teaching methods used by the teacher align with the principles outlined in the Merdeka Curriculum. With a respondent achievement level of 77.58% and an average score of 3.88, this aspect falls into the "Adequately Aligned" category. This indicates that while the teaching methods have supported the implementation of the curriculum, there is still room for improvement to make the teaching more effective and in line with the curriculums demands.

The aspect of active student participation measures how actively students engage in the learning process. With an achievement level of 82.88% and an average score of 4.14, this point is rated as "Fully Aligned." This reflects that the learning approach applied has encouraged students to actively participate, whether in discussions, group activities, or independent learning processes.

The aspect of teacher feedback to students evaluates the quality and frequency of feedback provided by the teacher during the learning process. With an achievement level of 87.47% and an average score of 4.37, this aspect falls into the "Fully Aligned" category. This shows that the teacher has provided excellent feedback, helping students to better understand the material and improve their learning outcomes.

The aspect of relevant learning activities measures how well the learning activities conducted are relevant to the learning objectives and the student's needs. With an achievement level of 83.94% and an average score of 4.20, this point is also categorized as "Fully Aligned." This indicates that the learning activities have been well-designed to meet the curriculum objectives and are relevant to real-world contexts.

Overall, the process dimension has an average achievement level of 82.98%, placing it in the "Fully Aligned" category. Active student participation, teacher feedback, and the relevance of learning activities were all rated highly. However, the teaching methods still fall under the "Adequately Aligned" category, indicating a need for improvement in the application of teaching methods to make them more effective and fully support the optimal implementation of the Merdeka Curriculum.

*Product component*

The Product component in this study has 4 indicators, which are student achievement according to standards, student skill development, and the relevance of the curriculum to real life, and student independence and interest in learning. The presentation of the

achievement levels of respondents for each item from the process aspect can be seen in Table 4.

The aspect of student achievement according to standards evaluates how well student learning outcomes align with the standards set in the curriculum. With an achievement level of 81.06% and an average score of 4.05, this aspect falls into the "Fully Aligned" category. This indicates that students have successfully achieved the competencies expected in line with the learning targets.

The aspect of student skill development measures the success of the curriculum in helping students develop relevant skills for both the workforce and daily life. With an achievement level of 80.91% and an average score of 4.05, this aspect also falls into the "Fully Aligned" category. This reflects that the curriculum has been successful in providing the skills students need to face future challenges.

The aspect of the relevance of the curriculum to real-life situations assesses how well the curriculum connects learning materials to real-world contexts. With an achievement level of 83.54% and an average score of 4.18, this aspect is rated as "Fully Aligned." This shows that the Merdeka Curriculum-based learning is relevant and applicable, preparing students to handle various real-life Situations.

**Table 4.** Recapitulation of Respondents' Achievement Levels for the Product Aspect

| No | Statement Item | Respondents' Achievement Level | Category |
|---|---|---|---|
| A | Student achievement according to standards | 81.06 | Fully Aligned |
| B | Development of student skills | 80.91 | Fully Aligned |
| C | Relevance of curriculum to real-life | 83.54 | Fully Aligned |
| D | Student independence and learning interest | 85.86 | Fully Aligned |
| Respondents' Achievement Level (Product) | | 223.88 | Fully Aligned |

The aspect of student independence and interest in learning measures the level of student autonomy in learning and their interest in the learning process. With an achievement level of 85.86% and an average score of 4.29, this aspect falls into the "Fully Aligned" category. These results indicate that the curriculum has successfully enhanced students' motivation to learn independently, which is one of the main goals of the Merdeka Curriculum.

Overall, the product dimension has an average achievement level of 83.84%, placing it in the "Fully Aligned" category. All aspects, from student achievement to independence and interest in learning, show very positive results. This indicates that the implementation of the Merdeka Curriculum at SMK Negeri 2 Payakumbuh has successfully produced graduates who are competent, relevant to real life, and highly autonomous in their learning.

*Discussion*

Based on the research, in general, the evaluation of the implementation of the Merdeka Curriculum at SMK N 2 Payakumbuh from the aspects of Context, Input, Process, and Product shows only minor differences in the average scores. However, there are several indicators from each variable that need to be analyzed further. The research findings on the evaluation of the implementation of the Merdeka Curriculum at SMK Negeri 2 Payakumbuh using the CIPP evaluation model (Context, Input, Process, and Product) provide a comprehensive picture of the effectiveness and challenges in implementing the curriculum. The following is an in-depth discussion based on the research findings:

*Context component*

The evaluation of the context component shows that the implementation of the Merdeka Curriculum at SMK Negeri 2 Payakumbuh is relevant to the needs of the community, supported by adequate policies, and connected to the local culture. The average achievement level of 82.69% indicates that the curriculum aligns with the needs of the industrial world, the job market, and the local community. Sukmadinata (2009) states that a good curriculum should reflect the needs of society and the relevance of local culture, serving as a bridge between theory in schools and the realities in the community.

On the indicator of the alignment between the curriculum's objectives and the needs of the community, the majority of respondents rated the curriculum's goals as highly relevant, with an achievement level of 85.66%. This reflects the growing needs of the industrial world and the job market, which is in line with Finch et al. (1999) view that vocational education should integrate theory and practical experience so that students can directly apply their knowledge in the workplace.

Policy support for the curriculum's implementation achieved an average of 81.06%, indicating that there is sufficient support. However, support at the regional level remains suboptimal, as seen in the achievement of 79.09% for the regional policy indicator. Tilaar (2004) emphasizes that the success of education policy implementation depends on the synergy between national and regional policies, which is often hindered by a lack of coordination.

Regarding the relevance of the curriculum to local culture, the achievement level of 82.69% shows that the curriculum allows room for the development of local culture. However, there is still room for improvement in strengthening students' identities. The Ministry of Education and Culture (2013) mentions that a curriculum relevant to local culture not only preserves traditional values but also enhances students' appreciation for cultural heritage amidst the challenges of globalization.

*Input component*

The input component includes the availability of curriculum guides, the quality of learning materials, resource availability, and teacher training. The research shows that the curriculum guide and the quality of learning materials have high achievement levels, with scores of 84.17% and 83.84%, respectively. The curriculum guide is considered clear, comprehensive, and helpful for teachers in designing lessons, while the learning materials are rated as relevant to curriculum standards as well as developments in technology and knowledge.

The curriculum guide, with an achievement level of 84.17%, has met the needs of teachers in preparing lesson plans and activities. This guide provides clear directions for implementing the Merdeka Curriculum, including teaching strategies, assessments, and student projects. Fullan (2007) mentions that a good guide is an essential tool for teachers to connect theory and practice in teaching, thereby supporting the success of curriculum reform.

Resource availability achieved a score of 82.32%, indicating that the existing facilities are sufficiently supportive of the learning process. However, some teachers expressed concerns about the limited availability of technological equipment, such as computers, projectors, and internet access, which are crucial for supporting project-based and technology-driven learning. UNESCO (2015) emphasizes that adequate physical and digital resources are critical for the successful implementation of a competency-based curriculum, especially in the digital age, investing in educational infrastructure a priority.

Teacher training was the indicator with the lowest achievement level, at 67.42%, which falls under the "Adequately Aligned" category. Teachers feel that the training they have received has not sufficiently helped them understand the innovative teaching strategies that align with the Merdeka Curriculum. Joyce et al. (2002) state that effective training should include theory, practice, and feedback, and should be conducted continuously to foster innovation and improve teaching practices.

*Process component*

The process component includes teaching methods, active student participation, teacher feedback, and the relevance of learning activities. Overall, the achievement level for this component is 82.98%, indicating that the learning process is running well. However, each indicator in this component presents challenges and opportunities for improvement.

Teaching methods received a score of 77.58%, which falls under the "Adequately Aligned" category. Teachers at SMK Negeri 2 Payakumbuh have used various teaching methods to create an active learning environment, such as group discussions, projects, and presentations. However, many teachers feel the need to develop more varied methods to support competency-based learning and student exploration. Gagne (1985) states that variation in teaching methods is crucial to meet the diverse learning needs of students, especially in the 21st-century learning context, which emphasizes critical thinking and collaboration skills. Gagne also emphasizes that well-planned teaching methods can maximize the transfer of learning from theory to practice.

Active student participation achieved a score of 82.88%, indicating that most students have actively engaged in the learning process. Project-based activities, discussions, and simulations have encouraged students to participate more actively. However, some students still show dependency on the teacher to complete tasks. Bandura (2002) argued that students' self-efficacy can improve through activities that require individual and group responsibility, making students more confident in taking initiative. Bandura also added that building students' confidence in a collaborative learning context can enhance overall learning outcomes.

*Component product*

The product component includes student achievement according to standards, skill development, curriculum relevance to real-life situations, and student independence and interest in learning. Overall, the average achievement level of 83.21% shows that the Merdeka Curriculum has had a positive impact on student development.

Student achievement according to standards received a score of 81.06%, indicating that most students have reached the competencies set in the curriculum. The learning process at SMK Negeri 2 Payakumbuh has been successful in helping students master the material, although additional efforts such as remedial learning and differentiation strategies are needed for students facing learning difficulties. Bloom (1976) states that learning should ensure all students reach a certain level of mastery before moving on to the next material.

Skill development received a score of 80.91%, indicating that students have developed practical skills relevant to the needs of the workforce, such as critical thinking, collaboration, and problem-solving. However, some students still require further guidance to optimally improve these skills. Trilling et al. (2010) emphasize that 21st-century skills should be at the core of every curriculum to prepare students for global challenges.

Curriculum relevance to real-life situations received a score of 83.54%, indicating that the learning process has successfully connected theory with practical contexts. Project-based learning and community-based projects have provided students with real-life experiences. Kolb (1984) explains that learning is more effective when students are directly involved in practical experiences, which strengthens their understanding.

Student independence and interest in learning received the highest score, 85.86%. The Merdeka Curriculum has provided students with opportunities to learn independently and foster their interests through flexible learning approaches, such as blended learning. Bloom (1976) states that student independence in learning is an indicator of a successful curriculum and can enhance intrinsic motivation to achieve better learning outcomes.

Overall, the product component indicates that the Merdeka Curriculum has had a positive impact on student achievement, skill development, the relevance of learning to real-life situations, and student independence and interest in learning. However, further efforts are needed, particularly to ensure that all students can achieve the expected competencies evenly.

## Conclusion

Based on the evaluation results of the implementation of the Merdeka Curriculum at SMK Negeri 2 Payakumbuh, it can be concluded that, overall, the curriculum has shown positive results across the four components analyzed: Context, Input, Process, and Product (CIPP). This evaluation indicates that the Merdeka Curriculum at SMK Negeri 2 Payakumbuh has successfully adapted to the needs of the workforce, is relevant to local culture, and has developed the skills required by students in the workplace. Context Component: This component shows success in aligning curriculum goals with the needs of society and the workforce, with an average achievement of 82.69%. The curriculum's relevance to the workforce, existing policy support, and the integration of local culture into learning have been effective. However, there is still a need for improvements in practical facilities and policies to better support optimal implementation. Input Component: The input component achieved a score of 80.83%, indicating that the curriculum guides and learning materials are generally good and relevant, although periodic updates are necessary to keep pace with technological and industrial developments. While the existing facilities are adequate, modern technological tools and more intensive teacher training are essential to support the quality of teaching. Process Component: This component recorded an average achievement of 82.98%, showing that project-based learning methods, active student participation, and teacher feedback have been effective. However, there is a need for innovation in teaching methods and the integration of technology into project-based learning to improve the quality of the learning process. Product Component: The product component shows positive results with an average score of 83.21%, indicating that students at SMK Negeri 2 Payakumbuh have met the set standards, developed both technical and soft skills, and can apply their knowledge in real-life situations. However, deeper theoretical instruction is still needed to support better conceptual understanding

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**Author Contributions**

This research was conducted with contributions from all authors. The primary author was responsible for conceptualizing the study, collecting and analyzing data using IBM SPSS Statistics 27, and drafting the manuscript. Dr. Ahyanuardi, M.T., as the research supervisor, guided in designing the methodology, refining the analysis, and reviewing the final manuscript. Both authors reviewed and approved the final version of the paper.

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**Conflicts of Interest**

No conflicts of interest

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