Curricula:
Journal of Curriculum Development

The effectiveness of Kurikulum 2013 and Kurikulum Merdeka: Analysis in vocational high school

Agistia Nurbani Rajaba[1], Riva Zahra Rizkyani[2], Silmi Asy-Syifaa[3], Hafsah Nugraha[4]

[1,2,3,4] Universitas Pendidikan Indonesia, Bandung, Indonesia

agistianrbnrjba@upi.edu[1], rivazahrar23@upi.edu[2], silmiasysyifaa-21@upi.edu[3], hafsahnugraha@upi.edu[4]

ABSTRACT

This study analyzes the effectiveness of implementing the Kurikulum 2013 and the Kurikulum Merdeka in Vocational High Schools (SMK) as part of Indonesia's education reform efforts to enhance students' competencies and meet industrial demands. The research aims to evaluate how well these two curricula, namely the Kurikulum 2013 and the Kurikulum Merdeka, align with the goals of vocational education, particularly at SMK Negeri 44 Jakarta. The study employs a qualitative descriptive method, focusing on evaluating the implementation of both curricula at SMK Negeri 44 Jakarta. The findings indicate that the Kurikulum Merdeka provides greater flexibility in project-based learning and material adjustment to industrial needs. At the same time, the Kurikulum 2013 is more structured with strict competency-based assessments. Although the Kurikulum Merdeka encourages students' creativity and independence, challenges such as teacher readiness and understanding remain crucial. The study recommends teacher training, incentives to support adopting more flexible and creative teaching methods, and infrastructure support to optimize the implementation of the Kurikulum Merdeka.

ABSTRAK

Penelitian ini menganalisis efektivitas implementasi Kurikulum 2013 dan Kurikulum Merdeka di Sekolah Menengah Kejuruan (SMK) sebagai upaya dari reformasi pendidikan di Indonesia untuk meningkatkan kompetensi peserta didik dan kebutuhan industri. Penelitian ini dilakukan untuk mengevaluasi sejauh mana kedua kurikulum yaitu Kurikulum Merdeka dan Kurikulum 2013 ini sudah selaras dengan tujuan pendidikan kejuruan, khususnya di SMK Negeri 44 Jakarta. Penelitian ini menggunakan metode kualitatif deskriptif, di mana berfokus pada evaluasi penerapan kedua kurikulum di SMK Negeri 44 Jakarta. Hasil penelitian menunjukkan bahwa Kurikulum Merdeka memberikan fleksibilitas lebih dalam pembelajaran berbasis proyek dan penyesuaian materi dengan kebutuhan industri, sementara Kurikulum 2013 lebih terstruktur dengan penilaian berbasis kompetensi yang ketat. Meskipun Kurikulum Merdeka mendorong kreativitas dan kemandirian peserta didik, tantangan yang dihadapi dalam penerapannya termasuk kesiapan guru dan pemahaman peserta didik menjadi hal yang harus diperhatikan. Penelitian ini menyarankan perlunya pelatihan guru, pemberian insentif supaya guru siap mengadopsi metode pembelajaran yang lebih fleksibel dan kreatif serta dukungan infrastruktur untuk mengoptimalkan penerapan Kurikulum Merdeka.

Kata Kunci: *Kurikulum 2013; Kurikulum Merdeka; pembelajaran berbasis proyek; reformasi pendidikan*

INTRODUCTION

Education plays a crucial role in improving the quality of human resources who are competent and ready to compete at the international level. As the foundation of a nation's development, education aims to produce innovative individuals capable of contributing to societal advancement. It is also one of the most influential factors in shaping the younger generation, given its importance in building a better future. However, the implementation of education cannot be separated from the role of the curriculum. The curriculum serves as the main guideline in the learning process, encompassing objectives, content, strategies, and assessments designed to develop students' abilities in line with current needs (Hutagalung & Kurniati, 2024).

The curriculum serves as the heart of the educational process; without a clear curriculum, education would lack direction and purpose. It acts as a roadmap guiding students toward achieving the expected competencies. More than just an educational tool, the curriculum also reflects a nation's educational philosophy. It is the core of the education system, providing guidance and direction throughout the learning process. In Indonesia, the curriculum has undergone continuous changes over time, generally based on evolving needs and developments (Herman, 2022; Priantini *et al*, 2022; Sapitri, 2022). These changes serve as a means to improve learning in ways that are more responsive to local needs and global challenges. Curriculum reforms have become one of the most significant aspects of national education in Indonesia, with each modification and adaptation tailored to the prevailing social, political, and economic context (Cantika *et al*., 2022).

Throughout Indonesia's history, the curriculum has undergone numerous transformations. Its development began with the 1947 curriculum, which mirrored the Dutch colonial system, followed by the 1968 curriculum that emphasized the principles of Pancasila, and the 1975 curriculum that adopted a systematic approach with specific objectives. The competency-based approach was first introduced in the 1994 curriculum and was further refined into the Competency-Based Curriculum (Kurikulum Berbasis Kompetensi, KBK) in 2004, followed by the School-Based Curriculum (Kurikulum Tingkat Satuan Pengajaran, KTSP) in 2006. A major shift occurred with the implementation of the 2013 Curriculum (Kurikulum 2013, K-13), which emphasized character development through competency-based, integrated, and thematic learning. The introduction of Kurikulum 2013 aimed to address weaknesses in previous curricula, focusing on the holistic development of students in cognitive, affective, and psychomotor domains. Moreover, it sought to instill strong religious values and character in students (Nadira *et al*., 2022).

However, the demand for education continues to grow, particularly in today's dynamic digital era. According to the Ministry of Education, Culture, Research, and Technology (Kemendikbud) in 2022, to address these challenges, the government introduced its own curriculum designed to provide greater flexibility for teachers and students, with an emphasis on project-based learning and the development of the *Pancasila Student Profile*, including independence, creativity, and critical thinking (see: https://guru.kemdikbud.go.id). Kurikulum Merdeka grants schools the flexibility to select learning materials relevant to their students' context. The transition from Kurikulum 2013 to Kurikulum Merdeka was not due to the failure of Kurikulum 2013, but rather a government policy response to the emergency

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situation caused by the COVID-19 pandemic in 2019. Its primary goal was to address learning disruptions resulting from the suspension of face-to-face instruction (Fitriyah & Wardani, 2022). Additionally, Kurikulum Merdeka serves as a governmental effort to overcome the learning crisis brought about by the pandemic (Nugraha, 2022).

The Kurikulum Merdeka was also designed as a response to the low literacy and numeracy skills of students in Indonesia. Based on the results of the 2018 Programme for International Student Assessment (PISA), the average scores of Indonesian students in literacy and numeracy remained below global standards. By updating the curriculum, the government aims to improve students' reading abilities and mathematical skills. The legal basis for the implementation of Kurikulum Merdeka is stipulated in the Regulation of the Minister of Education, Culture, Research, and Technology No. 56 of 2022. This regulation provides guidelines for schools in implementing a more flexible curriculum that is relevant to the needs of students in each region (Suryati *et al*., 2023).

Based on the above background, the researcher is interested in conducting a study on the effectiveness of implementing Kurikulum 2013 and Kurikulum Merdeka. This research will be conducted at SMK Negeri 44 Jakarta. As a vocational high school in Jakarta, SMK Negeri 44 Jakarta faces the challenge of keeping pace with technological advancements and establishing partnerships with the industrial sector. Data from the Jakarta Provincial Education Office in 2023 indicate that the implementation of Kurikulum Merdeka at SMK Negeri 44 Jakarta is supported by internship programs that provide students with direct, hands-on experience in the field. Previous studies have shown that Kurikulum 2013 has helped students understand vocational concepts theoretically but has been less effective in providing relevant practical experience (Asmaran *et al*., 2024). Other studies have highlighted its potential to enhance students' creativity and improve the quality of education (Fariza & Kusuma, 2024).

Through internship programs, students are better prepared to enter the workforce as they are accustomed to dealing with real-world industrial situations. In this study, the author aims to explain how Kurikulum 2013 and Kurikulum Merdeka are implemented in the learning process, their key differences, and how these differences manifest in instructional practices. Furthermore, this research seeks to analyze the obstacles encountered in curriculum implementation and assess the level of effectiveness of both curricula in vocational high schools. The findings of this study are expected to provide recommendations that can be utilized by stakeholders, including schools, educators, and policymakers, to ensure that as curricula continue to evolve, the implemented curriculum can more effectively achieve educational objectives.

LITERATURE REVIEW

Kurikulum 2013

Kurikulum 2013 was designed to develop students' abilities holistically, encompassing attitudes, knowledge, and skills. In line with its objectives, the curriculum aims to shape the *Pancasila Student Profile*, which includes being faithful and devoted to God Almighty with noble character; embracing global diversity; working collaboratively; demonstrating independence; thinking critically; and exhibiting creativity. Through these attributes,

students are expected to become productive citizens who contribute to the nation's progress (Pratycia *et al*., 2023). In its implementation, Kurikulum 2013 employs a scientific approach consisting of the steps of observing, questioning, experimenting, reasoning, and presenting results. The goal of this approach is to enable students to master subject matter deeply while also fostering logical thinking skills (Suaryo *et al*., 2023).

The implementation of Kurikulum 2013 in vocational high schools has succeeded in helping students acquire stronger theoretical understanding. However, its execution has often been hindered by a lack of teacher training and insufficient facilities to support practical learning. Teachers have also reported that heavy administrative burdens make it difficult for them to focus on more innovative teaching activities. Overall, while Kurikulum 2013 provides a structured learning framework, its flexibility is limited, posing challenges, particularly in vocational high schools that require more hands-on activities to prepare students for entering the workforce.

Kurikulum Merdeka

The Kurikulum Merdeka emerged as a response to the need for more personalized and relevant education. Unlike the more uniform structure of Kurikulum 2013, Kurikulum Merdeka offers flexibility that allows each student to learn according to their individual potential and pace. One of its defining features is project-based learning, which aims to help students connect lessons to real-life situations and foster their creativity. The implementation of Kurikulum Merdeka in vocational high schools has proven effective in enhancing students' problem-solving abilities and in completing work-related, project-based tasks (Risna, 2023).

Teachers are likewise challenged to think creatively when designing lessons. However, limitations in facilities and technical training often pose challenges to its implementation. Students report feeling more engaged in the learning process because the content is more relevant to their lives. This curriculum also promotes the development of essential future skills, such as communication, teamwork, and innovation (Hartawati & Karim, 2024).

Konsep Efektivitas dalam Pendidikan

Effectiveness in education refers to the extent to which educational objectives are successfully achieved through a systematically designed process encompassing planning, implementation, and outcomes. In the context of curriculum, effectiveness is measured by the degree to which the curriculum enables students to attain the targeted competencies, both academic and other skills relevant to societal and labor market needs. Effectiveness is not solely associated with quantitatively measured learning outcomes; it also includes the quality of the learning process, such as the extent to which teachers and students actively engage in learning activities. This highlights that effectiveness is multidimensional, ranging from individual achievement to alignment with broader educational system goals (Mea, 2024). Effectiveness can be identified through several key indicators:

1. Improvement in Student Competence. A curriculum is considered effective if it successfully enhances students' cognitive (knowledge), psychomotor (skills), and affective (attitude) abilities. For example, the ability of vocational high school students to complete project-

based tasks that reflect workplace demands demonstrates the effectiveness of curriculum implementation (Sudirman *et al.*, 2024).

2. Relevance to the Real World. The Kurikulum Merdeka has proven itself to be an innovation capable of producing graduates who are well-aligned with contemporary needs. By providing schools with the flexibility to adapt instructional content, the curriculum has succeeded in preparing graduates who are ready to face the evolving challenges of the labor market (Azalia *et al.*, 2023).

3. Stakeholder Satisfaction. The satisfaction levels of students, teachers, and industry stakeholders with the implemented curriculum also serve as a measure of success. This satisfaction encompasses the perception that the curriculum delivers direct benefits for students' career prospects and fosters meaningful learning experiences (Rofi'ah *et al.*, 2024).

4. Curriculum Flexibility. Research shows that an effective curriculum can adapt to diverse local needs. In the case of the Kurikulum Merdeka, for instance, flexibility in selecting content and instructional approaches enables schools to design curricula that are more contextualized and relevant (Azalia *et al.*, 2023).

Comparison of the Effectiveness of Kurikulum 2013 and Kurikulum Merdeka

The Kurikulum 2013 excels in providing a clear instructional structure, enabling teachers to deliver content systematically. However, its limited flexibility often hinders teachers from adapting lessons to the specific needs of students in the field (Martatiyana *et al.*, 2023). In contrast, the Kurikulum Merdeka grants teachers greater autonomy to innovate in teaching, particularly in practice-oriented activities aligned with industrial requirements. This curriculum is more suitable for vocational high schools as it fosters skills that are directly applicable in the workplace, such as entrepreneurship and the use of modern technology. Conversely, the Kurikulum 2013 is better suited for establishing a strong theoretical foundation, though it places less emphasis on direct practical application (Amalia & Asbari, 2023).

Challenges in Implementing Kurikulum Merdeka

Although the Kurikulum Merdeka offers considerable autonomy, its implementation is not without challenges. One of the primary issues is the extent of teachers' ability to design creative and innovative learning experiences. Many teachers report a lack of confidence due to insufficient training in technology integration and inadequate access to supporting facilities (Nadira *et al.*, 2022). Vocational subject teachers, in particular, struggle to translate the Kurikulum Merdeka's concepts into effective classroom practices. The main obstacles lie in the limited availability of teaching tools and technical training support. Collaboration between schools and industry can serve as a viable solution to address these barriers. The industrial sector can contribute by providing practical equipment or offering training programs for teachers, thereby enhancing their readiness to implement the Kurikulum Merdeka (Kusumaningrum *et al.*, 2024).

METHODS

This study employed a qualitative research method with a descriptive qualitative approach. As qualitative research is inherently descriptive and prioritizes an inductive analytical perspective, emphasis was placed on the process and the viewpoints of the research subjects. The data consisted of a set of sentences that were comprehensively identified and analyzed. The research was conducted at SMK Negeri 44 Jakarta, located at Jalan Harapan Jaya 9 No. 5A, RT.8/RW.4, Cempaka Baru, Kemayoran, Central Jakarta, Special Capital Region of Jakarta. Data collection took place from November 26 to November 28, 2024. The data were gathered through school observations, interviews with teachers from the Accounting and Financial Institution department, and documentation conducted at the end of the interview sessions. The research procedure began with the preliminary stage, which involved conducting a survey at the school and interviewing relevant stakeholders to explore the implementation of the previous curriculum (Kurikulum 2013) and the newly adopted curriculum (Kurikulum Merdeka). In the second stage, data collection was carried out alongside the search for relevant references. In the final stage, data obtained from observations, interviews, and documentation were analyzed.

RESULTS AND DISCUSSION

Implementasi Kurikulum 2013 dan Kurikulum Merdeka di SMK Negeri 44 Jakarta

SMK Negeri 44 Jakarta implements the Kurikulum Merdeka in accordance with government regulations. As a public vocational school, SMK Negeri 44 Jakarta is required to adopt the curriculum mandated by the government. When Kurikulum 2013 was in effect, all public schools were obligated to use it. Likewise, with the current implementation of Kurikulum Merdeka, the school must follow the prescribed policy. In contrast, private schools possess greater flexibility in selecting the curriculum they deem appropriate and retain the freedom to decide which curriculum to implement.

Prior to transitioning to Kurikulum Merdeka, evaluations of Kurikulum 2013 and perspectives on the new curriculum at SMK Negeri 44 Jakarta were marked by both support and opposition. Some stakeholders argued that Kurikulum 2013 could still be implemented effectively, depending on how teachers structured classroom learning. However, the primary motivation for adopting Kurikulum Merdeka was to gain greater flexibility. In Kurikulum 2013, the *Kompetensi Inti* (Core Competencies) and *Kompetensi Dasar* (Basic Competencies) were predetermined, leaving no room to deviate from the established framework. In contrast, Kurikulum Merdeka allows the *Capaian Pembelajaran* (Learning Outcomes) and *Tujuan Pembelajaran* (Learning Objectives), the equivalent of Core and Basic Competencies in Kurikulum 2013, to be developed by each school according to their context and the capabilities of the students in each class.

Despite the ongoing debates surrounding its adoption, the freedom offered by Kurikulum Merdeka has made the teaching and learning process more engaging and adaptable. Schools are granted autonomy to design the curriculum, prepare learning materials, and structure classroom activities in alignment with their specific circumstances and needs. Nevertheless, teachers face the significant responsibility of setting clear boundaries to ensure students remain focused and accountable for their learning. Teachers must also emphasize to students

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that such freedom is intended to foster independence and creativity, while still achieving the predetermined learning objectives (Amiruddin *et al*., 2023).

Comparison of Kurikulum 2013 and Kurikulum Merdeka Implementation in Classroom Learning

Preparation for Teaching and Learning Activities at the Beginning of a New Academic Year

In Kurikulum 2013, the school year begins with teachers following guidelines established by the government, including *Kompetensi Dasar* (Basic Competencies) and *Kompetensi Inti* (Core Competencies). The objective is to ensure that the required knowledge is effectively delivered to students by utilizing the available facilities and resources. For example, if Kurikulum 2013 requires the completion of four Basic Competencies and ten Core Competencies, these must be addressed within a predetermined timeframe. Structured assessments—such as formative tests, summative tests, semester exams, and national examinations—are an integral part of this process. By contrast, in Kurikulum Merdeka, lesson preparation is carried out in the form of teaching scenarios.

There are no strict limitations on the number of *Capaian Pembelajaran* (Learning Outcomes) or *Tujuan Pembelajaran* (Learning Objectives) that must be completed in a specific manner or within a fixed timeframe. Teachers are given the freedom to improvise and explore their creativity in achieving curriculum elements. Unlike Kurikulum 2013, which tends to be more rigid in scheduling lessons, Kurikulum Merdeka offers greater flexibility for schools to innovate. According to the Ministry of Education and Culture's official website (2022), Kurikulum Merdeka enables schools to implement more in-depth and sustainable P5 (*Proyek Penguatan Profil Pelajar Pancasila*) projects, thereby optimizing the goal of shaping the *Profil Pelajar Pancasila* (Pancasila Student Profile) (Subhan, 2024).

P5 involves the creation of projects with specific themes determined collaboratively by teachers and students. These themes may relate to sustainability, local culture, or specific fields such as accounting, guiding students to think about their future paths, whether in higher education or the workforce. These projects integrate both intracurricular and extracurricular activities into the lesson hours, whereas in Kurikulum 2013, such activities were conducted separately. The implementation of Kurikulum Merdeka emphasizes practical experiences and collaboration. In Kurikulum 2013, forming effective student work teams often posed a challenge. However, with Kurikulum Merdeka and the P5 projects, students are encouraged to work in teams to complete and present their projects. This approach helps students develop teamwork skills, empathy, and emotional regulation (Supriyadi *et al*., 2024).

Teaching Approaches

The teaching approach in Kurikulum 2013 is scientific in nature, with a strong emphasis on knowledge-based instruction. Learning under Kurikulum 2013 is highly structured, with fixed schedules and strict time constraints for each competency. Instructional methods are guided

by established scientific frameworks, and teachers play a highly structured role, adhering closely to the prescribed *Kompetensi Inti* (Core Competencies) and *Kompetensi Dasar* (Basic Competencies). In contrast, Kurikulum Merdeka adopts a more flexible approach, focusing on motivating students to achieve the *Profil Pelajar Pancasila* (Pancasila Student Profile). Unlike traditional teacher-centered learning models, *Merdeka Belajar* emphasizes student-centered learning.

Teachers in this framework serve as facilitators, creating a conducive learning environment that encourages active student participation (Yusuf & Arfiansyah, 2021). They are granted the autonomy to improvise and explore creative methods in achieving curriculum elements without being bound by rigid *Capaian Pembelajaran* (Learning Outcomes) and *Tujuan Pembelajaran* (Learning Objectives). Lesson schedules are more adaptable, and schools have the freedom to design their curriculum and learning materials according to specific needs. This includes integrating P5 (*Proyek Penguatan Profil Pelajar Pancasila*) projects that provide practical experience and foster collaboration in learning (Putri & Astiwi, 2025).

Within Kurikulum Merdeka, the teacher's role as a facilitator involves encouraging student motivation through relevant instructional models, such as project-based learning. Teachers are expected to design teaching scenarios that inspire students to seek learning materials independently while still offering guidance and support when necessary. This approach enhances the flexibility of the learning process and emphasizes practical experiences that are expected to improve students' effectiveness and independence in learning (Athaya *et al*., 2024). Motivation plays a pivotal role in improving student comprehension throughout the learning process (Hadiapurwa *et al.*, 2021).

Learning Media

In Kurikulum 2013, learning media primarily consisted of standardized textbooks (*buku paket*). Students were expected to learn the subject matter from these textbooks, which also served as the main instructional reference for teachers. However, if teachers did not actively seek additional learning resources, the knowledge conveyed was limited to the contents of the textbook. Assessment and evaluation were conducted through *Lembar Kerja Siswa* (Student Worksheets), journals, and structured steps outlined in the textbooks. In contrast, Kurikulum Merdeka employs a much wider variety of learning media, going beyond the reliance on standardized textbooks. Students are encouraged not only to use textbooks but also to seek knowledge independently, in alignment with the demands of Kurikulum Merdeka (Zulaiha *et al*., 2023).

Unlike its more structured predecessor, Kurikulum Merdeka provides greater flexibility for both teachers and students to explore, enabling a more active, creative, and enjoyable learning process (Sherly *et al*., 2023). Interactive learning media can also enhance students' interest and participation in the learning process (Rosyiddin *et al.*, 2023). In this framework, textbooks are not mandatory as the sole source of learning materials. Instead, students are expected to independently search for relevant materials from the internet and other sources. This approach aims to increase students' active involvement in the learning process and foster independent knowledge acquisition. The materials gathered are then discussed

collaboratively in class. Additionally, teachers prepare summaries in the form of worksheets containing both content and step-by-step problem-solving activities, which are completed together with the students.

Industrial Work Practice and Learning During Internship Period

Under Kurikulum 2013, the duration of *Praktik Kerja Lapangan* (PKL) ranged from three months to one year. In public schools, including SMK Negeri 44 Jakarta, the shortest duration—three months—was typically adopted. PKL was conducted in the second semester of the 11th grade, allowing sufficient time for final examination preparation in the 12th grade and ensuring that students were well-prepared. Due to the relatively short three-month period, students were required to resume classes and examinations at school immediately after completing their internship. Conversely, in Kurikulum Merdeka, the PKL period is longer, ranging from six to 12 months. SMK Negeri 44 Jakarta opted for the shortest duration within this framework—six months. PKL was scheduled in the first semester of the 12th grade, with students spending the entire semester in industry placements (*Dunia Usaha dan Dunia Industri*—DUDI). As a result, the time remaining before final examinations was limited. To address this, teaching and exam preparation were conducted online via platforms such as Zoom and Google Classroom, ensuring that students' internship activities were not disrupted. For example, during the odd-semester final examinations, students on PKL participated in online tests to assess their retention of previously learned material. The exams remained open until midnight, allowing flexibility for those with shift-based work schedules or full-day commitments.

Evaluation and Assessment

In Kurikulum 2013, evaluation was conducted through structured examinations, including summative tests (*Ujian Harian*), formative tests (*Ujian Tengah Semester* and *Ujian Akhir Semester*), and national examinations. Assessment relied heavily on formal and structured test results. Students were deemed successful if their report card grades and examination scores were satisfactory. In contrast, evaluation under Kurikulum Merdeka is more continuous and flexible. Assessment is carried out in an ongoing manner, without strict requirements to base evaluations solely on test results. Instead, it emphasizes how students can actualize themselves and respond to challenges, particularly in relation to the *Profil Pelajar Pancasila*. The focus is on the learning process and the continuous development of students, rather than solely on formal examination outcomes.

Indicators for Assessing Learning Objectives

In Kurikulum 2013, the primary assessment indicator is the *Kompetensi Kriteria Minimal* (KKM, Minimum Competency Criteria). Each subject has a KKM threshold that students must meet. If a student's score falls below the KKM, they are required to take remedial lessons. Should the remedial result still fail to meet the threshold, the student is deemed unsuccessful and is not promoted to the next grade level. Kurikulum 2013 thus emphasizes clear and structured assessment standards. In contrast, Kurikulum Merdeka does not use KKM as an

assessment indicator. Instead, it adopts more flexible competency achievement indicators. Students who fail to meet these indicators are still required to undergo remedial learning; however, at the end of the academic year, all students are granted the opportunity to advance to the next grade, even if their scores remain below the benchmark. This approach shifts the focus toward individual ability and developmental progress rather than rigid numerical thresholds.

Support for Students with Special Needs (ABK)

In Kurikulum 2013, provisions for students with special needs (*Anak Berkebutuhan Khusus*, ABK) existed but were not comprehensively addressed. In Kurikulum Merdeka, support for ABK is more targeted, tailored to the students' individual talents and interests. These students are given opportunities to develop their abilities, and success indicators are adapted to their specific circumstances. At the end of the learning process, ABK students also receive report cards, albeit with different achievement indicators from those applied to other students.

Challenges in Transitioning from Kurikulum 2013 to Kurikulum Merdeka

The shift from Kurikulum 2013 to Kurikulum Merdeka has encountered several challenges. One significant issue is students' misunderstanding of the term *Merdeka*. Many mistakenly believe that *Kurikulum Merdeka* grants unlimited freedom in learning, including the freedom to choose whether or not to study. The challenge for educators is to guide students toward the correct understanding, that while Kurikulum Merdeka allows for greater autonomy, this freedom is bounded by the objectives of the *Profil Pelajar Pancasila*, which remain the ultimate goal (Nadira *et al*., 2022).

Another challenge lies in the implementation of more independent learning. Kurikulum Merdeka expects students to find learning materials on their own; however, in subjects such as accounting, the lack of foundational knowledge poses a significant barrier. Unlike subjects such as mathematics or English, accounting is not typically introduced in primary or junior secondary school, leaving students without a strong foundation upon entering vocational high school. This makes applying self-directed learning principles, aligned with the *Cara Belajar Siswa Aktif* (CBSA) approach, more difficult in practice.

Effectiveness of Implementation: Kurikulum 2013 vs. Kurikulum Merdeka

The notable differences observed in students' performance under Kurikulum Merdeka compared to Kurikulum 2013 indicate a significant shift in competency attainment, often falling short of the expected standards. Kurikulum 2013 emphasizes individual learning, in which the required knowledge is clearly outlined for students. This approach compels students to study independently, allowing individual abilities to be more visible and measurable. Learning materials and the *Kompetensi Kriteria Minimal* (KKM, Minimum Competency Criteria) are explicitly and firmly established, with strict assessment ensuring that students have a clear benchmark for achieving learning objectives. Kurikulum 2013 thus

provides a structured framework, using KKM as the primary assessment indicator to ensure that students meet the prescribed minimum competency standards.

The assessment process in Kurikulum 2013 is rigorous and systematic, encompassing various evaluation formats such as summative and formative assessments, semester examinations, and national exams, all designed to ensure students achieve the prescribed knowledge standards. Students must meet the established KKM to be deemed successful; otherwise, they are required to undergo remedial learning. Additionally, Kurikulum 2013 supports project-based learning and cooperative learning. Through project-based learning, students are given opportunities to apply their knowledge in real-world projects (Syawalia *et al.*, 2023). while cooperative learning fosters collaboration among students to solve problems and complete tasks together. Nevertheless, the emphasis on meeting fixed standards can limit opportunities for creativity and the development of individual potential in both students and teachers.

In contrast, Kurikulum Merdeka offers greater flexibility in the learning process. Students are encouraged to seek knowledge from diverse sources, including the internet, and assessments are more flexible, focusing on students' abilities and their engagement in group contexts. Special attention is also given to students with special needs (*Anak Berkebutuhan Khusus*, ABK) through approaches tailored to their talents and interests. However, this flexibility may lead to the absence of firm benchmarks, potentially diminishing students' motivation and perseverance. The freedom to source information online also poses challenges in discerning accurate and relevant content, necessitating active guidance from teachers, parents, and the government.

Under Kurikulum Merdeka, students are expected to independently locate learning materials. Yet in fields such as accounting, where foundational knowledge is often lacking, unlike subjects such as mathematics or English that are introduced earlier, students require more intensive guidance and stimulation from teachers. This situation makes it difficult to fully implement self-directed learning in line with the *Cara Belajar Siswa Aktif* (CBSA) approach. Consequently, teachers must take a more active role, not only as facilitators but also by adopting certain instructional methods from Kurikulum 2013, such as lectures, discussions, and problem-based learning.

Teachers face the challenge of balancing the autonomy offered by Kurikulum Merdeka with the need to provide firm direction and foundational knowledge. While Kurikulum Merdeka offers greater opportunities for developing students' individual abilities and creativity, its effectiveness is highly dependent on the guidance and support provided by teachers, parents, and government institutions. Thus, it is essential to ensure that the freedom granted under Kurikulum Merdeka is managed effectively to maintain learning effectiveness.

In the case of SMK Negeri 44 Jakarta, the structured approach of Kurikulum 2013 remains necessary to ensure effective learning. Therefore, a blended approach, combining methods from Kurikulum 2013 with new approaches, has been implemented to address challenges and ensure that students acquire the necessary knowledge effectively. Overall, Kurikulum 2013, with its structured framework and rigorous assessment, proves more effective in achieving learning objectives, particularly in measuring and ensuring students' competency attainment.

Discussion

The relationship between the flexibility of the *Kurikulum Merdeka* and the attainment of student competency targets indicates that, while such flexibility can foster creativity and independence, it also presents challenges in terms of consistency and the availability of resources (Athaya *et al*., 2024). Therefore, strategies to address these challenges are essential, including strengthening collaboration between schools and industry, as well as ensuring the provision of adequate resources. This study contributes to understanding the effectiveness of implementing the 2013 Curriculum (*Kurikulum 2013*) and the *Kurikulum Merdeka* at SMK Negeri 44 Jakarta. The findings can be utilized by policymakers to evaluate the effectiveness of both curricula in the context of vocational education, thereby informing better curriculum policy decisions.

An effective curriculum in vocational education is one that bridges theory and practice through project-based learning models. This approach is essential to ensure that students not only master theoretical knowledge but also develop technical skills (Martatiyana *et al*., 2023). The effectiveness of a curriculum can be measured by the extent to which it enhances students' employability skills. The *Kurikulum Merdeka* has proven more effective in preparing students to face real-world work challenges. SMK students who learn under the *Kurikulum Merdeka* are more frequently engaged in real projects and hands-on activities that align with industry needs (Sudirman *et al*., 2024).

This research also highlights the importance of teacher training and professional development in ensuring readiness for implementing the *Kurikulum Merdeka*. Challenges such as misconceptions about the concept of "freedom" and insufficient foundational knowledge in certain subject areas were identified in this study. These insights can help educators better prepare mitigation strategies for potential learning obstacles. It is crucial to provide comprehensive training for teachers and to strengthen collaboration between schools and industry to ensure that the implemented curriculum remains relevant to workforce demands (Nadira *et al*., 2022).

Limitations in facilities and the lack of training have reduced teachers' confidence in translating the *Kurikulum Merdeka* framework into effective classroom practice, particularly in practical, skills-based learning. Addressing these challenges requires targeted strategies, such as joint efforts between schools and industry in providing facilities for practical learning, as well as teacher training focused on innovative teaching methods that emphasize student autonomy without neglecting essential learning objectives (Kusumaningrum *et al*., 2024).

In addition to comprehensive teacher training, the development of teaching materials aligned with industry requirements, especially those with direct applicability in the workplace, should be prioritized. Teachers and stakeholders must remain responsive to current industrial trends and local needs when collaborating on curriculum design. For example, lessons could incorporate the use of digital applications in product development or explore marketing strategies through trending social media campaigns. Such content could serve both as case studies and practical learning activities (Amalia & Asbari, 2023). Teacher perceptions of teaching materials also warrant attention, as they play a critical role in improving instructional quality (Khaira *et al*., 2023).

The flexibility envisioned in the *Kurikulum Merdeka* can only be realized through collaborative engagement among teachers, stakeholders, and students, each fulfilling their respective roles. Students can actively contribute by proposing topics or ideas for learning through structured discussions with teachers. These topics need not be overly complex, leveraging trends popular among youth as discussion starters can help teachers design materials that reflect current realities. Teachers, in turn, must play an active role in fostering an open and healthy classroom discourse, encouraging students to express their opinions, and providing moral support throughout the learning process (Athaya *et al*., 2024).

CONCLUSION

Based on the analysis conducted at SMK Negeri 44 Jakarta, both the 2013 Curriculum (*Kurikulum 2013*) and the *Kurikulum Merdeka* possess distinct strengths and challenges within the vocational education setting. The *Kurikulum 2013* offers a systematic learning framework but lacks flexibility in adapting to the diverse needs of students. Conversely, the *Kurikulum Merdeka* aims to prepare students for the evolving demands of the workforce, yet achieving this goal requires stronger support for teachers, particularly in digital competence development and the integration of technology into teaching practices. Adequate infrastructure is also essential to sustain technology-based learning. While both curricula demonstrate effectiveness, they do so within different scopes. Therefore, intensive teacher training is necessary to enable the adoption of more flexible and creative instructional approaches. Enhancing learning infrastructure to support project-based learning, along with ensuring sufficient resources, is equally important. Furthermore, closer collaboration between schools and industry is vital to ensure that the curriculum remains aligned with real-world workforce requirements.

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