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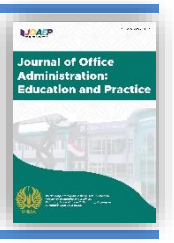

Policy Analysis of Merdeka Curriculum: Readiness to Fulfill Industry Needs

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ABSTRACT

The COVID-19 pandemic in Indonesia has shifted towards blended learning, combining distance and face-to-face methods. In dealing with these conditions, the Indonesian government implemented an education policy, namely the emergency curriculum, followed by a Merdeka curriculum policy. This study explores schools' readiness to implement the Merdeka curriculum using literature study and observation methods. Data were analyzed descriptively on aspects of curriculum preparation and current industry competency needs, including curriculum structure, learning outcomes, learning and assessment, teaching tools, and teacher linearity. The research results show that teachers experience several obstacles in preparing learning for industry needs. Thus, it is recommended that schools consider field conditions and implementation experiences from other vocational high schools, and it is expected that students will acquire knowledge and skills relevant to the Industrial era so that they are ready to compete globally.

INTRODUCTION

Current developments continue to progress rapidly, transitioning from the Industrial Revolution to the era of Society 5.0. This era aims to create a super-intelligent society, enhancing comfort and vitality by integrating virtual and physical spaces to provide essential goods and services (Huang et al., 2022). Therefore, digitalization and the use of technology,

especially the Internet of Things (IoT), in life has become very important, and it can fulfill specific fields of work.

Competent human resources are crucial in the era of Society 5.0, especially in education. Education provides the knowledge and skills needed for the modern workforce. Indonesia ranks 67th out of 203 countries in the World's Best Education Systems, indicating that Indonesia's education system still needs improvement to better impact its economic and social environment and break into the top 20 rankings. According to *worldtop20.org*, the weakness of the education system in Indonesia is the Teacher Ratio Academic Levels.

Education constantly faces challenges, especially during the COVID-19 pandemic, which requires IoT-based learning. The current challenge is making digital tools efficient and user-friendly for teachers and students (O'Connor et al., 2023). During the Covid-19 pandemic, education in Indonesia experienced a learning *loss*. The pandemic and post-pandemic have changed the view of education using mixed learning patterns, namely distance learning and face-to-face learning. The research results of Banihashem et al. (2023) show that the mixed learning model increases teacher workload and stress.

To address these challenges, the Indonesian government introduced the emergency curriculum to ease the burden on teachers during the pandemic and emphasize essential competencies. Currently, Indonesia is entering an era of learning recovery. The Ministry of Education and Culture has designed a new Merdeka curriculum to restore learning.

The Merdeka Curriculum is a new curriculum design developed from the evaluation of the 2013 curriculum in 2019 learned during the pandemic and insights from other countries which aims to improve learning quality based on students' needs in terms of knowledge, skills and essential competencies (Rachmawati & Pahlevi, 2023). The curriculum formed by the Merdeka Learning Policy will be flexible, competency-based, focused on developing character and soft skills, and accommodating to world needs (Menteri Pendidikan dan Kebudayaan Republik Indonesia, 2020). It has been explained in more detail in its implementation. It is regulated in the Decree of the Minister of Education, Culture, Research and Technology of the Republic of Indonesia Number 262/M/2022 concerning Amendments to the Decree of the Minister of Education, Culture, Research and Technology Number 56/M/2022 concerning Guidelines Implementation of the Curriculum in the Context of Learning Recovery (Menteri Pendidikan, Kebudayaan, Riset, 2022). The teacher's role as the door to education must be aware of changes in developing learning with new curriculum policies. Quality changes not developed by a teacher will not produce meaningful quality in a new curriculum policy

(Riowati & Yoenanto, 2022).

One of the challenges of the Merdeka curriculum is the low literacy of teachers in utilizing technological developments, especially in designing and developing learning media. Success in improving the quality of education depends on the quality of teachers, so the curriculum policy that will be used certainly needs to be aligned with the competence of quality teachers. To achieve quality, teachers, especially those who can accept changes to the new curriculum policy, must master knowledge, abilities, skills, and beliefs (Suhandi & Robi'ah, 2022). The new Curriculum Policy faced several obstacles during its implementation and still requires evaluation, as shown by Nur & Arfandi (2023), shows the Evaluation of the Merdeka Curriculum Implementation Process at the Leading Central Vocational School in Sorong City that not all teachers implement the Merdeka Curriculum optimally due to limited facilities and infrastructure and are still struggling with old learning techniques. Some teachers must conduct assessments following the learning and assessment guidelines published by the Education Standards, Curriculum and Assessment Agency of the Ministry of Education, Culture, Research and Technology. It is not optimal when evaluating the project to strengthen the Pancasila student profile because it is not in line with the guidelines for developing the project to strengthen the Pancasila student profile.

The Merdeka Curriculum applies to all levels of education, including the Middle Level, which is implemented by the Vocational High School education unit. Vocational High School or Vocational Madrasah Aliyah is part of the national vocational education system, which aims to produce skilled workers who meet the demands of the industrial sector. This system helps students develop their potential to adopt and adapt to advancements in science, technology, and the arts (Menteri Pendidikan dan Kebudayaan Republik Indonesia, 2018). The Merdeka Curriculum aims to improve student abilities through increased project-based learning, fostering independence and competence to meet the demands of vocational school graduates in the business and industrial job market (Zaenab et al., 2022). Data from the Central Statistics Agency shows that the Open Unemployment Rate (OUR) in the last three years is based on education level; Vocational et al. X is the highest level of education compared to other highest levels of education, namely, in 2020, it was 11.89%, in 2021 it was 9.54%, and in 2022 of 6.70% (Berita et al., 2022). Even though Vocational High School X has the highest Outcome Undergoing Research (OUR) rate, the figures are still optimistic. In other words, there has been a decline in 3 years, and the level of Vocational High School X education finds OUR below Vocational High School X; in other words, non-vocational High School X OUR is better in

percentage quantity. However, as of August 2023, the OUR for Vocational School Education Levels has increased by 8.70% (Berita Resmi Statistik, 2023). As of August 2023, the Outcome Undergoing Research (OUR) rates increase in vocational high schools will likely contribute positively to OURs in Gresik Regency and East Java Province. However, it was found that Gresik has the second-highest open unemployment rate among the 38 cities and regencies in East Java Province (Berita Resmi Statistik, 2023).

Vocational High School X, which implements the Merdeka curriculum policy, needs more classroom observations and often only uses textbooks. Furthermore, teachers cannot develop teaching modules that align with the vocational high school context and are relevant to the world of work.

Tracer Study data for the 2021/2022 academic year found that 16 of 328 graduates are still unemployed, and 155 of the 362 graduates for the 2022/2023 academic year. It means that half of the total graduates of Vocational High School X have not worked in their final year. Furthermore, only 7 out of 62 teachers have competency certificates, indicating limited professional teachers. At the same time, the student-teacher ratio of 19 to 1 surpasses the vocational school ideal of 15 students per teacher (Indonesian Republic, 2008). Based on these conditions, an analysis is needed to find out how the Merdeka curriculum is implemented to meet the needs of the business and industrial world at Vocational High School

METHODS

This study used a qualitative approach, using literature and observation methods. Data were collected by tracing various literary sources: regulatory documents from the Minister of Education, previous research, other documents related to the Merdeka curriculum, and observations at the Vocational School. Data analysis was carried out descriptively (Miles & Huberman, 1994; Widianingrum et al., 2020) on aspects of curriculum preparation and current industrial competency needs, including 1) curriculum structure (intracurricular learning and projects to strengthen the Pancasila student profile), 2) learning outcomes, 3) learning and assessment, 4) teaching tools, and 5) teacher linearity.

RESULTS AND DISCUSSION

The Merdeka Curriculum for middle school aims to develop competent students aligned with independent study principles, fostering creativity and innovation by placing students at

the center of learning activities and promoting self-directed learning and exploration (Alwi & Indriyani, 2023). The Merdeka Curriculum applied learning, encouraging project students to collaborate with their friends and grow to think critically and high-level thinking (Jojor & Sihotang, 2022). Achieving the objective of curriculum independence and achievement of learning independence requires effort to mobilize members in the matter. A teacher fulfills the hope of quality and affordable education utilized in the maximum way. Competencies that teachers have with aligned Business and industrial world needs can influence what you get students during learning. Focus activity in Merdeka Curriculum consists of learning project For develop soft skills and character profile Pancasila students; it is essential to own enough time on the skill bases students like literacy and teacher change to create different learning talents and interests students so that created atmosphere of comfortable learning (Oktavia & Qudsiyah, 2023).

Vocational High School X offers five skill programs: Automotive Engineering, Mechanical Engineering, Computer Network and Telecommunications Engineering, Office Management and Business Services, and Accounting and Institutional Finance. Through implementing the Merdeka Curriculum, Vocational High School X aims to address the needs of the business and industrial sectors with the competencies provided by its programs. This study analyzes the curriculum structure, including extracurricular learning, projects to enhance student profiles based on Pancasila values, learning outcomes, learning and assessment methods, teaching tools, and teacher consistency at Vocational High School X.

Curriculum Structure (Intracurricular Learning and Projects to Strengthen The Pancasila Student Profile)

The curriculum structure in secondary education at Vocational Schools X Intracurricular learning activities for each subject refers to learning outcomes. Project activities to strengthen the Pancasila student profile aim to strengthen efforts to achieve the Pancasila student profile, which refers to the Graduate Competency Standards.

The government has set several themes for strengthening the profile of Pancasila students, which can be chosen by educational units and adapted to student characteristics. These themes are sustainable lifestyle, local wisdom, unity in diversity, building body and soul, the voice of democracy, engineering and technology, entrepreneurship, and employment. The project to strengthen the Pancasila student profile at Vocational High School X is implemented through three themes: “Building Your Body and Soul,” “Entrepreneurship,” and “Work.”

Learning Outcomes

Learning outcomes are competencies that must be achieved during each development phase. These learning outcomes cover the entire collection of material and competencies arranged comprehensively. Learning outcomes for each level consist of phases A to F. Vocational High School X has implemented phases E for 10th and F for 11th and 12th grades. However, teachers have not developed learning outcomes for students with intellectual disabilities in vocational education. The need for references for compiling learning outcomes for the needs of special needs students and industry partners (DUDI Partners_ shows significant obstacles and constraints.

Learning and Assessment

Implementation of learning includes interaction between teachers and students in understanding the material. Identifying student learning needs is used to fulfill learning designs tailored to predetermined learning outcomes and student needs, mainly by industrial needs (DUDI). In this case, Vocational High School X teachers adopt a student-centered approach to create conducive learning environments.

Teachers faced several obstacles, including differences in students' backgrounds, student inactivity, and influences of friends, which made ineffective classroom learning. Another challenge is inadequate facilities; the number of laboratories or practical spaces does not match the number of students, and there needs to be more equipment suitable for advanced industrial technology due to limited funding for learning materials. The laboratories that can be used to support learning at Vocational School X have a total of 1 laboratory for eight classes of Office Management and Business Services, two laboratories for eight classes of Computer Engineering and Telecommunication Networks, 1 laboratory for 3 classes of Accounting and Institutional Finance, two laboratories for 14 classes of Motorcycle Engineering, and two laboratories for five classes of Mechanical Engineering Industry.

The assessment results at Vocational High School X are adjusted to the concentration of their expertise, where productive teachers choose Performance Criteria in the form of work used as a reference in processing assessment results. However, subject teachers still use the processing of assessment results implemented in the previous curriculum, namely the 2013 curriculum.

Teaching Tools

Teachers used various teaching materials, such as textbooks, modules, project modules designed to strengthen the Pancasila student profile, learning videos, and more, to achieve predetermined learning outcomes and cultivate the Pancasila student profile.

Vocational high schools face several challenges in using teaching tools effectively. These include a need for more resources designed explicitly for their curriculum, limited examples of teaching tools compatible with the new Merdeka Curriculum, and difficulty finding materials aligned with industry-based learning outcomes. Schools must also provide students with textbooks to guide industry-based learning, which hinders teachers from supporting teaching tools. The government has provided several alternatives to help teachers implement this Merdeka curriculum, such as providing a learning platform and mobilizing teachers. Conversely, teachers need more knowledge regarding the Merdeka learning platform the Ministry of Education provides in choosing teaching tools that suit their needs. Many teachers in vocational schools still need to be registered in the primary education data, which is an obstacle to accessing the platform.

Teacher Linearity

Merdeka Curriculum teacher training for vocational high schools incorporates a dual focus. It addresses the national guidelines for training educators while also adapting to the specific expertise programs offered by each vocational school.

The linear arrangement for teachers in the Merdeka Curriculum includes guidelines for certified teacher educators and adaptations for the expertise program at Vocational High School X. The expertise program includes 1) Office Management and Business Services, 2) Motorcycle Engineering, 3) Industrial Mechanical Engineering, 4) Computer Engineering and Telecommunication Networks, and 5) Institutional Accounting and Finance

Merdeka Curriculum teacher alignment at vocational high schools focuses on program needs. However, only 7 out of 62 teachers have internship experience in industry. According to some students, Indonesian, English, and Mathematics teachers do not still need to integrate industry-based learning, while only some teachers have adjusted learning to industry conditions. It shows that the knowledge and experience that should be transferred to students could be more optimal.

Industrial Competency Requirements

The industries of Society 5.0 require workers with specific competencies, including knowledge, motivation, and a blend of soft and hard skills (Poláková et al., 2023). Soft skills are crucial in enriching interpersonal interactions, encouraging effective collaboration and cooperation, innovation, building solid relationships, and supporting professional personal development. These skills are necessary to navigate the challenges and take advantage of the opportunities presented by digitalization conditions in the era of society 5.0. Having soft skills with digital increases one's marketability and opens up opportunities in a dynamic labor market (Golovianko et al., 2023).

Current industrial conditions show that the needed trends are related to AI (Artificial Intelligence), big data, supply chain, digital transformation, machine learning, and the Internet of Things. Education must align with the demands of Society 5.0, preparing the younger generation with essential 21st-century competencies like creativity, critical thinking, communication, and collaboration to meet the challenges of the evolving labor market. (Wibowo, Mujib, & Kusuma, 2023). According to Rahmawan & Effendi (2022), fulfilling industrial competencies through continuous education in the era of Society 5.0 consists of 3 aspects, namely: 1) Big data, 2) Artificial Intelligence, and 3) Internet of Things

Big data can be used to predict development students, process evaluation data and visualize data. Artificial intelligence can be achieved through learning variations, gap discovery, and intelligent classrooms. The Internet of Things can be done with digital learning, classroom management, and communication networks. Vocational High School X has conducted several activities to meet industry demands by integrating LMS (Learning Management System) into their curriculum. However, this implementation is currently limited to the Middle and Final Examinations. Furthermore, not all teachers are familiar with the LMS, and daily learning activities have not used the system.

CONCLUSION

Based on the Merdeka Curriculum policy analysis results, it is concluded that the program still needs to achieve the expected industry-based learning goal fully. Students must consistently acquire the knowledge and skills directly relevant to business and industry needs. This gap can be attributed to two key factors. Firstly, there are limited industry-specific reference materials available for teachers. Secondly, many teachers need more experience in

the current industry setting, particularly regarding the digitalization and collaborative learning approaches emphasized in Society 5.0.

The writers provide several recommendations for the implementation of a Merdeka curriculum that can be applied in vocational schools as follows: 1) Implement the TeFa (Teaching Factory) learning strategy, 2) Improve the practice room or laboratory, 3) Industry-based teacher training program adapted to Budget plan, 4) Special industrial visits for teachers so they can carry out upskilling and reskilling, 5) Provide curriculum synchronization with partners from the business world and the Industrial world. Therefore, it is recommended to future researchers to 1) the researcher can explore alternative methods deemed more suitable to obtain more optimal and varied results 2) the researcher can replace the research subject with another school or similar institution to enrich insights into teacher competence, 3) it is hoped that the research gaps in this study can be completed in further research.

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REFERENCES

Alwi, R., & Indriyani, R. (2023). Analisis Implementasi Program Kurikulum Merdeka Belajar Sebagai Strategi Peningkatan Mutu Pendidikan. *Al-Mubin: Islamic Scientific Journal*, *6*(1), 67–73.

Banihashem, S. K., Noroozi, O., den Brok, P., Biemans, H. J., & Kerman, N. T. (2023). Modeling teachers' and students' attitudes, emotions, and perceptions in blended education: Towards post-pandemic education. *The International Journal of Management Education*, *21*(2), 100803.

Berita Resmi Statistik. (2022, November). Keadaan Ketenagakerjaan Jawa Timur Agustus 2022. *Badan Pusat Statistik Jawa Timur*, pp. 1–16.

Berita Resmi Statistik. (2023, November). Keadaan Ketenagakerjaan Jawa Timur Agustus 2023. *Badan Pusat Statistik Jawa Timur*, pp. 1–16.

Golovianko, M., Terziyan, V., Branytskyi, V., & Malyk, D. (2023). Industry 4.0 vs. Industry 5.0: Co-existence, Transition, or a Hybrid. *Procedia Computer Science*, *217*, 102–113.

Huang, S., Wang, B., Li, X., Zheng, P., Mourtzis, D., & Wang, L. (2022). Industry 5.0 and Society 5.0— Comparison, complementation and co-evolution. *Journal of Manufacturing Systems*, *64*, 424–428.

Jojor, A., & Sihotang, H. (2022). Analisis kurikulum merdeka dalam mengatasi learning loss di masa pandemi Covid-19 (analisis studi kasus kebijakan pendidikan). *Edukatif: Jurnal Ilmu Pendidikan*, *4*(4), 5150–5161.

Menteri Pendidikan, Kebudayaan, Riset, (2022). *Keputusan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia Nomor 262/M/2022 Tentang Perubahan Atas Keputusan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 56/M/2022 Tentang Pedoman Penerapan Kurikulum Dalam Rangka Pemul*. Jakarta: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia.

Menteri Pendidikan dan Kebudayaan Republik Indonesia. (2018). *Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 34 Tahun 2018 Tentang Standar Nasional Pendidikan Sekolah Menengah Kejuruan/Madrasah Aliyah Kejuruan*. Jakarta: Kementrian Pendidikan dan Kebudayaan Republik Indonesia.

Menteri Pendidikan dan Kebudayaan Republik Indonesia. (2020). *Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 22 Tahun 2020 Tentang Rencana Strategis Kementerian Pendidikan dan Kebudayaan Tahun 2020-2024*. Jakarta: Kementrian Pendidikan dan Kebudayaan Republik Indonesia.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis*. California: SAGE Publications.

Nur, H., & Arfandi, A. (2023). Evaluasi Implementasi Kurikulum Merdeka pada Sekolah Menengah Kejuruan Pusat Keunggulan di Kota Sorong. *SEMINAR NASIONAL DIES NATALIS 62*, *1*, 412–416.

O'Connor, J., Ludgate, S., Le, Q. V., Le, H. T., & Huynh, P. D. P. (2023). Lessons from the pandemic: Teacher educators' use of digital technologies and pedagogies in Vietnam before, during, and after the COVID-19 lockdown. *International Journal of Educational Development*, *103*, 102942.

Oktavia, F. T. A., & Qudsiyah, K. (2023). Problematika penerapan kurikulum merdeka belajar pada pembelajaran matematika di SMK Negeri 2 Pacitan. *Jurnal Edumatic: Jurnal Pendidikan Matematika*, *4*(1).

Pemerintah Republik Indonesia. (2008). *Peraturan Pemerintah Republik Indonesia Nomor 74 Tahun 2008 Tentang Guru*. Jakarta: Pemerintah Republik Indonesia.

Poláková, M., Suleimanová, J. H., Madzík, P., Copuš, L., Molnárová, I., & Polednová, J. (2023). Soft skills and their importance in the labor market under the conditions of Industry 5.0. *Heliyon*, *9*(8).

Rachmawati, N., & Pahlevi, T. (2023). Developing Assessment of Fifth Element Based on Merdeka Curriculum with Quizizz for Vocational High School of Office Management and Business Services. *Journal of Office Administration : Education and Practice*, *3*(1), 63–73. https://doi.org/10.26740/joaep.v3n1.p63-73

Rahmawan, A. Z., & Effendi, Z. (2022). Implementasi Society 5.0 Dalam Kebijakan dan Strategi Pendidikan Pada Pandemi COVID-19. *STRATEGY: Jurnal Inovasi Strategi Dan Model Pembelajaran*, *2*(1), 34–43.

Riowati, R., & Yoenanto, N. H. (2022). Peran guru penggerak pada merdeka belajar untuk memperbaiki mutu pendidikan di Indonesia. *Journal of Education and Instruction (JOEAI)*, *5*(1), 1–16.

Suhandi, A. M., & Robi'ah, F. (2022). Guru dan Tantangan Kurikulum Baru: Analisis Peran Guru dalam Kebijakan Kurikulum Baru. *Jurnal Basicedu*, *6*(4), 5936–5945. https://doi.org/10.31004/basicedu.v6i4.3172

Wibowo, M. E. S., Mujib, M., & Kusuma, P. J. (2023). Peningkatan Kompetensi Diri untuk Kesiapan Memasuki Dunia Kerja Di Era Society 5.0 bagi Pelajar Nahdlatul Ulama Di Kecamatan Sawangan Kabupaten Magelang. *Sasambo: Jurnal Abdimas (Journal of Community Service)*, *5*(1), 85–93.

Widianingrum, R., Suranto, Hermanto, F. Y., & Sholikah, M. (2020). Office Communication Competencies for Vocational High School in Industri 4.0. *Dinamika Pendidikan*, *15*(1), 77–86. https://doi.org/10.15294/dp.v15i1.24348

Zaenab, Z., Yanto, H., Hidayah, I., & Pramono, S. E. (2022). Peran Pemerintah Bersama DUDI dalam Implementasi Merdeka Belajar pada Pendidikan Vokasi SMKN 4 Gowa. *In Prosiding Seminar Nasional Pascasarjana*, *5*(1), 1229–1235.