

## **The Transformation of the Independent Curriculum: An Analysis of Learning Crisis Recovery and Its Relevance in 21st Century Learning in the Society 5.0 Era**

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### **Abstract**

*This study aims to analyze the transformation of the Merdeka Curriculum as a solution to address the learning crisis caused by the COVID-19 pandemic and its relevance within the context of 21st-century learning in the era of Society 5.0. The method used is a literature study with a qualitative analysis of recent academic sources. The findings indicate that the Merdeka Curriculum provides flexible learning, emphasizes the development of 21st-century skills, and incorporates digital technology, although there are challenges related to infrastructure and human resource readiness. This curriculum application focuses on project-based and character education, aligning well with the current digital era's needs and helping prepare students to become adaptive and innovative learners.*

**Keywords:** Merdeka Curriculum, Learning Crisis Recovery, 21st-Century Skills, Society 5.0

### **Abstract**

This study aims to analyze the transformation of the Independent Curriculum as a solution in recovering the learning crisis due to the COVID-19 pandemic and its relevance in the context of 21st century learning in the era of Society 5.0. The method used is a literature study with qualitative analysis of various current academic sources. The results of the study show that the Independent Curriculum provides learning flexibility, an emphasis on 21st century skill development, and the application of digital technology, despite challenges related to infrastructure and human resource readiness. This curriculum application emphasizes project- and character-based learning, is relevant to the needs of today's digital age and helps prepare students to become adaptive and innovative learners.

**Keywords:** Independent Curriculum, Learning Crisis Recovery, 21st Century Skills

### **A. Introduction**

The curriculum plays an important role in education, being the foundation for the achievement of competencies and the formation of students' character. The COVID-19 pandemic has caused a significant learning crisis, especially in terms of the loss of students' essential skills due to disruption to the learning process. The Government of Indonesia, through the Ministry of Education, Culture, Research, and Technology (Kemdikbudristek), launched the Independent Curriculum in response to recover the learning lag experienced by students during the pandemic (Nugraha, 2022: 252) which is focused on flexibility and meeting the needs of students in the

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context of 21st century learning, including critical, collaborative, and digital skills that are increasingly needed in the *Society 5.0* era.

This crisis, known as "*learning loss*," has led to a decline in the quality of education globally. The pandemic situation forces a distance learning policy that is not fully effective and evenly distributed throughout the region. The Independent Curriculum is expected to be able to overcome this lag by focusing on the mastery of essential competencies, the use of digital technology, and project-based learning that can be tailored to individual needs (Putri et al., 2021: 830). The Merdeka curriculum offers flexibility that allows educational units to choose the best way to achieve their desired learning competencies, including character-based learning options and life skills in the digital age.

The formulation of the fundamental problem in this study is, how can the Independent Curriculum recover from the learning crisis due to the pandemic? How is the relevance of this curriculum in supporting student competencies in the *Society 5.0* era? The purpose of this research is to analyze the implementation of the Independent Curriculum as a solution to the recovery of learning crises and assess its relevance in supporting the development of student skills needed in the 21st century and *the era of Society 5.0*.

The Merdeka Curriculum is expected to function not only as a solution to the learning crisis, but also as a platform to encourage the achievement of the 4C's: *critical thinking, communication, collaboration, and creativity* skills, which are the main foundations of education in this digital era (Indarta et al., 2022: 3012) Traditional learning allows students to play an active role in constructing their own knowledge, while supporting the development of their character in social life in an increasingly complex and digital era.

In this effort, the Indonesian government also emphasized the importance of technology and infrastructure readiness in schools, especially in remote areas. The lack of access to devices and internet connectivity has become a significant obstacle for most schools in implementing the Independent Curriculum optimally (Sucipto et al., 2024: 279). Improving infrastructure and strengthening the competence of human resources are two key components that must be prioritized for the successful implementation of this curriculum.

In addition, the role of teachers is very important in the implementation of this curriculum. Teachers must have skills that are relevant to technological developments and adaptive to changes in teaching methods that are more interactive and collaborative. *Society 5.0* requires teachers who are able to create a learning environment that encourages students to be active subjects in the learning process, not just passive objects receiving information (Puspitarini, 2022: 1).

The *Society 5.0* era, which is an evolution of the Industrial Revolution 4.0, emphasizes the use of more human-centered technology, which means that students are expected to be able to master technology while still prioritizing social and humanitarian values (Rahmawati et al., 2021: 151). The Merdeka Curriculum is designed to answer these challenges by instilling technology-based life skills and high adaptability.

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The need for a dynamic and responsive curriculum is very urgent given the characteristics of the current generation. 21st century students need education that is relevant to the demands of the times, which integrates social skills, technological proficiency, and critical thinking skills as the basis for their readiness to face the complex world of work and social life (Effendi & Wahidy, 2019: 126). The Merdeka Curriculum is an effort to ensure that this generation gains comprehensive and relevant skills.

Overall, the transformation of the Independent Curriculum offers alternative solutions that focus on holistic and adaptive learning. Through this curriculum, students are expected not only to become well-rounded individuals, but also to have the ability to adapt, think creatively, and collaborate basic competencies that are indispensable in the rapidly evolving digital era (Nugraha, 2022: 252).

Previous research has shown that the Independent Curriculum is designed to provide greater flexibility in the learning process, adapt to the individual needs of students, and encourage the development of 21st century skills, such as collaboration, creativity, critical thinking, and communication (4C), which are indispensable in *the era of Society 5.0* (Firdaus, 2024: 1887). With this approach, students can become active subjects in the learning process, where they can optimally develop their potential and skills according to their respective interests and needs (Indarta et al., 2022: 3012)

The Merdeka Curriculum not only offers project-based learning methods, but also puts forward a holistic approach to help students understand the world more comprehensively. Project-based learning allows students to engage in real, life-relevant learning experiences, which enhance their conceptual understanding and critical thinking abilities. This is in line with research that states that project-based learning can improve students' cognitive skills, increase motivation to learn, and encourage deeper understanding (Puspitarini, 2022: 1).

On the other hand, there are challenges faced in the implementation of the Independent Curriculum, especially related to the limitations of digital infrastructure in several regions and the low technological readiness of teaching staff. Sucipto et al. (2024) revealed that the technological infrastructure in many schools, especially in remote areas, is still inadequate, thus limiting access to and implementation of technology-based learning, which is one of the main components of the Independent Curriculum (Sucipto et al., 2024: 278). The readiness of teacher human resources is also a significant obstacle, because low technological skills can hinder the implementation of the curriculum optimally.

Other research also shows that the Independent Curriculum plays an important role in overcoming the learning loss experienced by students during the COVID-19 pandemic. The program provides strategies that can be used to catch up with learning through an approach that focuses on the core skills that students must master. Nugraha (2022) notes that the Independent Curriculum is focused on essential competencies that help students regain basic skills lost during distance learning, such as basic literacy, numeracy, and social skills required in the *Society 5.0* era (Nugraha, 2022: 252).

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In addition, *Society 5.0* requires students who are not only tech-savvy but also have strong social skills and character values. The emphasis on the Pancasila student profile in the Independent Curriculum aims to build students' character so that they are ready to face global challenges without losing their cultural identity and social values. This curriculum aims to develop students who are independent, critically minded, and have high adaptability—key traits needed in an era that is technology-oriented but still human-centered (Rahmawati et al., 2021: 151).

By combining elements of technology and character development, the Independent Curriculum is considered to be able to prepare students to face the challenges of *Society 5.0*. However, for the implementation to be optimal, there needs to be support in the form of intensive training for teachers to strengthen their understanding of this new curriculum and improve their technological skills. The existence of policy support from the government is also very important to ensure the availability of adequate infrastructure and resources in schools throughout Indonesia (Effendi & Wahidy, 2019: 126).

## **B. Research Methods**

This study uses a literature study method with a descriptive qualitative approach to analyze the role of the Independent Curriculum in recovering from the learning crisis due to the COVID-19 pandemic and its relevance in the context of 21st century learning and *the Society 5.0* era. The literature study was chosen because it allows researchers to examine various relevant current academic sources, so as to provide an in-depth understanding of the implementation and impact of this curriculum (Sugiyono, 2022: 54).

1. The object of this study is the Independent Curriculum which is analyzed as a framework for education recovery, especially in mitigating learning loss due to the pandemic and as a tool to equip students with essential skills for the 21st century, such as critical thinking and technological adaptation in the *Society 5.0* era (Indarta et al., 2022: 3012).
2. The data used in this study consisted of journal articles, books, and research reports related to the Independent Curriculum, all of which were published in the last five years. This time limit aims to ensure that the data used is relevant to the latest developments in education, especially in the context of *Society 5.0* (Firdaus, 2024: 1887).
3. This research was carried out from January to March 2024. This time span is used to collect, review, and analyze data from various related sources, ensuring that the results of the analysis describe the latest conditions and are relevant to the implementation of the Independent Curriculum in the field (Sucipto et al., 2024: 278).
4. Data was collected through documentation techniques, in which researchers systematically searched literature from trusted academic databases, including accredited journals and official reports from the Ministry of Education, Culture, Research, and Technology. The use of this technique allows researchers to obtain various perspectives and empirical data related to the implementation of the Independent Curriculum in education in Indonesia (Effendi & Wahidy, 2019: 126).
5. Data analysis was carried out with a thematic qualitative approach, where the collected data was categorized into key themes related to learning crisis recovery, curriculum flexibility, 21st century skills development, and relevance to *Society 5.0*. This approach

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makes it easier for researchers to understand the contribution of the Independent Curriculum in more detail and structured (Nugraha, 2022: 252).

6. The results of the analysis are presented in thematic form to provide a clear and focused picture of the impact and practical implications of the implementation of the Independent Curriculum. The results are arranged in such a way that they are easily understood by educators, policymakers, and related parties in the world of education. The validity of the data is maintained through *a cross-checking* process using several reliable and academic literature sources. This verification is carried out to ensure that the data and conclusions obtained have a high level of reliability and are reliable to describe the actual conditions of implementation of the Independent Curriculum in the field (Puspitarini, 2022: 1)

## **C. Results and Discussion**

### **1. Learning Flexibility in the Independent Curriculum**

The implementation of the Independent Curriculum has provided flexibility in learning methods, where teachers and students have more choices in the teaching-learning process. One form of this flexibility is the use of project-based learning, which allows students to engage in relevant and practical learning experiences. Project-based learning is considered to be in accordance with the principles of Society 5.0 because it places students at the center of learning and encourages them to solve real-world problems (Indarta et al., 2022: 3012). Through this approach, students are encouraged to think critically, explore creativity, and develop collaboration skills. This process not only enriches students' understanding of academic concepts, but also increases their confidence in applying knowledge in the real world. Thus, students are expected to be able to face the challenges of the Society 5.0 era, where adaptation skills and critical thinking are needed (Firdaus, 2024: 1887)

The Independent Curriculum also promotes more personalized learning, adapting to the needs of each student. This approach makes it easier for teachers to design the most effective methods for their learners, allowing students to learn according to their own pace and learning style. This is very helpful in increasing student involvement in the learning process, as well as forming independent learning skills that are very important in the digital era (Nugraha, 2022: 252)

In addition, this flexibility provides space for educators to innovate in developing learning materials. Teachers can integrate technology and digital tools into the curriculum, enrich learning resources, and increase the appeal of teaching materials. In this way, the Independent Curriculum not only offers opportunities for students to learn more effectively, but also gives teachers the freedom to structure learning that is relevant to the demands of the times (Effendi & Wahidy, 2019: 126)

### **2. Infrastructure Challenges and Technology Readiness**

One of the main obstacles in the implementation of the Independent Curriculum is the limitation of technological infrastructure, especially in remote areas. Many schools in the region

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still face obstacles in providing adequate digital learning tools, such as computers and stable internet access. This is a significant challenge in an effort to encourage technology-based learning which is an important part of the Independent Curriculum (Sucipto et al., 2024: 279).

In addition to infrastructure, teachers' readiness to use technology is also an inhibiting factor. In some schools, there is still a lack of training or workshops needed to help teachers master the digital skills that support the implementation of this curriculum. This technological unpreparedness has an impact on the quality of learning that students receive, where students in remote areas may not get the full benefits of this curriculum, which ultimately widens the educational gap (Rahmawati et al., 2021: 151).

Another challenge that arises is the school's ability to support the maintenance and maintenance needs of technological devices. Many schools are experiencing budget constraints to ensure that existing devices continue to function properly. Without adequate infrastructure support, the implementation of the Independent Curriculum will experience obstacles that have the potential to reduce the effectiveness of this curriculum in achieving its goals (Indarta et al., 2022: 3012)

The government has worked to overcome these barriers by improving internet access and providing additional devices for schools in remote areas. However, this effort still needs improvement so that all students can feel the same benefits from the Independent Curriculum. Collaboration between the government, the private sector, and the education community is needed to realize a more equitable infrastructure and support the digital learning process (Firdaus, 2024: 1887)

### **3. Teacher Competency Enhancement and Training Support**

The Independent Curriculum demands an improvement in teacher competence, especially in adapting technology and project-based learning approaches. Many teachers still need intensive training to comprehensively understand the principles and practices of the Independent Curriculum. Adequate teacher competence is essential so that they can teach this curriculum effectively and have a positive impact on student development (Nugraha, 2022: 252)

This competency enhancement includes skills in designing and executing learning that is interactive, technology-based, and relevant to students' needs in the digital age. Teachers also need to understand how to implement project-based learning effectively, including how to direct students in complex project activities. These skills are not only essential for the successful implementation of the curriculum, but also help students develop critical and creative thinking skills (Effendi & Wahidy, 2019: 126).

The government has provided training for teachers through professional development programs, but the scope still needs to be expanded, especially in hard-to-reach areas. In addition, support in the form of digital teaching materials and teaching aids is also needed so that teachers can optimally implement the Independent Curriculum. With adequate training support, teachers will be more confident in implementing this curriculum, providing a more meaningful learning experience for students (Sucipto et al., 2024: 279).

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In the future, a more sustainable and structured approach to training is needed, so that teachers can keep up with the ever-changing curriculum and technology. This training should also involve a hands-on learning approach to improve teachers' skills in using digital tools and designing learning projects. This will strengthen the role of teachers as learning facilitators who are able to guide students to become independent learners and adapt to changes in the Society 5.0 era (Puspitarini, 2022: 1)

#### **D. Conclusion**

The Merdeka Curriculum Transformation offers an effective solution in recovering from the learning crisis caused by the COVID-19 pandemic while improving essential skills for the 21st century. With a flexible approach and technology-based adaptation, the curriculum meets the needs of students in the era of Society 5.0, where critical thinking, collaboration, and adaptation skills are essential to meet global challenges. This curriculum places students as the main subjects of learning, encouraging them to be actively and independently involved in the learning process.

In order for the implementation of the Independent Curriculum to run optimally, the government needs to increase school readiness through the provision of adequate technological infrastructure and comprehensive training programs for teachers. In addition, cooperation between the government, the private sector, and the education community is needed to ensure the availability of adequate resources and support. With the synergy of various parties, it is hoped that the Independent Curriculum can be applied effectively, relevantly, and sustainably in preparing a generation that is ready to face the Society 5.0 era.

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