

The Phenomena of Curriculum Development and Shifting in Modern Era

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Gressya Pebriani Agatha Tamba¹, Chesia Aulia¹, Jauharotun Ramadhani Ahmad¹, Kristi Debora Siagian¹, Winda Valerina Simanjuntak¹, & Natalia Silalahi²

¹Faculty of Mathematics and Natural Sciences, Medan State University, Indonesia

²Faculty of Education, Universitas Negeri Medan, Indonesia

CORRESPONDING AUTHOR

Author Name: Gressya Pebriani Agatha Tamba

E-mail: gressyatamba@gmail.com

Post Address:

Faculty of Mathematic and Natural Sciences, Medan State University, Indonesia

ABSTRACT

This research discusses the development and shifting of curriculum in the modern era, highlighting the changing paradigm of education to address global needs and local challenges. The study traces the evolution of the curriculum, from traditional concepts to modern innovations such as the Merdeka Curriculum. Particular attention is paid to the integration of project-based approaches, learning flexibility and strengthening student character through the values of the Pancasila Student Profile. It also reviews the drivers and inhibitors of curriculum development, including teacher readiness, educational infrastructure, and social and cultural dynamics. Policy implications show the importance of collaboration between government, educators and communities to ensure the successful implementation of a relevant, inclusive and adaptive curriculum. This research offers strategic recommendations to build an education system that is able to respond to the demands of the digital era and the diversity of society.

Keywords

Independent curriculum, inclusive education, learning innovation, modern era

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1. INTRODUCTION

Curriculum development in the modern era reflects the dynamic interaction between innovative educational practices and societal needs, with a focus on adaptability and relevance in facing global changes. Recent studies emphasize the importance of integrating innovative curricular proposals to meet the demands of the continuously evolving education system, particularly in fostering critical thinking, communication skills, and professional readiness among students (Фінін, 2019). This aligns with the need to equip students with relevant skills to face the challenges of the dynamic global workforce.

Historically, the evolution of the curriculum, particularly in the field of medical education, has produced important models such as SPICES Harden and the Kern framework, which emphasize a student-centered approach. The SPICES model (Student-centered, Problem-based, Integrated, Community-based, Elective, Systematic), for example, encourages active learning through the integration of various contemporary approaches. These approaches include strategies such as the flipped classroom, which allows students to study the material independently before interactive class sessions, as well as simulation-based learning that provides practical experience in a controlled environment (Simiao & Andrew, 2018).

Additionally, content analysis in curriculum development shows a shift in focus towards more contextual teaching strategies, data-driven needs assessment, and holistic evaluation methods. More qualitative research in curriculum studies, as exemplified by Jawabreh & Gunduz (2021), emphasizes the importance of considering student needs and the relevance of local and global contexts in curriculum design. This approach helps bridge the gap between theory and practice, allowing education to be more responsive to real-world needs.

From a theoretical perspective, philosophical views such as those put forth by Wittgenstein challenge the traditional paradigm in understanding the curriculum. Wittgenstein emphasizes the importance of expanding the definition of knowledge and educational practices, which ultimately enriches the discourse on curriculum development. This line of thought leads to the understanding that the curriculum is not just about the transfer of knowledge, but also about the formation of ways of thinking that are relevant to social and cultural changes (Triche, 2002).

In specific fields such as informatics, the need for a curriculum that is responsive to technological developments is becoming increasingly urgent. Curriculum initiatives must be aligned with the continuously evolving competencies of society, such as digital skills, programming, and data analysis. With the rapid advancement of technology, informatics education has become a crucial foundation to meet the workforce needs in the era of the 4.0 industrial revolution and global digital transformation (Van Weert & Munro, 2017). The development of this adaptive and innovative curriculum will ensure that graduates have a competitive edge in an increasingly digitalized world.

Overall, an approach that integrates innovation, relevance, and the specific needs of society is key to ensuring that the curriculum can meet the demands of the times while maintaining the quality and sustainability of education. In this context, the analysis of the implementation of various curriculum models, such as SPICES and competency-based approaches, can serve as a strong foundation for formulating more effective educational policy recommendations. Moreover, future research is expected to not only include evaluations of the effectiveness of teaching and learning strategies but also to examine the interactions between curriculum development and global challenges such as digitalization, environmental sustainability, and social inclusion. By considering perspectives from various disciplines, this

study can also provide insights into how technology-based educational approaches, industry needs, and local cultural perspectives can be synergistically integrated into curriculum design.

Thus, this research aims to enrich the academic literature, support educational policy innovations, and encourage the development of curricula that are not only adaptive to changing times but also proactive in facing future challenges. "Analysis of Curriculum Development in the Modern Era" is expected to serve as a strategic reference for educational stakeholders in guiding the transformation of relevant, innovative, and inclusive curricula.

2. METHODOLOGY

The research method used is a qualitative approach based on literature study. This approach is carried out by collecting, analyzing, and synthesizing various literature sources related to curriculum development, both from historical reviews, educational philosophy, and curriculum implementation in the modern era. This literature study includes the analysis of educational policy documents such as the Competency-Based Curriculum (KBK), the School-Based Curriculum (KTSP), the 2013 Curriculum, and the Independent Curriculum, as well as relevant scientific articles and research findings. This approach allows the authors to identify patterns, concepts, and key challenges in curriculum development, as well as draw conclusions based on supporting empirical and theoretical data. The analysis is conducted thematically this thematic analysis is done by identifying, analyzing, and interpreting it into a description of the results to understand the relationship between curriculum innovation and the social, cultural, and technological dynamics in the modern era. This method provides a strong foundation for generating strategic recommendations in educational policy renewal.

3. RESULTS AND DISCUSSION

3.1. Curriculum Change: Dynamics and Factors

Etymologically, the term "curriculum" comes from ancient Greek, specifically *curir*, which means "runner," and *curene*, which refers to "race track." This concept first appeared in the world of sports, particularly athletics, where the term described the distance or track that a runner had to cover. Over time, this meaning was adapted into the world of education as a metaphor for the journey or learning path that students must undertake.

According to Amalia & Asyari (2024), the curriculum involves four main elements, namely: (1) the educational goals to be achieved, (2) the learning experiences provided to support the achievement of those goals, (3) the effective organization of learning experiences, and (4) indicators that show the achievement of educational goals. Tyler emphasizes the importance of a well-planned learning process in supporting educational success. The curriculum encompasses four main dimensions within the school system, namely the curriculum itself, instruction, teaching activities, and the learning process. From this perspective, the curriculum is not only viewed as a collection of learning materials but also as an integral core of the entire teaching and learning process.

Initially, the curriculum was only seen as a series of subjects that students had to complete to obtain a diploma. The main focus was on memorizing academic concepts, which were viewed as a benchmark for educational success. In this context, the curriculum served as a roadmap for students' academic journeys, where the expected outcome was the students' ability to master a predetermined amount of material. With the evolution of time, the concept of the curriculum has become more dynamic, encompassing more complex elements to ensure that students not only memorize but also understand, apply, and develop relevant skills and

knowledge. The historical journey of this term underscores its transformation from a sports concept to the core of educational planning, which continues to be refined to meet the ever-changing needs of society.

Curriculum changes in Indonesia reflect continuous efforts to address the challenges and educational needs of each era. These changes are not merely technical updates, but also reflect the dynamics of social, cultural, and temporal developments. One of the main foundations of curriculum change is the philosophical foundation, which emphasizes ideological values and an educational vision that is relevant to societal conditions. This philosophy shapes the direction of education, making it a means to build a generation that meets national and global needs (Ledia et al., 2024).

From another perspective, the psychological foundation focuses on the characteristics of learners, including their needs, developmental stages, and learning styles. Curriculum changes based on this foundation ensure that the learning process is designed in accordance with students' cognitive and emotional development, allowing them to learn optimally (Falasifa & Umdaturrosyidah, 2021; Irawan, 2020). Furthermore, the sociological foundation emphasizes the importance of the relationship between education and societal life. The curriculum is designed to reflect social, cultural, and technological advancements, which play a crucial role in shaping students' competencies to remain relevant in a constantly changing world.

Historical foundations also become an important aspect in curriculum changes. Through the analysis of past successes and failures, the new curriculum can be spared from repeating previous mistakes. The history of education provides important insights into how education has evolved and how it can be prepared for future needs. By integrating these four foundations, curriculum changes in Indonesia not only focus on academic goals but also on the development of students as individuals and members of society with global competitiveness.

3.2. Curriculum Development in Indonesian

The development of the curriculum in Indonesia reflects the government's efforts to continuously improve the quality of education in accordance with the needs of society and global challenges. The Competency-Based Curriculum (CBC) of 2004 marked the initial step with a focus on the development of student competencies, which include knowledge, skills, values, and attitudes reflected in thinking and acting habits. This curriculum emphasizes diversity and the application of various learning methods, where learning resources do not only come from teachers but also from various other references that support educational elements (Sitika et al., 2023; Sugianto, 2022).

In 2006, Indonesia adopted the School-Based Curriculum (KTSP), which is an improvement of the Competency-Based Curriculum (KBK). This curriculum reinforces the spirit of educational decentralization, granting schools the authority to develop syllabi according to their local conditions. Competency standards and basic competencies are still set by the government, but teachers are given the freedom to design evaluations that are relevant to the context of their school and region. This allows learning to become more contextual and adaptive to the needs of students (Sugianto, 2022).

Next, the 2013 Curriculum (K-13) was introduced as a replacement for KTSP, with the aim of enhancing the integration of students' knowledge, skills, and behavioral attitudes. This curriculum adopts a more interactive learning approach, such as observation, questioning, critical thinking, and communication. In addition, the teaching materials are designed more efficiently, with some subjects streamlined, while relevant new materials, such as Mathematics, are added. Teachers are expected to encourage students to learn independently,

be responsible for the environment, and be able to think critically in solving problems (Sugianto, 2022).

In 2022, the Merdeka Curriculum was launched to address more complex educational challenges. This curriculum focuses on flexible intramural learning, providing students with enough time to deeply understand concepts and hone their skills. Teachers are given the freedom to choose teaching materials that align with the needs and interests of the students, so that learning can be tailored to the individual characteristics of the learners. In addition, this curriculum introduces theme-based projects designed to develop the values of the Pancasila Student Profile. These projects are not tied to specific learning outcomes, but rather aim to strengthen students' character and competencies holistically (Baharuddin, 2021; Fatirul, 2022).

The evolution of this curriculum demonstrates Indonesia's commitment to building an adaptive, relevant, and character development-oriented education system amidst the dynamics of the times.

3.3. Challenges in Curriculum Development

The process of curriculum development is influenced by several main factors. Higher education institutions play a crucial role in contributing through the development of knowledge, technology, and education. The knowledge developed in higher education institutions influences the content of teaching materials, while technology supports the use of educational tools and media in the curriculum. In addition, society, as an inseparable part of the school, also influences the curriculum. The curriculum content must be able to address the needs of the community environment and prepare students for community life. The curriculum is also influenced by value systems, such as moral, religious, social, cultural, and political values, which are part of the community's identity (Khamim et al., 2024). The challenge is the diversity of values in a heterogeneous society, so the curriculum must be able to accommodate various groups with different backgrounds.

Some challenges in the implementation of curriculum development are often encountered, including: (1) Rapid changes; frequently changing curriculum policies can confuse students and teachers. This can lead to a decline in student achievement due to difficulties in adapting to the new learning system. (2) Teacher readiness; teachers often need time to understand and properly implement the new curriculum. The lack of training and socialization has become the main obstacle. (3) Availability of Facilities; The difference in the quality of educational infrastructure, especially between urban and rural areas, affects the success of the new curriculum implementation. Another obstacle comes from the community, which sometimes lacks support for the curriculum renewal process. Overcoming these obstacles is key to the successful development of an effective and relevant curriculum (Amalia & Asyari, 2024; Setiyorini & Setiawan, 2023)

3.4. Curriculum Approaches in the Modern Era

The Independent Curriculum in Indonesia, known as "Merdeka Belajar," is a breakthrough in the education system designed to improve the quality of learning through a flexible, relevant, and student-needs-based approach. Launched by Minister of Education Nadiem Makarim, this curriculum emphasizes project-based learning (Project-Based Learning or PBL), mastery of essential materials, and flexibility in the implementation of learning. The main objective is to integrate the development of students' character with intellectual growth, in accordance with the Pancasila Student Profile. This profile includes elements of critical thinking, creativity, independence, and collaboration, aiming to produce a generation that is not only

academically intelligent but also possesses integrity and social sensitivity (Hakim & Nabila, 2022; Windayani & Putra, 2022).

One of the core aspects of this curriculum is Project-Based Learning (PBL), which provides students with autonomy in learning and emphasizes the importance of collaboration. Through PBL, students are encouraged to actively interact with various sources of knowledge, hone their analytical skills, and solve real-world problems. Research shows that the implementation of PBL not only increases student participation but also encourages the emergence of innovative teaching practices in the classroom. However, its implementation is not without challenges, especially in terms of teacher readiness, uneven educational infrastructure, and the diversity of student abilities in various regions (Gai Mali, 2016).

This curriculum also offers flexibility in learning, allowing teachers to adjust teaching strategies according to the needs and potential of students. This freedom is designed to create a more personal and meaningful learning experience. (Devian et al., 2023; Pratami et al., 2024). However, this flexibility requires adequate infrastructure support and an evaluation system capable of accurately measuring learning outcomes. Effective evaluation is the key to success in ensuring that curriculum objectives are achieved (Arung et al., 2023).

Thus, the Independent Curriculum is a transformative approach aimed at changing the educational paradigm in Indonesia. By combining innovation, flexibility, and a focus on character development, this curriculum aims to produce individuals who are not only knowledgeable but also capable of adapting to global challenges. This step is expected to create a generation that is resilient, creative, and ready to contribute to society.

3.5. Implications and Recommendations

Curriculum development in modern Indonesia requires a collaborative approach involving the government, educators, and the community to ensure the success of the "Merdeka Belajar" policy. This policy emphasizes decentralization, providing flexibility to schools and teachers to design curricula that are relevant to local needs. In addition, this policy also encourages creativity in teaching and the integration of technology to support modern learning. However, its implementation requires active participation from all stakeholders, considering the social and cultural diversity in Indonesia.

The government, both central and regional, plays a role as the main facilitator in the implementation of this policy. Their responsibilities include providing guidelines, regulations, educational infrastructure, and training for teachers to support the implementation of the curriculum (Irhamisyah, 2023). On the other hand, teachers play a central role in implementing the curriculum in the classroom. They are not only required to understand the policies but also to adapt them according to the needs of the students. Teachers also act as a bridge between the school and the community, ensuring that the implemented curriculum is relevant to local needs and the values of the surrounding society (Arung et al., 2023).

In general, the curriculum in Indonesia must be able to reflect pluralistic values to promote unity amidst diversity. A well-designed curriculum can strengthen national identity and equip students with the skills to live harmoniously in a multicultural society. In this modern era, aligning the curriculum with contemporary demands, such as social changes, technological advancements, and global dynamics, has also become very important. This process requires cooperation between the government, local authorities, and other educational stakeholders so that educational reforms can meet the needs and aspirations of students and society (Lestariningsih, 2019).

The success of the "Merdeka Belajar" policy highly depends on effective collaboration among all parties. The government needs to create inclusive dialogue spaces to hear input from

educators and the community, as well as provide sustainable evaluation mechanisms to assess the effectiveness of the curriculum. With this approach, curriculum development is not only locally relevant but also globally competitive, addressing the challenges of education in the modern era.

4. CONCLUSION

Curriculum development in the modern era reflects a response to global dynamics, social changes, and the evolving needs of local communities. The transformation of the curriculum from traditional concepts to more adaptive approaches, such as the Merdeka Curriculum, demonstrates the commitment of education to shaping a generation that is competent, character-driven, and ready to face the challenges of the digital world. With a focus on project-based learning, intramural flexibility, and the reinforcement of the Pancasila Student Profile values, the current curriculum aims to holistically integrate the intellectual and emotional aspects of students. However, the successful implementation of this curriculum still faces various challenges, including teacher readiness, gaps in educational infrastructure, and socio-cultural diversity. Therefore, solid collaboration between the government, educators, and the community is necessary to ensure the effective and inclusive implementation of the curriculum policy.

Through the development of a relevant, innovative, and student-needs-based curriculum, education is expected not only to meet the demands of the modern era but also to build a generation of learners who are globally competitive and contribute positively to social and environmental sustainability. This study provides a strategic contribution to the education literature and serves as a guide for policymakers in designing more responsive educational policies in the future.

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