

Education Zoning and Learning System Transformation in The Society 5.0 Era: Strategies for Achieving Equitable and Fair Educational Access

Farhan Hidayat¹, Hasbullah², Jihan Abdullah³

^{1,2}Universitas Islam Negeri Sultan Maulana Hasanuddin Banten, Indonesia

³Universitas Gunadharma, Indonesia

¹daysfarhan25@gmail.com, ²hasbullah@uinbanten.ac.id, ³jianaabd@gmail.com

ABSTRACT

Education serves as a fundamental pillar for sustainable development and societal advancement. In Indonesia, the education zoning policy—introduced to reduce inequality and eliminate the “favorite school” stigma—was expected to promote equal access. However, implementation challenges persist, particularly regarding disparities in infrastructure and school quality. This article examines the dynamics of Indonesia’s education zoning policy within the broader context of Sustainable Development Goal 4 (Quality Education) and the rapid sociotechnical shifts of the Society 5.0 era. Using a descriptive qualitative approach through literature analysis, this study identifies three essential themes: the zoning system as a contested effort toward equality, the challenges and opportunities emerging in the Society 5.0 context, and the strategic role of youth as agents of change in transforming educational equity. Findings show that education zoning has the potential to improve access, but gaps in resource distribution, technology integration, and school quality require deeper reform. Moreover, youth involvement, powered by digital literacy and innovation, emerges as a crucial force in ensuring inclusive and adaptive educational transformation. Overall, the integration of policy reform, technological advancement, and youth participation is vital to achieving equitable and human-centered education in the Society 5.0 era.

Keywords: *Education zoning; Society 5.0; SDG 4; Equality in-education; Youth participation.*

INTRODUCTION

Education plays a central role in shaping human development, fostering character, and enhancing national competitiveness (Ningsih & Gunawan, 2019). The Sustainable Development Goal 4 (SDG 4) emphasizes inclusive, equitable, and quality education for all. In Indonesia, the education zoning policy was formulated to reduce disparities and bring schools closer to communities (Agrawal & Jaggi, 2023). By prioritizing geographical distance over academic ranking, the policy aims to democratize educational opportunities and deconstruct the hierarchy of “elite schools” (Duane & Satre, 2014).

However, the implementation of zoning has triggered significant public debate. Unequal distribution of educational resources, limited infrastructure, and variations in teacher competence exacerbate disparities between regions. Students with high academic achievement may be denied access to desired schools solely based on distance, raising concerns regarding fairness and meritocracy (Jacob et al., 2020).



Figure 1. The 17 Sustainable Development Goals (SDGs) established by the United Nations, presented in Indonesian (*Tujuan Pembangunan Berkelanjutan*), outlining global targets for social, economic, and environmental prosperity.

Simultaneously, the emergence of Society 5.0—a human-centered society supported by advanced technologies such as artificial intelligence (AI), IoT, and big data—demands a renewed vision for education. Technology integration must not only enhance learning but also ensure inclusivity, personalization, and adaptability. Within this environment, youth hold a strategic role as innovators, advocates, and drivers of change (Kaur et al., 2023).

This study analyzes how education zoning intersects with SDG 4, the challenges posed by the Society 5.0 era, and the potential contributions of youth as agents of educational transformation

METHOD

Subjects of Research

The subjects of this research were identified through a purposive sampling technique to obtain a comprehensive perspective on the implementation of education zoning in Kabupaten Serang.

The primary informants consist of Fauzi Salam, an education activist from *Himpunan Mahasiswa Serang* who provides a critical oversight of regional educational resource distribution, and Della, a student from SMA Kramat Watu who offers first-hand data regarding the lived experiences of students during the admission process.

In addition to human informants, this study utilizes scholarly literature and government regulations, specifically the Ministry of Education and Culture Regulation No. 14/2018 regarding the Admission of New Students (PPDB), as documentary subjects for in-depth thematic analysis.

Instruments

This qualitative descriptive study employs several key instruments to accurately capture social and policy realities. The researchers serve as the primary instrument (*researcher as instrument*), performing narrative interpretations of the informants' experiences. Furthermore, a semi-structured interview guide is utilized to explore structural barriers such as disparities in facilities, teacher distribution, and technological access in the field. A literature review protocol is also applied as a framework to examine the alignment of local policies with the global targets of Sustainable Development Goal 4 (Quality Education) and the socio-technological demands of the Society 5.0 era.

Data Collection

Data collection was conducted through the integration of in-depth interviews and a systematic literature study to establish a robust theoretical and empirical foundation. Data analysis is performed inductively using thematic analysis techniques to identify primary patterns, such as school quota limitations and infrastructure imbalances between regions. The researchers conduct a narrative synthesis by merging informant testimonies—such as the geographical constraints experienced by students—with an analysis of national regulatory documents. This process aims to evaluate the actual impact of zoning policies on educational equity in Kabupaten Serang, while accounting for the structural gaps that persist in the digital era.

RESULTS AND DISCUSSION

Education Zoning: Equity Goals and Persistent Structural Gaps

The implementation of education zoning in Indonesia continues to reflect a complex interplay between policy intentions and on-ground realities. While zoning is designed to promote fairness by bringing students closer to their nearest schools and reducing competition based solely on academic scores, structural disparities remain evident—particularly in regions such as Kabupaten Serang. Interviews reveal that schools in rural districts still face significant shortages in teaching staff, inadequate classroom facilities, and limited technological infrastructure.

These disparities undermine the core objective of zoning, as students placed in poorly resourced schools experience lower learning quality despite being within the designated zone (Makhmudah, 2021). Furthermore, the limited capacity of nearby schools often forces students to attend institutions farther from home, contradicting the policy's intent to reduce travel burdens and foster localized learning environments. These findings highlight that zoning alone cannot achieve equity without parallel improvements in resource distribution, school development, and regional educational planning.

Challenges and Opportunities in the Society 5.0 Era

In the context of Society 5.0, the education sector faces both amplified challenges and unprecedented opportunities. The rapid integration of digital technologies such

as artificial intelligence, big data, and Internet of Things (IoT) demands a more adaptive and technology-oriented schooling system. However, the digital divide between urban and rural areas—particularly evident in Kabupaten Serang—creates unequal access to digital learning tools, online resources, and modern teaching methods. Schools in resource-limited regions struggle to adopt blended or technology-supported learning, leaving students at a disadvantage in an increasingly digital world.

Despite these obstacles, Society 5.0 also opens pathways for innovation in education. Digital platforms, virtual learning communities, and data-driven decision-making provide opportunities to bridge gaps in learning quality and expand access to educational resources. When integrated effectively, technology can strengthen zoning outcomes by enabling students in underserved areas to access quality content, connect with diverse learning communities, and overcome geographical limitations.

Role of Youth as Change Agents in Educational Transformation

Youth hold a pivotal role in driving transformation within the education system, particularly against the challenges posed by zoning inequalities and the demands of Society 5.0. As digital natives, young people possess the skills and adaptability needed to support technological integration in learning environments. Their involvement in community initiatives—ranging from tutoring programs, digital literacy workshops, to advocacy campaigns—demonstrates significant potential to improve access and raise awareness about educational disparities (Nugroho et al., 2024).

Interviews conducted in this study indicate that youth organizations and student activists actively highlight inequality issues, participate in policy discussions, and support their peers in navigating zoning-related obstacles. In the broader societal context, youth serve not only as beneficiaries of the education system but also as innovators capable of creating digital learning solutions and facilitating community engagement. Their contributions align with national goals for inclusive education and reinforce the human-centered foundation of Society 5.0, making youth participation indispensable in advancing equitable educational reform.

CONCLUSION

The education zoning policy is a significant initiative for ensuring equitable educational access in Indonesia. However, its implementation in Kabupaten Serang reveals persistent inequalities in infrastructure, school distribution, and access opportunities. The Society 5.0 era requires zoning to be more adaptive, technologically integrated, and oriented toward human-centered goals. Interviews show that structural disparities challenge the policy’s fairness, while literature confirms the need for systemic reform. Youth involvement and technological innovation hold strong potential for strengthening education equity. Achieving SDG

4 requires collaborative efforts between government, schools, communities, and youth to build an adaptive, inclusive, and future-oriented education system.

REFERENCES

- Agrawal, R. C., & Jaggi, S. (2023). Transforming Agricultural Education for a Sustainable Future. In K. C. Bansal, W. S. Lakra, & H. Pathak (Eds.), *Transformation of Agri-Food Systems* (pp. 357–369). Springer Nature Singapore. https://doi.org/10.1007/978-981-99-8014-7_25
- Duane, B. T., & Satre, M. E. (2014). Utilizing constructivism learning theory in collaborative testing as a creative strategy to promote essential nursing skills. *Nurse Education Today*, 34(1), 31–34. <https://doi.org/10.1016/j.nedt.2013.03.005>
- Jacob, J., Peters, M., & Yang, T. A. (2020). *Interdisciplinary Cybersecurity: Rethinking the Approach and the Process*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-31239-8>
- Kaur, P., Kumar, H., & Kaushal, S. (2023). Technology-Assisted Language Learning Adaptive Systems: A Comprehensive Review. *International Journal of Cognitive Computing in Engineering*, 4, 301–313. <https://doi.org/10.1016/j.ijcce.2023.09.002>
- Makhmudah, S. (2021). Pendidik Dalam Upaya Pembentukan Karakter Rabani Generasi Muda Melalui Penerapan Metode Lagu Islami. *J-PAI: Jurnal Pendidikan Agama Islam*, 7(2). <https://doi.org/10.18860/jpai.v7i2.11918>
- Ningsih, H., & Gunawan, W. (2019). Recontextualisation of genre-based pedagogy: The case of Indonesian EFL classrooms. *Indonesian Journal of Applied Linguistics*, 9(2), 335–347.
- Nugroho, R., Roesminingsih, M., Lestari, G. D., Rosyanafi, R. J., & Yulianti, E. (2024). Self-directed Learning: Strategy to Increase Digital Literacy in Suburban Society. *Mimbar Ilmu*, 29(1), 163–172. <https://doi.org/10.23887/mi.v29i1.64372>

