

Navigating Educational Challenges in Indonesia: Strategic Planning for Sustainable Education Inspired by Philip H. Coombs

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ABSTRACT

This study examines the educational challenges and opportunities within Indonesia's educational system, drawing on the foundational insights of Philip H. Coombs and his emphasis on strategic educational planning. Set against the backdrop of demographic shifts and increasing demands for equitable access, the research aims to identify strategies for fostering sustainable education. Utilizing a literature review, the study synthesizes existing research on educational policies, demographic trends, and technological advancements. Findings highlight significant progress in curriculum development and technology integration yet underscore persistent challenges such as teacher shortages and resource disparities across regions. The analysis reveals that public-private partnerships and community involvement are crucial for bridging funding gaps and enhancing infrastructure. Coombs' principles of aligning educational goals with society needs are particularly relevant, emphasizing the need for a balanced approach that integrates both quantitative expansion and qualitative enhancement. The study concludes that effective policy and leadership are vital for sustainable educational planning, requiring inclusive and adaptable strategies that reflect Indonesia's diverse cultural and geographic landscape. Future research should focus on assessing the long-term impacts of technological solutions and developing incentive models for educator retention in underserved areas. This research underscores the importance of collaboration among stakeholders to create an educational system that is resilient, equitable, and prepared for future challenges.

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1. INTRODUCTION

The evolution of educational systems worldwide requires continuous adaptation to meet the dynamic needs of society. Educational systems face complex challenges such as demographic shifts, rapid technological advancements, and heightened demands for job-specific skills, necessitating more responsive educational planning [1]. Sustainable education, crucial for long term success, often encounters significant hurdles in its implementation, particularly in resource-limited settings such as Indonesia. This is further complicated by financial constraints and educational disparities, as noted by [2].

Philip H. Coombs, a pioneer in educational planning, emphasized the need for innovative approaches to address the challenges of increased educational demand, funding limitations, and the alignment of education

with economic developments [3]. These issues are exacerbated by the rise of technology in education, making Coombs' insights increasingly relevant today [4]. Despite the growing awareness of sustainability in education, studies such as those by [5] and [6] highlight the fragmented implementation of sustainable practices within educational curriculum and policies.

In Indonesia, the urgency of these challenges is magnified by the country's diverse and expansive population, which faces significant geographical and social barriers. Approximately 30% of schools in remote areas lack basic facilities, and disparities in educational quality between regions remain a major concern [7], [8]. These issues underscore the need for an integrated and data-driven approach to educational planning that ensures equitable access and quality of education.

This research aims to address these gaps by applying Coombs' theoretical frameworks to the specific context of Indonesia, focusing on sustainability. By re-evaluating existing policies through Coombs' perspectives and designing a sustainable educational planning framework, this study proposes a dual approach to tackle immediate and long-term educational challenges. This strategy aligns with global educational goals and aims to ensure long-term sustainability [9].

By revisiting Coombs' theories and integrating contemporary challenges, this research contributes new insights into sustainable educational planning. It offers innovative solutions that could benefit educational planners, policymakers, and academicians, aiming to provide a blueprint for incorporating sustainability into educational systems. Ultimately, this study enriches academic discourse and provides practical solutions to prevalent educational challenges, thereby enhancing the effectiveness and sustainability of educational practices.

2. METHOD

This study employs a literature review methodology to explore existing research on sustainable educational planning, with a particular focus on Philip H. Coombs' theoretical frameworks. The objective is to synthesize findings from a variety of sources, including Coombs' primary texts, translations of his works, and secondary analyses by scholars in the field. Primary sources include Coombs' original writings, such as "The World Crisis in Education: The View from The Eighties" [10] and "Major Problems Facing Educational Planning in the Next Decade" [3]. Secondary literature will focus on scholarly articles and books that analyze and interpret Coombs' theories, ensuring a comprehensive understanding of his contributions [11], [12].

The literature review process begins with the identification of key themes related to sustainable education and Coombs' contributions to educational planning. Relevant literature will be sourced from academic databases Scopus and Google Scholar, as well as bibliographies of influential texts in the field. The selection criteria prioritize peer-reviewed articles and authoritative sources published within the last 10 years, while also including seminal works that have significantly influenced the field. Table 1 summarizes the selection criteria used to evaluate literature.

Table 1. Selection criteria for literature review

Criteria	Description
Type of Source	Peer-reviewed articles, books, and authoritative reports.
Publication Date	Works published within the last 10 years, with exceptions for seminal texts.
Relevance	Focus on sustainable educational planning and Coombs' theories.
Geographical Focus	Studies relevant to Indonesia or comparable contexts.
Methodological Rigor	Preference for studies with clear methodologies and significant findings.

Once the literature is gathered, a thorough reading and analysis are conducted to extract key concepts, methodologies, and findings from each source. Content analysis is employed to identify themes, involving the coding of literature based on recurring ideas related to Coombs' theories and sustainable educational practices. This thematic analysis follows a structured process: first, familiarization with literature; second, generating initial codes; third, searching for themes; and finally, reviewing and defining themes to ensure a coherent

narrative emerges from the data [13], [14]. Figure 1 illustrates the step-by-step research process involved in conducting this literature review.

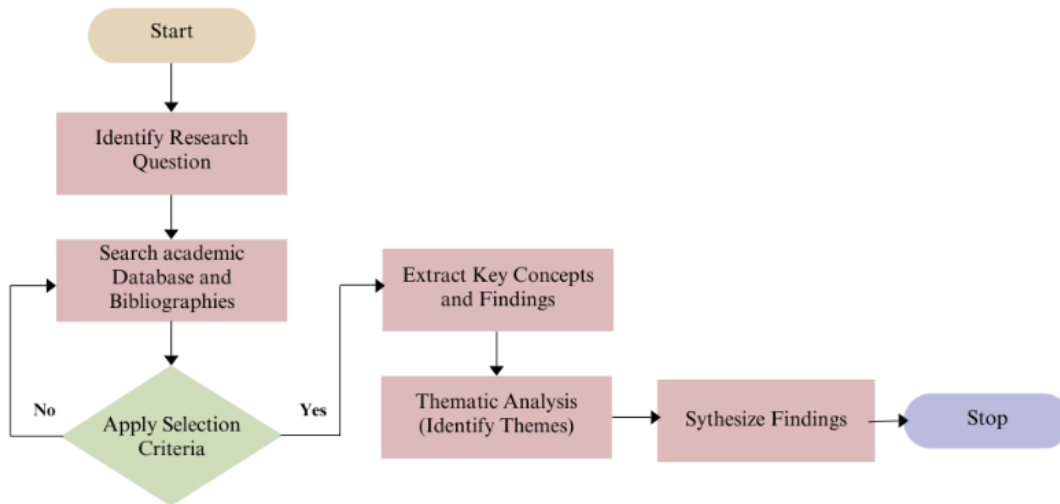


Figure 1. Workflow of the literature review process

3. RESULTS AND DISCUSSION

3.1. Result

The literature review identified several key themes related to sustainable educational planning through the lens of Philip H. Coombs' theoretical frameworks. Educational planning is a rational decision-making process aimed at achieving educational goals efficiently and effectively through the utilization of available resources [1]. Coombs emphasized that educational planning must be conducted systematically, based on a thorough analysis of educational needs and issues, while also considering the economic, social, and cultural factors that influence the educational system. In his view, educational planning encompasses not only curriculum development and human resource management but also all aspects related to the provision of educational services, including funding, infrastructure development, and the formulation of educational policies that support national educational goals.

Given the complexity and dynamism of the education sector, effective planning requires a deep understanding of the various internal and external factors impacting educational performance. Educational management planning faces significant challenges due to ongoing social [15] economic [16], and technological [17] changes. These dynamics necessitate adaptive strategies to ensure effective and sustainable education delivery.

In recent decades, the education sector worldwide has faced increasingly complex challenges. Among these are globalization, technological advancements, and demographic changes. Globalization has led to increased demands for skills relevant to the global market [18], while technological advancements have reshaped traditional teaching and learning methods [19]. To address these evolving challenges, it is crucial to identify and understand the key issues in educational planning that require strategic focus and innovative solutions. Given these contexts, several key issues are identified in educational planning.

3.1.1. Access, Equity, and Demographic Changes

Coombs highlights the critical importance of ensuring equitable access to education for all societal groups, particularly in remote areas and among underserved populations. This issue is particularly relevant in Indonesia, where geographic and socio-economic disparities significantly affect educational access and quality [20]. Rapid population growth and urbanization further complicate these challenges, requiring educational planners to address the increasing number of students and the need for adequate infrastructure.

In Indonesia, education is a powerful catalyst for transforming social and economic conditions, significantly enhancing individuals' standards of living [21]. There is a well-documented positive correlation between the demand for education and economic growth, suggesting that increased educational demand can

drive economic development [22]. As standards of living rise and populations grow, more Indonesians view education as a crucial investment for improving their prospects [23]. This trend necessitates the continuous evolution of educational systems to accommodate these demands, leading to heightened funding requirements for educational infrastructure, educator salaries, and other essential resources across all levels of education.

3.1.2. Relevance of Education

Education plays a pivotal role in facilitating rural and agricultural development, sectors foundational for sustainable economic progress. In Indonesia, the lack of government support poses a significant barrier to advancing education in these areas. The insufficient promotion of agricultural education impacts higher education institutions' ability to produce graduates who meet national needs [24]. Most food and natural resource management occurs in rural areas, making their development crucial for industrial and economic growth.

The current mismatch between the high demand for jobs and the quality of graduates highlights a critical issue: the education curriculum is not well-aligned with industry needs, leading to a skills gap for modern industry requirements [25]. This gap results in individuals struggling to find suitable employment, while industries face difficulties in sourcing skilled and professional human resources. This situation underscores the need for both quality enhancement of general education and the development of vocational schools and polytechnics to support industry, trade, and governance.

A critical issue facing educational systems worldwide, including Indonesia, is the shortage of qualified teachers and educational professionals. This shortage is particularly acute in specialized fields, hampering the ability to meet the demands of modern educational systems. The increasing demand for skilled workers in areas such as science, technology, engineering, health, and education is driven by economic growth, especially in developing countries.

3.1.3. Financing

Efficiency in educational resource utilization and adequate financing are critical for improving educational outcomes in Indonesia. The country faces significant disparities in resource allocation, particularly between urban and rural areas, leading to inadequate infrastructure and limited access to quality educational materials in less developed regions. The Indonesian government allocated 20%, or Rp 660.8 trillion, to education in the 2024 state budget, highlighting the financial challenges in planning and budgeting, especially for higher education institutions [26].

Investment in education is inherently a long-term commitment, with benefits often becoming apparent only after several decades. This substantial funding requirement poses a persistent challenge, as education budgets must compete with other critical sectors like health and infrastructure. Additionally, the distribution of funds is often compromised by individuals seeking personal gain, resulting in regional disparities. Financially independent schools that do not receive government assistance transfer the financial burden to parents. These private schools often set high tuition fees to provide attractive facilities and programs, creating a competitive environment for quality education.

3.1.4. Technology and Innovation

Challenges in enhancing productivity and fostering innovation in education in Indonesia arise from various systemic, cultural, and technological factors. Teachers often face constraints due to limited time and resources, which restrict their capacity to implement new and effective teaching practices. Inadequate school infrastructure, including imbalanced teacher-student ratios, overcrowded classrooms, and ineffective curriculum implementation, further complicates these efforts. These issues contribute to administrative burdens that can hinder educational administration and slow down or stifle teacher-led initiatives [27].

Research indicates that the implementation of technology in Indonesian schools faces significant hurdles, including insufficient digital infrastructure, lack of training for teachers, and limited access to technological resources in rural areas [28], [29], [30]. Integrating technology into education can enhance accessibility and quality but requires careful planning for teacher training and curriculum development. Coombs emphasizes the need for educational systems to adapt to technological changes by incorporating digital tools and resources effectively [3].

Additionally, the absence of a culture of innovation within schools, coupled with unsupportive leadership and harsh criticism of new approaches, makes it difficult to sustain innovative practices. This

environment can discourage teachers from experimenting with novel methods, ultimately impeding progress within the education system [31].

3.1.5. Social and Economic Disparities

In Indonesia, education is increasingly seen as a key pathway to social change and economic advancement. Parents, students, and communities view education as a crucial investment for a better future. This perspective is influenced by shifts in family structures and social roles. The traditional family model, where the father is the primary breadwinner and the mother is the caregiver, is evolving. In modern society, more mothers are participating in the workforce [32], and single-parent families are becoming more common [33]. These changes impact how children are educated, both at home and in school [34].

As more mothers work and single-parent families become common, schools are increasingly expected to provide additional services such as tutoring, counseling, and after-school activities. These institutions must also address the social and emotional needs of students who may lack full support at home. Consequently, schools are becoming more proactive in involving families and communities in the educational process, fostering a supportive network for students.

The evolution of social and cultural values in modern society significantly influences education. Values once considered paramount, such as strict obedience to authority and a focus on traditional formal education, are shifting towards a more democratic, pluralistic, and open society. This shift impacts classroom dynamics, where teachers, traditionally seen as the primary authority, are now encouraged to adopt participatory and dialogic approaches. This change requires teachers to adapt to more inclusive and interactive teaching methods that engage students and accommodate diverse perspectives.

3.1.6. Policy and Leadership

Effective policy and leadership are critical components in shaping the educational landscape in Indonesia. Strong leadership at both the national and local levels can drive significant improvements in educational quality and accessibility. However, challenges persist, including inconsistent policy implementation, bureaucratic inefficiencies, and limited resources [35]. These issues often hinder the development and execution of comprehensive educational strategies.

Coombs' theories on educational planning emphasize the need for strategic, long-term planning that is adaptable to changing social and economic conditions. In Indonesia, the complexity of the education system, compounded by regional disparities, requires policies that are both flexible and inclusive. The lack of coherent policy frameworks and the frequent changes in leadership can lead to fragmented educational initiatives that fail to address the root causes of disparities [36].

3.2. Discussion

The educational landscape in Indonesia is undergoing significant transformation, driven by demographic shifts and increasing demands for access and equity. As the population grows and family structures evolve, educational planners are faced with the dual challenge of expanding student capacity while simultaneously enhancing the quality of education. This necessitates not only curriculum revisions to meet contemporary needs but also the integration of technological innovations to ensure equitable access across diverse communities. The goal is to produce graduates who are academically proficient and well-prepared for a competitive workforce, thereby contributing to sustainable economic growth [37].

However, these ambitions are tempered by practical constraints, including limited government funding and the lengthy lead time required to train new educators. This poses a risk of teacher shortages, which could undermine efforts to maintain educational quality. Strategic planning must therefore balance quantitative expansion with qualitative enhancement to address these challenges effectively [38], [39].

Improving the quality and relevance of education is crucial for addressing these challenges. This involves aligning curriculum and teaching methods with labor market demands and global developments. Coombs emphasizes that education should be future-oriented, preparing students for emerging industries and technologies [10]. In rural areas, educational strategies should encompass both formal and non-formal education, such as farmer training and literacy programs, to ensure accessibility and relevance to local needs. Bridging the skills gap requires a focus on vocational training and the integration of technological innovations, providing practical pathways to employment [40].

Efficiency and financing are critical components of educational reform in Indonesia. Leveraging technology to enhance learning and streamline administrative processes can lead to cost savings and improved quality. Public-private partnerships and community involvement can provide additional resources, helping to address funding gaps and enhance educational infrastructure [41], [42]. Collaboration between the government, industry, and educational institutions is essential for developing sustainable solutions that meet the needs of students and the broader economy.

Technology and innovation have the potential to transform education in Indonesia. Investing in professional development equips educators with the skills needed to implement innovative teaching methods effectively [43]. However, overcoming barriers such as inadequate digital infrastructure and limited teacher training is critical. Providing access to digital tools can enhance learning experiences and enable personalized education, tailored to individual student needs [44]. Fostering a culture of experimentation and collaboration among educators is essential for driving meaningful innovation.

Social and economic disparities continue to impact educational access and quality. Coombs underscores the importance of strategies that reduce these disparities, ensuring inclusive education for all societal groups. The digital divide remains a significant challenge, as not all students have equal access to technology. Addressing this issue is crucial for ensuring equitable educational opportunities and empowering students from all backgrounds [39].

Effective policy and leadership are vital for navigating these complex challenges. Policies must be inclusive, equitable, and adaptable, reflecting the diverse cultural, economic, and geographic factors influencing educational outcomes in Indonesia. Leadership plays a pivotal role in aligning national and local policies, fostering collaboration among stakeholders, and driving systemic change. By investing in professional development and improving infrastructure, Indonesia can build an educational system that is resilient and capable of meeting the diverse needs of its population [45].

To ensure sustainable educational planning, Indonesia must adopt a holistic approach that integrates a long-term strategic vision with adaptive practices. Continuous assessment and feedback mechanisms are essential for adjusting policies and strategies in response to evolving societal needs and technological advancements. Investing in human capital, particularly in teacher development and retention, is crucial. Providing incentives for educators to work in underserved areas and ensuring their professional growth can help mitigate teacher shortages and improve educational quality. Additionally, fostering partnerships with international organizations can bring in diverse perspectives and resources, aiding the development of innovative educational practices.

Ultimately, sustainable educational planning in Indonesia requires a comprehensive strategy that balances immediate needs with long-term goals. By fostering collaboration among stakeholders, investing in human and technological resources, and maintaining a flexible and responsive policy framework, Indonesia can build an educational system that is not only equitable and inclusive but also resilient and future ready.

4. CONCLUSION

This study has explored the multifaceted challenges and opportunities within Indonesia's educational system, focusing on access, equity, quality, efficiency, technology, and leadership. The research highlights the critical need for strategic planning that balances the expansion of educational capacity with enhancements in quality. By aligning curriculum with labor market demands and integrating technological innovations, Indonesia can better prepare its graduates for a competitive global workforce.

Key findings indicate that addressing demographic changes and social disparities requires a comprehensive approach that includes both formal and non-formal educational strategies. Moreover, leveraging public-private partnerships and fostering collaboration among stakeholders can provide essential resources and support for sustainable educational development. The study underscores the importance of effective policy and leadership in navigating these challenges. Policies must be inclusive and adaptable, while strong leadership is crucial for aligning national and local educational goals. Investing in teacher development and infrastructure is vital for building a resilient educational system capable of meeting diverse needs.

Future research should focus on evaluating the long-term impacts of integrated technological solutions in education, particularly in rural and underserved areas. Additionally, studies could explore the effectiveness of various incentive models for attracting and retaining educators in these regions. Ongoing research should also examine the role of international collaborations in enhancing educational practices and outcomes. In conclusion, achieving a sustainable and equitable educational system in Indonesia requires a holistic, adaptive approach. By continuing to innovate and collaborate, stakeholders can create an environment where all students can succeed and contribute to the nation's development.

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REFERENCES

- [1] P. H. Coombs, *What is Educational Planning*. Paris: UNESCO: International Institute for Educational Planning, 1970. [Online]. Available: <https://eric.ed.gov/?id=ED052510>
- [2] Y. Azzizah, "Socio-Economic Factors on Indonesia Education Disparity," *IES*, vol. 8, no. 12, p. 218, Nov. 2015, doi: 10.5539/ies.v8n12p218.
- [3] P. H. Coombs, *Major Problem Facing Educational Planning in The Next Decade*. Paris: UNESCO: International Institute for Educational Planning, 1974. [Online]. Available: <https://eric.ed.gov/?id=ED113787>
- [4] Ranbir, "Educational Technology Integration: Challenges and Opportunities," *irt*, vol. 10, no. 2, pp. 75–79, May 2024, doi: 10.36676/irt.v10.i2.1406.
- [5] F. Gale, A. Davison, G. Wood, S. Williams, and N. Towle, "Four Impediments to Embedding Education for Sustainability in Higher Education," *Aust. J. environ. educ.*, vol. 31, no. 2, pp. 248–263, Dec. 2015, doi: 10.1017/aee.2015.36.
- [6] I. Thomas, "Sustainability in tertiary curricula: what is stopping it happening?," *International Journal of Sustainability in Higher Education*, vol. 5, no. 1, pp. 33–47, Mar. 2004, doi: 10.1108/14676370410517387.
- [7] W. Winardi, "Decentralization of Education in Indonesia—A Study on Education Development Gaps in the Provincial Areas," *IES*, vol. 10, no. 7, p. 79, Jun. 2017, doi: 10.5539/ies.v10n7p79.
- [8] G. W. Jones and P. Hagul, "Schooling in Indonesia: Crisis-Related and Longer-Term Issues," *Bulletin of Indonesian Economic Studies*, vol. 37, no. 2, pp. 207–231, Aug. 2001, doi: 10.1080/00074910152390892.
- [9] United Nations, "The Sustainable Development Goals Report 2023," 2023.
- [10] P. H. Coombs, *The world crisis in education: the view from the eighties*. New York: Oxford University Press, 1985.
- [11] Y. G.-M. Yulat, "Education and national development: The continuing problem of misdiagnosis and irrelevant prescriptions," *International Journal of Educational Development*, vol. 8, no. 4, pp. 315–328, Jan. 1988, doi: 10.1016/0738-0593(88)90018-1.
- [12] P. G. Altbach, "Educational Futurology," *Comparative Education Review*, vol. 29, no. 4, pp. 557–561, 1985.
- [13] V. Braun and V. Clarke, "Using thematic analysis in psychology," *Qualitative Research in Psychology*, vol. 3, no. 2, pp. 77–101, Jan. 2006, doi: 10.1191/1478088706qp063oa.
- [14] M. Naeem, W. Ozuem, K. Howell, and S. Ranfagni, "A Step-by-Step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research," *International Journal of Qualitative Methods*, vol. 22, p. 16094069231205789, Oct. 2023, doi: 10.1177/16094069231205789.
- [15] C. Betsurmath and P. S. Murthy, "Change Management in Education," *International Journal of Health and Allied Sciences*, vol. 11, no. 3, Jun. 2023, doi: 10.55691/2278-344X.1040.
- [16] K. Kumar, "Challenges in Management Education," *Management Dynamics*, vol. 15, no. 1, pp. 1–3, Apr. 2022, doi: 10.57198/2583-4932.1094.
- [17] H. Basri, Nurhayuni, S. Hasri, and Sohiron, "Modern Education Management: Challenges, Strategies Towards a Future of Continuing Education," *Munaddhomah*, vol. 5, no. 3, pp. 260–269, Jul. 2024, doi: 10.31538/munaddhomah.v5i3.875.
- [18] M. H. Sawalmeh and M. Dey, "Globalization and the increasing demand for spoken English teachers," *RJAH*, vol. 4, no. 2, Jul. 2023, doi: 10.58256/rjah.v4i2.1097.
- [19] I. Muhtaba, Y. Prapantja, A. Khatuni, and M. S. Hadi, "Online English Education: A Paradigm Shifts in Education System and Its Challenges," *English Language in Focus (ELIF)*, vol. 3, no. 2, pp. 119–126, 2021, doi: 10.24853/elif.3.2.119-126.
- [20] A. Hendriani, R. Hermawan, and S. Kusniasari, "The Issues of Educational Equality in Indonesia," *IJRSI*, vol. XI, no. II, pp. 352–359, 2024, doi: 10.51244/IJRSI.2024.1102027.
- [21] S. W. Munda, "Demand Driven University Education Provision: Implication for Equity and Quality," *IJESSR*, vol. 07, no. 03, pp. 65–81, 2024, doi: 10.37500/IJESSR.2024.7305.
- [22] L. C. Pal, "Impact of Education on Economic Development," *Khazanah Pendidikan Islam*, vol. 5, no. 1, pp. 10–19, Jun. 2023, doi: 10.15575/kp.v5i1.25199.
- [23] S. Kumiawati, D. Suryadarma, L. Bima, and A. Yusrina, "Education in Indonesia: A White Elephant?," *A White Elephant? Journal of Southeast Asian Economies (JSEAE)*, vol. 35, pp. 185–199, 2018.
- [24] E. Yu. Astrakhantseva, "Analysis of the impact of socio-economic problems in rural area on agricultural education," *E3S Web Conf.*, vol. 282, p. 08008, 2021, doi: 10.1051/e3sconf/202128208008.
- [25] Surono and R. W. Anggraini, "Mapping Of Occupation In Quality Management Within National Qualification Framework To Close The Gap Between Education And Industry Needs," *IJSSR*, vol. 4, no. 05, pp. 1288–1301, Jun. 2024, doi: 10.46799/ijssr.v4i05.807.
- [26] A. Fakhrurraji, Prasetyono, and S. Musyarofah, "The Problem with State Finance Planning and Budgeting in Higher Education," *Asia Pacific Fraud Journal*, vol. 4, no. 1, pp. 101–111, 2019, doi: 10.21532/apfj.001.19.04.01.12.
- [27] K. Khairiah, A. Amin, M. Muassomah, M. Mareta, S. Sulistyorini, and M. Yusuf, "Challenges to professional teacher development through workplace culture management," *IJERE*, vol. 13, no. 2, p. 714, Apr. 2024, doi: 10.11591/ijere.v13i2.25666.
- [28] Muhaimin, Asrial, A. Habibi, A. Mukminin, and P. Hadisaputra, "Science teachers' integration of digital resources in education: A survey in rural areas of one Indonesian province," *Heliyon*, vol. 6, no. 8, p. e04631, Aug. 2020, doi: 10.1016/j.heliyon.2020.e04631.
- [29] M. R. A. Pradana and T. Josiah, "Application of Technology in Educational Management in Rural Schools," *Ensiklopedia*, vol. 4, no. 01, pp. 37–43, Jun. 2024, doi: 10.24967/esp.v4i01.3183.

- [30] D. E. Subroto, Supriandi, R. Wirawan, and A. Y. Rukmana, "Implementasi Teknologi dalam Pembelajaran di Era Digital: Tantangan dan Peluang bagi Dunia Pendidikan di Indonesia," *JPDWS*, vol. 1, no. 07, pp. 473–480, Jul. 2023, doi: 10.58812/jpdws.v1i07.542.
- [31] Y. C. Gai Mali *et al.*, "Issues and Challenges of Technology Use in Indonesian School: Implication for Teaching and Learning," *IJIET*, vol. 7, no. 2, pp. 221–233, Jul. 2023, doi: 10.24071/ijiet.v7i2.6310.
- [32] L. D. Iriani, S. N. A. C. Darsono, and M. Samae, "The Effect of Working Mother on Children's Cognitive Achievement," *JERSS*, vol. 7, no. 1, pp. 36–48, Feb. 2023, doi: 10.18196/jerss.v7i1.17634.
- [33] S. R. S. Mahmood and N. Sangeetha, "Students From Single-Parent Households: Their Issues & Challenges," *ASWJ*, vol. 8, no. 4, p. e00252, Oct. 2023, doi: 10.47405/aswj.v8i4.262.
- [34] N. K. W. Anggaraini and N. P. W. Setyari, "The Impact of Working Mothers' Bargaining Power on Their Children's Human Capital in Indonesia," *jesp*, vol. 21, no. 2, 2020, doi: 10.18196/jesp.21.2.5044.
- [35] H. Harun, S. Wardhaningtyas, H. Z. Khan, Y. An, and R. Masdar, "Understanding the institutional challenges and impacts of higher education reforms in Indonesia," *Public Money & Management*, vol. 40, no. 4, pp. 307–315, May 2020, doi: 10.1080/09540962.2019.1627063.
- [36] J. P. Bishop and P. A. Noguera, "The Ecology of Educational Equity: Implications for Policy," *Peabody Journal of Education*, vol. 94, no. 2, pp. 122–141, Mar. 2019, doi: 10.1080/0161956X.2019.1598108.
- [37] E. I. Orji, D. O. Idika, Institute of Education University of Calabar-Nigeria, V. Ekwukoma, and Nigerian Educational Research and Development Council (NERDC), Abuja, "Strategic Training for Quality Higher Education Graduates: Achieving United Nations Sustainable Development Goal 4 (SDG4)," *Shodh Sari*, vol. 02, no. 02, pp. 148–161, Apr. 2023, doi: 10.59231/SARI7580.
- [38] J. Murphy, "A Degree of Waste: the economic benefits of educational expansion," *Oxford Review of Education*, vol. 19, no. 1, pp. 9–31, Jan. 1993, doi: 10.1080/0305498930190102.
- [39] H. S. Nabiela and N. Ulfatin, "Inclusive Education Policy In Indonesia: Best Practices, Challenges, And Future Directions," *IJERSC*, vol. 4, no. 6, pp. 1007–1012, Dec. 2023, doi: 10.51601/ijersc.v4i6.739.
- [40] J. I. Oviawe, R. Uwameiye, and P. S. O. Uddin, "Bridging Skill Gap to Meet Technical, Vocational Education and Training School-Workplace Collaboration in the 21 Century," *IJVETr*, vol. 3, no. 1, p. 7, 2017, doi: 10.11648/j.ijvetr.20170301.12.
- [41] S. Wong and S. Guggenheim, *Community-Driven Development: Myths and Realities*. World Bank, Washington, DC, 2018. doi: 10.1596/1813-9450-8435.
- [42] B. S. Yadav, "Sustainable Development by Public Private Partnership: A Mpve Towards Quality Enhancement in Education," *globusedujournal*, vol. 10, no. 1, p. 18, May 2020, doi: 10.46360/globus.220201003.
- [43] A. Inamorato, S. Gausas, R. Mackevičiūtė, A. Jotautytė, and Ž. Martinaitis, *Innovating professional development in higher education: an analysis of practices*. Luxembourg: Publications Office, 2019. Accessed: Feb. 03, 2025. [Online]. Available: <https://data.europa.eu/doi/10.2760/26224>
- [44] A. M. Surur, S. Ulfa, Y. Soepriyanto, and M. Hasnah Binti, "Personalized Learning in a Digital Environment," *IJOMER*, vol. 2, no. 1, May 2024, doi: 10.30762/ijomer.v2i1.2737.
- [45] A. Kurniawan and R. Rohmad, "Building Resilient Inclusive Education Post-Pandemic: An Indonesian Case Study," *IJSSHR*, vol. 7, no. 08, Aug. 2024, doi: 10.47191/ijsshr/v7-i08-16.