

The Process of Formulating A Strategic Plan for The Implementation of Vocational Education in Indonesia

Dani Darmawan¹, Dedy Achmad Kurniady², Aan Komariah³, Taufani C Kurniatun⁴

Educational Administration

Indonesian University of Education, Bandung

*corresponding author:

dani.darmawan@upi.edu

Abstract

Strategic planning is a central governance mechanism for translating national development priorities into sectoral policies, programs, budgets, and performance accountability. In Indonesia, vocational education reform requires coherent planning because it involves labour-market responsiveness, institutional coordination, curriculum relevance, teacher capacity, and industry partnership. This study examines how the Directorate General of Vocational Education, Ministry of Education and Culture, formulated its 2020–2024 Strategic Plan and how the process connected national development priorities with vocational education governance. Using a qualitative case-study design, the research drew on policy and regulatory documents, institutional planning materials, observations of planning-related processes, and in-depth interviews with actors involved in or knowledgeable about strategic planning. The data were analysed thematically to identify the main stages and governance dimensions of strategic plan formulation. The findings show that the formulation process consisted of three interrelated stages: technocratic analysis, political alignment, and formal determination. The technocratic stage provided an evidence-based basis for identifying sectoral challenges and development priorities; the political stage aligned the draft plan with the RPJMN and presidential priorities; and the determination stage institutionalized the plan as an authoritative reference for annual work plans, budgeting, and performance reporting. The study contributes to vocational education governance literature by showing that strategic planning is not merely an administrative requirement, but a negotiated policy-translation process that links evidence, political legitimacy, institutional coordination, and implementation accountability.

Keywords: Vocational Education; Strategic Planning; Policy Alignment; Public-Sector Governance; Indonesia

Introduction

Vocational education has become increasingly important in national development strategies because contemporary economies require education systems that can respond to technological change, labour-market transformation, and the demand for higher productivity. Studies on vocational education and training show that the responsiveness of vocational systems depends on their capacity to align curricula, institutional governance, employer engagement, and labour-market demands ([Wahyuni et al., 2026](#); [Motsepe et al., 2026](#)). In Indonesia, this issue is particularly important because productivity growth remains one of the key constraints to long-term economic transformation. BAPPENAS estimates indicate that Indonesia's total factor productivity growth has declined over the last 15 years, placing Indonesia among the countries with relatively low productivity in the region ([Hidayat et al., 2021](#)).

Human capital is a central foundation of productivity because workers' skills, basic education, and health determine the capacity of the labour force to generate economic value. Increasing labour productivity has significant potential to support Indonesia's economic growth, especially because a large share of the population is currently of working age ([Hidayat et al., 2021](#)). The human development perspective also

broadens the meaning of development beyond income alone by emphasizing health, education, and decent living standards as core dimensions of human well-being ([Karyono et al., 2021](#)). In this context, education is not only a social service but also a strategic instrument for strengthening productive capacity and national competitiveness.

Vocational education is directly connected to this agenda because it prepares learners with occupational, technical, and employability skills needed in the world of work. [Billett \(2011\)](#) argues that vocational education supports participation in working life by preparing individuals for employment, developing work-related capacities, and enabling career transitions across the life course. Similarly, vocational education has historically been understood as education designed to prepare individuals for useful employment and practical work ([Thompson, 1973](#)), while contemporary vocational education emphasizes mastery of skills required in specific occupations ([Suharno et al., 2020](#)). Therefore, the quality of vocational education depends not only on school-level implementation but also on the policy and planning systems that shape its direction, resources, and institutional coordination.

In Indonesia, vocational education has experienced repeated reforms and policy attention, including efforts to expand access, improve relevance, and strengthen links with industry. However, persistent challenges remain, including the quality and relevance of graduates, the availability and competence of productive teachers, and the capacity of institutions to respond to labour-market needs ([Suharno et al., 2020](#)). Recent journal-based studies also emphasize that vocational education reform cannot be understood as a set of isolated interventions; rather, it requires an integrated ecosystem in which governance, curriculum alignment, industry partnership, financing, and employability outcomes interact systematically ([Wahyuni et al., 2026](#)). Policy formulation studies in Indonesia further show that the integration between vocational education and the labour market remains constrained by weak stakeholder synergy, limited employment projection alignment, and insufficient policy coherence ([Rahman et al., 2021](#)). This makes strategic planning a crucial governance mechanism for translating national development priorities into operational programs, institutional targets, and budget directions.

Strategic planning in the public sector is not merely a technical exercise of producing formal documents. It is a governance process through which institutions define priorities, align resources, coordinate stakeholders, and respond to political, administrative, and social demands. [Bryson et al. \(2018\)](#) argue that public-sector strategic planning becomes strategic when it pays attention to context, stakeholders, implementation challenges, and future-oriented choices. This perspective is relevant to vocational education governance because the formulation of a strategic plan must connect national development goals, ministerial mandates, institutional capacity, labour-market expectations, and public accountability.

Despite the importance of strategic planning, existing discussions on Indonesian vocational education have tended to focus on historical development, graduate outcomes, school-industry linkages, policy paradigms, or the formulation of labour-market integration policies ([Rahman et al., 2021](#); [Suharno et al., 2020](#); [Yasdin & Muksin, 2024](#)). Less attention has been given to how strategic planning is formulated within the central government institution responsible for vocational education and how this process mediates between national development priorities and sectoral governance. This gap is important because the strategic plan of a ministry or agency functions as the formal bridge between the National Medium-Term Development Plan and the annual work plans, programs, and budgets of the institution.

Accordingly, this study examines the process through which the Directorate General of Vocational Education, Ministry of Education and Culture, formulates its 2020–2024 strategic plan. The study focuses on how the formulation process connects technocratic analysis, political alignment, institutional coordination, and formal determination of the strategic plan. By doing so, this article contributes to the literature on vocational education governance and public-sector strategic planning by explaining how national development priorities are translated into sectoral planning within a central government agency.

Literature Review

Literature on vocational education increasingly places technical and vocational education and training (TVET) within a broader governance and labour-market framework rather than treating it only as a school-based program. [Billett \(2011\)](#) explains that vocational education is intended to prepare individuals for working life, develop occupational capacities, support continuing development across the life course, and facilitate transitions between jobs. This view positions vocational education as a dynamic system that links learning, work, institutional coordination, and social development. In the Indonesian context, vocational education refers to formal education at secondary and higher education levels that prepares learners for specific occupations and professional fields ([Suharno et al., 2020](#)).

A major issue in the TVET literature is the relationship between education systems and labour markets. [Caves et al. \(2021\)](#) argue that effective TVET programs depend on the linkage between education and employment systems, particularly in curriculum design, program delivery, and curriculum updating. Their education–employment linkage perspective suggests that vocational education becomes more effective when employers and education institutions share responsibility for shaping competencies and learning processes. Similarly, [Motsepe et al. \(2026\)](#) found that curriculum relevance is strongly influenced by employer engagement, integration of digital and transversal skills, and institutionalised labour-market feedback mechanisms. These studies indicate that vocational education reform requires adaptive governance rather than merely expanding access or increasing the number of institutions.

From a governance perspective, vocational education also requires coordination among multiple actors. [Wu and Sarker \(2022\)](#) emphasize that synergetic governance in vocational education depends on openness, equilibrium, dynamism, and cooperation among educational institutions, markets, government, society, and private organizations. This argument is important because the quality of vocational education is shaped by the interaction between policy direction, institutional capacity, industry participation, and social demand. In Indonesia, these governance issues are reflected in continuing challenges related to graduate relevance, productive teachers, institutional coordination, and responsiveness to labour-market needs ([Rahman et al., 2021](#); [Suharno et al., 2020](#)).

Strategic planning provides a relevant analytical lens for understanding how vocational education governance is organized. [Bryson et al. \(2018\)](#) define public-sector strategic planning as a deliberative and disciplined process that produces fundamental decisions and actions shaping what an organization does and why it does it. For public institutions, strategic planning is not only a formal planning document but also a mechanism for clarifying mandates, identifying strategic issues, mobilizing stakeholders, and linking plans with implementation. [Retnandari \(2022\)](#) further shows that strategic planning in Indonesian public administration often faces problems of weak data quality, limited planning capacity, formalistic stakeholder engagement, and political-administrative constraints. These findings suggest that the quality of strategic

planning depends on whether planning documents are connected to evidence, institutional capacity, stakeholder participation, and implementation mechanisms.

Stakeholder participation is another central theme in strategic planning. [Falqueto et al. \(2019\)](#) argue that strategic planning in educational institutions involves both internal and external stakeholders because each actor can influence organizational strategy positively or negatively. In vocational education, this stakeholder dimension is particularly important because curriculum relevance, industry partnership, teacher development, institutional financing, and graduate employability cannot be addressed by education institutions alone. Recent studies on Indonesian vocational education also show that policy integration with the labour market requires stronger synergy among government, education providers, employers, and local actors ([Rahman et al., 2021](#); [Yasdin & Muksin, 2024](#)).

Based on this literature, this study conceptualizes the formulation of the Directorate General of Vocational Education Strategic Plan as a governance process that links vocational education reform, labour-market responsiveness, stakeholder coordination, and public-sector strategic planning. The literature indicates that a strategic plan becomes meaningful when it does not merely reproduce administrative requirements, but translates national development priorities into sectoral objectives, programs, activities, and performance directions. Therefore, the formulation of the 2020–2024 Strategic Plan can be examined through three interrelated dimensions: technocratic analysis, political alignment, and formal institutional determination.

Methodology

This study employed a qualitative case-study design to examine the formulation of the 2020–2024 Strategic Plan of the Directorate General of Vocational Education. A case-study approach was selected because the study investigates a contemporary policy process within its real institutional context, where the boundaries between the formulation process, institutional actors, regulatory mandates, and national development planning are closely connected. This design is appropriate for explaining how strategic planning is constructed through technocratic analysis, political alignment, stakeholder coordination, and formal institutional determination ([Mtisi, 2022](#); [Yin, 2018](#)).

3.1. Research Design and Case Selection

The case was the strategic planning process within the Directorate General of Vocational Education, Ministry of Education and Culture, which is institutionally responsible for the governance of vocational education in Indonesia. The Directorate General was selected because it represents the central government unit through which national development priorities in vocational education are translated into sectoral objectives, programs, activities, and budget directions. The unit of analysis was not individual behaviour, but the institutional process of strategic plan formulation from the technocratic stage to political alignment and formal determination.

3.2. Data Sources and Collection

Data were collected from multiple qualitative sources, including policy documents, regulatory documents, institutional planning materials, observation of planning-related processes, and in-depth interviews with actors involved in or knowledgeable about strategic planning. Document analysis was used to examine the RPJMN, BAPPENAS strategic planning guidelines, the draft and final strategic plan, and related institutional documents. Interviews and observations were used to capture how formal procedures were

interpreted, coordinated, and implemented by institutional actors. The use of multiple data sources was intended to strengthen the depth and credibility of the case analysis through methodological triangulation ([Chand, 2025](#); [Schlunegger et al., 2024](#)).

3.3. Data Analysis

The data were analyzed using a qualitative thematic procedure. First, all documents, interview notes, and observation notes were read repeatedly to develop familiarity with the data. Second, initial codes were generated based on the study focus, including strategic planning mandates, technocratic analysis, stakeholder involvement, policy alignment, institutional coordination, and determination procedures. Third, the codes were grouped into broader analytical themes that reflected the stages and governance dimensions of the strategic plan formulation process. [Braun and Clarke \(2006\)](#) emphasize that thematic analysis is a flexible method for identifying, analyzing, and reporting patterns within qualitative data. In this study, thematic analysis was used to connect empirical evidence with the conceptual framework developed from vocational education governance and public-sector strategic planning literature.

3.4. Trustworthiness and Ethical Considerations

To enhance trustworthiness, the study used source triangulation, methodological triangulation, and consistency checks between interview findings, observations, and policy documents. Emerging interpretations were compared with documentary evidence and the formal sequence of strategic planning procedures. Where possible, clarification was sought from relevant informants to reduce misinterpretation of institutional processes. These procedures were used to strengthen credibility, dependability, and confirmability in the qualitative analysis ([McKim, 2023](#); [Schlunegger et al., 2024](#)). Ethical considerations were addressed by ensuring that information obtained from participants was used only for academic analysis, that institutional information was interpreted carefully, and that the study focused on the policy process rather than personal evaluation of individual officials.

Result And Discussion

The findings show that the formulation of the 2020–2024 Strategic Plan of the Directorate General of Vocational Education was shaped by the interaction between national development planning requirements, ministerial mandates, institutional coordination, and political priorities. Rather than functioning only as an administrative document, the strategic plan operated as a governance instrument that translated the 2020–2024 RPJMN into sectoral objectives, programs, activities, and performance directions for vocational education. This finding supports the argument that public-sector strategic planning becomes meaningful when it links formal mandates, stakeholder coordination, policy alignment, and implementation capacity ([Bryson et al., 2018](#); [Retnandari, 2022](#)).

A. Strategic Plan as a Policy Alignment Instrument

The strategic position of the K/L Strategic Plan is reflected in its role as a bridge between the RPJMN and the annual work plan of each ministry or agency. In this planning architecture, the K/L Strategic Plan elaborates national development priorities into the vision, mission, objectives, strategies, policies, programs, and activities of the ministry or agency ([BAPPENAS, 2019](#)). This structure indicates that the formulation of

the strategic plan is not an isolated institutional exercise, but a mechanism of vertical policy alignment between national planning priorities and sectoral governance.

1. The first linkage is between the K/L Strategic Plan and the RPJMN. The K/L Strategic Plan must be guided by the RPJMN and must translate national priorities into ministry-level objectives, strategies, programs, and activities.
2. The second linkage is between the K/L Strategic Plan and the vision, mission, and priority programs of the elected President. This linkage shows that strategic planning is also influenced by political direction and leadership priorities.
3. The third linkage is between the K/L Strategic Plan and the annual ministry or agency work plan. The annual work plan is prepared based on the strategic plan and refers to development priorities and indicative budget ceilings.

These linkages demonstrate that the strategic plan performs both policy and managerial functions. At the policy level, it ensures consistency between national development objectives and sectoral priorities. At the managerial level, it becomes a reference for annual planning, budgeting, performance reporting, and organizational accountability. This finding is consistent with studies showing that alignment between governance design, performance logic, and internal processes is critical for improving public-sector performance ([Virani & van der Wal, 2023](#); [Mwanza & Dar, 2025](#)).

B. Technocratic Process: Evidence-Based Sectoral Planning

The first stage in the formulation process was the technocratic process. This stage involved the preparation of a technocratic draft based on objective analysis, evaluation of previous sectoral development, development scenarios, and alignment with the technocratic draft of the RPJMN. In the context of vocational education, this stage was important because it provided the analytical basis for identifying sectoral challenges such as graduate relevance, teacher capacity, institutional readiness, and labour-market responsiveness.

The technocratic process reflects the evidence-based dimension of strategic planning. In this stage, the Directorate General needed to translate national planning assumptions into sectoral priorities and measurable directions for vocational education. However, the process also reveals a common challenge in Indonesian public-sector planning: the quality of strategic planning depends on the availability of reliable data, analytical capacity, and the ability of planners to connect evidence with institutional decisions. [Retnandari \(2022\)](#) notes that strategic planning in Indonesian public administration is often constrained by weak data quality, limited planning capacity, and formalistic use of planning documents. Therefore, the technocratic process can strengthen vocational education governance only when evidence is not treated as a procedural requirement, but as a basis for policy prioritization and resource allocation.

C. Political Alignment: Translating Presidential Priorities into Sectoral Strategy

The second stage was the political process, in which the technocratic draft was adjusted to the vision, mission, and priority programs of the elected President. This stage shows that strategic planning in the public sector is not purely technical. It is also shaped by political mandate, leadership direction, and the need to ensure that sectoral strategies support the national development agenda. [Filgueiras et al. \(2023\)](#) argue that governance processes should be understood through the interaction between technocratic and political dimensions because policy steering is shaped by both expert-based analysis and political choices.

In this stage, the draft Strategic Plan of the Directorate General was aligned with the initial draft of the RPJMN, the President's priority programs, and coordination with relevant government actors. This alignment was necessary to ensure that vocational education planning did not operate separately from national development priorities. At the same time, the political process required the Directorate General to maintain coherence between sectoral needs and broader government commitments. This is particularly important for vocational education because labour-market alignment, industry partnership, and institutional reform require coordination across ministries, regional governments, and non-state actors ([Rahman et al., 2021](#); [Wu & Sarker, 2022](#)).

The political alignment stage therefore functions as a mediating mechanism between technical analysis and political legitimacy. On the one hand, the plan must remain evidence-based and responsive to vocational education challenges. On the other hand, it must reflect the priorities of the elected government and the formal direction of national development. This dual requirement makes strategic planning a negotiated governance process rather than a linear administrative activity.

D. Formal Determination and Institutional Accountability

The final stage was the determination of the Strategic Plan. After the RPJMN was established, the draft K/L Strategic Plan was adjusted, reviewed, and formally determined through a regulation of the head of the ministry or agency. The determined strategic plan was then submitted to relevant national institutions, including BAPPENAS, the Ministry of Finance, the Ministry of Home Affairs, and the Ministry of Administrative and Bureaucratic Reform. This stage transformed the draft plan into an authoritative institutional document that guides annual work plans, budgeting, and performance reporting.

The determination stage is significant because it institutionalizes policy alignment into formal planning and accountability mechanisms. Once determined, the strategic plan becomes the reference for annual work plans and indicative budget ceilings. This confirms that strategic planning is closely connected with budget governance and performance management. In public organizations, however, formal determination does not automatically guarantee effective implementation. Studies on public-sector strategy implementation show that organizational capability, internal processes, leadership, communication, and adaptive implementation practices are essential for transforming strategic plans into actual performance outcomes ([Mwanza & Dar, 2025](#); [Nkone et al., 2024](#)).

E. Discussion: Strategic Planning as Vocational Education Governance

The overall formulation process demonstrates that strategic planning for vocational education is a governance process involving three interrelated dimensions. First, the technocratic dimension provides evidence-based analysis of sectoral conditions and future development scenarios. Second, the political dimension ensures that sectoral planning reflects presidential priorities and national development direction. Third, the institutional dimension formalizes the plan into a binding document that guides programs, budgets, and performance accountability. These dimensions correspond to the conceptualization of strategic planning as a process that connects mandates, stakeholders, strategic issues, and implementation arrangements ([Bryson et al., 2018](#); [Falqueto et al., 2019](#)).

For vocational education governance, these findings have important implications. The effectiveness of the Strategic Plan depends on whether it can move beyond compliance with planning procedures and become a tool for addressing substantive challenges in vocational education, including labour-market relevance, curriculum alignment, teacher capacity, institutional partnerships, and employability outcomes. [Caves et al.](#)

(2021) show that effective TVET systems require strong linkage between education and employment systems, while [Rahman et al. \(2021\)](#) emphasize that Indonesia still faces policy integration challenges between vocational education graduates and the labour market. Therefore, the value of the strategic plan lies not only in its formal consistency with the RPJMN, but also in its capacity to coordinate actors and guide implementation toward measurable vocational education outcomes.

The findings also suggest that the formulation of the Directorate General's Strategic Plan should be understood as a negotiated process of policy translation. National priorities are not transferred mechanically into sectoral planning; they are interpreted through institutional mandates, technocratic evidence, political direction, and coordination with other government actors. This interpretation strengthens the article's contribution to the literature by showing how public-sector strategic planning operates as a mechanism of policy alignment in vocational education governance.

Conclusion

This study answers the research question by showing that the formulation of the 2020–2024 Strategic Plan of the Directorate General of Vocational Education was carried out through three interrelated processes: technocratic analysis, political alignment, and formal determination. The technocratic process provided the analytical basis for identifying vocational education challenges and development priorities; the political process aligned the draft strategic plan with the RPJMN and the vision, mission, and priority programs of the elected President; and the determination process institutionalized the strategic plan as an authoritative document for guiding annual work plans, budgeting, and performance accountability.

Therefore, the formulation of the Strategic Plan should not be understood only as an administrative requirement, but as a governance mechanism that translates national development priorities into sectoral objectives, programs, activities, and performance directions for vocational education. The findings indicate that the effectiveness of this process depends on the coherence between evidence-based planning, political legitimacy, institutional coordination, and implementation accountability. In this sense, the strategic plan serves as an institutional bridge between national development planning and vocational education governance in Indonesia.

References

- BAPPENAS. (2019). *Tata cara penyusunan rencana strategis kementerian/lembaga tahun 2020–2024* (Nomor 5 Tahun 2019). BAPPENAS.
- Billett, S. (2011). *Vocational education: Purposes, traditions and prospects*. Springer.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Bryson, J. M., Edwards, L. H., & Van Slyke, D. M. (2018). Getting strategic about strategic planning research. *Public Management Review*, 20(3), 317–339.
- Caves, K. M., Ghisletta, A., Kemper, J. M., McDonald, P., & Renold, U. (2021). Meeting in the middle: TVET programs' education–employment linkage at different stages of development. *Social Sciences*, 10(6), 220. <https://doi.org/10.3390/socsci10060220>

- Chand, S. P. (2025). Methods of data collection in qualitative research: Interviews, focus groups, observations, and document analysis. *Advances in Educational Research and Evaluation*, 6(1), 303–317. <https://doi.org/10.25082/AERE.2025.01.001>
- Falqueto, J. M. Z., et al. (2019). Strategic planning in higher education institutions: What are the stakeholders' roles in the process? *Higher Education*.
- Filgueiras, F., Palotti, P., & Testa, G. G. (2023). Complexing governance styles: Connecting politics and policy in governance theories. *SAGE Open*, 13(1), 1–19. <https://doi.org/10.1177/21582440231158521>
- Hidayat, M. F., Saputro, A. N., & Maula, B. F. (2021). *Diagnosis pertumbuhan Indonesia: Prioritas strategis untuk mendorong pertumbuhan ekonomi*. BAPPENAS.
- Karyono, Y., et al. (2021). *Indeks pembangunan manusia 2020*. Badan Pusat Statistik.
- McKim, C. (2023). Meaningful member-checking: A structured approach to member-checking. *American Journal of Qualitative Research*, 7(2), 41–52. <https://doi.org/10.29333/ajqr/12973>
- Motsepe, H. L., Sethu, M. J., Sikhosana, S., & Dladlama, B. (2026). Aligning technical and vocational education and training curricula with labour market demands: An assessment of contemporary relevance. *International Journal of Applied Research in Business and Management*, 7(2). <https://doi.org/10.51137/wrp.ijarbm.513>
- Mtisi, S. (2022). The qualitative case study research strategy as applied on a rural enterprise development doctoral research project. *International Journal of Qualitative Methods*, 21, 1–13. <https://doi.org/10.1177/16094069221145849>
- Mwanza, P. M., & Dar, J. A. (2025). The role of strategy implementation practices on performance of the public sector organisations. *Africa's Public Service Delivery and Performance Review*, 13(1), a891. <https://doi.org/10.4102/apsdpr.v13i1.891>
- Nkone, B., Matoka, C., & Ngirwa, C. (2024). Effective strategy implementation: A literature review of success factors in public sector. *International Journal of Business Management and Economic Review*, 7(6), 1–20. <https://doi.org/10.35409/IJBMER.2024.3617>
- Premono, A., Riyadi, T. I., & Daryanto. (2015). A synchronization concept of vocational education in Indonesia. In *The 3rd UPI International Conference on Technical and Vocational Education and Training* (pp. 11–14). Atlantis Press.
- Rahman, A., Zebua, W. D. A., Satispi, E., & Kusuma, A. A. (2021). Policy formulation in integrating vocational education graduates with the labor market in Indonesia. *Jurnal Studi Pemerintahan*, 12(3), 331–371. <https://doi.org/10.18196/jgp.123141>
- Retnandari, N. D. (2022). Implementation of strategic planning in regional/municipal governments: Obstacles and challenges. *Policy & Governance Review*, 6(2), 155–175. <https://doi.org/10.30589/pgr.v6i2.556>
- Sa'ud, U. S., & Makmun, A. S. (2009). *Perencanaan pendidikan*. Remaja Rosdakarya.
- Schlunegger, M. C., Zumstein-Shaha, M., & Palm, R. (2024). Methodologic and data-analysis triangulation in case studies: A scoping review. *Western Journal of Nursing Research*, 46(8), 611–622. <https://doi.org/10.1177/01939459241263011>
- Suharno, Pambudi, N. A., & Harjanto, B. (2020). Vocational education in Indonesia: History, development, opportunities, and challenges. *Children and Youth Services Review*, 115.
- Thompson, J. F. (1973). *Foundations of vocational education*. Prentice-Hall.
- Virani, A., & van der Wal, Z. (2023). Enhancing the effectiveness of public sector performance regimes: A proposed causal model for aligning governance design with performance logics. *Perspectives on Public Management and Governance*, 6(1), 54–65. <https://doi.org/10.1093/ppmgov/gvac026>
- Wahyuni, S. T., Yensy, N. A., & Danim, S. (2026). Towards a vocational education ecosystem framework: A systematic literature review of industry partnership, curriculum alignment, educational financing,

and employability in SMK and TVET. *Journal of Advanced Sciences and Mathematics Education*, 6(2), 178–203.

Wu, M., & Sarker, M. N. I. (2022). Assessment of multiple subjects' synergetic governance in vocational education. *Frontiers in Psychology*, 13, 947665. <https://doi.org/10.3389/fpsyg.2022.947665>

Yasdin, Y., & Muksin, M. (2024). Political paradigms and vocational education policy in Indonesia: A document analysis. *Quality Education for All*, 1(1), 204–221.

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE.