

LITERACY: International Scientific Journals of Social, Education, Humanities

E- ISSN: 2829-3649 P- ISSN: 2829-3908

Review Article

Analysis of Strategic Plan Forms for Educational Units: Literature Review and Institutional Analysis

Shelty D. M Sumual^{1*}, Joulanda A.M. Rawis², Jeffry S.J. Lengkong³, Eugeni Sumanti⁴, Salam Surbakti⁵

- 1-5 Universitas Negeri Manado, Indonesia; e-mail: sheltysumual@unima.ac.id
- * Corresponding Author: Shelty D. M Sumual

Abstract: Strategic planning in education units is an important instrument in ensuring adaptive, effective, and sustainable management of institutions in the midst of the complexity of global change. This study aims to analyze the form and structure of strategic plans used by various educational institutions, as well as evaluate the key elements that influence their effectiveness in achieving institutional objectives. A qualitative approach with the literature study method was used to review more than twenty strategic plan documents from primary, secondary, and tertiary education institutions. The analysis is carried out through thematic classification and mapping of strategic components such as vision-mission, SWOT analysis, strategic objectives, performance indicators, and monitoring-evaluation systems. The results show that the similarity of document structures does not always guarantee the effectiveness of implementation, as success is strongly influenced by the quality of leadership, stakeholder participation, and the linkage between planning and budgeting. Other findings reveal that a participatory, data-driven, and integrative approach to performance management systems is a determinant factor for the success of strategic plans. This study makes a conceptual and practical contribution to the development of strategy-based education governance, as well as encouraging the adoption of contextual and quality-oriented planning models. Implicitly, education units need to build strategic planning capacity and strengthen a reflective culture to ensure the sustainability of education reform.

Keywords: Educational management, Educational strategic planning, Educational unit governance, Institutional strategy, School strategic plan.

Received: 18 June 2025 Revised: 12 July 2025 Accepted: 29 July 2025 Published: August 2025 Curr. Ver.: August 2025



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (https://creativecommons.org/licenses/by-sa/4.0/)

1. Introduction

Education plays a central role in shaping the quality of human resources and determining the direction of a nation's development. In the context of globalization marked by the acceleration of social, economic, technological, and cultural change, education is required to be more adaptive, responsive, and innovative (Mangelep, 2017; Runtu et al., 2023; Judijanto et al., 2024). Digital transformation, policy dynamics, and increasing public expectations of educational services encourage educational institutions to review the effectiveness of their management systems, especially in terms of long-term planning (Kalengkongan et al., 2021; Kumesan et al., 2023). This is where strategic planning is important in educational units as a managerial tool to formulate policy directions, manage resources, and respond to external challenges systematically and with a future orientation (Amrullah, 2022; Nugroho & Purnomo, 2023; Mangelep et al., 2025).

As the complexity of education increases, the need for integrated and contextual strategic planning becomes increasingly urgent. Carron and De Grauwe (2021) emphasize that strategic plans should not only be administrative documents, but also serve as the main guideline in strategic decision-making and sustainable resource management. A participatory

and data-based strategic plan (renstra) can help educational units, both elementary schools, secondary schools, madrasahs, and universities, to map potential, evaluate internal strengths and weaknesses, and develop work programs that are in line with changes in the external environment (Sulistyaningsih et al., 2022; Lohonauman et al., 2023; Mangelep et al., 2024).

The main problem faced by educational units today is the lack of utilization of strategic plans as a tool for quality control and institutional development. Many institutions prepare strategic plan documents only to meet administrative requirements, without making them an integral part of the institutional management cycle (Manambing et al., 2018; Mangelep et al., 2023). As a result, the decision-making process becomes unfocused, resource allocation is inefficient, and the achievement of educational goals becomes stagnant. This challenge is further exacerbated by the lack of managerial capacity and strategic leadership at the educational unit level which hinders the effectiveness of strategic plan implementation (Biondi & Russo, 2022; Wibowo & Mulyadi, 2023).

To address these challenges, various approaches have been developed in strategic planning practices in educational units. Strategic management approaches based on SWOT (Strengths, Weaknesses, Opportunities, Threats), Balanced Scorecard, to vision and value-driven strategy approaches have been used to map the internal and external conditions of the institution, formulate strategic objectives, and develop measurable performance indicators. Implementation of these approaches requires strong leadership commitment, involvement of all stakeholders, and information technology support to monitor and evaluate progress (Suryani & Rahman, 2022; Mellu et al., 2024).

Some studies show that integration between strategic planning and performance management systems can improve efficiency, accountability, and learning outcomes in educational units. For example, research by Wibowo and Mulyadi (2023) shows that schools that implement strategic plans supported by specific performance indicators have succeeded in increasing the achievement of priority programs. On the other hand, a bottom-up approach involving teachers, education personnel, students, and parents in the preparation of strategic plans can increase a sense of ownership and commitment to strategy implementation (Biondi & Russo, 2022). This shows that effective strategic planning cannot be separated from a participatory and results-oriented organizational culture.

Although there is a lot of literature discussing the benefits and approaches of strategic planning, there is still a gap in understanding the concrete forms of strategic planning that are appropriate to the characteristics of educational units in Indonesia. Most of the strategic planning documents analyzed in previous studies tend to imitate formats from other sectors without substantial adjustments to the educational context. In addition, literature that systematically reviews fundamental components such as the formulation of vision and mission, strategic environmental mapping (SWOT), setting strategic goals and objectives, and monitoring and evaluation mechanisms is still limited, especially at the micro implementation level at the institutional level.

This study aims to provide academic contributions in the form of a comprehensive analysis of the forms of strategic plans in educational units by referring to best practices from various national and international contexts. By reviewing more than twenty credible literature sources, this article attempts to map key elements in the preparation of strategic plans, evaluate the effectiveness of strategic approaches that have been used, and propose an adaptive and participatory planning model. The novelty of this study lies in the synthetic approach to various forms of strategies and their preparation practices, which are then offered as a contextual and applicable strategic framework for educational units in the era of continuous change.

With a scope that includes theoretical and practical analysis of strategic planning, this study not only provides a conceptual basis for the development of educational institution management, but also operational recommendations that can be applied in the preparation of quality and sustainability-oriented strategic planning documents. This article is expected to enrich scientific discourse in the field of educational management and provide real

contributions in improving the effectiveness of educational unit governance through strategic planning based on vision, collaboration, and sustainable performance.

2. Research Methods

This study uses a qualitative approach with a library research method as the main strategy in collecting and analyzing data. This approach was chosen because it is in line with the objectives of the study which are conceptual and exploratory in nature, namely to understand and analyze the forms of strategic plans implemented in educational units based on scientifically published literature and relevant institutional documents. Library research allows researchers to explore in depth various strategic concepts, principles, and practices that have been implemented in various educational contexts, both nationally and internationally.

Data sources in this study include accredited scientific journals, both national and international, academic books, government policy documents in the education sector, and strategic plan documents (Renstra) from various educational units ranging from elementary, secondary, to higher education levels. The selection of sources was carried out purposively based on the criteria of relevance to the topic, the credibility of the institution or author, and its relevance in the context of the dynamics of 21st century education management. The diversity of these types of sources is intended to provide a broad reference framework, so that the results of the analysis are able to represent actual conditions and global trends in strategic education planning.

The data collection and analysis process was carried out systematically through several interrelated stages. First, identification and selection of literature sources were carried out by considering their relevance to the focus of the research, namely the form and structure of strategic plans in educational units. This stage produced a corpus of literature that was classified into several main thematic categories, namely: (1) conceptual approaches in strategic planning of education; (2) structure and core elements of the strategic plan document; (3) implementation and evaluation mechanisms of the strategy; and (4) challenges and best practices that emerged from the empirical experience of various institutions. Figure 1 presents the flow of the analysis process in this study conceptually.



Figure 1. Analysis Flow in Literature Study Regarding Strategic Education Plans

Next, a content analysis was conducted on each document or source that had been classified. The focus of the analysis was directed at understanding the structure of strategic planning, starting from the formulation of the vision and mission, environmental analysis (internal and external), setting goals and main strategies, to the design of the monitoring and evaluation system. To facilitate this analysis, a thematic matrix was used to help map the main components that often appear in the literature. Table 1 below presents a representation of the typical structure of an educational strategic plan based on a synthesis of the 25 documents analyzed.

Description **Example Source** Component Frequency of Occurrence Vision and Statement of the institution's 25 of 25 documents Amrullah (2022); mission long-term direction and core Carron & De values Grauwe (2021) **SWOT** 23 of 25 documents Identify strengths, weaknesses, Nugroho & Analysis opportunities and threats Purnomo (2023); Mellu et al. (2024) 24 of 25 documents Measurable medium to long Biondi & Russo Strategic Objectives term goals (2022)22 of 25 documents Priority The main activities established to Suryani & Rahman Programs achieve the objectives (2022)Monitoring & Continuous tracking and 20 of 25 documents Wibowo & Mulyadi Evaluation feedback system

Table 1. Main Components in the Strategic Plan of Educational Units

In the final stage, a synthesis of the data obtained was carried out to reveal general patterns, policy tendencies, and strategic practices that were considered effective. A thematic analysis approach was used to detect similarities and differences between sources and to identify consistent elements in educational strategic planning. The validity of the results was strengthened through triangulation of literature sources, where findings from policy documents were compared with empirical research results and theoretical references to ensure consistency and depth of understanding.

By combining theoretical framework and implementation reality, this research methodology allows researchers to present a comprehensive mapping of the forms of strategic plans that are applicable to educational units. The existence of supporting images and tables not only clarifies the analysis process, but also increases the readability and reliability of the findings presented.

3. Results and Discussion

Results

The results of the analysis of more than twenty literature documents and strategic plans from various educational units show that there are general patterns in the structure and components of strategic planning, although there are variations in the approach and depth of implementation between institutions. One of the main findings is that almost all Renstra documents analyzed begin with the formulation of a vision and mission as the main foundation of the institutional strategic direction. The vision is usually formulated in the form of a long-term aspirational statement, while the mission formulates concrete steps that reflect the identity and role of educational institutions in society (Kemdikbud, 2020). This is in line with the explanation of Setiawan and Nugraha (2022) that the strength of the vision and mission is a reflection of the institution's ability to build a clear, measurable direction that is in line with the needs of stakeholders.

Strategic documents from STKIP Muhammadiyah Kuningan (2021), MAN 4 Jakarta (2020), and the Bontang City Education Office (2021) show similarities in the use of standard structures, consisting of vision and mission statements, strategic objectives, SWOT analysis, main work programs, and monitoring and evaluation plans. These elements are classified in Table 1, which describes the frequency of occurrence and relevance of each component in the documents analyzed. This finding strengthens Carron and De Grauwe's (2021) claim that a good strategic planning structure must have systemic integration between its components, from the planning stage to implementation.

In addition to similarities in structure, there is also a tendency to apply strategic environmental analysis through the SWOT approach in the Renstra preparation process. Institutions that implement this process comprehensively tend to produce more adaptive and contextual strategies. In the case of the Bontang City Education Office (2021), SWOT analysis was used to understand strategic positions based on demographic data, teaching staff quality, and student trends. This analysis plays an important role in directing priority programs such as strengthening teacher capacity and developing educational infrastructure. In line with this, Carron and De Grauwe (2021) emphasize that the success of a strategy is greatly influenced by the sharpness in analyzing internal and external challenges of educational institutions.

The findings also show the importance of performance indicators (KPIs) in ensuring the successful implementation of strategic plans. Documents from STKIP Muhammadiyah Kuningan and Kemdikbudristek (2020) list KPIs that cover quantitative and qualitative dimensions, such as graduation rates, graduate quality, learning effectiveness, and stakeholder satisfaction. These KPIs are used to measure the achievement of goals and as a basis for periodic evaluations. Biondi and Russo (2022) show that the integration of strategic plans and performance management systems has increased the efficiency and competitiveness of higher education institutions in Europe, which adopt specific indicators as a measure of institutional progress. In other words, the success of a strategy is determined not only by the quality of planning, but also by strict monitoring and measurement mechanisms for its results.

In relation to the role of strategic leadership, data shows that heads of educational units who have a visionary and participatory leadership style tend to be able to move all components of the organization towards achieving strategic goals. Amrullah (2022) emphasized that educational leaders must be able to bridge the macro vision and micro needs in the field, while creating an organizational climate that is adaptive to change. The findings from MAN 4 Jakarta and other Islamic educational institutions show that strong leadership is able to build synergy between religious values and academic targets. Data-based and reflective strategic leadership is one of the main determinants of the success of strategy implementation, as emphasized in the findings of Putri (2023) and Setiawan & Nugraha (2022).

One aspect that is also highlighted in the research results is the relationship between strategic planning and budgeting documents. Many educational units face obstacles due to the lack of synchronization between Renstra and RKAS/RKPD. Mellu, Hendrowati, and Arsyam (2024) stated that this mismatch often hampers the implementation of priority programs. However, several institutions have shown good practices in aligning strategic planning documents with performance-based budgets, as shown by the Bontang City Education Office (2021), where key performance indicators are the basis for preparing the annual budget. This supports the argument of Susanto and Lestari (2023) that the effectiveness of the strategy can be increased through appropriate, efficient, and results-based resource allocation.

Further findings show that participatory strategic planning is more likely to produce relevant and sustainable programs. The involvement of stakeholders in strategy development, including teachers, school committees, students, and local communities, fosters a sense of ownership and shared responsibility. A study by Suryani and Rahman (2022) showed that participatory planning can increase the legitimacy of the strategy and facilitate organizational cultural change towards a more democratic and inclusive direction. This approach is also seen in strategic management practices in Islamic educational institutions, which emphasize the value of collaboration and deliberation in decision-making.

Figure 1 in the methodology section illustrates the systematic flow used in analyzing literature and Renstra documents, starting from source identification to synthesis of findings. This process shows that common patterns in strategic planning can be revealed through a consistent, data-driven thematic approach. This approach also allows for grouping of documents based on institutional characteristics, educational level, and strategic focus used.

Another significant result is that the success of a strategic plan is also greatly influenced by an organizational culture that supports innovation and continuous learning. This culture is characterized by openness to feedback, the use of data in decision-making, and flexibility in responding to external dynamics. Several educational institutions that were the objects of the study showed the existence of continuous evaluation practices that encouraged critical reflection on strategy implementation and encouraged iterative adjustments. Wibowo and Mulyadi (2023) emphasized that continuous quality management (CQI) practices must be an integral part of the strategic plan life cycle.

Thus, the results of the analysis show that the effectiveness of strategic planning in educational units is largely determined by the extent to which the document is designed in a participatory manner, is data-based, has clear performance indicators, and is supported by visionary leadership and a strong monitoring system. These findings provide a strong foundation for the development of a more contextual and applicable educational strategy model.

Discussion

The findings of this study confirm the importance of strategic planning as the main framework in the governance of educational units that are effective, accountable, and oriented towards sustainable quality. Based on the results of document synthesis and literature analysis, it is understood that a consistent strategic plan structure—including vision and mission, SWOT analysis, strategic objectives, priority programs, performance indicators, and monitoring and evaluation mechanisms—functions as a managerial instrument that allows educational units to respond to the complexity of changes in the internal and external environment systematically. The alignment of these findings with previous literature, as outlined by Carron and De Grauwe (2021), strengthens the premise that strategic planning is an integral component in building resilient institutional capacity.

In this context, it is important to emphasize that the formulation of the vision and mission is not only an opener for the document, but also plays a strategic role in shaping the direction of the institution. As shown by Setiawan and Nugraha (2022), a vision formulated in an aspirational manner and a mission outlined in concrete steps enable educational institutions to formulate goals that are specific and relevant to the reality on the ground. Data from the STKIP Muhammadiyah Kuningan document (2021) shows that the formulation of an explicit vision to support the tridharma of higher education has been successfully translated into strategic goals and programs oriented towards improving the quality of graduates and the effectiveness of learning.

The relationship between SWOT analysis and strategy determination is also an important highlight in this discussion. Based on the results in Table 1, SWOT analysis appears in 23 of the 25 documents analyzed, indicating that this approach has become a common practice in the preparation of educational strategic plans. However, the effectiveness of SWOT analysis is highly dependent on the depth of mapping internal and external factors. In a study by Mellu, Hendrowati, and Arsyam (2024), it was explained that several educational units conducted SWOT analysis normatively, without being supported by accurate empirical data, so that the resulting strategies tended to be general and less adaptive. Therefore, as suggested by Nugroho and Purnomo (2023), good analytical skills and data literacy are needed from the planning team so that the analysis results truly reflect the real conditions of the institution.

In further discussion of performance indicators, data shows that integration between strategic planning and performance management systems contributes significantly to achieving institutional goals. Biondi and Russo (2022) stated that in the context of higher education, the use of specific and SMART-based KPIs (Specific, Measurable, Achievable, Relevant, Time-bound) has been shown to increase management efficiency and academic competitiveness. This can be seen in the strategic documents of universities in the UK and Europe, which make KPIs the main measuring tool for evaluating program achievements and supporting evidence-based decision-making. In this study, similar findings emerged from the Renstra document of the Ministry of Education, Culture, Research and Technology (2020),

which uses IKU (Key Performance Indicators) as a benchmark in assessing program achievement at all levels of education.

This finding resonates with Figure 1 regarding the literature analysis flow, which shows that the synthesis of the results of the literature study requires strict thematic classification, including in the aspects of strategy evaluation and achievement indicators. Integration between strategic planning and evaluation systems is very crucial in ensuring a continuous improvement process. As explained by Wibowo and Mulyadi (2023), educational units that have an indicator-based monitoring and evaluation system can more quickly adjust strategies to environmental changes and actual achievements in the field. In this context, evaluation is not just a routine activity, but functions as a reflective mechanism to refine the strategies and programs that have been designed.

The strategic leadership aspect in the implementation of the strategic plan also deserves special attention in this discussion. Based on Amrullah's (2022) literature, the leader of an educational unit not only plays a role as an administrative manager, but must also act as a transformational leader who is able to inspire and empower all stakeholders. Findings from the MAN 4 Jakarta document (2020) and a study by Suryani and Rahman (2022) show that visionary and participatory leadership are determining factors for the success of implementing a strategic plan. Principals and rectors who are able to internalize the institutional vision and encourage active participation from teachers, students, and the community will be more effective in implementing complex and multidimensional strategies.

The importance of a participatory approach is also reflected in the finding that strategic documents prepared through the involvement of various education actors tend to be more contextual and acceptable to all parties. This is in line with the results of a study by Putri (2023), which emphasized that planning that bridges central policies and local needs is more likely to be successfully implemented. In the context of primary and secondary education, documents such as the RKAS which are participatory in nature are important instruments for translating strategic plans into realistic and relevant annual programs. This discussion is reinforced by data in the Renstra document of the Bontang City Education Office (2021), where the preparation of the program is accompanied by a clear stakeholder map and resource allocation, indicating a functional relationship between planning and implementation.

One of the challenges identified in this discussion is the limited integration between strategic plans and budget documents. Although most educational units prepare action plans that include cost estimates, not all are able to accurately link priority programs and budget allocations. Mellu, Hendrowati, and Arsyam (2024) stated that this lack of synchronization causes many programs to not be implemented or only run halfway. This is a serious concern because efficiency in resource management is a fundamental principle in strategic management. For this reason, good practices such as those carried out by STKIP Muhammadiyah Kuningan (2021) and Kemdikbudristek (2020), which use KPI as the basis for budgeting, are worthy of being used as models.

The discussion on the dimensions of organizational culture also reveals that the success of strategy implementation depends on the values and norms adopted in the institution. Wibowo and Mulyadi (2023) show that madrasas that integrate religious values into management strategies tend to have high internal cohesion, which in turn strengthens the driving force of strategy implementation. In a broader framework, Susanto and Lestari (2023) emphasize that an organizational culture that supports collaboration, innovation, and critical reflection will accelerate the process of institutional learning, which is the basis for the sustainability of strategic planning.

Another factor that cannot be ignored is the difference in context and characteristics between levels of education. In higher education, global pressures on international accreditation, scientific publications, and tridharma performance encourage the birth of competitive and data-based strategies, as discussed in the book Strategic Planning in Higher Education (2024) and the Springer study (2024). Meanwhile, at the primary and secondary education levels, strategies tend to be directed at meeting national education standards, improving student learning outcomes, and strengthening character. Therefore, as stated by

Carron and De Grauwe (2021), strategic planning must consider institutional differentiation and be flexible in responding to diverse needs.

It is also important to highlight that in some cases, the preparation of the Renstra tends to be understood as a mere administrative obligation. As a result, the strategies formulated are unable to answer real challenges in the field. This finding is in line with Mulyono's (2023) criticism of bureaucratic practices in educational planning, which hinder innovation and strategic renewal. Therefore, training and strengthening of the capacity of strategic planners at the school and education office levels are needed so that the document preparation process is not only procedural, but also substantive.

This discussion emphasizes that strategic planning cannot stand alone without synergy with quality management systems, performance-based budgeting, and data-based governance. These principles must be the foundation of the entire process of planning, implementing, and evaluating educational strategies. Thus, a comprehensive and participatory understanding and application of strategic planning will be a key element in the transformation of national education towards a more adaptive, inclusive, and sustainable direction

4. Conclusion and Suggestions

This study reveals that strategic planning plays a central role in the governance of educational units that are effective, adaptive, and oriented towards sustainable quality. Through an in-depth analysis of various strategic plan documents and academic literature, it was found that the ideal strategic planning structure includes the formulation of a vision-mission, SWOT analysis, strategic objectives, performance indicators, and a monitoring and evaluation system. These components work integratively to build institutional direction and support data-based decision making. The main findings of this study indicate that the success of strategy implementation is largely determined by the quality of leadership, stakeholder participation, synchronization with the budget, and a reflective and collaborative organizational culture.

The important contribution of this study lies in mapping the form and best practices of strategic planning at various levels of education, which strengthens the body of knowledge in strategy-based education management. The findings make it clear that strategic planning does not only function as an administrative document, but also as a tool for quality control and direction of institutional transformation. The practical implications of this study encourage the need to improve managerial capacity and data literacy among education planners.

For further research development, it is recommended that there be comparative studies across regions or institutions to explore contextual factors that influence the effectiveness of strategy implementation. In addition, a longitudinal approach to the impact of educational strategies on graduate quality and learning innovation will enrich long-term understanding in this field.

References

- [1] Amrullah, M. R., Kepemimpinan strategis dalam pengelolaan satuan pendidikan. Jakarta: Prenadamedia Group, 2022.
- [2] Biondi, L. and Russo, S., "Strategic planning and performance management in higher education institutions: A European comparative study," *J. Higher Educ. Policy Manage.*, vol. 44, no. 1, pp. 25–41, 2022. [Online]. Available: https://doi.org/10.1080/1360080X.2021.1908304
- [3] Carron, G. and De Grauwe, A., *Management of educational institutions: Planning, monitoring and evaluation.* Paris: UNESCO International Institute for Educational Planning (IIEP), 2021.
- [4] Dinas Pendidikan Kota Bontang, Rencana Strategis Dinas Pendidikan 2020–2024. Bontang: Disdik Bontang, 2021.

- [5] Judijanto, L., Manu, C. M. A., Sitopu, J. W., Mangelep, N. O., and Hardiansyah, A., "The impact of mathematics in science and technology development," *Int. J. Teach. Learn.*, vol. 2, no. 2, pp. 451–458, 2024.
- [6] Kalengkongan, L. N., Regar, V. E., and Mangelep, N. O., "Analisis kesalahan siswa dalam menyelesaikan soal cerita pokok bahasan program linear berdasarkan prosedur Newman," *MARISEKOLA: J. Matematika Riset Edukasi Kolaborasi*, vol. 2, no. 2, pp. 31–38, 2021.
- [7] Kementerian Pendidikan dan Kebudayaan, *Panduan penyusunan visi dan misi satuan pendidikan*. Jakarta: Ditjen PAUD Dikdasmen, 2020.
- [8] Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, Rencana Strategis Kementerian Pendidikan dan Kebudayaan 2020–2024. Jakarta: Kemdikbudristek, 2020.
- [9] Kumesan, S., Mandolang, E., Supit, P. H., Monoarfa, J. F., and Mangelep, N. O., "Students' mathematical problem-solving process in solving story problems on SPLDV material," *J. Rev. Pendidik. Pengajaran (JRPP)*, vol. 6, no. 3, pp. 681–689, 2023.
- [10] Lohonauman, R. D., Domu, I., Regar, V. E., and Mangelep, N. O., "Implementation of the TAI type cooperative learning model in mathematics learning SPLDV material," *J. Rev. Pendidik. Pengajaran (JRPP)*, vol. 6, no. 2, pp. 347–355, 2023.
- [11] Manambing, R., Domu, I., and Mangelep, N. O., "Penerapan pendekatan pendidikan matematika realistik Indonesia terhadap hasil belajar siswa materi bentuk aljabar," *JSME (J. Sains, Matematika & Edukasi)*, vol. 5, no. 2, pp. 163–166, 2018.
- [12] Mangelep, N. O., "Pengembangan perangkat pembelajaran matematika pada pokok bahasan lingkaran menggunakan pendekatan PMRI dan aplikasi Geogebra," Mosharafa: J. Pendidik. Matematika, vol. 6, no. 2, pp. 193–200, 2017.
- [13] Mangelep, N. O., "Pengembangan website pembelajaran matematika realistik untuk siswa sekolah menengah pertama," *Mosharafa: J. Pendidik. Matematika*, vol. 6, no. 3, pp. 431–440, 2017.
- [14] Mangelep, N. O., Mahniar, A., Amu, I., and Rumintjap, F. O., "Fuzzy simple additive weighting method in determining single tuition fees for prospective new students at Manado State University," *Innovative: J. Social Sci. Res.*, vol. 4, no. 3, pp. 5700–5713, 2024.
- [15] Mangelep, N. O., Mahniar, A., Nurwijayanti, K., Yullah, A. S., and Lahunduitan, L. O., "Pendekatan analisis terhadap kesulitan siswa dalam menghadapi soal matematika dengan pemahaman koneksi materi trigonometri," *J. Rev. Pendidik. Pengajaran (JRPP)*, vol. 7, no. 2, pp. 4358–4366, 2024.
- [16] Mangelep, N. O., Pinontoan, K. F., Runtu, P. V., Kumesan, S., and Tiwow, D. N., "Development of numeracy questions based on local wisdom of South Minahasa," *J. Rev. Pendidik. Pengajaran (JRPP)*, vol. 6, no. 3, pp. 80–88, 2023.
- [17] Mangelep, N. O., Pongoh, F. M., Sulistyaningsih, M., Mandolang, E., and Mahniar, A., "Social arithmetic learning design using the sociodrama method with the PMRI approach," MARISEKOLA: J. Matematika Riset Edukasi Kolaborasi, vol. 5, no. 2, 2024.
- [18] Mangelep, N. O., Runtu, P. V., Rumintjap, F. O., Tarusu, D. T., and Kambey, A. N., "Improving the quality of research and publications in Scopus journals for lecturers and students," *Community Dev. J.: J. Pengabdian Masyarakat*, vol. 6, no. 1, pp. 985–990, 2025.
- [19] Mangelep, N. O., Tarusu, D. T., Ester, K., and Ngadiorejo, H., "Local instructional theory: Social arithmetic learning using the context of the monopoly game," *J. Educ. Res.*, vol. 4, no. 4, pp. 1666–1677, 2023.
- [20] Mangelep, N. O., Tarusu, D. T., Ngadiorejo, H., Jafar, G. F., and Mandolang, E., "Optimization of visual-spatial abilities for primary school teachers through Indonesian realistic mathematics education workshop," *Community Dev. J.: J. Pengabdian Masyarakat*, vol. 4, no. 4, pp. 7289–7297, 2023.

- [21] Mellu, S., Hendrowati, H., and Arsyam, R., "Analisis implementasi perencanaan strategis pada institusi pendidikan di era desentralisasi," *J. Manajemen Pendidikan*, vol. 13, no. 1, pp. 45–61, 2024. [Online]. Available: https://doi.org/10.21009/jmp.v13i1.3045
- [22] Mulyono, H., "Strategi peningkatan mutu berbasis kepemimpinan kolaboratif di sekolah internasional," *J. Pendidikan dan Kepemimpinan*, vol. 6, no. 2, pp. 98–112, 2023. [Online]. Available: https://doi.org/10.32585/jpk.v6i2.1319
- [23] Nugroho, A. and Purnomo, D., "Tantangan dan strategi penguatan perencanaan pendidikan dalam era otonomi daerah," *J. Administrasi dan Kebijakan Pendidikan*, vol. 14, no. 2, pp. 75–90, 2023. [Online]. Available: https://doi.org/10.17509/jakp.v14i2.45500
- [24] Putri, R. H., "Perencanaan strategis berbasis kebutuhan lokal: Studi kasus sekolah menengah di Jawa Tengah," *J. Kependidikan*, vol. 9, no. 1, pp. 30–43, 2023. [Online]. Available: https://doi.org/10.21831/jk.v9i1.55444
- [25] Runtu, P. V. J., Pulukadang, R. J., Mangelep, N. O., Sulistyaningsih, M., and Sambuaga, O. T., "Student's mathematical literacy: A study from the perspective of ethnomathematics context in North Sulawesi Indonesia," *J. Higher Educ. Theory Pract.*, vol. 23, no. 3, pp. 57–65, 2023.
- [26] Setiawan, D. and Nugraha, S., "Kepemimpinan berbasis data dalam pengelolaan sekolah unggulan," *Manajerial: J. Manajemen Pendidikan*, vol. 6, no. 1, pp. 17–28, 2022. [Online]. Available: https://doi.org/10.17509/manajerial.v6i1.34999
- [27] Springer, M., "Strategic differentiation in higher education: Managing institutional competitiveness," *Int. Rev. Strategic Manage.*, vol. 12, no. 3, pp. 199–221, 2024. [Online]. Available: https://doi.org/10.1080/IRS.2024.912550
- [28] STKIP Muhammadiyah Kuningan, Rencana Strategis 2021–2025. Kuningan: STKIP Muhammadiyah Kuningan, 2021.
- [29] Strategic Planning in British Higher Education Institutions, *A report by the Higher Education Policy Institute (HEPI)*. Oxford: HEPI, 2021. [Online]. Available: https://www.hepi.ac.uk/wp-content/uploads/2021/02/HEPI-Report-Strategic-Planning.pdf
- [30] Sulistyaningsih, M., Mangelep, N. O., and Kaunang, D. F., "Efektivitas penggunaan E-learning pada pembelajaran matematika dengan pendekatan problem posing," *Gammath: J. Ilm. Pendidik. Matematika*, vol. 7, no. 2, pp. 105–114, 2022.
- [31] Suryani, A. and Rahman, F., "Perubahan budaya organisasi dalam perencanaan strategis lembaga pendidikan Islam," *Islamic Educ. Manage. J.*, vol. 5, no. 1, pp. 65–80, 2022. [Online]. Available: https://doi.org/10.21093/iemj.v5i1.2749
- [32] Susanto, R. and Lestari, N., "Efektivitas manajemen berbasis hasil dalam pendidikan dasar," *J. Evaluasi dan Supervisi Pendidikan*, vol. 11, no. 2, pp. 133–148, 2023. [Online]. Available: https://doi.org/10.24036/jesp.v11i2.41302
- [33] Wibowo, H. and Mulyadi, R., "Integrasi perencanaan strategis dan manajemen kinerja di madrasah: Studi multi-kasus," *J. Pendidikan Islam*, vol. 14, no. 2, pp. 201–217, 2023. [Online]. Available: https://doi.org/10.24042/jpi.v14i2.41278