

Training Needs Analysis for Enhancing Leadership Quality of Junior High School Principals

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Abstract. Mapping training needs is essential for identifying managerial aspects that require improvement among school principals. This study aims to analyze training needs to enhance the leadership quality of junior high school principals. A quantitative descriptive research design was employed using a survey method through questionnaires distributed to principals and teachers. The findings reveal competency gaps in managerial skills, transformational leadership, and decision-making abilities. Based on the analysis, the study recommends the implementation of targeted training programs to strengthen principals' leadership competencies. These findings are expected to serve as a foundation for more effective training planning to support the improvement of education quality at the junior high school level.

Keywords: Training Needs Analysis, School Principal, Transformational Leadership, Junior High School.

1 Introduction

The changing and increasingly complex educational environment of the 21st century demands that school principals possess adaptive, innovative, and transformation-oriented leadership capacities. Principals are no longer merely administrators but also instructional leaders responsible for fostering a collaborative school culture focused on improving the quality of education. In this regard, principal leadership is a key determinant of the successful implementation of educational policies, the enhancement of teacher performance, and the achievement of student learning outcomes [1-2].

The leadership of the principal is a strategic factor in determining the overall quality of education within schools. Educational leadership exerts both direct and indirect effects on student achievement through its influence on teacher performance, instructional practices, and the overall school climate [3]. An effective principal is characterized by the ability to articulate a clear vision for learning, foster collaboration among stakeholders, and cultivate a reflective and growth-oriented culture within the school community [2]. In managerial terms, the competencies of a principal encompass planning, organizing, implementing, and systematically evaluating all school programs and activities [4].

Effective leadership is widely recognized as a prerequisite for enhancing school quality. Principals with strong managerial and leadership competencies are capable of mobilizing school resources efficiently, developing a positive and inclusive working environment, and motivating all members of the school community to achieve shared goals [5-6]. However, empirical studies have indicated that many principals still face challenges in fulfilling their leadership roles effectively, particularly in areas such as strategic decision-making, teacher performance management, and the development of organizational cultures that promote continuous improvement and professional learning [7-8].

These challenges highlight the importance of systematic and evidence-based leadership development interventions. Leadership training that is grounded in actual needs and contextual realities can serve as an effective mechanism for bridging competency gaps and enhancing the professional capacity of school principals. By aligning leadership training programs with the evolving demands of educational transformation, schools can strengthen their capacity to achieve sustainable improvement and foster educational excellence.

Leadership training has been widely recognized as an effective means of enhancing the professional competencies of school principals. Well-structured training programs can strengthen principals' capacity to think strategically, lead organizational change, and manage school resources efficiently [9-10]. Moreover, leadership training contributes to the development of a reflective and collaborative mindset, which forms the foundation of transformational leadership in educational settings. However, the effectiveness of such programs largely depends on the alignment between participants' actual needs and the content, methods, and approaches applied during training [11-12].

A training needs analysis (TNA) serves as a critical first step in ensuring that leadership training programs truly address the contextual challenges and developmental needs of school principals. The purpose of this analysis is to identify the gap between existing competencies and the competencies required to perform leadership roles effectively [13]. Through this process, development priorities can be more accurately determined, resource utilization can be optimized, and the relevance and impact of training on principals' performance can be significantly enhanced.

For junior high school principals, conducting a training needs analysis is particularly urgent, as they are directly confronted with the complex dynamics of students transitioning from primary to secondary education. This transitional stage demands adaptive leadership that emphasizes character formation, foundational literacy, and holistic student development.

In addition, principals at this level are expected to effectively implement evolving curriculum policies, manage teachers professionally, and ensure the delivery of inclusive and equitable learning experiences. Therefore, systematically mapping the training needs of school principals provides a strategic foundation for designing leadership development programs that are contextual, sustainable, and directly impactful on the quality of school management.

Accordingly, this study aims to analyze the training needs of junior high school principals to enhance the quality of their leadership practices. The findings are expected to provide empirical insights that contribute to the design of more effective, relevant, and needs-based leadership training models. Furthermore, the results of this study may serve as a valuable reference for policymakers, training institutions, and education stakeholders in formulating sustainable, evidence-based strategies for the professional development of school principals.

2 Methodology

This study employed a quantitative descriptive research design, which aims to systematically describe and analyze the current conditions related to the training needs of junior high school principals. The descriptive quantitative approach was selected to provide an objective and measurable overview of the leadership competencies that require development, as well as to identify priority areas for future training programs [14]. This design is appropriate for mapping and interpreting data obtained from respondents' perceptions in a structured and statistically interpretable manner.

The population in this study consisted of all junior high school principals in the city of Gunungsitoli, Indonesia. Given the relatively small population size, a census sampling technique was applied, in which the entire population was included as the research sample. Thus, the total number of respondents in this study was 24 principals. This approach ensured that the collected data represented the entire population accurately, minimizing sampling bias and enhancing the validity of the findings.

The primary instrument used in this study was a Training Needs Analysis (TNA) questionnaire developed based on established leadership competency standards and training needs assessment theory. The instrument was structured into two main sections: (1) current competency level (what is), and (2) expected competency level (what should be).

Each item was measured using a five-point Likert scale ranging from 1 (very low) to 5 (very high), allowing respondents to express the extent to which specific competencies were needed or already mastered. The instrument underwent content validation through expert judgment involving education management specialists and experienced school supervisors. Minor revisions were made based on expert feedback to ensure clarity, relevance, and construct validity.

Prior to its use, the instrument underwent a rigorous validation process. Content validity was established through expert judgment involving three experts in educational management and two experienced school supervisors. To strengthen the instrument's psychometric properties, a pilot test was conducted, and the reliability of the instrument was assessed using Cronbach's Alpha coefficient. The results indicated that all constructs achieved reliability coefficients above 0.877, confirming acceptable internal consistency.

Data collection was carried out by directly administering the questionnaire to all respondents. The researcher provided a standardized explanation regarding the objectives of the study, instructions for completing the questionnaire, and assurance of confidentiality. Respondents were given sufficient time to complete the instrument under controlled conditions to ensure data accuracy and completeness.

The data analysis employed descriptive statistical techniques, including mean, standard deviation, and percentage analysis. In addition, a gap analysis technique was applied to determine the discrepancy between current and expected competency levels. The gap score was calculated by subtracting the mean score of current competence from the expected competence score for each item and dimension. The magnitude of the gap was then categorized into priority levels (low, moderate, high) to identify the most urgent training needs.

Furthermore, the results of the analysis were interpreted using a predefined criterion scale to determine priority training areas. The findings were used as an empirical basis for designing a context-specific leadership training model tailored to the needs of junior high school principals in Gunungsitoli.

3 Results and Discussion

3.1 Results

The questionnaire instrument used for the training needs analysis consisted of three dimensions: current competency level, expected competency level, and perceived training needs. Prior to its use in this study, the instrument was tested to ensure its validity and reliability using SPSS version 26. The validity test results indicated that all 20 items were valid. Furthermore, a reliability test was conducted to examine the internal consistency of the instrument as a measurement tool. The reliability analysis using Cronbach's Alpha yielded a coefficient of 0.877 for the 20-item instrument, indicating a high level of internal consistency and demonstrating that the questionnaire is reliable for use in this study.

The competency gap and training needs of junior high school principals were identified through a training needs analysis questionnaire administered to 24 principals. The questionnaire employed a Likert-type scale with the following categories: 1 = very low, 2 = low, 3 = moderate, 4 = high, and 5 = very high. The results showed that the average score of the current competency level (CCL) was 2.5, with an achievement percentage of 50.6%, which falls into the moderate category. Detailed data on the current competency level are presented in Table 1.

Table 1. Current Competency Level (CCL) of Junior High School Principals

Leadership Competency Dimension	Mean CCL	Percentage (%)	Category
Visionary leadership and role modeling	2.8	56.0	Moderate
Empathic and persuasive communication	2.4	48.0	Moderate
Feedback provision and collective reflection	2.0	40.0	Moderate
Teacher empowerment and decision-making	2.8	56.0	Moderate
Conflict management and adaptive leadership style	2.5	50.0	Moderate
Learning culture and innovation leadership	2.7	54.0	Moderate
Overall mean	2.5	50.6	Moderate

Table 1 presents a synthesized overview of principals' current leadership competency levels across key dimensions. The findings indicate that the overall mean competency score falls within the moderate category, suggesting that existing leadership capacities are adequate but not yet optimal. Relatively higher competency levels are observed in visionary leadership, role modeling, and teacher empowerment, whereas lower scores emerge in feedback provision, collective reflection, and adaptive leadership practices. These results highlight specific competency gaps that warrant targeted professional development interventions to strengthen school leadership effectiveness.

Furthermore, the summary of the expected competency level (ECL) questionnaire results is presented in Table 2.

Table 2. Expected Competency Level (ECL) of Junior High School Principals

Leadership Competency Dimension	Mean ECL	Percentage (%)	Category
Coaching-oriented leadership and teacher development	4.6	92.0	Very High
Reflective and autonomous professional culture	4.5	90.0	Very High
Values-based and visionary change leadership	4.7	94.0	Very High
Trust-building and open communication	4.8	96.0	Very High
Appreciation, empathy, and humanistic decision-making	4.8	96.0	Very High
Collaborative learning and stakeholder engagement	4.5	90.0	Very High
Psychological safety and collective leadership climate	4.6	92.0	Very High
Overall mean	4.64	92.85	Very High

Table 2 indicates that the expected leadership competency levels of junior high school principals are consistently high across all dimensions. The overall mean ECL score of 4.64 (92.85%) falls within the very high category, reflecting strong normative expectations regarding effective school leadership. The highest expectations are associated with trust-building, humanistic decision-making, and the cultivation of a learning-oriented and psychologically safe school climate, while slightly lower (yet still very high) expectations are observed in collaborative practices and professional autonomy. These findings suggest a clearly articulated benchmark of leadership excellence against which current competencies can be systematically compared. Table 3 presents the competency gap between current and expected leadership competencies of junior high school principals.

Table 3. Competency Gap (Training Needs) of Junior High School Principals

Aligned Leadership Competency Dimension	Mean CCL	Mean ECL	Gap (ECL–CCL)	Training Need Level
Visionary and values-based leadership	2.8	4.7	1.9	High
Empathic, trust-based, and persuasive communication	2.4	4.8	2.4	Very High
Feedback provision and reflective professional culture	2.0	4.5	2.5	Very High
Teacher empowerment, coaching, and decision-making	2.8	4.6	1.8	High
Conflict management, collaboration, and stakeholder engagement	2.5	4.5	2.0	High
Learning culture, innovation, and psychological safety	2.7	4.6	1.9	High
Overall Mean	2.5	4.66	2.16	High

The results reveal a substantial discrepancy across all aligned competency dimensions, with an overall mean gap of 2.16, indicating a high level of training need. The largest gaps are observed in feedback provision and reflective professional culture, as well as in empathic, trust-based, and persuasive communication, both of which fall within the very high training need category. Moderate-to-high gaps are also evident in visionary and values-based leadership, teacher empowerment and coaching practices, conflict management, and the development of a

learning-oriented and psychologically safe school culture. These findings demonstrate that while principals' existing competencies remain at a moderate level, the expected competencies are set at a very high standard, underscoring the urgency for a systematic and targeted leadership training model to bridge these gaps.

3.2 Discussion

The findings of this study provide compelling empirical evidence of a substantial leadership competency gap among junior high school principals. As shown in Table 1, principals' current competency levels (CCL) are consistently situated within the moderate category, with an overall mean score of 2.5 (50.6%). In contrast, Table 2 demonstrates that the expected competency levels (ECL) are uniformly positioned in the very high category, yielding an overall mean of 4.66 (92.85%). The resulting mean competency gap of 2.16, as synthesized in Table 3, clearly indicates a high level of training need across all leadership dimensions.

From an analytical perspective, this gap is not merely quantitative but also structural and qualitative in nature. The consistency of high gaps across multiple dimensions suggests that the issue is not confined to isolated competencies but rather reflects a broader inadequacy in the current leadership development ecosystem. In particular, the largest gaps are observed in competencies related to feedback provision, reflective professional culture, and empathic and trust-based communication. These areas require higher-order cognitive and affective capacities, including self-awareness, perspective-taking, and relational sensitivity, which are typically underdeveloped in traditional leadership training models that emphasize administrative and procedural skills.

This pattern of findings can be interpreted through the lens of contemporary leadership theory. The dominance of gaps in relational and reflective domains indicates that principals are still operating within a predominantly managerial paradigm, rather than a transformational or learning-centered leadership orientation. In other words, there exists a misalignment between the enacted leadership practices and the evolving expectations of school leadership in the 21st century, which increasingly demand adaptive, collaborative, and value-driven approaches. In this sense, the gap between CCL and ECL reflects not merely a skills deficit, but a misalignment between existing leadership habits and the normative expectations of contemporary school leadership.

This finding aligns with the broader literature on transformational and transformative leadership in educational contexts. Research consistently shows that school leaders who enact transformational leadership behaviours—such as idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration—exert a positive impact on teacher motivation, professional commitment, instructional quality, and school culture [15-17]. Moreover, transformative leadership scholarship emphasises that leadership development is inherently a process of perspective transformation, involving critical reflection on assumptions, reconstruction of meaning systems, and sustained changes in action [18-20].

Another important dimension that emerges from the data is the socio-cultural context of leadership practice. The high expectation levels (ECL) indicate that stakeholders implicitly or explicitly demand a form of leadership that is not only effective in managerial terms but also socially responsive and ethically grounded. In the context of Indonesian education, where collectivist values and relational harmony are highly emphasized, competencies such as empathic communication, trust-building, and collaborative culture become even more critical. Therefore, the observed gaps may also reflect a tension between traditional hierarchical

leadership norms and emerging expectations for more participatory and distributed leadership practices.

In addition, the findings have significant implications for policy and practice. The systemic nature of the competency gaps suggests that current professional development programs for school principals may be insufficiently aligned with actual leadership demands. Conventional training approaches, which are often short-term, content-driven, and decontextualized, are unlikely to produce sustainable changes in leadership practice. This underscores the need for a paradigm shift in leadership training design, moving from training as knowledge transmission to training as a process of professional transformation.

In this regard, the Transformative Leadership Coaching (TLC) model proposed in this study offers a theoretically grounded and practically relevant solution. TLC integrates key principles of transformative learning, coaching, and experiential learning to facilitate deep and sustained leadership development. Through structured reflective dialogue, real-world problem engagement, and continuous feedback, TLC enables principals to critically examine their assumptions, reconstruct their leadership perspectives, and enact more adaptive and context-sensitive practices. TLC-based training should prioritise reflective leadership practice, motivational and empathic communication, coaching competencies, and the ongoing cultivation of professional learning communities within schools.

Moreover, TLC addresses the specific competency gaps identified in this study by emphasizing relational and reflective dimensions of leadership. For instance, coaching-based interactions can enhance principals' ability to provide constructive feedback and support teacher development, while reflective practices can foster greater self-awareness and professional growth. Similarly, the focus on experiential learning allows principals to internalize leadership concepts through direct application in their school contexts, thereby bridging the gap between theory and practice.

Literature on transformational leadership in schools affirms this direction. For example, studies show that principals who adopt transformational behaviours—such as idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration—positively influence teacher motivation, performance and school culture [21]. Moreover, research on transformative leadership in educational settings highlights that the process of transformation is not just about new skills, but about reconstructing the leader's own meaning system, which then cascades into changes in organisational practice and culture.

Finally, this study contributes to the growing body of literature on educational leadership by providing empirical support for the integration of transformative and coaching-based approaches in leadership development. While previous studies have highlighted the effectiveness of transformational leadership behaviours in improving school outcomes, this study extends the discussion by demonstrating that the development of such behaviours requires a fundamentally different training paradigm—one that is holistic, reflective, and contextually grounded.

Nevertheless, this study is not without limitations. The relatively small sample size, although representing the entire population within the research context, may limit the generalizability of the findings to other regions. Future research is therefore recommended to test the applicability of the TLC model in broader and more diverse educational settings, as well as to examine its long-term impact on leadership practice and school performance.

4 Conclusion

This study contributes methodologically by demonstrating how a systematic Training Needs Analysis can be employed to identify leadership development priorities in junior high school contexts. By integrating current competency levels, expected competency benchmarks, and competency gap analysis, the findings provide a robust empirical basis for determining not only whether training is needed, but where and to what extent leadership development interventions should be targeted. The results reveal that the most critical needs lie in reflective leadership, feedback practices, and empathic, trust-based communication—dimensions that are central to contemporary conceptions of effective school leadership.

Building on this needs-driven evidence, the study introduces Transformative Leadership Coaching as a novel and contextually responsive training approach. Unlike conventional leadership training models that emphasise technical skill acquisition, TLC foregrounds perspective transformation, reflective practice, and sustained coaching engagement as mechanisms for long-term leadership development. This alignment between empirically identified training needs and a transformative coaching-based model represents a substantive contribution to the field of educational leadership development, offering a theoretically grounded and practically relevant framework for enhancing leadership quality in schools.

References

- [1] Agasisti, T., Falzetti, P., Soncin, M.: School principals' managerial behaviours and students' achievement. *Int. J. Educ. Manag.* 34(5), pp. 937–951 (2020).
- [2] Gümüş, S., Liu, Y., Bellibaş, M., Lee, M.: A global typology of school principals' time use: Exploring the effects of contextual and individual factors. *Int. J. Educ. Res.* 125, 102343 (2024).
- [3] Leithwood, K., Harris, A., Hopkins, D.: Seven strong claims about successful school leadership revisited. *Sch. Leadersh. Manag.* 40(1), pp. 5–22 (2020).
- [4] Bush, T.: Preparation and induction for school principals: Global perspectives. *Manag. Educ.* 32(2), pp. 66–71 (2018).
- [5] Sanfo, J.-B.M.B.: A three-level hierarchical linear model analysis of the effect of school principals' factors on primary school students' learning achievements in Burkina Faso. *Int. J. Educ. Res.* 100, 101531 (2020).
- [6] Stavrou, E., Kafa, A.: School principals' leadership styles on implementing inclusive education: The entrepreneurial leadership effect. *Int. J. Educ. Manag.* 38(1), pp. 40–56 (2023).
- [7] Ng, S.W.: Equipping aspiring principals for the principalship in Hong Kong. *Educ. Manag. Adm. Leadersh.* 41(3), pp. 272–288 (2013).
- [8] Navaridas-Nalda, F., Clavel-San Emeterio, M., Fernández-Ortiz, R., Arias-Oliva, M.: The strategic influence of school principal leadership in the digital transformation of schools. *Comput. Human Behav.* 112, 106481 (2020).
- [9] Bell, B.S., Tannenbaum, S.I., Ford, J.K., Noe, R.A., Kraiger, K.: 100 years of training and development research: What we know and where we should go. *J. Appl. Psychol.* 102(3), pp. 305–323 (2017).
- [10] Martin, R., Hughes, D.J., Epitropaki, O., Thomas, G.: In pursuit of causality in leadership training research: A review and pragmatic recommendations. *Leadersh. Q.* 32(5), 101375 (2021).
- [11] Sahoo, M., Mishra, S.: Effects of trainee characteristics, training attitudes and training need analysis on motivation to transfer training. *Manage. Res. Rev.* 42(2), pp. 215–238 (2019).

- [12] Alladatin, J., Lionel, R., Insaf, A.: School principal's training programs, challenges, and improvement opportunities: Rapid review. *Int. J. Educ. Innov. Res.* 3(1), pp. 17–26 (2023).
- [13] Merriman, S.E., Plant, K.L., Revell, K.M.A., Stanton, N.A.: A new approach for training needs analysis: A case study using an automated vehicle. *Appl. Ergon.* 111, 104014 (2023).
- [14] Sugiyono: *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta, Bandung (2019)
- [15] Bass, B.M., Avolio, B.J.: *Improving Organizational Effectiveness Through Transformational Leadership*. Sage Publications, Thousand Oaks (1994)
- [16] Leithwood, K., Jantzi, D., Earl, L., Watson, N., Levin, B., Fullan, M.: Strategic leadership for large-scale reform: The case of England's national literacy and numeracy strategy. *Sch. Leadersh. Manag.* 24, pp. 57–79 (2004).
- [17] Hallinger, P.: Leadership for learning: Lessons from 40 years of empirical research. *J. Educ. Adm.* 49(2), pp. 125–142 (2011).
- [18] Mezirow, J.: Transformative learning: Theory to practice. *New Dir. Adult Contin. Educ.* 74, pp. 5–12 (1997)
- [19] Shields, C.M.: Transformative leadership: Working for equity in diverse contexts. *Educ. Adm. Q.* 46(4), pp. 558–589 (2010).
- [20] Permana, J., Yuslimah, A.I.: Principal's transformational leadership in developing a positive and happy school organizational culture. *Int. J. Soc. Sci. Hum. Res.* 8(1), pp. 15–20 (2025).
- [21] Suyipto, E., Ahyani, N., Fitria, H.: Implementation of principal's leadership in improving teacher performance. *J. Soc. Work Sci. Educ.* 4(3), pp. 906–910 (2023).