



Principal instructional leadership: Implications for curriculum design, implementation, and evaluation

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ABSTRACT

This research is motivated by the challenges faced by schools in Indonesia, particularly after the COVID-19 pandemic, which requires a more flexible approach to managing the school environment and learning. The purpose of this study is to explore the instructional leadership practices of principals in creating a comfortable school environment and analyze their impact on curriculum development, implementation, and evaluation. This study employs a Systematic Literature Review (SLR) approach, analyzing relevant scientific publications from 2020 to 2024 using content analysis. The research findings indicate that the principal's instructional leadership plays a crucial role in creating a physical, psychosocial, and academic environment conducive to learning. Furthermore, this study found that effective leadership strengthens curriculum implementation, improves learning outcomes, and encourages a more comprehensive evaluation of the educational process in schools. This research makes an important contribution to the development of educational leadership policies and practices in Indonesia, particularly in the context of more holistic and responsive curriculum design, implementation, and evaluation.

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ABSTRAK

Penelitian ini dilatarbelakangi oleh tantangan yang dihadapi sekolah-sekolah di Indonesia, khususnya pasca pandemi COVID-19, yang memerlukan pendekatan yang lebih fleksibel dalam pengelolaan lingkungan sekolah dan pembelajaran. Tujuan penelitian ini adalah mengeksplorasi praktik kepemimpinan instruksional kepala sekolah dalam menciptakan lingkungan sekolah yang nyaman serta menganalisis dampaknya terhadap pengembangan, implementasi, dan evaluasi kurikulum. Metode yang digunakan dalam penelitian ini adalah pendekatan Systematic Literature Review (SLR), dengan menganalisis publikasi ilmiah yang relevan dari periode 2020 hingga 2024 dengan metode analisis konten. Temuan penelitian menunjukkan bahwa kepemimpinan instruksional kepala sekolah berperan penting dalam menciptakan lingkungan fisik, psikososial, dan akademik yang kondusif untuk pembelajaran. Selain itu, penelitian ini menemukan bahwa penerapan kepemimpinan yang efektif memperkuat implementasi kurikulum, meningkatkan kualitas pembelajaran, serta mendorong evaluasi yang lebih komprehensif terhadap proses pendidikan di sekolah. Penelitian ini memberikan kontribusi penting terhadap pengembangan kebijakan dan praktik kepemimpinan pendidikan di Indonesia, khususnya dalam konteks desain, implementasi, dan evaluasi kurikulum yang lebih holistik dan responsif.

Kata Kunci: iklim akademik; kepemimpinan instruksional; kepemimpinan pendidikan; lingkungan sekolah; pengembangan profesional

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INTRODUCTION

The challenges faced in education today are increasingly diverse, especially in the post-COVID-19 era, which demands continuous adaptation to technological developments and societal demands. In the context of education in Indonesia, school principals have a strategic role as instructional leaders who are not only responsible for school administration, but also for the quality of learning and the creation of a conducive school environment (Kuanine et al., 2023). Creating a comfortable school environment is an important factor in supporting the success of the teaching and learning process and the well-being of all school members. The instructional leadership of the principal has a significant correlation with the development of a positive and inclusive learning environment and supports optimal student development.

Kepemimpinan instruksional kepala sekolah yang berfokus pada penciptaan lingkungan belajar yang nyaman merupakan faktor katalis dalam mendukung keberhasilan implementasi kurikulum. Kepala sekolah yang menerapkan kepemimpinan instruksional yang efektif dapat menciptakan ekosistem pendidikan yang mendukung pengembangan kompetensi siswa secara menyeluruh (Wulandari et al., 2025). The ability of a school principal to articulate a clear learning vision, develop a professional community, and build a positive school culture is an important aspect in creating a conducive environment for the teaching and learning process. In this regard, adaptive instructional leadership is highly necessary to face various contemporary educational challenges, such as learning digitization, diverse student needs, and increasing accountability demands (Nufus et al., 2024). The presence of comprehensive research on instructional leadership in creating a comfortable school environment is a significant contribution to the development of educational leadership theory and practice in Indonesia.

The school principal's instructional leadership plays a central role in creating a comfortable learning environment and supporting the implementation of a curriculum focused on students' holistic achievement of competencies. Research shows that effective principals not only develop the school's vision and mission together with teachers and stakeholders but also actively manage learning programs, conduct academic supervision, and encourage collaboration and professional development of teachers (Dwiyono et al., 2022; Nikmah et al., 2025; Ralebese et al., 2025b, 2025a). Through strategies such as training, mentoring, and teacher workshop discussions, principals are able to improve the quality of lesson planning, teacher engagement, and a positive school atmosphere (Hariyati et al., 2023; Helmawati et al., 2025; Wathon, 2025). Studies also show a positive trend in the development of leadership models that focus on improving the quality of learning. Principals who implement instructional leadership models can increase teacher motivation and student academic achievement through regular supervision and the development of teacher professionalism (Pujianto et al., 2020). These findings are in line with previous research that identified five dimensions of effective instructional leadership, namely: 1) Formulation and communication of the school vision; 2) Management of instructional programs; 3) Creation of a positive school climate; 4) Monitoring and evaluation of learning; and 5) Development of professional capacity (Scott & Gong, 2021). Related to a comfortable school environment, the importance of a holistic approach that considers physical, socio-emotional, and academic aspects in developing a conducive school environment (Wulandari et al., 2025).

Furthermore, a study found that principals who succeed in creating a comfortable school environment implement collaborative strategies that involve various stakeholders, including teachers, students, parents, and the surrounding community. The study also found that schools with a comfortable environment have higher student attendance rates, lower dropout rates, and better academic achievements (Sulastri et al., 2022). In addition to research in several leading schools in Indonesia, it was identified that principals' communication skills and ability to build interpersonal relationships are important factors in creating a positive and supportive school environment (Rendhika, 2024).

In the context of curriculum design, implementation, and evaluation, the principal acts as a change agent, ensuring the curriculum is designed according to student needs and the times. It is implemented effectively through continuous supervision and evaluation (Lilik et al., 2025). Instructional leadership also encourages learning innovation, the use of differentiation methods, and the strengthening of a reflective culture in schools (Tiwow et al., 2025). Additionally, adaptive principals can integrate technology and build a collaborative culture to address the challenges of 21st-century education (Oktaviani et al., 2025). Other research also highlights the importance of curriculum evaluation conducted collaboratively, involving teachers and other stakeholders, to ensure that the curriculum is truly oriented towards the holistic development of students' competencies (Khaira et al., 2023; Safarina & Widiyanah, 2024). Thus, the adaptive and collaborative instructional leadership of principals has been proven to strengthen the design, implementation, and evaluation of the curriculum, as well as create a comfortable learning environment that supports the holistic achievement of student competencies.

Although various studies have separately explored aspects of instructional leadership and the school environment, there remains a gap in comprehensive research that integrates both. This is highlighted by research indicating that studies specifically exploring the mechanisms and strategies of school principals' instructional leadership in creating a comfortable school environment in the context of Indonesian education still face limitations (Pitriyani, 2023). This gap has become increasingly crucial considering the post-pandemic educational challenges that require an adaptive and transformative leadership approach. There is a lack of studies focusing on the practical aspects of applying instructional leadership in Indonesia's diverse socio-cultural context (Riyatuljannah, 2020).

Cultural plurality and Indonesia's geographical conditions must be considered in developing a contextual instructional leadership model. This phenomenon warrants further study, given the various problems in the school environment that persist, including bullying, academic stress, and inadequate infrastructure.

Based on a gap analysis, this study aims to explore and analyze school principals' instructional leadership practices for creating a comfortable school environment, considering the socio-cultural context and contemporary educational challenges in Indonesia. Specifically, this study attempts to answer the questions: 1) What is an effective model of principals' instructional leadership in creating a physically, socio-emotionally, and academically comfortable school environment to support curriculum implementation?; 2) What strategies and approaches are applied by principals in integrating aspects of instructional leadership with the development of a conducive school environment in accordance with curriculum objectives? The novelty of this research lies in the development

of a conceptual framework that integrates instructional leadership theory with a comprehensive approach to creating a school environment, serving as a reference for developing school leadership policies and practices in Indonesia.

The results of this study are expected to provide practical implications for the development of school principal capacity-building programs, the formulation of education policies, and the development of school leadership evaluation models that consider learning environment aspects. In addition, this study is expected to serve as a basis for developing a conceptual framework for instructional leadership that is contextualized to the educational situation and conditions in Indonesia. Thus, school principals' instructional leadership in creating a comfortable environment not only becomes an academic discourse but also an effective practice implemented in the national education system.

LITERATURE REVIEW

Conceptualization of Main Instructional Leadership in the Literature

The instructional leadership of school principals has undergone a significant conceptual evolution in Indonesian education. Based on the literature analysis, this concept has evolved from a conventional managerial approach to a comprehensive one that places the quality of learning at the core of educational leadership. Instructional leadership is an important factor in improving learning effectiveness in schools, where the principal acts as a leader who not only formulates vision and mission but also actively participates in the learning process (Dwiyono et al., 2022).

The dimensions of effective instructional leadership include the ability to formulate a learning vision, develop teachers' professional capacity, and create a supportive educational climate. A leadership approach that places the needs of the school community above the personal interests of the leader can create a more inclusive and effective educational environment (Nufus et al., 2024). This emphasizes that an instructional leadership model focused on the development and well-being of the educational community is a relevant approach in Indonesian education today.

Comfortable School Environment Aspects from a Multidimensional Perspective

A comfortable school environment encompasses three main interrelated components: physical, psychosocial, and academic. Based on research findings, the physical component includes infrastructure, learning facilities, and school safety. Studies reveal that creating a safe and pleasant physical environment is one of the strategies to create a comfortable school environment (Komara & Hadiapurwa, 2023; Putra et al., 2015). Psychosocial components include interpersonal relationships, social-emotional support, and a positive school climate. The integration of values in educational leadership creates a holistic learning environment and strengthens social bonds within the school community (Shofiyyah et al., 2023). Meanwhile, the academic components include a relevant curriculum, effective learning, and fair assessment. **Table 1** below presents the relationship among school environment components, based on a synthesis of the literature.

Table 1. The Interrelation of Components of a Comfortable School Environment

Component	Key Aspects	Impact on the School Environment	Relationship with Other Components
Physical	Infrastructure, learning facilities, security	Creating a sense of physical safety and comfort	Supporting social activities and learning
Psychosocial	Interpersonal relationships, emotional support, school climate	Building a sense of belonging and social attachment	Improving learning motivation and learning effectiveness
Academic	Curriculum, learning, assessment	Stimulating intellectual development and achievement	Strengthening social relationships and the use of physical facilities

Source: Results of analysis based on (Putra et al., 2015; Shofiyyah et al., 2023)

Instructional Leadership Practices in Creating a Comfortable School Environment

In creating a comfortable school environment, the principal implements various strategies and approaches. For the development of the physical environment, the principal conducts strategic planning related to the development of learning facilities and the arrangement of the physical environment that supports the teaching and learning process. The principal's adaptive leadership is very important in creating a conducive learning climate, especially in facing changes such as those that occurred during distance learning (Miasih & Hasanah, 2021).

In the formation of a positive socio-emotional climate, the principal plays the role of a model and facilitator in building harmonious relationships among school members. It is important to build good relationships with students through effective communication and empathy as an effort to create a comfortable environment for the well-being of students (Putra et al., 2015). To develop the academic environment, the principal encourages learning innovation and teacher professional development. An effective principal encourages teachers' creative efforts in learning and actively engages in overcoming learning obstacles in the classroom (Dwiyono et al., 2022).

METHODS

This study uses a Systematic Literature Review (SLR) approach to analyze the instructional leadership practices of school principals in creating a comfortable school environment and their impact on the development, implementation, and evaluation of the curriculum. The SLR approach is chosen because it can provide a deeper, more comprehensive understanding by systematically and transparently identifying, evaluating, and integrating relevant research findings. This research design adopts an interpretive paradigm, seeking to understand the meanings embedded in textual and contextual data from relevant literature.

The subjects of this study are scientific literature discussing school principals' instructional leadership and the creation of a comfortable school environment, published during the period 2020-2025. Literature selection was conducted using purposive sampling, guided by predetermined inclusion and exclusion criteria. Inclusion criteria include: 1) Journal articles indexed in Sinta 1-4 or reputable international journals; 2) Articles that discuss aspects of

school principals' instructional leadership and/or school environment; 3) Articles published in Indonesian or English; and 4) Articles accessible in full text. Meanwhile, exclusion criteria include: 1) Articles that have not undergone a peer-review process; 2) Articles irrelevant to the Indonesian educational context; and 3) articles in the form of opinion pieces or popular articles.

The data collection process was conducted through systematic searches across several journal databases, including the Portal Garuda, DOAJ Indonesia, and Indeks Sains dan Teknologi (SINTA). This data collection was conducted using the Publish or Perish application, covering the years 2020-2025. Literature searches were conducted using the keywords: "kepemimpinan instruksional," "kepala sekolah," "desain kurikulum," "lingkungan sekolah yang nyaman," "iklim sekolah," "kepemimpinan pendidikan," and combinations of these keywords. The data from similar studies were analyzed and interpreted to produce conclusions that form a new theory.

Data analysis was conducted using a modified qualitative content analysis, based on the principles of SLR. The analysis process follows systematic stages: 1) Data reduction, which involves literature selection, focusing, and simplification of data; 2) Data presentation, which organizes information into certain patterns to facilitate analysis and drawing conclusions; 3) Coding and categorization, to identify main themes and relevant sub-themes; 4) Interpretation of meaning, to analyze the relationships between themes; and 5) Conclusion and verification, which ensures the findings align with the research objectives. To enhance the credibility and validity of the findings, this study applied source triangulation techniques by comparing perspectives from different literature on the same phenomenon.

This research also considers ethical aspects by acknowledging each author's intellectual contributions through proper citation and avoiding plagiarism. The practice of critical reading is also carried out to ensure accurate interpretation of the texts being analyzed, taking into account the historical, social, and cultural contexts of each literature studied.

RESULTS AND DISCUSSION

The instructional leadership of a school principal is a key factor in creating a comfortable learning environment that supports the successful design, implementation, and evaluation of the curriculum. Various studies highlight that an effective principal not only acts as an administrative manager but also as a learning leader who can build a shared vision, manage learning programs, conduct academic supervision, and encourage teacher collaboration and professional development. Through participatory, innovative, and collaborative approaches, principals can improve the quality of learning planning, teacher engagement, and a positive and conducive school atmosphere for the holistic development of students. In addition, adaptive instructional leadership can also respond to modern educational challenges, such as technology integration and curriculum changes, thereby improving the quality of education sustainably.

A total of 20 articles were selected from 1,000 identified in the Publish or Perish application through a screening process. Of this number, 20 articles were declared to meet the criteria and were included in the final analysis. This process demonstrates a strict and transparent

literature selection to ensure the quality and relevance of the sources used. The following are the data results for the years 2020-2025.

Table 2. Article Analysis Data for the Years 2020-2025

No	Article Title	Focus of Study	Key Findings	Journal	Year	Citations
1	Examining Primary School Principals' Instructional Leadership Practices: A Case Study on Curriculum Reform and Implementation	Instructional leadership practices in curriculum reform	Instructional leadership shapes vision, manages programs, and the school climate	Education Sciences	2025	(Ralebese et al., 2025a)
2	The Role of Principal's Instructional Leadership in Improving Teacher Performance: A Case Study at SMPN 3 Baleendah	The influence of instructional leadership on teacher performance	Participatory and innovative strategies improve teacher performance	Jurnal Visionary	2025	(Helmawati et al., 2025)
3	Perceptions and practices of principals: examining instructional leadership for curriculum reform	Perceptions and practices of instructional leadership	There is a gap between perception and actual practice, training is needed	Frontiers in Education	2025	(Ralebese et al., 2025b)
4	The Role of the Principal in Developing Institutions through the Kurikulum Merdeka	Leadership in the implementation of the Kurikulum Merdeka	Strategic leadership drives innovation and collaboration	AS-SABIQUN	2025	(Wathon, 2025)
5	Implementation Of Instructional Leadership By School Principals In Elementary School	Implementation of instructional leadership in elementary schools	Supervision and KKG improve planning and learning outcomes	AJIS	2025	(Nikmah et al., 2025)
6	Principal Leadership Behavior: A Panacea For Effective Curriculum Implementation...	School principal leadership behavior	Training and supervision are important for curriculum implementation	Int. J. of Educational Research and Development	2025	(Abdulrahman & Adegoroye, 2025)
7	Principal's leadership in improving student learning outcomes	Leadership and student learning outcomes	Instructional leadership improves the quality of education	Fair Value	2022	(Firdaus et al., 2022)
8	Teachers' and middle managers' experiences of principals'	Experience of teachers and middle managers	Teacher professional development and	South African J. of Childhood Education	2021	(Chabalala & Naidoo, 2021)

No	Article Title	Focus of Study	Key Findings	Journal	Year	Citations
	instructional leadership...		collaboration are important			
9	Instructional Principalship: A Shared Leadership for Learning Framework...	Shared leadership in curriculum development	Collaboration and holistic school culture	Open Journal of Leadership	2024	(Farley, 2024)
10	Leadership of School Principals in Improving The Quality of Teacher Learning	Leadership in improving teacher quality	Participatory supervision and reflection enhance professionalism	Urwatul Wutsqo	2025	(Ayumi & Nasution, 2025)
11	Transformational Leadership of School Principals in the Implementation of the Independent Curriculum	Transformational leadership in the Kurikulum Merdeka	Commitment and mentoring increase teacher readiness	Thawalib	2025	(Lilik et al., 2025)
12	Actualization of Principal Instructional Leadership in the Implementation of Differentiated Learning...	Leadership in differentiated learning	Supervision and evaluation support student well-being	Educational Journal	2023	(Hariyati et al., 2023)
13	The Perceptions of School Management Teams and Teachers of the Principal's Instructional Leadership...	Perception of the management team and teachers	Collaboration and delegation of instructional tasks are effective	Interchange	2021	(Mestry & Govindasamy, 2021)
14	Curriculum Evaluation: Inputs for Principal's Instructional Leadership	Curriculum and leadership evaluation	Collaborative evaluation and professional development	Int. J. of Social Learning	2021	(Arrieta, 2021)
15	Assistance to School Principals in Designing and Managing Independent Curriculum Programs...	Assistance for school principals in curriculum design	Training and collaboration improve curriculum understanding	Initiative	2024	(Mustoip et al., 2024)
16	Principal Instructional Leadership for Improved Student Achievement	Dimensions of instructional leadership	Three main dimensions influence student learning outcomes	-	2020	(Maponya, 2020)
17	Interplay of Principal Instructional Leadership, School Organizational	The relationship between leadership, school climate,	A positive climate increases satisfaction	Int. J. of Learning, Teaching and	2025	(Guo et al., 2025)

No	Article Title	Focus of Study	Key Findings	Journal	Year	Citations
18	Climate, and Teacher Job Satisfaction	and teacher satisfaction	and the quality of education	Educational Research	2021	(Martin, 2021)
19	Qualities of Instructional Leadership Among Principals in High-Performing Christian Schools	Value-based leadership in learning	Clear vision and collaboration create a conducive environment	Int. J. of Educational Research & Social Sciences	2021	(Naz & Rashid, 2021)
20	Effective Instructional Leadership can Enhance Teachers' Motivation and Improve Students' Learning Outcomes	The influence of leadership on teacher motivation and student outcomes	A conducive environment and professional development are important	-	2021	(Naz & Rashid, 2021)
20	Leading STEM Success: The Role of School Principals in Advancing Science and Mathematics...	Instructional leadership in STEM learning	Support from the principal improves the quality of learning	Int. J. of Innovative Research and Scientific Studies	2025	(Arokiasamy et al., 2025)

Source: Research 2025

Based on **Table 2**, the instructional leadership of the school principal plays a very important role in creating a comfortable learning environment, improving the quality of learning, and effectively supporting the design, implementation, and evaluation of the curriculum. Principals who can build a shared vision, conduct academic supervision, encourage collaboration, and adapt to change and technology have been shown to enhance teacher performance, student motivation, and overall educational quality. Collaboration, innovation, and continuous evaluation are the main keys to creating a conducive learning environment and holistically developing students' competencies.

Discussion

Integration of Instructional Leadership and School Environment Development

Analysis of the reciprocal relationship between instructional leadership and the quality of the school environment shows a significant influence between the two (Nufus et al., 2024). Effective instructional leadership creates supportive school environment conditions, while a conducive school environment also reinforces the effectiveness of instructional leadership (Sulistiyowati & Abdullah, 2024). The principal acts as a catalyst for change in the learning environment through a transformative leadership approach. Principals who implement a leadership approach focused on the development of the school community successfully create a collaborative culture and increase the participation of all stakeholders in the educational process (Nufus et al., 2024).

Philosophically, instructional leadership integrated with the development of a comfortable school environment reflects a paradigm shift from transactional leadership to transformative instructional leadership. This shift aligns with the demands of 21st-century education, which emphasize meaningful learning within a humanistic education ecosystem. The integration of

values in leadership practice forms the foundation for creating a holistic and equitable learning environment (Shofiyyah et al., 2023). Based on the research findings, the conceptual model of environmentally based instructional leadership is illustrated in **Table 3**.

Table 3. Conceptual Model of Instructional Leadership Based on the Environment

Dimensions of Instructional Leadership	Implementation Strategy	Impact on the School Environment
Formulation and communication of the learning vision	Involving stakeholders in the formulation of vision and mission, regular socialization	Strengthening the academic environment, creating a learning-oriented culture
Instructional program management	Learning supervision, curriculum evaluation, and teacher professional development	Improving academic quality, creating an innovative climate
Creating a positive school climate	Building effective communication, recognition of achievements, and conflict resolution	Strengthening the psychosocial environment, building a sense of togetherness
Resource management	Optimization of facility utilization, priority-based budgeting	Improving the quality of the physical environment and learning support

Source: Results of analysis based on (Dwiyono et al., 2022)

This study emphasizes that the instructional leadership of school principals plays a very important role in creating a conducive learning environment. As instructional leaders, principals influence the quality of the school environment, both in terms of physical, psychosocial, and academic aspects. According to Leithwood's transformational leadership theory, principals who have a clear vision, support teachers, and are committed to student success can foster an environment that enables effective curriculum implementation. The findings of this study indicate that principals who adopt participative leadership and ensure all stakeholders are involved are more successful in creating a holistic environment that supports educational success.

Challenges and Obstacles in the Implementation of Instructional Leadership in the Indonesian Context

The implementation of instructional leadership in Indonesia faces several structural and systemic challenges, including limited resources, a heavy administrative burden, and insufficient policy support. The challenges faced include the limitation of teachers in interacting interactively with students, suboptimal fulfillment of character education, as well as limitations in counseling activities and extracurricular guidance (Dwiyono et al., 2022). Cultural and social factors are also significant challenges, including hierarchical culture, resistance to change, and a lack of community involvement.

The challenges of implementing instructional leadership in Indonesia are also inseparable from the educational bureaucracy structure, which tends to be hierarchical and procedural. School principals are often constrained by administrative tasks that consume time and energy, making them less optimal in carrying out instructional leadership functions.

Reforming support systems and empowering school principals should be aimed at balancing managerial and instructional tasks, enabling principals to play a more effective role as learning leaders.

In the context of Indonesian education, which is rich in social and cultural diversity, an instructional leadership model needs to be contextualized by taking into account local wisdom and the cultural values that are alive in society. A 'satu ukuran untuk semua' approach in school leadership development tends to overlook the complexity and uniqueness of the local context (Wulandari et al., 2025). Therefore, adapting an instructional leadership model that is responsive to local needs and characteristics becomes very important. Parental involvement and support are necessary in creating a conducive learning climate, which shows that instructional leadership must go beyond school boundaries and involve the wider community (Miasih & Hasanah, 2021). In addition, the capacity and competence of the school principal are also key factors in the management of instructional leadership. The development of teacher professionalism, improvement of education quality, as well as transparent and objective evaluation are integral parts of the instructional leadership management process (Dwiyono et al., 2022).

Implications and Recommendations for the Development of Instructional Leadership to Support Curriculum Implementation

The findings of this study provide significant implications for the development of principals' instructional leadership in supporting the effective implementation of the curriculum. Instructional leadership functions not only as a conceptual framework but also as a strategic mechanism that bridges curriculum planning, classroom learning implementation, and continuous evaluation. Principals with strong instructional capacity are able to guide teachers in translating curriculum objectives into learning practices that are contextual, adaptive, and competency-oriented for students (Shofiyyah et al., 2023).

Instructional leadership also plays an important role in ensuring alignment between the curriculum vision, learning strategies, learning environment management, and systems of supervisory and academic reflection, particularly in the context of implementing the Merdeka Curriculum. Previous research shows that the success of curriculum implementation is greatly influenced by the extent to which school principals can facilitate teachers' understanding and commitment to curriculum changes (Ajasan, 2016). Therefore, strengthening instructional leadership becomes a key prerequisite so that the curriculum does not merely stop at the document level, but is realized in meaningful and effective learning practices.

Regarding curriculum design, this study shows that a supportive school environment is a key factor in the success of curriculum implementation, especially when facing new frameworks such as the Independent Curriculum. Principals who adopt an adaptive leadership style, responsive to technological advancements and student diversity, can facilitate a curriculum that meets the needs of 21st-century learners (Tiwow et al., 2025). The findings of this study show how principals who encourage innovation and collaboration among teachers can improve the quality of the academic climate and the success of curriculum implementation.

In addition, the development of school principals' instructional leadership capacity needs to consider aspects of digital literacy and information technology. In the era of technological

disruption, school principals are required to have the ability to integrate technology into the learning process and school management. This aligns with the Independent Learning policy, which encourages innovation and technological adaptation in education. For example, the use of digital platforms in learning evaluation or communication among teachers can accelerate the process of curriculum reflection and adaptation. Therefore, school leaders must be able to utilize technology as a tool to enhance curriculum effectiveness and create a more dynamic and personalized learning experience (Tiwow et al., 2025). Instructional leadership that is adaptive to technological developments will strengthen the school's capacity to face learning challenges in the digital era.

Strengthening collaboration among stakeholders is also an important aspect in improving the effectiveness of instructional leadership. Research shows that principals who can build solid working relationships with teachers, parents, and the surrounding community will create a school climate that supports the successful implementation of the curriculum (Kefi & Rosnelli, 2024). This collaboration also includes the ability of school principals to build networks with other educational institutions, the business world, and local government, which can provide additional resources and innovations in curriculum development.

An evidence-based approach in decision-making is an important element in instructional leadership. Principals need to use data to identify areas that require improvement, as well as make decisions based on relevant research and evaluation results. This is important to ensure that the curriculum is always adjusted to the students' needs and the challenges in the field. As studies show, principals who are involved in data-based decision-making processes have a greater impact on improving the quality of education (Ralebese et al., 2025b).

Ongoing professional development must also be designed with consideration of the career development stages of school principals. Development programs that are more personalized and based on the specific needs of school principals tend to be more effective than generic development programs. Programs that focus on strengthening the instructional leadership competencies and emotional intelligence of school principals will enhance the successful implementation of the curriculum, as emotional intelligence plays an important role in building positive relationships with teachers and students.

The findings of this study affirm that instructional leadership not only involves administrative and managerial aspects but also plays a central role in creating a conducive academic culture. Principals who can manage psychosocial and academic aspects in a balanced way can create a better learning environment. This reinforces the view that effective instructional leadership is an approach that integrates various leadership dimensions to achieve optimal learning quality.

A comfortable learning environment in this study contributes significantly to student engagement and achievement. Effective principals who balance instructional supervision with creating psychologically safe spaces show superior results in both academic and social-emotional domains. This highlights the need for leadership development programs that emphasize both technical instructional competencies and emotional intelligence.

This study also emphasizes that curriculum evaluation becomes stronger when supported by the role of the principal in creating an environment that is open to feedback and reflection.

Principals who facilitate ongoing professional development and are regularly involved in academic supervision play an important role in improving teaching practices and aligning the curriculum with the school's needs (Ralebese et al., 2025b). This practice is important to ensure that the curriculum is not only implemented well but also evaluated and improved periodically.

The results of this study are in line with findings that highlight the transformational role of school principals in curriculum reform (Dwiyono et al., 2022). However, this study provides new insights by emphasizing the multidimensional role of school principals in creating an environment that is not only academic but also psychosocially supportive of the learning process. This study integrates these elements into a comprehensive model that shows the interconnection between instructional leadership and the quality of the school environment as mutually reinforcing factors for the successful implementation of the curriculum.

In practice, these findings indicate that the development of principals' instructional leadership should be directed towards strengthening their capacity to manage the curriculum implementation process systematically. Principals must understand the substance of the curriculum, but also be able to guide teachers in lesson planning, the implementation of relevant pedagogical strategies, and the use of assessment as a basis for improving learning (El-Fadhil et al., 2025). Effective instructional leadership enables the alignment between curriculum goals, classroom learning practices, and the creation of a conducive learning environment (Juniar et al., 2024).

Finally, the findings of this study contribute to the growing body of literature emphasizing the connection between school principal leadership, the creation of a comfortable school environment, and the successful implementation of the curriculum. By examining this relationship in the Indonesian context, this study provides valuable insights that can inform leadership development initiatives throughout Southeast Asia and other regions with similar educational challenges and aspirations.

CONCLUSION

This study concludes that instructional leadership of school principals is a strategic element in creating a comfortable school environment that supports the success of curriculum design, implementation, and evaluation. The findings indicate that principals who actively act as learning leaders are able to guide instructional practices, strengthen teachers' professional capacity, and build a conducive physical, psychosocial, and academic climate. Curriculum implementation, including the Merdeka Curriculum, is not only determined by the quality of curriculum documents but also highly depends on the principal's ability to coordinate lesson planning, classroom learning implementation, and continuous evaluation.

The synthesis of findings produces a conceptual model of instructional leadership based on the school environment, which positions the principal as the main driver through four core practices, namely the formulation and communication of the learning vision, management of instructional programs, supervision and evaluation of learning, and professional development of teachers. These four practices work in an integrated manner to create a learning environment that supports the contextual implementation of the curriculum and is oriented towards achieving student competencies. Thus, instructional leadership functions as a

strategic link between curriculum policy and classroom learning practices, as well as serving as an important foundation for the development of educational leadership in Indonesia.

Recommendations for future research include longitudinal studies that examine the long-term impact of instructional leadership on the school environment and student learning outcomes. In addition, the development of instructional leadership assessment instruments that are contextual to the conditions of Indonesian education is also very important. This study provides significant contributions to the development of educational leadership theory and suggests a conceptual framework that integrates instructional leadership with a comprehensive approach to school environment development.

AUTHOR'S NOTE

The author states that there is no conflict of interest related to the publication of this article. The author emphasizes that the data and content of the article are free from plagiarism.

REFERENCES

- Abdulrahman, A. A., & Adegoroye, S. (2025). Principal leadership behavior: A panacea for effective curriculum implementation in senior secondary schools in Kwali Area Council, Abuja. *International Journal of Educational Research and Development*, 7(8), 32-42.
- Ajasan, N. (2016). Efektivitas pelaksanaan supervisi akademik oleh kepala sekolah dalam meningkatkan kinerja guru di SMK Negeri 1 Meulaboh. *Jurnal Administrasi Pendidikan: Program Pascasarjana Unsyiah*, 4(3), 1-9.
- Arokiasamy, A. R. A., Tasaloti, M., Ngadiron, M. S., Hossain, S. F. A., & Tanucan, J. C. M. (2025). Leading STEM success: The role of school principals in advancing science and mathematics through instructional leadership. *International Journal of Innovative Research and Scientific Studies*, 8(3), 545-557.
- Arrieta, G. S. (2021). Curriculum evaluation: Inputs for principal's instructional leadership. *International Journal of Social Learning (IJSLS)*, 1(2), 147-162.
- Ayumi, M., & Nasution, I. (2025). Leadership of school principals in improving the quality of teacher learning. *Urwatul Wutsqo: Jurnal Studi Kependidikan dan Keislaman*, 12(4), 464-478.
- Chabalala, G., & Naidoo, P. (2021). Teachers' and middle managers' experiences of principals' instructional leadership towards improving curriculum delivery in schools. *South African Journal of Childhood Education*, 11(1), 1-10.
- Dwiyono, Y., Warman, W., Kurniawan, D., Atmaja, A. A. B. S., & Lorensius, L. (2022). Kepemimpinan instruksional kepala sekolah dalam meningkatkan efektivitas pembelajaran. *Scaffolding: Jurnal Pendidikan Islam dan Multikulturalisme*, 4(3), 319-334.
- El-Fadhil, B. M., Riyadi, A., & Maulidah, N. (2025). Efektivitas supervisi klinis oleh kepala sekolah dalam meningkatkan kompetensi pedagogik guru SD pada implementasi kurikulum merdeka. *Elementary Journal: Jurnal Pendidikan Guru Sekolah Dasar*, 8(1), 99-106.

- Farley, C. (2024). Instructional principalship: A shared leadership for learning framework to improve administrative academic scholarship in comprehensive schools. *Open Journal of Leadership*, 13(2), 195-216.
- Firdaus, F., Giatman, M., & Ernawati, E. (2022). Principal's leadership in improving student learning outcomes. *Fair Value: Jurnal Ilmiah Akuntansi dan Keuangan*, 4(11), 4837-4847.
- Guo, H., Alias, B. S., & Mamud, M. I. (2025). Interplay of principal instructional leadership, school organizational climate, and teacher job satisfaction: Evidence from secondary schools in Northwest China. *International Journal of Learning, Teaching and Educational Research*, 24(4), 178-198.
- Hariyati, N., Riyanto, Y., Sujarwanto, S., Suyatno, S., & Islamiah, N. (2023). Actualization of principal instructional leadership in the implementation of differentiated learning to realize students' well-being. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran*, 9(1), 188-199.
- Helmawati, H., Muchtar, H. S., Suryana, A., & Mulyati, M. (2025). The role of principal's instructional leadership in improving teacher performance: A case study at SMPN 3 Baleendah. *Jurnal Visionary: Research and Development in Educational Management Volume*, 13(1), 40-46.
- Juniar, R. M., Hidayati, D., & Suyata, P. (2024). Penerapan kepemimpinan instruksional dalam meningkatkan kualitas pendidikan di SMA IT Kota Balikpapan. *Jurnal Kepemimpinan dan Pengurusan Sekolah*, 9(3), 302-312.
- Kefi, Y., & Rosnelli. (2024). Kepemimpinan transformasional kepala sekolah dalam implementasi kurikulum merdeka di SMA Deli Murni Bandar Baru. *Jurnal Ilmu Manajemen dan Pendidikan*, 4(1), 27-34.
- Khaira, H. S., Al Hafizh, M. F., Darmansyah, P. S. A., Nugraha, H., & Komara, D. A. (2023). Analysis of needs and teachers' perception towards business teaching materials at SMA Labschool UPI. *Curricula: Journal of Curriculum Development*, 2(2), 299-314.
- Komara, D. A., & Hadiapurwa, A. (2023). Improving literacy of junior high school students through revitalization of library in kampus mengajar IV activities. *Dwija Cendekia: Jurnal Riset Pedagogik*, 7(1), 143-152.
- Kuanine, H. M., Edison, Y. K., & Afi, M. (2023). Upaya guru menciptakan lingkungan yang nyaman melalui manajemen budaya sekolah yang positif. *Jurnal Manajemen Pendidikan Kristen*, 3(1), 1-14.
- Lilik, N., Nur, A., Sari, I., Muspawi, M., & Pratama, L. (2025). Transformational leadership of school principals in the implementation of the independent curriculum. *Thawalib: Jurnal Kependidikan Islam*, 6(1), 85-98.
- Maponya, T. J. (2020). The instructional leadership role of the school principal on learners' academic achievement. *African Educational Research Journal*, 8(2), 183-193.
- Martin, M. E. (2021). Qualities of instructional leadership among principals in high-performing Christian schools. *Journal of Research on Christian Education*, 27(2), 157-182.

- Mestry, R., & Govindasamy, V. (2021). The perceptions of school management teams and teachers of the principal's instructional leadership role in managing curriculum changes. *Interchange*, 52(3), 545-560.
- Miasih, R., & Hasanah, E. (2021). Best practice kepemimpinan kepala sekolah dalam menciptakan iklim belajar jarak jauh yang kondusif. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran, dan Pembelajaran*, 7(3), 565-575.
- Mustoip, S., Ghozali, M. I. Al, & Rahman, D. I. (2024). Assistance to school principals in designing and managing independent curriculum programs in elementary schools. *Inisiatif: Jurnal Dedikasi Pengabdian Masyarakat*, 3(2), 136-145.
- Naz, F., & Rashid, S. (2021). Effective instructional leadership can enhance teachers' motivation and improve students' learning outcomes. *SJESR*, 4(1), 477-485.
- Nikmah, N., Lailiyah, M., & Nurkolis. (2025). Implementation of instructional leadership by school principals in elementary school. *AJIS: Academic Journal of Islamic Studies*, 10(1), 213-223.
- Nufus, E. A. B., Riyanto, Y., & Setyowati, S. (2024). Strategi dan pendekatan kepemimpinan dalam meningkatkan kualitas pendidikan. *Jurnal Administrasi Pendidikan Islam*, 6(2), 185-202.
- Oktaviani, W. N., Apriani, S., Heri, A., & Iskandar, S. (2025). Adaptive leadership of principals: A literature review of the challenges of technology and globalization in 21st century education. *Jurnal Ilmiah Global Education*, 6(2), 906-915.
- Pitriyani, P. (2023). Peran kepemimpinan kepala sekolah dalam meningkatkan kinerja guru di Madrasah Ibtidaiyah Jayasari. *Jurnal Global Futuristik*, 1(1), 21-26.
- Pujianto, P., Arafat, Y., & Setiawan, A. A. (2020). Pengaruh supervisi akademik kepala sekolah dan lingkungan kerja terhadap kinerja guru Sekolah Dasar Negeri Air Salek. *Journal of Education Research*, 1(2), 106-113.
- Putra, J. S., Saifullah, U. H., Septian, H., Fitri, D., Safitri, Y., Subhan, M., & Rajab, K. (2024). Upaya guru dalam menciptakan lingkungan sekolah yang nyaman terhadap kesejahteraan siswa Sekolah Dasar Islam Terpadu An-Nur Al-Fatih Pekanbaru. *Jurnal Edukasi: Jurnal Bimbingan Konseling*, 10(1), 128-136.
- Ralebese, M. D., Jita, L., & Badmus, O. T. (2025a). Examining primary school principals' instructional leadership practices: A case study on curriculum reform and implementation. *Education Sciences*, 15(1), 1-15.
- Ralebese, M. D., Jita, L. C., & Badmus, O. T. (2025b). Perceptions and practices of principals: Examining instructional leadership for curriculum reform. *Frontiers in Education*, 10(1), 1-11.
- Rendhika, R. (2024). Peran kepemimpinan transformasional kepala sekolah dalam dinamika manajemen konflik di lembaga pendidikan. *Unisan Jurnal*, 3(1), 642-657.
- Riyatuljannah, T. (2020). Peran dan fungsi kepala sekolah dalam mewujudkan sekolah efektif di lingkungan sekolah dasar. *Al-Aulad: Journal of Islamic Primary Education*, 3(2), 56-68.

- Safarina, A., & Widiyanah, I. (2024). Peran kepemimpinan pembelajaran kepala sekolah dalam meningkatkan hasil belajar siswa di SMP Negeri 40 Semarang. *Inspirasi Manajemen Pendidikan, 12*(3), 656-666.
- Scott, I., & Gong, T. (2021). Coordinating government silos: Challenges and opportunities. *Global Public Policy and Governance, 1*(1), 20-38.
- Shofiyyah, N. A., Komarudin, T. S., & Ulum, M. (2023). Integrasi nilai-nilai Islami dalam praktik kepemimpinan pendidikan: Membangun lingkungan pembelajaran yang berdaya saing. *El-Idare: Jurnal Manajemen Pendidikan Islam, 9*(2), 66-77.
- Sulastri, S., Nellitawati, N., Adi, N., & Syahril, S. (2022). Analisis kebutuhan kepemimpinan pembelajaran kepala sekolah di sekolah menengah pertama. *JPPi (Jurnal Penelitian Pendidikan Indonesia), 8*(4), 957-963.
- Sulistyowati, A., & Abdullah, G. (2024). Pengaruh kepemimpinan instruksional kepala sekolah, kompetensi profesional, dan kesejahteraan psikologis guru terhadap mutu pendidikan SMP/Mts Kecamatan Tersono Kabupaten Batang. *Pendas: Jurnal Ilmiah Pendidikan Dasar, 9*(4), 234-245.
- Tiwow, G. M., Arsana, I. K. S., & Dolonseda, H. P. (2025). Designing a transglobal leadership model to optimize holistic learning within the independent learning framework. *Tadbir: Jurnal Studi Manajemen Pendidikan, 9*(1), 257-278.
- Wathon, A. (2025). Peran kepala sekolah dalam mengembangkan lembaga melalui kurikulum merdeka. *As-Sabiqun, 7*(1), 111-129.
- Wulandari, Y. N., Aslamiah, A., Noorhafizah, N., & Novitawati, N. (2025). Manajemen kepemimpinan kepala sekolah untuk meningkatkan mutu pendidikan dan menciptakan lingkungan belajar yang kondusif. *Learning: Jurnal Inovasi Penelitian Pendidikan dan Pembelajaran, 5*(1), 312-321.

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