

Transformational leadership and the development of professional learning communities in elementary schools

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ABSTRACT

Transformational leadership has become increasingly vital in education for fostering school improvement, innovation, and teacher collaboration. This study aimed to describe how transformational leadership is implemented by elementary school principals and how it contributes to the development of Professional Learning Communities (PLCs). Conducted at SDN 019 Pabaki Bandung, West Java province of Indonesia, this study employed a qualitative case study design. Data were gathered through purposive sampling from three participants: a principal, a vice principal, and a teacher. Methods included interviews, direct observations, and document analysis. Triangulation and inductive analysis were used to ensure data validity and depth. The findings reveal that the principal's transformational leadership significantly improved teacher collaboration, instructional quality, and administrative efficiency. The development of PLCs was evident through continuous, collaborative learning practices supported by the principal's guidance, encouragement of innovation, and cultivation of a supportive school culture. These practices fostered a harmonious and innovative environment conducive to ongoing professional growth. This study underscores the importance of transformational leadership in empowering educators and sustaining PLCs. The findings highlight the role of school leaders in promoting continuous learning and collaboration, ultimately contributing to improved educational quality. The implications suggest that adopting transformational leadership can serve as a catalyst for meaningful school reform and long-term professional development.

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Introduction

Education in the 21st century exists within a context of profound and rapid transformation. The relentless pace of technological advancement and the increasing availability of digital information have revolutionized the way individuals learn and interact with knowledge (Dakhi et al., 2020; Yang & Hong, 2025). This global shift has

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placed immense pressure on educational systems to remain adaptive, innovative, and relevant. As countries strive to equip students with the skills required for an uncertain and technologically saturated future, schools are required not only to enhance academic performance but also to foster critical thinking, collaboration, and lifelong learning (Sun et al., 2024). Meeting these global demands necessitates comprehensive reforms that integrate digital tools into pedagogy, redefine classroom dynamics, and elevate teaching quality through continuous professional development (Rahmatullah et al., 2022).

Students today are inundated with vast and accessible information, enabling them to engage in more personalized and self-directed learning experiences (Cunha et al., 2020). However, this shift also presents a paradox: while learners gain independence, educators must recalibrate their roles and methodologies to remain effective facilitators of learning (Nii Akai Nettey et al., 2024). This requires a fundamental shift in school leadership practices. Leaders must champion innovation, inspire change, and cultivate collaborative professional cultures that support educators through continuous transformation (McKay et al., 2024). As such, the role of the school principal has become increasingly pivotal in shaping school effectiveness and guiding institutional responses to complex educational challenges.

One of the most effective leadership models in this evolving educational landscape is transformational leadership. Unlike transactional models focused on compliance and short-term goals, transformational leadership emphasizes vision, motivation, intellectual stimulation, and personalized support (Bragg et al., 2021; Jabbour Al Maalouf et al., 2025). It creates an environment where educators feel valued, empowered, and inspired to improve their practice. As noted by Triyono (2019), visionary and exemplary school leaders are critical for addressing declining student outcomes, teacher disengagement, and stagnant institutional practices. Transformational leaders actively shape school culture, foster innovation, and cultivate a sense of collective purpose and commitment among staff (Agazu et al., 2025; Sirait, 2021).

Despite ongoing efforts in Indonesia to improve teacher qualifications and professional certification, substantial challenges persist in ensuring teacher competency meets national standards. According to data from the Indonesian House of Representatives' Commission X in 2020, the national average score for the Teacher Competency Test (UKG) was only 53.02—below the minimum benchmark of 55. This issue remains pressing. In 2021, the average score stagnated, with pedagogical knowledge at 48.94 and professional competence at 54.77. Although efforts have been made to interpret these results as a basis for performance-based professional development, significant gaps in capacity and certification remain. For example, only 52.3% of elementary teachers in Indonesia are certified, despite 88.2% holding qualifications. These statistics underline the urgent need for systemic, school-based approaches to professional development that go beyond external training programs and are embedded within the daily culture of teaching and learning.

In response to this challenge, Professional Learning Communities (PLCs) have emerged as a promising strategy for enhancing teacher professionalism and instructional effectiveness. PLCs are structured around collaboration, reflection, shared leadership, and evidence-informed practice. They enable teachers to identify and address instructional challenges collectively, engage in dialogue about student learning, and experiment with new strategies in a supportive environment (Hamdian Affandi et al., 2019; Peel, 2021). Research has shown that PLCs contribute significantly to teacher learning, motivation, and school improvement when they are well-facilitated and sustained over time (Opara et al., 2024; De Jong et al., 2022). In particular, PLCs provide a platform for ongoing peer-to-peer learning and professional inquiry, fostering a culture of transparency, trust, and shared responsibility.

However, the success of PLCs is closely tied to the quality of school leadership. Transformational principals play a central role in establishing and nurturing the conditions necessary for PLCs to thrive. They articulate a compelling vision for

professional learning, model collaborative behaviors, and create time and structures that support sustained dialogue and experimentation (Wiramarta et al., 2023). Zhen Ming et al. (2020) demonstrated that transformational leadership significantly influences the implementation and success of PLCs in Malaysian elementary schools. Similarly, Luyten and Bazo (2019) found that the relationship between transformational leadership and PLC development is stronger than that between transformational leadership and general teacher learning. These findings suggest that the principal's leadership style is more impactful in fostering collective learning environments than in facilitating isolated teacher development efforts.

Nevertheless, a gap remains in the literature. Most existing studies tend to treat the relationship between transformational leadership and PLCs in general terms, often focusing on correlation rather than on the specific mechanisms or processes through which leadership practices support the growth of PLCs. Furthermore, there is a lack of context-specific research in Indonesian elementary schools that explores how principals enact transformational leadership to facilitate PLC development at the grassroots level. Previous research has rarely delved into how the four dimensions of transformational leadership—idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration—manifest in the everyday practices of principals leading professional communities of teachers.

This study seeks to address that gap by investigating the implementation of transformational leadership and its direct role in cultivating Professional Learning Communities at SDN 019 Pabaki Bandung, a public elementary school in West Java, Indonesia. Unlike prior studies, this research aims to provide a descriptive and nuanced analysis of how school principals utilize transformational leadership to support teacher learning, improve pedagogical quality, and build a collaborative school culture. By focusing on the specific practices, strategies, and challenges encountered in this setting, the study contributes novel insights into how leadership shapes teacher collaboration and professional growth in real-world school contexts.

Ultimately, this study offers practical implications for policymakers, school leaders, and educators interested in strengthening professional development through school-based initiatives. It also supports national efforts to enhance educational quality through sustainable teacher capacity-building frameworks. The study is expected to demonstrate that transformational leadership is not only a theoretical ideal but a practical model for driving grassroots educational reform. Based on the background and identified research gap, the following research questions are formulated:

- (1) What is the description of the implementation of transformational leadership by the school principal in elementary schools?
- (2) What is the description of the development of the Professional Learning Community in elementary schools?
- (3) How is transformational leadership implemented in the development of the Professional Learning Community in elementary schools?

Method

This study employed a qualitative case study design to explore the implementation of transformational leadership and the development of Professional Learning Communities (PLCs) in an elementary school context. Case study is particularly well-suited for understanding and interpreting complex social phenomena within their natural settings (Candra Susanto et al., 2024). By emphasizing descriptive and exploratory approaches, this method enables researchers to uncover the underlying meaning of behaviors, interactions, and organizational practices. The study was conducted at SDN 019 Pabaki Bandung, an elementary school located in Bandung City, West Java province of Indonesia. The choice of this setting allowed for direct observation of leadership practices

and collaborative teacher initiatives within their authentic environment. The qualitative approach also facilitated comparisons between various variables observed in the field, offering a comprehensive view of the relationships among leadership style, school culture, and professional development activities.

Participants in this study were selected using purposive sampling, a technique commonly used in qualitative research to identify informants who possess deep knowledge and experience related to the study's focus (Campbell et al., 2020). The participants included the principal (coded as N1_KS), one vice principal responsible for curriculum (N2_G), and one classroom teacher (N3_G). These individuals were chosen based on specific criteria, particularly their direct involvement in school leadership and instructional development. According to Sugiyono (2017), purposive sampling ensures that those selected can provide rich, relevant, and insightful data that align with the study's objectives. The selected participants were considered capable of articulating detailed information regarding the implementation of transformational leadership and its influence on the school's PLC practices.

To collect data, the study utilized three main instruments: interviews, observations, and document analysis. Interviews served as the primary data collection method, offering in-depth insights into participants' perspectives and experiences related to leadership and PLC practices. These were complemented by structured observations, which involved systematically observing behaviors, interactions, and school routines directly in the field. Observational data were gathered through visual and sensory engagement, including stages of preparation, real-time recording, and subsequent analysis. Additionally, document analysis was conducted to triangulate findings and provide contextual evidence. This included reviewing school documents such as meeting notes, program plans, teacher reflections, and relevant institutional records (Morgan, 2022). The combination of these instruments ensured comprehensive and credible data collection.

Data were analyzed using a systematic qualitative approach based on the model proposed by Miles, Huberman, and Saldana. This involved three concurrent processes: data condensation, data presentation, and conclusion drawing and verification. First, raw data were reduced and organized into meaningful categories to allow focused analysis. This was followed by the presentation of data in visual or narrative formats to facilitate the identification of emerging themes and patterns. Finally, conclusions were drawn and verified through iterative analysis and triangulation across different data sources. As emphasized by Hu (2021), qualitative data analysis requires synthesizing diverse forms of evidence, recognizing essential elements, and interpreting findings to generate meaningful insights. The use of triangulation and inductive reasoning enhanced the credibility, dependability, and trustworthiness of the results.

Results

The results section explains findings based on answers obtained from sources using various techniques, including interviews, observations, and documentary studies. Interviews provide detailed perspectives and experiences, observations offer additional insights into behaviour and context, and documentary studies use secondary data to support and contextualise the findings. Integrating these methods gives the researcher a comprehensive and detailed understanding of the phenomenon or issue studied.

The implementation of transformational leadership by the principal

The principal's transformational leadership in SDN 019 Pabaki Bandung positively impacted the school by promoting a shared vision, enhancing teacher communication, and fostering collaboration. The principal's clear and inspiring vision, collaborative goal-setting, and delegation of decisions encouraged innovation in teaching methods and improved the quality of learning and commitment to educational goals. This approach

developed a professional learning-oriented culture and supported teacher creativity and ownership of academic outcomes. Figure 1 presents transformational Leadership with Idealized Influence dimension indicator.

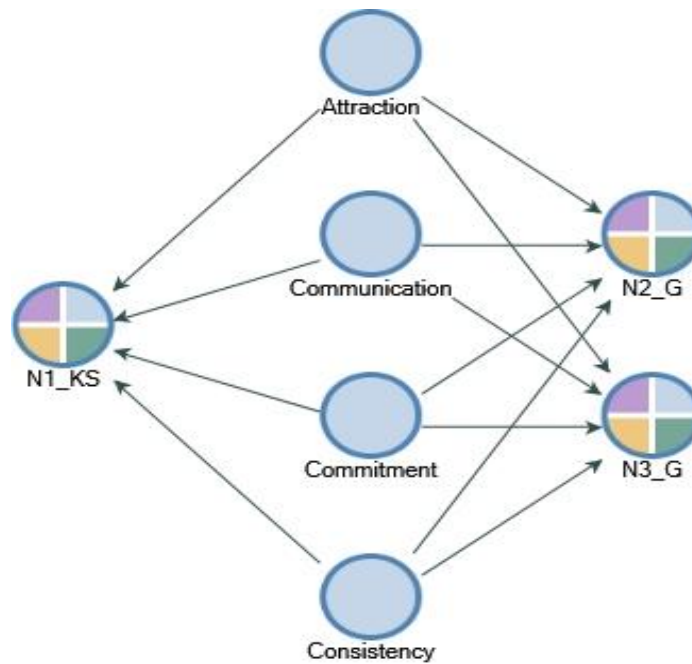


Figure 1. Transformational leadership with idealized influence dimension indicator

Several views from the informants also support the above during the interview process conducted by researchers at SDN 019 Pabaki Bandung. As stated,

"I not only give awards yearly but also involve everyone in the committee for each event, such as MPLS, PPDB, and other big day activities, which always change committees. From there, their performance, enthusiasm, and hard work make the activity successful. Usually, I will give an award, even though it is not big, but they feel appreciated. This is not a wage but an award." (N1_KS).

In the interview, the principal displayed transformational leadership through charismatic motivation and inclusive practices. The principal boosted teacher motivation and appreciation by giving modest annual awards and involving teachers in event committees, fostering a sense of value and commitment to the school's success, which enhanced their engagement and loyalty. This was supported by the opinion of a teacher who was also the treasurer.

"In meetings, the principal always gives praise when giving awards to teachers. In fact, there are teachers who have received gifts from the principal as an example for other teachers." (N3_G)

The principal regularly praises and rewards outstanding teachers, reinforcing their leadership and embodying transformational leadership principles. This approach motivates recipients, inspires others, and fosters a positive school environment. By emphasizing emotional and motivational aspects and academic achievements, the principal effectively communicates and influences teachers' attitudes and behaviours, enhancing the overall school atmosphere. This is in line with the statement from the principal, namely,

"I don't require formal meetings but prefer a heart-to-heart approach. For example, I invite one level to gather in my room and ask them about what they need and want. I write it down for the school program. This approach turns out to be more effective than a general meeting. The responses can vary when I convey something in a general meeting and ask who wants to comment or express an opinion. However, meeting directly per level is more effective and flexible, and they are more courageous in expressing their aspirations." (N1_KS)

The principal favours small-scale meetings for personal communication, addressing teachers' needs and aspirations. The principal fosters ownership, strengthens relationships, and encourages participation by asking direct questions and acting on staff input. This approach exemplifies idealised influence in transformational leadership, as the principal acts as a respected role model and inspires staff engagement and idea-sharing. This is following the statement from the teacher, who is also the treasurer,

"The principal always prepares a work program together with the team, for example, with the curriculum, student, or coordination teams. In addition, the principal also conducts socialization with teachers, students, and parents. There is a school committee here, so the principal routinely holds special monthly meetings with the parent representative committee in each class." (N3_G)

The principal holds monthly meetings with the parent representative committee to involve them in school life and gather their input. This approach reflects idealized influence in transformational leadership by emphasizing transparency, participation, and appreciation, strengthening relationships with the school community, and demonstrating a commitment to an inclusive and prosperous environment. According to a teacher and vice principal for student affairs,

"What the principal shows about the commitment and integrity that he instils in teachers or subordinates is through her attitude. The principal does not dictate but sets an example. For example, she always arrives earlier than the teachers. Sometimes, if a teacher arrives late, the principal is already in class first, so the teacher is surprised. So, the principal does not dictate it should be like this or that, but always sets an example through real actions." (N2_G)

The principal sets high standards through actions like punctuality, demonstrating a commitment to integrity and reinforcing idealized influence in transformational leadership. By serving as a role model, the principal inspires staff, builds trust, and strengthens relationships within the school community. This consistency in behaviour highlights the importance of integrity as a core value that all school members should uphold.

"The principal cares about environmental cleanliness. Every morning, he always talks in front of the children to bring tumblers. In addition, we are also given special bowls and tumblers to use when buying snacks. According to the mother, we must set an example for the children. Therefore, teachers are also facilitated to set an example for students. The principal has told the children about the waste reduction program and the importance of buying snacks using their tumblers. The principal bought bowls and tumblers for us so that we can set a good example." (N2_G)

The principal not only voices concern for environmental cleanliness but also consistently implements these values in daily life at school. For example, the principal provides a direct example and real action by introducing a policy of using unique tumblers and bowls. This reflects a commitment to reducing waste and educating about cleanliness, encouraging teachers to instil these values in students. In the context of idealized influence, the principal becomes a role model and source of inspiration, strengthens relationships with all school community members, and creates a strong foundation for the

growth and development of an environmentally responsible school culture. Figure 2 shows transformational leadership with inspirational motivation dimension indicator.

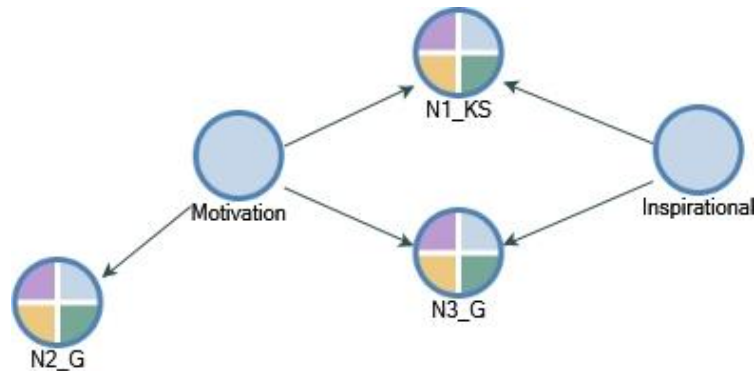


Figure 2. Transformational leadership with *inspirational motivation* dimension indicator

Based on the research results conducted by the researcher, there are several views from the informants of SDN 019 Pabaki Bandung. As stated by the principal as follows,

"Every year, I award teachers whose performance is considered good. As the principal, I must observe everything from how they do their assignments, their responses, and their behaviour to their attitudes. Awards like this have been routinely given, even since the COVID-19 pandemic. I also award teachers who respond well when asked to create teaching modules." (N1_KS)

At SDN 019 Pabaki Bandung, the principal's transformational leadership is evident through strong inspirational motivation, notably by awarding and recognizing staff for excellent performance. The principal annually observes and acknowledges teachers' efforts, including during the COVID-19 pandemic, rewarding those who developed teaching modules. This recognition has motivated teachers to maintain high standards and contributed to a positive school culture, demonstrating a commitment to supporting professional development. Then, the principal added again that,

"In the past, there were three teachers who were awarded because they showed good commitment in implementing the Merdeka Curriculum." (N1_KS)

The awards given to three teachers committed to the Independent Curriculum reflect the principal's transformational leadership. By recognizing and appreciating their efforts, the principal motivates and supports individual development, fostering an environment that values innovation and hard work. This approach enhances a positive, collaborative school culture, encouraging teachers to continue learning, contribute effectively, and improve professionalism to achieve better educational goals. This is also supported by the opinion of a teacher who serves as the vice principal for student affairs, namely,

"Teachers who teach continuously, always use good media and truly inspire other teachers are awarded yearly. Yesterday, three teachers received awards from the mother in the form of certificates and prizes. In addition, we also often hold character-building activities, such as going on trips as a form of appreciation for teachers." (N2_G)

The principal uses transformational leadership, emphasizing Inspirational Motivation to motivate teachers. Annual awards, including certificates and prizes, recognize teachers' effective and continuous teaching, with recent awards for

implementing the Merdeka Curriculum. In addition to formal recognition, the principal organizes group outings to foster team spirit and collaboration. This approach provides appreciation and inspires teachers to innovate and improve, creating a supportive environment for continuous educational advancement.

"For rewards, the principal always gives awards to children, for example, to those who excel and win competitions." (N3_G)

At SDN 019 Pabaki Bandung, rewarding students for achievements like winning competitions reflects a transformational leadership approach. This strategy uses positive and consistent praise to motivate students, reinforcing the value of achievement and fostering a competitive, yet supportive educational environment. It highlights hard work and effort, aiming to appreciate individual successes while building a spirit of achievement and improving overall academic quality. Figure 3 depicts transformational leadership with intellectual stimulation dimension indicator.

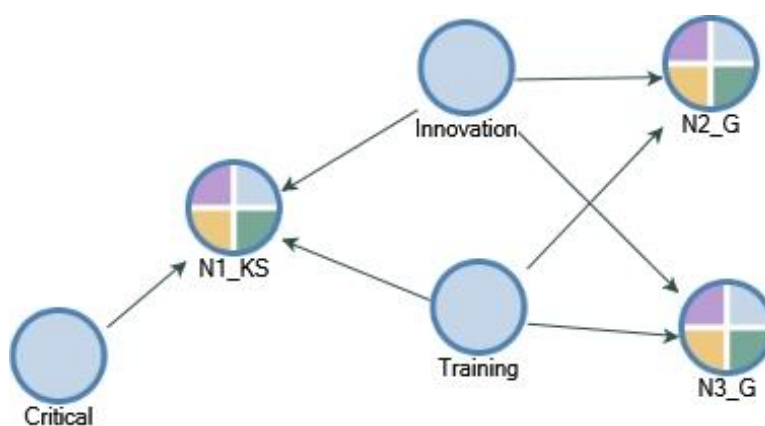


Figure 3. Transformational leadership with intellectual stimulation dimension indicator

The principal fosters intellectual stimulation by encouraging teachers to introduce new ideas in the curriculum, teaching methods, and school management, which enhances educational relevance and prepares students for the future. This approach promotes critical thinking, supports open discussions, and evaluates existing practices to improve decision-making and teaching quality. Additionally, the principal identifies professional development needs and provides high-quality training, enhancing staff competencies and their ability to adapt to educational changes. This is what the principal said,

"Principal Assistants are always invited to coordinate and confirm to support the school program that must be implemented. Their voices are recorded, such as input on the curriculum that must be heard by the student team, facilities and infrastructure, and public relations." (N1_KS)

The principal's involvement as the Assistant Principal in coordinating various school programs shows a commitment to intellectual stimulation and collaboration. The principal promotes critical thinking and innovation by valuing and documenting the Assistant Principal's contributions. This method enhances decision-making, strengthens school culture, and fosters a dynamic, adaptive educational environment focused on learning and intellectual growth for teachers. In this case, in line with the teacher's opinion that,

"The principal will ask teachers to attend seminars, training, and coaching as well as PMM according to the teacher's shortcomings. For example, when I was supervised and found to

have shortcomings in exploring children's questions, the mother gave notes. She asked me to attend a seminar or webinar exploring children's questions." (N2_G)

The principal is committed to individual teacher development by providing supervision, evaluations, and support for professional growth activities like seminars and coaching. This emphasis on development nurtures critical and innovative thinking, improving teaching quality and creating a dynamic, progressive educational environment aligned with transformational leadership principles. Figure 4 demonstrates transformational Leadership with Individualized Consideration dimension indicator

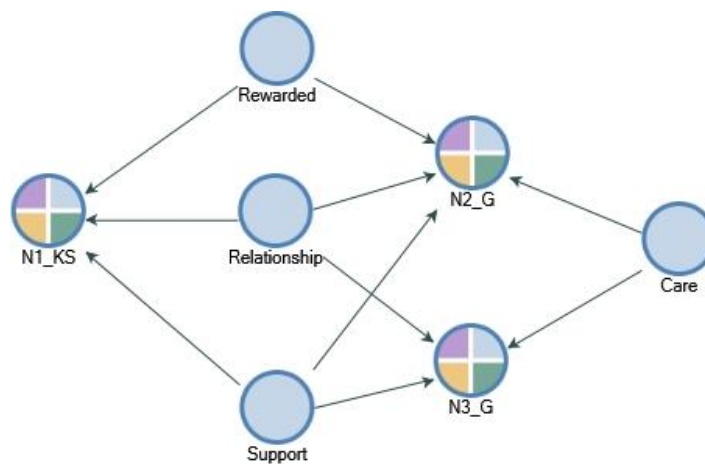


Figure 4. Transformational Leadership with Individualized Consideration dimension indicator

The principal of SDN 019, Pabaki Bandung, consistently recognizes and supports staff contributions and professional development. By building trust and empathy, the principal creates an environment where individuals feel valued and supported, strengthening motivation and fostering collaborative, sustainable achievement of school goals. This can be seen from the principal's opinion, namely,

"I don't require formal meetings. I prefer a heart-to-heart approach, such as inviting one level to gather in my room and asking them about their needs and desires. I will note these things for the school program. This approach turns out to be more effective than meetings as a whole." (N1_KS)

Holding informal meetings where each teacher can speak directly with the principal demonstrates genuine respect for individual contributions and needs. This approach ensures that staff ideas and needs are incorporated into the school program, boosts teacher ownership and engagement, and fosters an environment where each person feels valued and personally cared for by school leadership. The principal also said,

"When ideas come from teachers, I always appreciate them. The ideas must come from the bottom first and then be responded to well. Teachers will feel more responsible because the idea came from them rather than if I proposed it." (N1_KS)

The principal emphasizes valuing and supporting teachers' ideas, allowing individual contributions and creativity to thrive. By involving teachers in decision-making, the principal enhances their sense of ownership of school initiatives, building greater responsibility and ensuring their contributions are recognized and appreciated in driving positive change. The principal's statement that supports this,

"I divide the Assistant Principal's Work into four parts: Facilities and Infrastructure, Curriculum, PPID Public Relations, and Student Affairs. The four Assistant Principals are always invited to coordinate and confirm to support the school program that must be implemented. Their input is recorded, such as wishes related to the curriculum that students and Facilities and Infrastructure and Public Relations must hear. Thus, when compiling the school budget program, they help, so there is no difficulty in including the program." (N1_KS)

The principal emphasizes collaborating with the Assistant Principal across infrastructure, curriculum, public relations, and student affairs to enhance coordination and efficiency in school programs and budgets. Involving the Assistant Principal in budget planning ensures data-driven, broadly supported decisions. The principal also values recognizing individual team members' characteristics and adjusting the leadership approach to build productive relationships, making teachers feel valued and supported while facilitating their professional development. The statement from the teacher that promotes this,

"There are so many teachers in this school, but the principal can understand the character of each teacher. Mom knows how to behave with me and other teachers differently, so the principal pays attention to each teacher's character." (N2_G)

In addition, from the side of the relationship between the principal and students shows an attitude that is focused on students' academic development and the development of student potential through activities outside the classroom. The opinion of the teacher shows this,

"In our school, there are many extracurricular activities. Your leadership is evident in arousing students' interests and talents. When there are competitions, you prepare for them well in advance, even up to a year in advance." (N2_G)

The principal's approach aligns with the Independent Curriculum principles by emphasizing holistic student development and supporting extracurricular activities. This approach fosters student exploration of interests and creates a learning environment that supports contextual and participatory learning. The principal also focuses on the welfare of teachers, students, and the physical school environment, including plant care, to enhance the overall learning experience. The teacher's statement that supports this,

"The principal even looks for a special person to take care of the plants at school. If it is assigned to the school guards, who are only two men (actually, there are three, but one person went home), their tasks are already very many. So, school plants need someone special to take care of them." (N3_G)

The principal understands the importance of caring for the school's physical environment by separating caring for plants from other tasks and showing concern for maintaining the school environment. In addition to focusing on formal education, the principal creates a physically and psychologically supportive environment, builds strong relationships with teachers and students, and develops the school as a comfortable and conducive place for learning and growth.

Professional learning community development at elementary school

The principal plays a central role in guiding this process, while teachers actively ensure that planning leads to effective results and continues to reflect continuous improvement. The principal, namely, expressed this,

"Yesterday, I saw the PLC in compiling the grids for the end-of-year assessment. Last week, the grid collection was carried out with the curriculum coordinator. I will check the grids made by the teachers and give them the freedom to determine the form of questions,

whether per project, written assessment, or online. The important thing is that they know clearly what the children must achieve and how to measure it." (N1_KS)

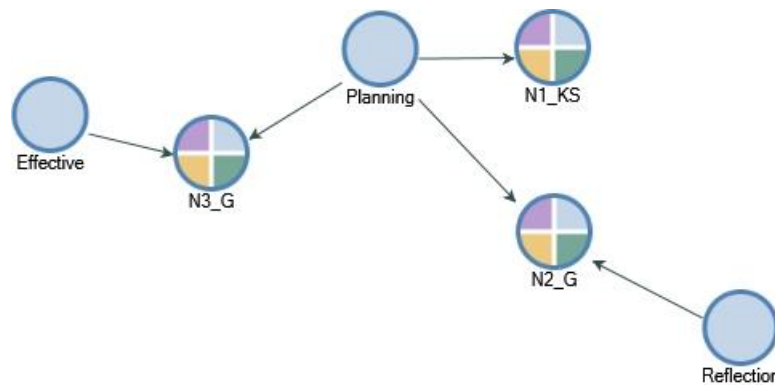


Figure 5. Overview of Professional Learning Community Development in Effective, Planning, Reflection Indicators

The principal emphasised the role of teachers in creating the end-of-year assessment grid through the Teacher Working Group. This approach enhances teacher responsibility and ownership of the learning process. Teachers can select assessment methods—projects, written or online—that suit learning needs and conditions, provided they align with learning objectives and accurately measure student achievement. This is also in line with the teacher's opinion, namely,

"The form of activity is usually a documented discussion in a certain room. There is an attendance list, minutes, photos, and products produced. For example, last week during the PLC, we made questions for the end-of-year assessment. If not, we usually compile a teaching module for the next week. Every PLC must produce a product that can be accounted for." (N3_G)

Principals who allow teachers to choose their teaching methods foster creativity and professionalism. This is evident in PLC activities, where teacher collaboration produces high-quality teaching materials. Granting directed freedom supports innovation and aligns teacher initiatives with educational goals, demonstrating the principal's trust in their professional abilities. This is also in line with the opinion of another teacher, namely,

"Before starting learning at the beginning of the school year, we hold a meeting to prepare an annual program, ATP (Learning Objective Flow), CP (Learning Achievements), and TP (Learning Objectives). In addition, we also determine the learning modules that will be used." (N2_G)

The principal's dedication to involving teachers in planning fosters collaboration, knowledge sharing, and support in curriculum design. Teachers feel valued as their contributions are recognized. PLC meetings provide a platform for detailed discussions on learning objectives, teaching strategies, and assessment methods, promoting reflection and continuous improvement. Figure 6 shows overview of Professional Learning Community Development in Program Indicators, End of Year Assessment, Administration, Teaching Modules, Problem Solutions

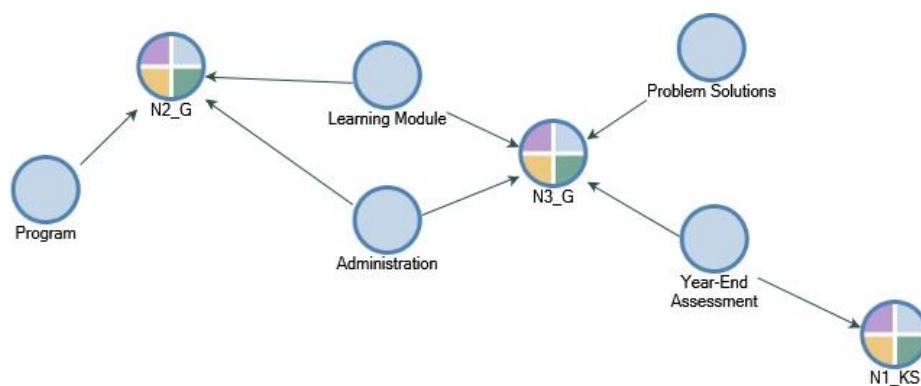


Figure 6. Overview of Professional Learning Community Development in Program Indicators, End of Year Assessment, Administration, Teaching Modules, Problem Solutions

A Professional Learning Community (PLC) concept shows that the principal's leadership is critical in creating an environment that supports teacher professional development. As the teacher (N2_G) stated, preparing annual programs and teaching modules is an essential step in PLC, where teachers gather to discuss and design learning programs according to student needs and curriculum objectives. This is shown through the interview conducted, namely,

"Later, before we start learning at the beginning of the school year, we will hold a meeting to prepare the annual program, Learning Objective Flow, Learning Achievements, and Learning Objectives." (N2_G)

"We hold PLC per class first, such as for class 1, then classes 2, 3, 4, 5, and 6. After completion and agreement per level, we will hold PLC again per phase, such as phases 1 and 2, 3 and 4, and 5 and 6, to match related programs." (N2_G)

Annual program planning is conducted systematically before the new school year. Teachers create yearly programs outlining Learning Objective Flow, Learning Outcomes, and Learning Objectives through PLC meetings. Class-level PLC meetings involve teachers designing specific programs and teaching modules, while level-wide PLC meetings align programs between adjacent classes to ensure continuity and consistency of materials. A statement from another teacher namely supports this,

"Yesterday, I participated in PLC to create questions for the end-of-year assessment. If not, we usually compile teaching modules for the next week. Every PLC must produce products like that." (N3_G)

Comprehensive and step-by-step planning provides clear guidance for teachers and fosters collaboration, enhancing the quality of teaching modules. This results in a structured, aligned, and ready-to-implement learning program that supports educational goals. Additionally, within the PLC framework, it is crucial to help teachers complete and periodically upload necessary administrative tasks according to their feedback. As the teacher (N2_G) expressed,

"With the PLC, we can discuss with each other because there is much to be uploaded. We discuss this with the principal and colleagues. For grade 5, we have enough of what needs to be uploaded, including workshop certificates." (N2_G)

PLC is a forum for teachers to discuss administrative requirements, such as uploading essential documents. Discussions involve the principal and colleagues to ensure all requirements are timely. With this collaboration, especially in grade 5, documents can

be uploaded and organized correctly, making PLC an essential mechanism in supporting the smooth running of school administrative processes.

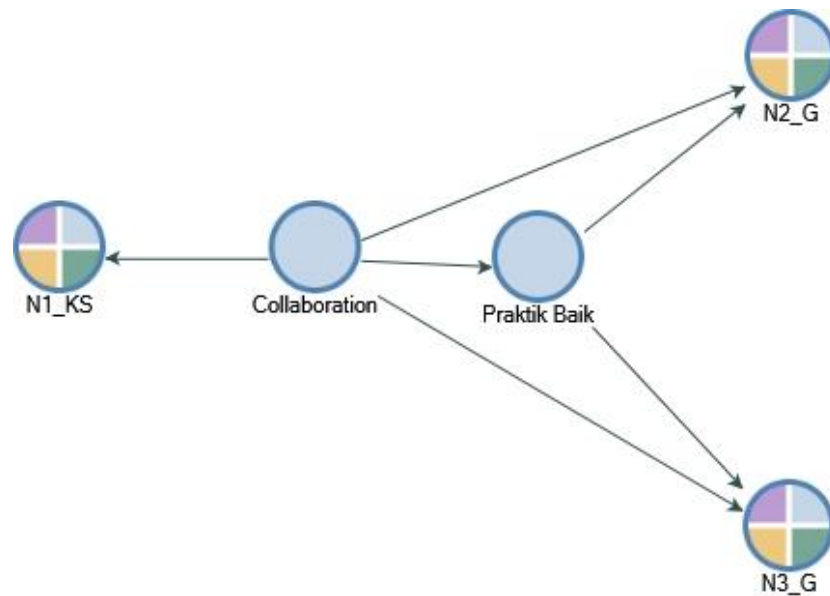


Figure 7. Overview of Professional Learning Community Development in Collaboration indicators and Good Practice aspects

Collaboration between the principal (N1_KS) and teachers (N2_G and N3_G) in creating and sharing good practices demonstrates the principal's central role in facilitating cooperation. As expressed in her statement, the principal encourages teachers to work together, creating a more effective and productive learning environment.

"Now, in the Independent Curriculum, I see that the main characteristic is collaboration. So, this collaboration is an important moment to be raised in the PLC. PLC should prioritize collaboration more." (N1_KS)

In the interview results, the principal and teachers were actively involved in the PLC, emphasizing cooperation and collaboration. Teachers (N2_G and N3_G) were engaged in discussions and shared good practices that they had implemented in the classroom. This is supported by the teacher's statement in the PLC indicator as a place for coaching for teachers, namely,

"Yes, we feel the benefits because friends have received training that I have not received so that we can share knowledge. In addition, if I face problems in class, such as with children or parents, I can ask other friends for input. So, we collaborate." (N2_G)

This statement shows how PLC becomes a place where teachers can share knowledge and experiences they gain from various trainings and provide joint solutions to problems faced in the classroom. Another teacher's statement, namely also supports this,

"The impact is, if I don't understand something, I can learn it myself first. In addition, I can also share good practices because there is a demand to share with other teachers. So, this PLC is a beneficial forum for that." (N3_G)

This was also added to the teacher's statement (N2_G), namely,

"Besides discussing programs that will be taught to children, PLC is often used to share good practices. In PMM, we are asked to carry out good practice actions among teachers. For example, if I use the Quizizz application, we learn together, and I teach friends who are not familiar with the application." (N2_G)

Teacher (N2_G) described PLC as a forum for sharing good practices and innovative methods such as Quizizz. PLC supported collaborative and practical action related to PMM, with the teacher (N2_G) teaching technology to their colleagues, reflecting a commitment to using technology and sharing knowledge in professional development.

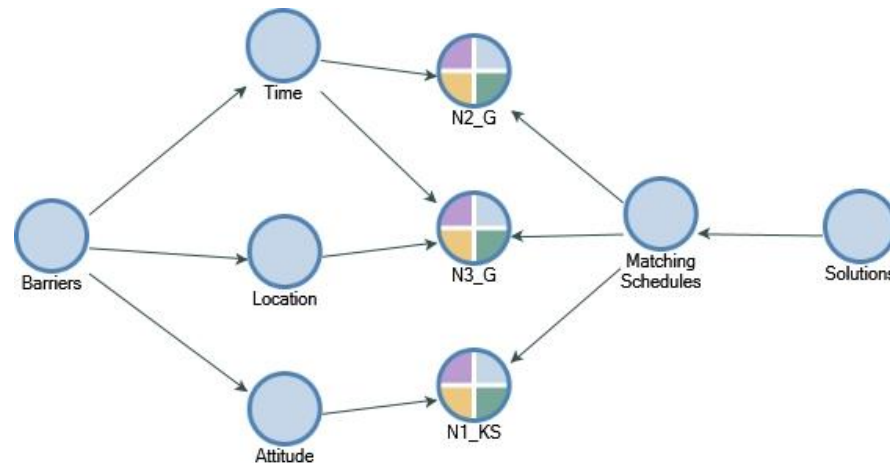


Figure 8. Overview of Professional Learning Community Development in the Obstacles and Solutions Indicators

PLC coaching at SDN 019 Pabaki Bandung faces three main obstacles: location that affects accessibility, limited time to schedule meetings, and teachers' attitudes that lack commitment or interest. These obstacles affect the effectiveness of communication and coaching implementation. These indicators were stated directly by the informants (N3_G, N2_G, and N1_KS), namely,

"In addition, because the classes are full, there are often no empty places for PLC. We sometimes have to use the library or teacher's room because there are no classrooms available." (N3_G)

The limited space for PLC meetings causes location constraints at SDN 019 Pabaki Bandung. Full classrooms require participants to find alternative venues, such as the library or teacher's lounge, which are not ideal. This affects the consistency, comfort, and productivity of the meetings. Proposed solutions include more flexible scheduling, using multifunctional spaces, or providing a dedicated space for future PLC activities.

Regarding time, this obstacle indicator is also an important aspect, based on what was expressed by the teacher (N2_G),

"There are indeed obstacles. Previously, classes were divided into 5A, 5B, 5C, 5D in the morning, and 5E, 5F, 5G, 5H in the afternoon. The difficulty was that some teachers had not arrived or rushed home, so the problem lay in time. It has been combined, but some teachers still cannot attend due to other interests." (N2_G)

The same thing was also expressed by the teacher (N3_G),

"The obstacle is often a clash of schedules because even though we are at the same level, we are on two different shifts. Adjusting the schedule to gather all the teachers requires extra effort. Usually, we do it on Saturdays, but if it is urgent, we do it on weekdays. Making good use of the break time is one of the main challenges." (N3_G)

Scheduling PLC meetings is challenging due to teachers' differing work shifts (morning and afternoon), especially for weekday urgent meetings. Limited break time between shifts complicates coordination and participation. Solutions include flexible or virtual meetings to ensure all members can participate effectively. Additionally, interviews revealed that attitudes also impact the effectiveness of PLC development at SDN 019 Pabaki Bandung, highlighting the need to address this factor. The principal stated that,

"Obstacles are always there, such as the attitude of some teachers who are not respectful or give certain reasons." (N1_KS)

Negative attitudes from some teachers, such as indifference or lack of respect, can impede PLC collaboration and goal achievement. Causes might include disagreements or personal interests. Increasing awareness and commitment to PLC goals is essential to address these issues. PLC coaching is proposed to improve collaboration and learning quality, aiming for a more effective and positive PLC experience at SDN 019 Pabaki Bandung. With this, the speakers (N3_G, N2_G, and N1_KS) agreed that an effective solution to overcome these obstacles is to match the schedule as stated by the principal (N1_KS),

"The way is to divide the schedule according to level. In the past, there was a division like 5A, 5B, 5C, 5D in the morning and 5E, 5F, 5G, 5H in the afternoon. For this school year, I am thinking of implementing an odd-even system with a mutual agreement on the curriculum so that per level, for example, only for grade 4, can be adjusted." (N1_KS)

Careful planning and proactive communication are essential to the PLC process. By planning meeting schedules well in advance, teachers have ample time to manage their commitments, reducing absenteeism. Communication and collaboration in scheduling through groups help teachers coordinate and find suitable times and meeting places.

Transformational leadership implementation in professional learning community development

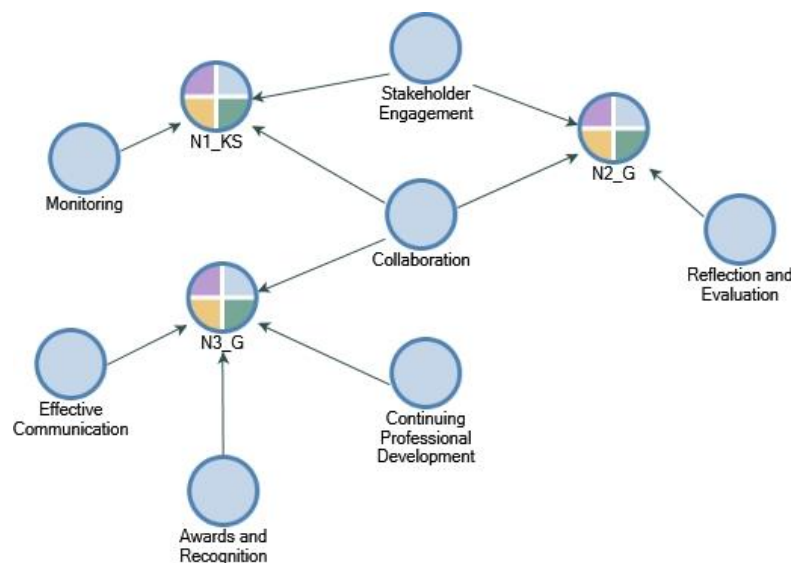


Figure 9. Overview of Professional Learning Community Development in the indicators of Monitoring, Stakeholder Involvement, Collaboration, Reflection and Evaluation, Communication, Continuous Professional Development, Awards and Recognition

SDN 019 Pabaki Bandung's principal exemplifies transformational leadership through Intellectual Stimulation and Idealized Influence. By continuously inspiring, guiding, and actively monitoring PLC implementation, the principal ensures that activities adhere to planned objectives and contribute to improving the learning process. This is known through interviews, namely.

"The principal actively monitors the PLC and compiles the end-of-year assessment grid. He collects the grid with the curriculum coordinator. He gives teachers the freedom to determine the form of questions - whether projects, written, or online - as long as they can measure student achievement accurately. The principal does not determine one assessment form because each Learning Achievement has different characteristics." (N1_KS)

The principal at SDN 019 Pabaki Bandung actively monitors PLC activities, such as assessment grid preparation and submission reviews, while allowing teachers flexibility in choosing assessment methods—projects, written or online—aligned with learning objectives. The principal inspires and connects stakeholders by applying Inspirational Motivation and Idealized Influence, enhancing communication and collaboration. This approach shows appreciation for contributions, supports innovation, and increases the effectiveness of the PLC, ensuring all stakeholders feel valued and involved in the learning process. The principal (N1_KS) also explained that,

"The scheduled PLC is held at least once a month. However, meetings can be held more than once if many things need to be discussed in one month. The schedule is determined by the teachers at each level because Pabaki is a large school with many teachers. Therefore, each teacher working group is comprised of around eight people per level." (N1_KS)

In collaboration, the principal uses Individualized Consideration and Inspirational Motivation dimensions to encourage teachers to collaborate and share knowledge and experiences. This allows teachers to work together in designing and implementing learning activities and exchanging experiences. This is reinforced by the existence of an excellent practice-sharing program in the PLC, as explained by one of the teachers (N2_G):

"Besides discussing programs that will be taught to students, PLC is often used to share good practices. For example, PMM asks us to carry out good practice actions with fellow teachers. For example, I use the Quizizz application, and we learn together, with me teaching those who are not familiar with the application." (N2_G)

At SDN 019 Pabaki Bandung, collaboration extends beyond formal meetings to include tools like Quizizz and supports professional development. PLC aids in mastering technology for E-Performance and PMM administration. Monthly pre-PTS and ASAT meetings allow for reflection, evaluation, and adaptation. The principal's use of Individualized Consideration and Intellectual Stimulation enhances ongoing professional development, improving teaching practices and student outcomes. Effective communication, facilitated by a routine PLC schedule, relies on Inspirational Motivation and Idealized Influence to convey vision and goals and motivate PLC members. This is as stated by the teacher (N3_G),

"What is more effective here is PLC because we have a routine PLC schedule per level almost every week. For example, for grade 1, there are eight classes with eight teachers, so it is enough to form one PLC group. Likewise, for grade 6, PJOK, and PAI, each has a PLC group of 8 people. Each subject or level has its own PLC group. If we need to combine, we also follow the demands in PMM." (N3_G)

The principal at SDN 019 Pabaki Bandung conducts weekly PLC meetings divided by grade level or subject, enabling targeted discussions and in-depth communication. This regular schedule allows for progress evaluation, feedback, and adjustments based on

PMM demands. The system supports open communication, addresses specific needs, and recognises teacher achievements through praise or awards. The principal uses Individualized Consideration and Intellectual Stimulation to support ongoing professional development. This was expressed by a teacher (N3_G) that,

"In meetings, Mother always gives praise and appreciation to teachers. In fact, Mother once gave gifts to teachers who were good examples for their colleagues." (N3_G)

The principal at SDN 019 Pabaki Bandung enhances teaching quality by actively praising and awarding teachers, boosting morale and fostering a positive culture of appreciation. This approach, embodying dimensions of inspiration, idealized influence, intellectual stimulation, and individual consideration, supports collaboration, stakeholder involvement, and professional development. Through effective monitoring and communication, the principal's transformational leadership aims to improve teaching and learning via a robust PLC.

Discussion

At SDN 019 Pabaki Bandung, the principal's transformational leadership is clearly reflected in the dimensions of Idealized Influence and Inspirational Motivation, which have significantly influenced teacher morale and institutional culture. The principal model integrity, commitment, and professionalism—demonstrated through practices such as providing awards, joining teacher committees, and maintaining environmental cleanliness. These behaviors, rooted in exemplary conduct, align with [Waruwu et al. \(2020\)](#), who argue that idealized leaders inspire trust and loyalty. The principal also fosters effective communication through structured, level-specific meetings, allowing for individual engagement and constructive dialogue. Such practices reflect a deep understanding of the human aspect of leadership, which not only enhances teacher engagement but also nurtures a climate of mutual respect ([Agazu et al., 2025](#); [Kucharska & Rebelo, 2022](#)). Furthermore, small yet symbolic initiatives like waste reduction campaigns strengthen the school's collective identity and demonstrate the principal's role as a moral compass ([Helalat et al., 2023](#)). These leadership strategies contribute to a robust school culture, where teachers feel valued and empowered to contribute meaningfully to educational outcomes.

The principal's Inspirational Motivation is evident in the consistent use of recognition and awards to promote teacher engagement, especially under challenging circumstances such as the COVID-19 pandemic. Teachers who successfully adapted to the Merdeka Curriculum or demonstrated innovative practices were acknowledged, reinforcing the value of perseverance and creativity. This aligns with [Permatasari et al. \(2023\)](#), who emphasize the role of recognition in sustaining teacher motivation. Character-building programs and collaborative initiatives further reflect the principal's commitment to cultivating a professional, cohesive team. Such strategies are also supported by [Windasari et al. \(2022\)](#), who highlight that recognition not only boosts individual morale but also strengthens team dynamics and student performance. The deliberate use of symbolic rewards demonstrates the principal's understanding of motivational theory and its practical application in the school setting. By setting high expectations and encouraging teachers to achieve beyond standard requirements, the principal fosters a sense of shared purpose and professional pride within the school.

The principal's encouragement of Intellectual Stimulation and Individualized Consideration is evident in efforts to promote teacher innovation and personal growth. Teachers are empowered to explore new teaching methods, such as digital tools and differentiated instruction strategies aligned with the Merdeka Curriculum. The principal's involvement in planning and coordination, particularly through engagement with the vice principal and other staff members, exemplifies distributed leadership and strategic

support. Professional development opportunities—such as webinars, seminars, and in-house training—are consistently offered, reflecting a commitment to continuous learning. These practices echo the findings of Joen et al. (2022), who assert that transformational leadership enhances teacher motivation and creativity. Moreover, attention to individual teacher needs, capabilities, and feedback reinforces a nurturing and inclusive environment. This personalized approach to leadership aligns with the conclusions of Sugiarto and Farid (2024), confirming that individualized support can build stronger professional relationships and a more responsive educational culture.

The study also found that transformational leadership significantly enhances the planning and implementation of Professional Learning Communities (PLCs). At SDN 019 Pabaki Bandung, the principal serves as a facilitator, assigning responsibilities for curriculum planning while granting teachers autonomy in assessment design. Teachers take active roles in PLC processes, from lesson planning to reflection, documentation, and peer review. PLCs at the school serve not only as platforms for professional growth but also for solving instructional problems, aligning with Rahmayanti et al. (2024) and Maharani (2023). Barriers such as time constraints and facility limitations are addressed through flexible scheduling and adaptive space utilization, indicating a responsive and proactive leadership approach. The principal and teachers collaboratively explore innovations like the Quizizz application to enhance digital competence. The adaptive use of PLCs to support differentiated learning under the Merdeka Curriculum further illustrates how transformational leadership fosters inclusive, learner-centered practices. Overall, the synergy between transformational leadership and PLCs significantly contributes to school improvement.

The integration of all four dimensions of transformational leadership—Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration—into PLC development demonstrates the principal's comprehensive leadership approach. Regular monitoring, inclusive decision-making, and a structured communication strategy have ensured that PLCs are sustainable and impactful. The school principal motivates teachers to engage in professional development by allocating budgets for training and recognizing collaborative achievements. This mirrors the findings of Hidayat and Ibrahim (2023), who stress the importance of structural support in cultivating PLC success. Open channels of communication, coupled with regular PLC scheduling, provide a framework for honest feedback, evaluation, and improvement (Al Ubaid' & Trihantoyo, 2022). These strategies collectively foster a reflective culture in which teachers continuously refine their practice. The principal's leadership has not only supported the operational success of PLCs but also reinforced the broader educational reforms promoted by the Merdeka Curriculum. This suggests that transformational leadership, when aligned with national goals, can be a catalyst for meaningful institutional change.

Theoretically, this study extends the application of transformational leadership theory in the context of primary education by linking it explicitly to the formation and sustainability of Professional Learning Communities. It underscores the multidimensional influence of school leaders in nurturing collaborative cultures, facilitating professional development, and aligning school practices with national curricular reforms. Practically, the findings suggest that school principals must actively embody transformational leadership traits to effectively implement PLCs and respond to evolving educational demands. This includes fostering open communication, allocating resources for continuous learning, and recognizing teacher achievements. Moreover, the results emphasize the importance of distributed leadership and personalized support in overcoming contextual challenges such as limited infrastructure and time constraints. These insights provide valuable guidance for policymakers, school leaders, and teacher educators seeking to improve school performance and teacher capacity through integrated leadership and professional learning models.

Conclusion

This study reveals that transformational leadership, as practiced by the principal of SDN 019 Pabaki Bandung, plays a pivotal role in enhancing the implementation of Professional Learning Communities (PLCs). The principal demonstrates strong commitment and integrity through actions such as recognizing teacher achievements, participating in school committees, and promoting environmental responsibility—efforts that significantly boost teacher motivation and institutional loyalty. By offering awards and recognition, particularly during challenging times like the COVID-19 pandemic, the principal fosters a culture of collaboration and professionalism. Intellectual stimulation is promoted through the encouragement of innovative teaching methods and curriculum practices, while individualized support is evident in the provision of professional development opportunities, including seminars and webinars. Effective and structured communication further ensures that PLC activities are consistently conducted, evaluated, and improved. These findings suggest that transformational leadership not only strengthens PLC effectiveness but also aligns with national curriculum reforms such as the Merdeka Curriculum, contributing to overall improvements in teaching quality and continuous teacher development.

Despite its valuable insights, this study is limited by its focus on a single school, which may restrict the generalizability of its findings. The use of purposive sampling, while suitable for in-depth exploration, may also introduce bias by relying on selected informants. Future research should consider expanding the study to multiple schools across different regions to validate the findings in more diverse contexts. In addition, incorporating quantitative or mixed-method approaches could provide a more comprehensive understanding of the impact of transformational leadership on PLC implementation. Exploring student outcomes or the long-term sustainability of PLCs under various leadership styles may also offer deeper insights into the mechanisms through which leadership influences school improvement. These directions would further contribute to the theoretical development and practical application of transformational leadership in educational settings.

References

- Agazu, B. G., Kero, C. A., & Debela, K. L. (2025). Transformational leadership and firm performance: a systematic literature review. *Journal of Innovation and Entrepreneurship*, 14(1), 29. <https://doi.org/10.1186/s13731-025-00476-x>
- Al Ubaid', A. R., & Trihantoyo, S. (2022). Kepemimpinan Transformasional Kepala Sekolah Dalam Pembelajaran di Thailand. *Jurnal Inspirasi Manajemen Pendidikan*, 10(4), 745–757. <https://ejournal.unesa.ac.id/index.php/inspirasi-manajemen-pendidikan/article/view/55943>
- Bragg, L. A., Walsh, C., & Heyeres, M. (2021). Successful design and delivery of online professional development for teachers: A systematic review of the literature. *Computers and Education*, 166, 104158. <https://doi.org/10.1016/j.compedu.2021.104158>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. <https://doi.org/10.1177/1744987120927206>
- Candra Susanto, P., Yuntina, L., Saribanon, E., Panatap Soehaditama, J., & Liana, E. (2024). Qualitative Method Concepts: Literature Review, Focus Group Discussion, Ethnography and Grounded Theory. *Siber Journal of Advanced Multidisciplinary*, 2(2), 262–275. <https://doi.org/10.38035/sjam.v2i2>
- Cunha, M. N., Chuchu, T., & Maziriri, E. T. (2020). Threats, challenges, and opportunities for open universities and massive online open courses in the digital revolution.

- International Journal of Emerging Technologies in Learning*, 15(12), 191–204. <https://doi.org/10.3991/ijet.v15i12.13435>
- Dakhi, O., Jama, J., & Irfan, D. (2020). Blended Learning: A 21st Century Learning Model at College. *International Journal of Multi Science*, 1(7), 50–65. <https://multisciencejournal.com/index.php/ijm/article/view/92>
- De Jong, L., Meirink, J., & Admiraal, W. (2022). Teacher learning in the context of teacher collaboration: connecting teacher dialogue to teacher learning. *Research Papers in Education*, 37(6), 1165–1188. <https://doi.org/10.1080/02671522.2021.1931950>
- Hamdian Affandi, L., Hadi Saputra, H., & Ermiana, I. (2019). Workshop Penyusunan Rencana Pengembangan Komunitas Belajar Profesional Guru di Sdn 10 Mataram Dan Sdn 30 Mataram. *Jurnal Warta Desa*, 1(3), 317–325. <https://doi.org/10.29303/jwd.v1i3.75>
- Helalat, A., Sharari, H., Qawasmeh, R., Bani-Mustafa, A., & Alkhazali, Z. (2023). Revisiting the relationship between transformational leadership and employee psychological empowerment: A more holistic view using organisational culture. *Cogent Business & Management*, 10(3), 2254023. <https://doi.org/10.1080/23311975.2023.2254023>
- Hidayat, & Ibrahim. (2023). Kepemimpinan Kepala Madrasah Dalam Mengembangkan Mutu Sumber Daya Tenaga Pendidik. *Jambura Journal of Educational Management*, 4(2), 312–325. <https://doi.org/10.37411/jjem.v4i2.2698>
- Hu, M. (2021). Three-way data analytics: Preparing and analyzing data in threes. *Information Sciences*, 573, 412–432. <https://doi.org/10.1016/j.ins.2021.05.058>
- Jabbour Al Maalouf, N., El Achi, S., & Balouza, M. (2025). Transformational leadership, innovation, and performance of SMEs in Europe. *Cogent Business & Management*, 12(1), 2473683. <https://doi.org/10.1080/23311975.2025.2473683>
- Joel, S., Purnamawati, & Amiruddin. (2022). Pengaruh Kepemimpinan Transformasional Kepala Sekolah Terhadap Kinerja Guru Melalui Motivasi Kerja Guru. *UNM of Journal Technologycal*, 6(3), 1–12. <https://doi.org/10.26858/ujtv.v6i3.37535>
- Kucharska, W., & Rebelo, T. (2022). Transformational leadership for researcher's innovativeness in the context of tacit knowledge and change adaptability. *International Journal of Leadership in Education*, 1–22. <https://doi.org/10.1080/13603124.2022.2068189>
- Luyten, H., & Bazo, M. (2019). Transformational leadership, professional learning communities, teacher learning and learner centred teaching practices; Evidence on their interrelations in Mozambican primary education. *Studies in Educational Evaluation*, 60, 14–31. <https://doi.org/10.1016/j.stueduc.2018.11.002>
- McKay, A., MacDonald, K., & Longmuir, F. (2024). The emotional intensity of educational leadership: A scoping review. *International Journal of Leadership in Education*, 1–23. <https://doi.org/10.1080/13603124.2022.2042856>
- Maharani, S. (2023). Pengaruh Kepemimpinan Transformasional Kepala Sekolah Berbasis Self Efficacy dalam Meningkatkan Kinerja Guru MIN 12 Medan. *GECI: Jurnal Generasi Ceria Indonesia*, 1(1), 1–6. <https://doi.org/10.47709/geci.v1i1.2322>
- Morgan, H. (2022). Conducting a Qualitative Document Analysis. *Qualitative Report*, 27(1), 64–77. <https://doi.org/10.46743/2160-3715/2022.5044>
- Nii Akai Nettey, J., Osei Mensah, R., Asafo-Adjei, R., & Adiza Babah, P. (2024). Analyzing the challenges basic school teachers face in integrating Information and Communication Technology into teaching and learning activities in a developing country. *Cogent Education*, 11(1), 2364544. <https://doi.org/10.1080/2331186X.2024.2364544>
- Opara, I. J., Eke, M. O., & Iheanacho, C. U. (2024). Professional Learning Community (PLC) as an Effective Strategy for Improving Teachers' Professional Practice: Implications to Educational Planning. *Socialscientia Journal of the Social Sciences and Humanities*, 8(6), 39–45. <https://journals.aphriapub.com/index.php/SS/>

- Peel, K. L. (2021). Professional dialogue in researcher-teacher collaborations: exploring practices for effective student learning. *Journal of Education for Teaching*, 47(2), 201–219. <https://doi.org/10.1080/02607476.2020.1855061>
- Permatasari, F., Lestari, N. A., Christie, C. D. Y., & Suhaimi, I. (2023). Kepemimpinan Transformasional Kepala Sekolah Dalam Meningkatkan Mutu Kinerja Guru: Studi Meta Analisis. *Indonesian Journal of Humanities and Social Sciences*, 4(3), 923–944. <https://doi.org/10.24246/j.jk.2018.v5.i1.p66-73>
- Rahmatullah, A. S., Mulyasa, E., Syahrani, S., Pongpalilu, F., & Putri, R. E. (2022). Digital Era 4.0: The Contribution to Education and Student Psychology. *Linguistics and Culture Review*, 6(special issue), 89–107. <https://doi.org/10.21744/lingcure.v6ns3.2064>
- Rahmayanti, W., Oktavia, G. F., Nazurti, Indriani, & Sastrawati, E. (2024). Evaluasi Kompetensi Guru Penggerak Dalam Mewujudkan Kepemimpinan Pembelajaran. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 09(02), 1028–1041. <https://doi.org/10.23969/jp.v9i2.13373>
- Sirait, D. (2021). The Influence of Principal Transformational Leadership, Work Culture and Work Environment on Teacher Performance in State Senior High Schools throughout Banjarbaru City. *Journal of Advances in Education and Philosophy*, 5(12), 2523–2223. <https://doi.org/10.36348/jaep.2021.v05i12.004>
- Sugiarto, & Farid, A. (2024). Kepemimpinan Transformasional dalam Meningkatkan mutu Madrasah Ibtidaiyah. In *Jurnal Kependidikan*, 13(2), 1767–1780. <https://doi.org/10.58230/27454312.429>
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta, CV.
- Sun, H., Xie, Y., & Lavonen, J. (2024). Effects of the use of ICT in schools on students' science higher-order thinking skills: Comparative study of China and Finland. *Research in Science & Technological Education*, 42(2), 276–293. <https://doi.org/10.1080/02635143.2022.2116421>
- Triyono, U. (2019). *Kepemimpinan Transformasional dalam Pendidikan (Formal, Nonformal, dan Informal)*. Deepublish. <http://repository.um-palembang.ac.id/id/eprint/9007>
- Waruwu, H., Asbari, M., Purwanto, A., Agung Nugroho, Y., Agung Ali Fikri, M., Fauji, A., Wahid Imam Shobihi, A., Hulu, P., Sudiyono, R., Agistiawati, E., Rahma Dewi, W. (2020). The Role of Transformational Leadership, Organizational Learning and Structure on Innovation Capacity: Evidence from Indonesian Private Schools. *Journal of Education, Psychology and Counseling*, 2(1), 378–397. <https://ummaspule-journal.id/Edupsycouns/article/view/499>
- Windasari, Roesminingsih, E., & Trihantoyo, S. (2022). Pengaruh Kepemimpinan Transformasional Kepala Sekolah Terhadap Perubahan Organisasi Sekolah Dasar. *Kelola: Jurnal Manajemen Pendidikan*, 9(1), 99–110. <https://doi.org/10.24246/j.jk.2022.v9.i1.p99-110>
- Wiramarta, K., M., S., & Singaraja, K. (2023). Analisis Konten Komunitas Belajar Profesional Pendidik (PLC) Dengan Mode Virtual Dalam Mengembangkan Kompetensi Pendidik. *PINTU: Pusat Penjamin Mutu*, 4(2), 1–11. <https://jurnal.stahnmpukuturan.ac.id/index.php/jurnalmutu/article/view/3875>
- Yang, T., & Hong, X. (2024). The educational technology divide in glocalisation: A perspective for interpreting early childhood teachers' practices of ICT implementation. *Early Education and Development*, 35(1), 150–168. <https://doi.org/10.1080/10409289.2023.2231321>
- Zhen Ming, H., Abdullah, Z., Komariah, A., Achmad Kurniady, D., Kurniatun, T. C., Lukman Hakim, D., Thahir, M., & Nurlatifah, S. (2020). Transformational Leadership of Headmasters and Professional Learning Communities in Primary Schools, Manjung, Perak. In *International Journal of Innovation, Creativity and Change*, 12(5), 467–481. www.ijicc.net