

## Principal Leadership as a Driver of Early Childhood Teacher Competency: A Systematic Literature Review

Sinta <sup>1)</sup>, Asma Kurniati <sup>2)</sup>, Siti Misra Susanti <sup>3)</sup>, Ratna Said <sup>4)</sup>

<sup>1, 2, 3)</sup> *Early Childhood Education Teacher Education Study Program, Faculty of Teacher Training and Education, Universitas Muhammadiyah Buton, Indonesia*

<sup>4)</sup> *Education, Universitas Muhammadiyah Malaysia, Malaysia*

*Correspondent Authors: Asma Kurniati, Email: [asmakurniati@gmail.com](mailto:asmakurniati@gmail.com)*

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**Abstract.** Early childhood teacher competency remains a critical issue in efforts to improve the quality of early childhood education, particularly because teachers are central to children's cognitive, social, emotional, and moral development. Principal leadership is widely recognized as a strategic factor in strengthening teacher professionalism; however, empirical findings on its role in developing early childhood teacher competency remain fragmented across studies. This study aims to analyze the role of principal leadership in improving early childhood teacher competency and to identify leadership strategies that are most effective in supporting teacher professional development. This study employed a systematic literature review with a descriptive synthesis approach. The data sources consisted of nine peer-reviewed scientific articles indexed in SINTA 2 and SINTA 3, published between 2019 and 2025, and retrieved through Google-based searches. Article selection was conducted using predetermined inclusion and exclusion criteria, while data were analyzed through systematic content analysis to identify recurring themes, leadership roles, and strategic patterns. The findings indicate that principals contribute to teacher competency development through their roles as academic supervisors, motivators, facilitators, instructional leaders, transformational leaders, servant leaders, empowering leaders, and collaborative leaders. The most prominent strategies include academic supervision, technology-based supervision, teacher empowerment, continuous professional development, workshop facilitation, learning communities, performance evaluation, and the creation of a collaborative and supportive work climate. This study concludes that effective principal leadership substantially enhances early childhood teacher competency and contributes to improved learning quality. The novelty of this study lies in its systematic synthesis of leadership roles and strategies specifically within early childhood education. The findings contribute to educational leadership scholarship and provide practical guidance for policy formulation, school leadership development, and teacher competency improvement programs.

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**Keywords:** *Principal Leadership; Early Childhood Education; Teacher Competency; Academic Supervision; Systematic Literature Review*

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### INTRODUCTION

Early Childhood Education (ECE) is a crucial foundation for shaping children's subsequent development, which will influence their success at subsequent levels of education. The quality of ECE services is largely determined by the quality of the learning experiences children receive. In the Indonesian context, improving the quality of ECE is a crucial concern because there is still variation in service quality among institutions, particularly in educator competency and educational unit management (Angraini et al., 2019; Putu et al., 2019). Various studies have shown that teacher competency is a key factor determining the effectiveness of learning in early childhood education. However, various challenges remain in developing teacher competency, particularly in pedagogical and professional aspects that influence the quality of learning. Teacher competency development is influenced not only by individual teacher characteristics but also by

organizational support and the leadership of the principal. Therefore, understanding how principal leadership contributes to improving teacher competency is a crucial issue in efforts to improve the quality of early childhood education. While relevant to the Indonesian context, this issue also has broader significance because strengthening educational leadership and teacher professional development are key agendas for improving the quality of early childhood education in various countries.

Although the quality of early childhood education is significantly influenced by teacher competence, various studies show that the quality of learning in early childhood education institutions still faces various challenges. Teachers still struggle to design and implement learning that is appropriate to children's developmental characteristics and to implement the curriculum effectively. This situation results in suboptimal learning processes and student development outcomes, underscoring the urgent need to enhance teacher competence to improve the quality of early childhood education services (Muna'amah et al., 2021; Rizal et al., 2022).

Teacher competence is a key factor determining the quality of learning in early childhood education. However, literature shows that pedagogical and professional competence are the two dimensions most frequently challenged in educational practice. Teachers still experience difficulties in designing child-centered learning, developing learning tools, optimally implementing the curriculum, and effectively utilizing learning media and technology. However, strong pedagogical and professional competence is an essential prerequisite for creating high-quality learning that meets children's developmental needs (Fikri, 2022; Mahartini & Suastika, 2022; Na'imah et al., 2022).

Various studies have shown that teacher competency development is influenced not only by individual factors but also by the principal's leadership support. In the context of pedagogical competency, the principal plays a role through academic supervision, learning assistance, and evaluation of the teaching and learning process. Meanwhile, in developing professional competency, the principal contributes through training, workshops, teacher empowerment, and ongoing professional development. Although the relationship between principal leadership and teacher competency has been extensively researched, the available findings are scattered across different contexts, approaches, and competency dimensions. Consequently, there has been no comprehensive synthesis of how the principal's leadership role and strategies contribute to improving the competency of early childhood education teachers. This situation underscores the need for a systematic review of the available literature (Amellia & Nukman, 2025; Kasar et al., 2019).

To address the various challenges in teacher competency development, principal leadership is viewed as a strategic factor that can influence the quality of learning and ongoing teacher

professional development. Principals serve not only as managers of educational institutions but also as academic mentors, supervisors, motivators, and facilitators, creating a conducive work environment for teacher competency development. Through academic supervision, professional support, and informed decision-making, principals can drive improved teacher performance and the effectiveness of educational institution management (Anwar et al., 2022; Izzah et al., 2023; Soffianningrum & Yetti, 2022).

Various studies have shown that several leadership approaches contribute to improving teacher competency. Instructional leadership focuses on improving the quality of learning through academic supervision, teacher mentoring, monitoring the learning process, and evaluating teaching practices. This approach directly supports the strengthening of teachers' pedagogical and professional competencies by placing the learning process as the primary focus of leadership (Ningrum et al., 2025). Meanwhile, transformational leadership emphasizes the leader's ability to inspire, motivate, and empower teachers to achieve positive changes in learning practices. This approach contributes to increased work motivation, professional commitment, creativity, and teacher readiness to face educational change. In addition to these two approaches, teacher professional development through training, workshops, mentoring, and continuous learning activities has also proven effective in improving teacher competency. Unlike instructional leadership, which focuses on improving the quality of learning, and transformational leadership, which focuses on changing teacher behavior and motivation, professional development serves as a means of continuously improving teacher knowledge and skills (Budi Rahardjo et al., 2022; Rahayu, 2020). Despite their different focuses, these three approaches share a fundamental similarity: placing the principal as the primary actor in teacher competency development. Therefore, the principal's leadership is positioned as the most relevant solution for improving the competence of early childhood education teachers because it can integrate academic supervision, teacher empowerment, and professional development simultaneously, according to the needs of the institution and the diverse characteristics of teachers.

The effectiveness of teacher competency development is determined not only by the principal's leadership strategies but also by other supporting factors. Social support, a conducive work environment, a collaborative organizational culture, and the principal's managerial capacity are crucial to the success of teacher development programs. Furthermore, improving teachers' academic qualifications is a factor that supports the strengthening of pedagogical and professional competencies. These findings indicate that teacher competency development is a complex process and cannot be separated from the broader context of the organization, work environment, and educational (Haryono & Herlina, 2020).

Although research on the role of principal leadership in improving early childhood teachers' competency has expanded considerably, the available findings remain scattered across various focus areas. Some studies highlight the role of leadership in fostering institutional innovation; others emphasize specific leadership strategies such as instructional and transformational leadership; and others focus on dimensions of teacher competency, such as pedagogical, professional, social, or individual teacher characteristics (Benedikta Jenahat et al., 2025a; Borg et al., 2025; Xie et al., 2024). Furthermore, existing research encompasses a variety of contexts and methodological approaches, yielding diverse findings. However, to date, no study has systematically integrated the role of the principal, the leadership strategies employed, the various dimensions of teacher competency developed, and the characteristics of the available research findings in the early childhood education context. Consequently, understanding of how principal leadership contributes to improving early childhood teacher competency remains fragmented. This gap provides an important basis for conducting a systematic literature review for this study.

Based on the identified research gaps, this study offers novelty through a systematic literature review that integrates various empirical findings regarding principal leadership and early childhood teacher competency into a comprehensive analytical framework. Unlike previous research that tends to focus on specific aspects in isolation, this study synthesizes the principal's role, the leadership strategies implemented, the various dimensions of teacher competency developed, and the organizational factors that influence teacher competency development. The study analyzes the relationship between principal leadership and the improvement of early childhood teachers' competencies, based on published research findings. Through this approach, the study aims to systematically analyze the contribution of principal leadership to teacher competency improvement and identify effective leadership strategies to support teacher competency development. This research contributes in the form of an integrated synthesis of empirical evidence regarding the role of school principals, leadership strategies, and the development of PAUD teacher competencies, which can be a conceptual basis for the development of early childhood education management as well as a reference for school principals and policymakers in designing more effective strategies for improving teacher competencies (Heldayanti & Utara, 2025; Nisa et al., 2025; Putri & Darsinah, 2023).

## **RESEARCH METHODS**

### **Types and Approaches of Research**

This study employed a Systematic Literature Review (SLR) method with descriptive synthesis. The SLR method was chosen because this study aimed to systematically analyze the role of principal leadership in improving early childhood teachers' competency and to identify

leadership strategies for teacher competency development, based on previous research findings. A Systematic Literature Review is a method that allows researchers to systematically identify, evaluate, and synthesize research findings to produce comprehensive, evidence-based conclusions (Rethlefsen & Page, 2022). In this study, a descriptive approach was operationalized through thematic synthesis, grouping research findings by the principal's leadership role, applied leadership strategies, and developed teacher competencies. This approach allows for the identification of patterns of relationships and trends in research findings regarding the contribution of principal leadership to improving early childhood teacher competency. Meta-analysis was not performed because the articles reviewed had diverse characteristics in research design, research context, and study focus. Therefore, descriptive synthesis was deemed more appropriate to answer the research objectives.

### Research Subjects

The data sources in this study were scientific articles discussing principal leadership and Early Childhood Education (ECE) teacher competency. The articles reviewed were from SINTA 2- and SINTA 3-indexed journals, selected for their high publication quality and relevance to the Indonesian educational context. Data sources were selected purposively, considering the articles' suitability for the research objectives. Articles included in the review must directly address the role, strategies, or practices of principal leadership in developing PAUD teacher competency. The article selection process was based on established inclusion and exclusion criteria to ensure that the studies analyzed were relevant, high-quality, and closely aligned with the research focus (Firmansyah, 2022).

Table 1.1 Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Peer-reviewed scientific journal articles	Articles in the form of opinions without empirical data or non-academic sources
Discussing principal leadership and teacher competency in the context of Early Childhood Education (ECE)	Does not discuss principal leadership and ECE teacher competency
Examining the relationship, role, strategy, or leadership practices of school principals in developing ECE teacher competencies	Does not examine the relationship between principal leadership and ECE teacher competency
Issues 2019–2025	Published outside the 2019–2025 year range
Available in full text	Study not available in full-text format
ECE Sinta Journal 2 and 3	Not PAUD Sinta 2 and 3 journals
Written in Indonesian or English	Written in languages other than Indonesian and English.

Note: Each article was assessed based on six quality assessment (QA) criteria. Articles that received a minimum score of 5 out of a maximum score of 6 were deemed eligible for inclusion in the data synthesis stage.

After the eligibility assessment stage, articles that met the inclusion criteria underwent a quality assessment (QA) to ensure their quality and relevance to the research focus. The assessment was based on six criteria: topic relevance to early childhood education principal leadership, relevance to early childhood education teacher competencies, clarity of research objectives, clarity of research methods, relevance of research findings, and availability of full-text articles. Articles that received a minimum score of 5 out of a maximum score of 6 were included in the final synthesis stage. This process was carried out to ensure that the analyzed articles had adequate methodological quality and were relevant to the research objectives.

### Research Implementation Procedures

Table 1.2 Inclusion and Exclusion Criteria

Code	Assessment criteria	Yes (1)	No (0)
QA1	The article discusses school principals' leadership in the context of PAUD.	✓	
QA2	The article discusses the competencies of PAUD teachers (pedagogical, professional, social, or personality).	✓	
QA3	The research objectives are clearly explained and relevant to the research focus.	✓	
QA4	The research method is explained clearly and systematically.	✓	
QA5	Research findings are relevant to the principal's role or leadership strategy.	✓	
QA6	Articles are available in full-text form	✓	

### Materials and Instruments

The instruments used in this study comprised tools and documents that supported the Systematic Literature Review (SLR) process. These included an inclusion and exclusion criteria sheet for selecting articles, a data extraction form for recording key information from each reviewed article, a coding sheet for grouping research findings based on predetermined themes, and a quality assessment instrument to evaluate the suitability of articles for analysis. Furthermore, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist was used to ensure that the process of identifying, screening, assessing suitability, and including articles was carried out systematically and transparently. To support reference management and bibliography compilation, this study utilized Mendeley software. The use of these instruments helped maintain consistency in the data selection, extraction, and

synthesis processes, thereby enhancing the credibility and traceability of the research results (Creswell et al., 2021).

### **Data collection**

The data collection technique in this study employed a documentation study by searching for and collecting scientific articles relevant to principal leadership and Early Childhood Education (ECE) teacher competency. A documentation study was chosen because it allows researchers to obtain data from credible, systematically documented written sources (Aurilia et al., 2025). Articles that met the inclusion and exclusion criteria were then documented and extracted using a pre-designed data extraction form. The extracted data included the author's name, year of publication, journal source, research objectives, research methods, sample characteristics or research context, type of leadership studied, teacher competency domains that were the focus of the study, and key findings related to the role of principal leadership in improving ECE teacher competency. The data collection process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) stages, namely identification, screening, eligibility assessment, and article inclusion. All data obtained were then classified and systematically organized to facilitate the process of analysis and synthesis of research findings.

### **Data Analysis Techniques**

The data analysis technique in this study was content analysis, used to identify, organize, and synthesize findings from articles that met the selection criteria. The analysis process began with a thorough reading of each article to understand the research objectives, research methods, and key findings related to principal leadership and early childhood education teacher competency. Next, the extracted data were coded using a deductive approach based on the established research focus, namely the principal's leadership role, the leadership strategies implemented, the dimensions of teacher competency developed, and the factors influencing teacher competency development. The coding results were then grouped into thematic categories that shared similar meanings and characteristics.

Following the categorization process, comparisons were conducted to identify similarities, differences, patterns, and trends among the studies. Key themes were developed from the most frequent, based on their relevance to the research objectives. If differences or inconsistencies were found across studies, interpretations were informed by the research context, methods used, and sample characteristics of each study. Next, all findings were synthesized descriptively to generate a comprehensive understanding of the contribution of principal leadership to improving early childhood teacher competency. To maintain the credibility of the synthesis, the coding and

interpretation results were consistently compared with the original data in each reviewed article. The analysis results were then presented in descriptive narratives and summary tables to facilitate understanding of the patterns and relationships found in the analyzed literature.

### **Data Validity**

The validity of the data in this study was maintained through several procedures to ensure the credibility and reliability of the synthesis results. First, validity was strengthened through a systematic article selection process based on predetermined inclusion and exclusion criteria and tailored to the research objectives and questions. Second, the quality of each article was evaluated using a Quality Assessment (QA) procedure based on predetermined criteria, including the relevance of the research topic, clarity of research objectives and methods, relevance of the findings to the study's focus, and the quality of the journal publications. This process was carried out to ensure that only articles meeting quality standards were used in the analysis.

Third, consistency in analysis was maintained by using the same coding categories across all reviewed articles, ensuring structured theme identification and interpretation of findings. Fourth, source triangulation was conducted by comparing findings across articles from different journals and research contexts to identify patterns, similarities, and differences. Furthermore, data validity was supported by a documented audit trail for the literature search, article selection, data extraction, article quality assessment, and data analysis, conducted systematically in accordance with the PRISMA guidelines. Finally, the credibility of the research findings was strengthened by aligning the inclusion criteria, study focus, and research questions, ensuring that all analyzed articles were directly relevant to the leadership role of school principals in improving the competency of Early Childhood Education (ECE) teachers (Rolando & Zahran, 2025)

### **RESULT**

This study used a Systematic Literature Review (SLR) approach to analyze the role of principal leadership in improving the competence of Early Childhood Education (ECE) teachers. The article identification process was carried out systematically in SINTA 2- and SINTA 3-indexed journals relevant to the research topic. Based on the initial search results, 90 potentially relevant articles were obtained. Next, a screening stage was conducted based on the titles and abstracts, resulting in 35 articles that matched the research focus. Articles excluded at this stage generally did not directly discuss principal leadership, ECE teacher competence, or the relationship between the two variables. During the feasibility assessment stage through full-text reading, 20 articles were excluded because they did not meet the inclusion criteria, such as not focusing on ECE teachers, not specifically discussing teacher competence, or having low relevance to the research objectives. Thus, 15 articles were obtained that met the requirements for

further evaluation. After assessing the quality and suitability of the research substance, 9 articles were declared to meet all criteria and were used in the synthesis process. The entire article selection process followed the PRISMA stages, which include identification, screening, feasibility assessment, and inclusion, so that the article selection process could be traced systematically and transparently.

The article selection process is presented in the PRISMA flowchart (Figure 1).

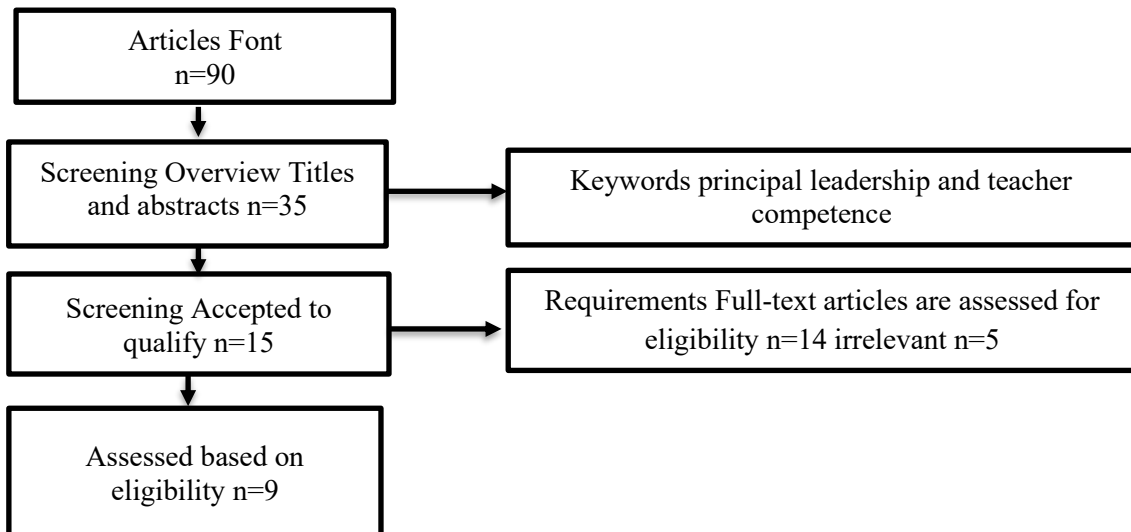


Figure 1. PRISMA Flow Diagram

Next, nine articles that met all inclusion criteria were analyzed in depth and classified by publication year, journal source, research method, study focus, principal leadership role, leadership strategies implemented, and the dimensions of teacher competency examined in the research. This classification was conducted to identify patterns of findings, research trends, and the relationship between principal leadership and the development of Early Childhood Education (ECE) teacher competency. A summary of the characteristics and main findings of each article is presented in Table 1.

Table 1.3 Characteristics and Synthesis of Reviewed Articles

No	Author (Year)	Title Article	Design Study	Type Leadership	Findings Main
1	(Febryanto R Bora et al., 2024)	Analysis Practice Servant Leadership for Head Catholic Kindergarten/Early Childhood Education School	Qualitative Descriptive	Servant Leadership	Implementation of servant leadership by the head of the school increases the development of teacher self-commitment, service, ability management,

					conflict, cohesiveness, teamwork, teacher performance, satisfaction, work climate, and organizational culture.
2	(Benedikta Jenahat et al., 2025)	Implementation Leadership Head School Based Culture Lonto Leok in Kindergarten	Qualitative	Leadership-Based Culture	Leadership-based culture: Lonto Leok emphasizes openness, mutual listening, working together, supportive collaboration, teacher professionalism, effective school management, and harmony.
3	(Azizatul Mu'arrafah et al., 2025)	Implementation of the Scientific Model of Supervision Based on Google Form by Head Schools in ECE	Studies Case Qualitative	Supervision Academic	Supervision academic Google Form-based supervision process is more structured, transparent, data-based, and supports the improvement of the professionalism of ECE teachers.
4	(Rusmina Ambarwati et al., 2024)	Contribution of Head School to Teacher Performance in the Development of the Curriculum for Independent Child Age Early	Qualitative Multisite	Leadership Managerial	Head school plays a role as educator, manager, administrator, supervisor, leader, innovator, and motivator in increasing teacher performance and development. Curriculum Independent.

5	(Cica Andrianie et al., 2025)	Strategy Head School in Increasing Early Childhood Education Teacher Performance	Qualitative Multisite	Leadership Transformational and Situational	Strategy head school covering supervision scheduled, teacher training, community learning, evaluation sustainable, and implementation leadership transformational as well as situational for increasing competence and teacher performance.
6	(Jaya, 2021)	Teacher Performance Reviewed from Leadership Style, Head School, And Motivation Work	Quantitative	Leadership Style Head School	Leadership style, head school, and motivation are influential, positive, and significant to the performance of ECE teachers.
7	(Sayekti Peni Puji Lestasi et al., 2025)	The Influence of Empowering Leadership on Employee Creativity in Early Childhood Education Teachers	Quantitative	Empowering Leadership	Empowering leadership is applied leadership that is influential in ECE institutions,, significant for improving the creativity of ECE teachers.
8	(Purwajatnika & Kadiyono, 2022)	Role of Head School as Managers, Teacher Professionalism, and Climate Security as Predictors of Quality Early Childhood Education	Quantitative Ex Post Facto	Leadership Managerial	Role managerial heads, teacher professionalism, and climate security are influential in improving the quality of early childhood education.

9	(Maknun et al., 2023)	Role of Leadership Head School to Teacher Performance in the New Normal Era at ECE Kudus Regency	Quantitative Correlational	Leadership Head School	Leadership at the head of the school is influential in improving teacher performance in the new normal era.
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### **The Role of Principal Leadership in Improving the Competence of Early Childhood Education Teachers**

Based on the nine articles analyzed, all studies indicate that principal leadership contributes to improving the competence of Early Childhood Education (ECE) teachers. However, this contribution occurs in different roles. Four studies identify the principal as an academic supervisor tasked with guiding, monitoring, and evaluating teachers' learning processes. Three studies demonstrate the principal's role as a motivator, encouraging improved teacher performance and work commitment. Furthermore, three studies position the principal as a facilitator of professional development. In comparison, two studies highlight the principal as an empowering leader who encourages teacher creativity and participation in school management. These findings indicate that the academic supervision function is the most dominant role in improving ECE teachers' competence.

Qualitative research findings indicate that the principal's leadership role extends beyond administrative duties to encompass ongoing teacher professional development. (Febryanto R Bora et al., 2024) found that servant leadership contributes to improved teacher self-development, work commitment, job satisfaction, and performance. (Benedikta Jenahat et al., 2025) demonstrated that Lonto Leok culture-based leadership strengthens teacher collaboration and professionalism through participatory decision-making. These findings demonstrate that the principal acts as a guide, motivator, and enabler in creating a work environment that supports teacher competency development.

Quantitative research supports these findings. (Jaya, 2021) found that the principal's leadership style had a positive and significant effect on the performance of early childhood education (ECE) teachers. Similar findings were reported by (Maknun et al., 2023), who showed that principal leadership contributed to improved teacher performance during the new normal era. Furthermore, Click or tap here to enter text. found that the principal's managerial role contributed to teacher professionalism and the quality of learning. Overall, the synthesis results indicate that the principal's role as an academic supervisor, motivator, facilitator, manager, and empowering

leader contributes to improving the pedagogical and professional competencies and performance of early childhood education (ECE) teachers.

### **Principals' Strategies in Improving the Competence of Early Childhood Education Teachers**

Based on Table 1, the strategies used by school principals to improve the competence of Early Childhood Education (ECE) teachers can be grouped into five main categories: academic supervision, technology-based supervision, teacher professional development, teacher empowerment, and strengthening a collaborative culture and work environment. Of these five categories, academic supervision and professional development were the strategies most frequently found in the articles analyzed.

Academic supervision is a dominant strategy because it directly aims to improve the quality of learning and teacher competence. (Rusmina Ambarwati et al., 2024) demonstrated that principal supervision improves teacher performance in implementing the Independent Curriculum. Similar findings were reported by (Cica Andrianie et al., 2025), who found that scheduled supervision and ongoing evaluation are important strategies for improving the competency and performance of early childhood education (ECE) teachers. These results indicate that academic supervision serves as a coaching tool that helps teachers continuously improve their teaching practices.

In addition to academic supervision, technology is also being utilized to improve the effectiveness of teacher development. (Azizatul Mu'arrafah et al., 2025) found that using Google Forms in academic supervision made the process more structured, transparent, documented, and data-driven. This strategy facilitated the principal's monitoring, evaluation, and follow-up of supervision results. These findings indicate that technology integration can improve the effectiveness of supervision while supporting more systematic teacher professional development.

Another frequently used strategy is teacher professional development through training, workshops, learning communities, and ongoing evaluation. (Cica Andrianie et al., 2025) showed that these activities contribute to the improvement of teachers' pedagogical and professional competencies. This finding is reinforced by (Rusmina Ambarwati et al., 2024), who showed that principal support for the development of the Independent Curriculum encouraged teachers to continuously improve their professional capacity. Thus, professional development is an important strategy for ensuring continuous improvement in teacher competency.

Teacher empowerment is also an effective strategy for improving the competence of early childhood education (ECE) teachers. (Purwajatnika & Kadiyono, 2022) found that empowering leadership significantly increased teacher creativity by providing trust, autonomy, and

opportunities to participate in decision-making. This strategy enables teachers to more actively develop learning innovations and enhance their professional skills according to student needs.

Furthermore, strengthening a collaborative culture and creating a conducive work environment helps improve teacher competency. (Benedikta Jenahat et al., 2025) demonstrated that Lonto Leok culture-based leadership encourages openness, communication, cooperation, and participation in school management. These findings are supported by (Febryanto R Bora et al., 2024), who found that servant leadership creates a positive work climate, increases job satisfaction, and strengthens teachers' commitment to their professional duties. Overall, the synthesis results indicate that academic supervision, technology utilization, professional development, teacher empowerment, and a collaborative work culture are the main strategies used by principals to improve the competency of early childhood education (ECE) teachers.

Based on a synthesis of nine analyzed articles, this study shows that principals contribute to improving the competence of early childhood education (ECE) teachers through various leadership roles, namely as academic supervisors, motivators, professional development facilitators, education managers, and empowering leaders. These roles are not mutually exclusive but complement each other in supporting the improvement of pedagogical competence, professional competence, creativity, and performance of early childhood education (ECE) teachers. Findings from various studies indicate that principals who actively provide guidance, offer motivation, facilitate professional development, and create a supportive work environment tend to encourage greater improvement in teacher competence.

To improve the competence of early childhood education (ECE) teachers, principals implement various strategies, including academic supervision, technology-based supervision, professional development through training and learning communities, teacher empowerment, and strengthening a collaborative culture and a conducive work environment. Academic supervision and professional development are the most consistent strategies identified in the reviewed articles, as they are directly related to improving teachers' pedagogical and professional competence. Meanwhile, strategies of teacher empowerment, technology utilization, and strengthening a collaborative culture contribute more to improving teacher creativity, work commitment, professionalism, and performance. The results of this synthesis indicate that improving the competence of early childhood education (ECE) teachers is not solely influenced by a single leadership style or strategy but by a combination of principal leadership roles and strategies that support one another in creating a quality learning environment.

## DISCUSSION

The findings of this study indicate that improving the competence of early childhood education (ECE) teachers is not solely determined by the presence of the principal as a formal leader, but primarily by leadership practices that directly support the learning process and teacher professional development. The results of a synthesis of nine articles indicate that academic supervision, continuous professional development, teacher empowerment, and a collaborative work culture are the main mechanisms that encourage improvements in pedagogical competence, professional competence, creativity, and teacher performance. Thus, this study argues that pedagogical leadership and teacher empowerment are two complementary mechanisms in supporting the sustainable development of ECE teacher competence.

This argument is most strongly explained through the perspective of instructional or pedagogical leadership. Based on the articles reviewed, academic supervision, teacher mentoring, learning evaluation, and professional development are the strategies most consistently used by school principals. This finding is evident in research by Azizatul Mu'arofah et al., 2025 Rusmina Ambarwati et al., 2024 Cica Andrianie et al., 2025), which shows that academic supervision helps teachers improve the quality of learning through continuous feedback and coaching. These findings align with those of (M. R. Modise, 2025) and (Brandisauskiene et al., 2024), who assert that learning-oriented leadership contributes to improving the quality of the curriculum, learning practices, and teacher professionalism. Therefore, compared to other leadership models, instructional leadership best explains the findings of this study because it is directly related to improving teacher competency through improved learning practices.

However, instructional leadership does not fully explain all research findings. Several articles indicate that teacher competency improvement is also influenced by motivation, work commitment, and active involvement in professional development. This condition aligns more closely with the transformational leadership perspective, which emphasizes the leader's ability to inspire, motivate, and build commitment to change. In the studies analyzed, training, learning communities, ongoing evaluation, and organizational support were factors that encouraged teachers to actively engage in competency development. These findings suggest that teacher competency improvement is influenced not only by academic supervision but also by the principal's ability to build intrinsic motivation and a positive learning culture. These conditions enable teachers to be more actively involved in professional development and improve the quality of instructional practices (Kurniati & Wahira, 2024). These findings align with those of (Zúñiga et al., 2025), who demonstrated that leadership support and an inclusive work environment contribute to increased teacher participation, efficacy, and performance.

In addition to instructional and transformational leadership, research findings also demonstrate the relevance of servant leadership and empowering leadership in the context of early childhood education (ECE). Febryanto R Bora et al., (2024) found that servant leadership improves teacher job satisfaction, professional commitment, and performance through a service approach and support for teacher needs. Meanwhile, Purwajatnika & Kadiyono, (2022) showed that empowering leadership increases teacher creativity by fostering trust, autonomy, and opportunities to participate in decision-making. Unlike academic supervision, which focuses on improving the quality of learning, teacher empowerment works by increasing self-efficacy, creativity, professional responsibility, and the courage to innovate. These findings indicate that teacher competency develops more optimally when the principal not only directs and supervises but also provides space for teachers to take initiative and develop their professional capacity independently. These findings align with (Nong et al., 2024) and (Vijayadevar et al., 2019), who demonstrated that collaborative leadership and empowerment through professional learning communities improve the capacity and quality of teacher practice.

The findings of this study also demonstrate the relevance of distributed leadership. Several studies have shown that improving teacher competency is more effective when leadership responsibility is not solely centered on the principal but distributed through collaboration, learning communities, and teacher involvement in decision-making. In the context of early childhood education (ECE), this approach is seen in collaborative cultural practices that enable teachers to share experiences, discuss learning issues, and develop solutions together. These findings support the research of (M. Modise et al., 2023), which shows that distributed leadership contributes to improving the quality of the curriculum and learning through the active participation of all members of the school organization. These findings are also in line with (Denee, 2024) and (M. R. Modise, 2025), who demonstrated that professional learning communities and teacher collaboration contribute to improving professional competency, learning quality, and teacher well-being. Thus, teacher competency development depends not only on the qualities of individual principals but also on the institution's ability to build collective leadership.

The results of this study are also consistent with various international studies that emphasize the importance of school leadership in improving the quality of early childhood education. (Loxton et al., 2020) showed that effective leadership helps teachers navigate curriculum changes and learning challenges. (Fabry et al., 2022) found that pedagogical leadership drives changes in instructional practices through collaboration and ongoing professional development. Meanwhile, (Whitlock et al., 2023) demonstrated that a lack of leadership support is a major barrier to implementing effective learning. These similar findings

reinforce the argument that developing teacher competencies requires active, engaged, and learning-oriented leadership.

However, not all studies have shown entirely positive results. (Opazo et al., 2025) found that the effectiveness of principal leadership in early childhood education can be hampered by the principal's limited understanding of its characteristics. Furthermore, (Oosterhoff et al., 2020) showed that policy pressures and administrative demands often limit the space for teachers to optimally develop their professionalism. Under these conditions, principals tend to focus more on meeting administrative demands than on teacher professional development. These differing findings indicate that the relationship between leadership and teacher competence is contextual. Leadership effectiveness is determined not only by the leadership style used, but also by the principal's competence, organizational culture, resource availability, institutional support, and the surrounding policy environment.

Based on the synthesis conducted, this study argues that the effectiveness of principal leadership in early childhood education (ECE) should be measured not only by administrative success, school program achievement, or regulatory compliance, but also by its observable contributions to improving teacher competency and learning quality. This position is important because most leadership evaluation models still place managerial aspects as the primary indicator of principal success. The results of this study indicate that leadership success is more accurately understood as the principal's ability to create conditions that enable teachers to develop professionally, collaborate, and continuously improve the quality of learning practices.

The practical implications of these findings suggest that early childhood education (ECE) principal development programs need to focus more on academic supervision competencies, teacher professional development, collaborative leadership, and teacher empowerment strategies. Furthermore, strengthening professional learning communities, utilizing technology in supervision, and creating a work culture that supports continuous learning should be integral to leadership practices in ECE institutions. This approach can help principals fulfill their roles not only as institutional managers but also as learning leaders who directly contribute to improving teacher competency and the quality of early childhood education services.

### **Recommendations and Solutions**

Based on the findings presented in Table 1, improving early childhood education (ECE) teacher competency is closely related to the implementation of academic supervision, ongoing professional development, teacher empowerment, and a collaborative culture within the school environment. These findings suggest that principals need to strengthen learning-oriented leadership practices through systematic coaching, the use of technology in supervision, and the

development of professional learning communities as a platform for continuous improvement in teacher competencies.

Furthermore, the synthesis results indicate that teacher competency develops more optimally when principals implement collaborative and empowering leadership. Therefore, efforts to improve teacher competency need to focus not only on supervision but also on providing professional support, increasing teacher participation in decision-making, and creating a work environment that supports learning innovation.

Another implication of this research is the need for principal development programs that emphasize not only managerial competencies but also instructional leadership, academic supervision, and teacher empowerment. This way, principals can more effectively fulfill their role in supporting teacher competency improvement and the quality of learning in early childhood education institutions.

## CONCLUSION

This systematic literature review concludes that principal leadership plays a central role in strengthening the competency of early childhood education teachers. Based on the synthesis of nine selected articles, the most dominant leadership roles identified were those of academic supervisor, facilitator of professional development, motivator, instructional leader, and supporter of collaborative professional practice. These roles contribute to the improvement of teachers' pedagogical competence, professional competence, creativity, commitment, and instructional performance through structured coaching, mentoring, monitoring, evaluation, and the development of a supportive school climate.

The key findings indicate that academic supervision, continuous professional development, technology-based supervision, teacher empowerment, and the strengthening of collaborative culture are the most consistently reported strategies for improving early childhood teacher competency. These findings imply that teacher competency development cannot rely solely on individual teacher initiative, but requires systematic institutional support from principals. Effective leadership provides teachers with opportunities to reflect on their teaching practices, participate in professional learning activities, receive constructive feedback, and engage in collegial collaboration.

This study contributes to the existing body of knowledge by demonstrating that the development of early childhood teacher competency is not sufficiently explained by instructional leadership alone. Instead, it is better understood through an integrative leadership perspective that combines instructional, transformational, servant, empowering, and distributed leadership

approaches. This synthesis provides a broader conceptual understanding of how principals influence teacher professional growth in early childhood education settings.

This study is limited to articles published in SINTA 2 and SINTA 3 indexed journals from 2019 to 2025. Therefore, further research is recommended to empirically test the leadership models identified in this review across diverse early childhood education contexts. Future studies should also examine differences between public and private institutions and investigate mediating variables such as teacher motivation, professional learning communities, organizational culture, digital supervision practices, and teacher self-efficacy.

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## REFERENCES

1. Amellia, M., & Nukman, M. (2025). Analisis Kesulitan Guru dalam Penggunaan Media Pembelajaran Digital. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 6(2), 179–190. <https://doi.org/10.37985/murhum.v6i2.1512>
2. Angraini, R., Tiara, M., & Walidi, A. (2019). Jurnal Etika Demokrasi Penggunaan Media Gambar dalam Menanamkan Nilai-nilai Pancasila pada Anak Usia Dini. In *Jurnal Etika Demokrasi Pendidikan Pancasila dan Kewarganegaraan* (Vol. 4, Number 1). <https://doi.org/https://doi.org/10.26618/jed.v4i1.2084>
3. Anwar, R. N., Mulyadi, M., & Soleh, A. K. (2022). Kepemimpinan Transformasional Kepala PAUD untuk Meningkatkan Mutu Pendidik. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(4), 2852–2862. <https://doi.org/10.31004/obsesi.v6i4.1577>
4. Aurilia, D., Putra, Z. H., Hermita, N., & Corpiady, J. (2025). *Didaktik : Jurnal Ilmiah pgsd fkip universitas mandiri strategi pengumpulan data kualitatif dalam penelitian implementasi kebijakan pendidikan dengan metode SYSTEMATIC LITERATURE REVIEW (SLR)*.
5. Azizatul Mu'arrafah, F., Widiatsih, A., & Afandi, A. (2025). Implementasi Supervisi Model Ilmiah Berbasis Google Form oleh Kepala Sekolah di PAUD. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 6(1), 1029–1040. <https://doi.org/10.37985/murhum.v6i1.1368>
6. Benedikta Jenahat, P., Rihendra Dantes, K., & Putu Wisna Ariawan, I. (2025a). Implementasi Kepemimpinan Kepala Sekolah Berbasis Budaya Lonto Leok di Taman Kanak-Kanak. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 6(1), 360–374. <https://doi.org/10.37985/murhum.v6i1.1213>
7. Benedikta Jenahat, P., Rihendra Dantes, K., & Putu Wisna Ariawan, I. (2025b). Implementasi Kepemimpinan Kepala Sekolah Berbasis Budaya Lonto Leok di Taman Kanak-Kanak. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 6(1), 360–374. <https://doi.org/10.37985/murhum.v6i1.1213>
8. Borg, F., Winberg, M., Gericke, N., & Borg, J. (2025). Principals' views and reported actions on sustainability from a whole school approach perspective: a comparative study of eco- and non-eco-certified preschools in Sweden. *Environmental Education Research*, 31(5), 897–919. <https://doi.org/10.1080/13504622.2025.2465716>

9. Brandisauskiene, A., Cesnaviciene, J., Bredikyte, M., & Sabaliauskiene, R. (2024). The Quality of Early Childhood Curricula and Distributed Leadership in Lithuanian ECEC Institutions. *Education Sciences*, 14(2). <https://doi.org/10.3390/educsci14020166>
10. Budi Rahardjo, Nur Amalia Olby Anwar, Ayu Aprilia Pangestu Putri, & Fachrul Rozie. (2022). Teachers' Role as Communicator and Motivator in Facilitating Early Childhood Sex Education in Kindergarten. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 10(2), 283–290. <https://doi.org/10.23887/paud.v10i2.49962>
11. Cica Andrianie, W., Wahyu, W., & Rifani Syaifuddin, A. (2025). Strategi Kepala Sekolah dalam Meningkatkan Kinerja Guru PAUD. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 6(2), 506–520. <https://doi.org/10.37985/murhum.v6i2.1566>
12. Creswell, C., Nauta, M. H., Hudson, J. L., March, S., Reardon, T., Arendt, K., Bodden, D., Cobham, V. E., Donovan, C., Halldorsson, B., In-Albon, T., Ishikawa, S. ichi, Johnsen, D. B., Jolstedt, M., de Jong, R., Kreuze, L., Mobach, L., Rapee, R. M., Spence, S. H., ... Kendall, P. C. (2021). Research Review: Recommendations for reporting on treatment trials for child and adolescent anxiety disorders – an international consensus statement. In *Journal of Child Psychology and Psychiatry and Allied Disciplines* (Vol. 62, Number 3, pp. 255–269). Blackwell Publishing Ltd. <https://doi.org/10.1111/jcpp.13283>
13. Denee, R. (2024). The network professional learning community approach: an effective model for individual and group learning. *Teacher Development*, 28(3), 330–346. <https://doi.org/10.1080/13664530.2024.2307588>
14. Fabry, A., Barblett, L., & Knaus, M. (2022). The role of early childhood pedagogical leaders in schools: Leading change for ongoing improvement. *Australasian Journal of Early Childhood*, 47(4), 275–288. <https://doi.org/10.1177/18369391221130788>
15. Febryanto R Bora, I., De Gomes, F., Dissriany Vista Banggur, M., A Sum, T., & R Lubienki, M. (2024). Analisis Praktik Kepemimpinan Servant Leadership para Kepala Sekolah TK/PAUD Katolik. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 5(1), 471–484. <https://doi.org/10.37985/murhum.v5i1.565>
16. Fikri, tasim. (2022). Peran Guru dalam Mengembangkan Sikap Peduli Sosial Anak Usia Dini. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 10(3), 478–487. <https://doi.org/10.23887/paud.v10i3.57205>
17. Firmansyah. (2022). Teknik Pengambilan Sampel Umum dalam Metodologi Penelitian: Literature Review. *Jurnal Ilmiah Pendidikan Holistik (JIPH)*, 1(2), 85–114. <https://doi.org/10.55927>
18. Haryono, M., & Herlina, Y. (2020). *Indonesian Education Administration and Leadership Journal (IDEAL) Peran Kepala Sekolah Dalam Meningkatkan Kualifikasi Akademik Guru PAUD Pada Gugus Mawar Kecamatan Talo Kabupaten Seluma (The Role Of The Head Of School In Increasing The Academic Qualification Of Paud Teachers In The Mawar Cluster Of Talo District, Seluma District)*. <https://online-journal.unja.ac.id/index.php/IDEAL>
19. Heldayanti, L., & Utara, P. (2025). Analisis kompetensi profesional kepala sekolah dalam meningkatkan kinerja guru paud pada sekolah penggerak di kabupaten pringsewu. *Agustus 2025 JMPA*, 7(2), 133–139.
20. Izzah, N., Setianti, Y., & Tiara, O. (2023). Peran Kepemimpinan Kepala Sekolah dalam Mewujudkan Sekolah Ramah Anak di Sekolah Inklusi. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 4(2), 272–284. <https://doi.org/10.37985/murhum.v4i2.236>
21. Jaya, W. S. (2021). Kinerja Guru Ditinjau dari Gaya Kepemimpinan Kepala Sekolah dan Motivasi Kerja. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(3), 1286–1294. <https://doi.org/10.31004/obsesi.v6i3.1738>

22. Kasar, M., Khuri, A., Mu'mala, A., Permainan, O., Tali, L., Mengembangkan, D., & Mu'mala Nadlifah, A. (2019). Optimalisasi Permainan Lompat Tali dalam Mengembangkan. *Age Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini*, 4(1).
23. Kurniati, A. & Wahira. (2024). Kebutuhan Manajemen Kurikulum Pendidikan Anak Usia Dini Berbasis Kearifan Lokal Budaya Buton. *Murhum: Jurnal Pendidikan Anak Usia Dini*. <https://doi.org/10.37985/murhum.v5i2.1013>
24. Loxton, J., Cunningham, C., & Knaus, M. (2020). An Investigation Of Early Childhood Staff And Their Transition To The New Western Australian Humanities And Social Sciences Curriculum. *Australian Journal of Teacher Education*, 45(7), 45–59. <https://doi.org/10.14221/ajte.2020v45n7.3>
25. Mahartini, K. T., & Suastika, I. N. (2022). Rencana Pelaksanaan Pembelajaran Harian Berbasis Tri Kaya Parisudha pada Kurikulum 2013 untuk Pendidikan Anak Usia Dini. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 10(1), 84–92. <https://doi.org/10.23887/paud.v10i1.42817>
26. Maknun, N. L., Arbarini, M., & Pranoto, Y. K. S. (2023). Pengembangan Video Animasi terhadap Kecerdasan Interpersonal Anak Usia Dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 7(1), 1024–1034. <https://doi.org/10.31004/obsesi.v7i1.4033>
27. Modise, M., Fonsén, E., Heikka, J., Phatudi, N., Bøe, M., & Phala, T. (2023). Global perspectives on leadership in early childhood education. In *Global Perspectives On Leadership in Early Childhood Education*. Helsinki University Press. <https://doi.org/10.33134/HUP-20>
28. Modise, M. R. (2025). Emotional Well-being of Early Childhood Education Teachers in South Africa During the Pandemic: Lessons for Teacher Training. *Asian Journal of University Education*, 21(3), 1158–1167. <https://doi.org/10.24191/ajue.v21i3.75>
29. Muna'amah, M., Masitoh, S., & Setyowati, S. (2021). Peran Guru dalam Optimalisasi Perkembangan Sikap Disiplin Anak Usia Dini. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 9(3), 355–362. <https://ejournal.undiksha.ac.id/index.php/JJPAUD/index>
30. Na'imah, Muassomah, & Azizah Nurul Fadlilah. (2022). Technology Challenge: EFL Teacher Experience Teaching Online at Kindergarten. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 10(2), 228–238. <https://doi.org/10.23887/paud.v10i2.52528>
31. Ningrum, L. I., Kusumaningsih, W., & Soedjono, S. (2025). Pengaruh Kepemimpinan Instruksional Kepala Sekolah dan Modal Psikologis terhadap Kompetensi Profesional Guru: Studi Korelasi di Sekolah Dasar Indonesia. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 9(5), 1418–1432. <https://doi.org/10.31004/obsesi.v9i5.7056>
32. Nisa, S. A. Z., Jatmikowati, T. E., & Rachman, A. U. (2025). Peran Manajerial Kepala Sekolah di Lembaga PAUD. *JECIE (Journal of Early Childhood and Inclusive Education)*, 8(2), 377–387. <https://doi.org/10.31537/jecie.v8i2.1827>
33. Nong, L. Y., Liao, C., & Ye, J. H. (2024). Constructing a model of the factors related to the job wellbeing of preschool teachers in China: a grounded theory study. *Frontiers in Public Health*, 12. <https://doi.org/10.3389/fpubh.2024.1497629>
34. Oosterhoff, A., Oenema-Mostert, I., & Minnaert, A. (2020). Constrained or sustained by demands? Perceptions of professional autonomy in early childhood education. *Contemporary Issues in Early Childhood*, 21(2), 138–152. <https://doi.org/10.1177/1463949120929464>
35. Opazo, M. J., Pardo, M., Rupin, P., & Galdames, S. (2025). School leaders' perceptions, practices and aspirations about schoolification in ECEC. *Contemporary Issues in Early Childhood*. <https://doi.org/10.1177/14639491251387763>

36. Purwajatnika, Z., & Kadiyono, A. L. (2022). Pengaruh Empowering Leadership terhadap Employee Creativity pada Guru PAUD. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(5), 5373–5383. <https://doi.org/10.31004/obsesi.v6i5.2541>
37. Putri, A., & Darsinah. (2023). Teaching Materials of Theme Aku Cinta Indonesia to Support the Quality of Learning. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 11(2), 246–254. <https://doi.org/10.23887/paud.v11i2.65467>
38. Putu, N., Dewi, A. S., Tirtayani, L. A., & Suniasih, N. W. (2019). Efektivitas program paud inklusi di kota denpasar ditinjau dari aspek konteks. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 7(1), 1–12. <https://ejournal.undiksha.ac.id/index.php/JJPAUD>
39. Rahayu, Y. (2020). Implementasi Peran Kepala Sekolah dalam Peningkatan Kompetensi Guru PAUD. <https://doi.org/10.29313/v6i2.22720>
40. Rethlefsen, M. L., & Page, M. J. (2022). PRISMA 2020 and PRISMA-S: common questions on tracking records and the flow diagram. In *Journal of the Medical Library Association* (Vol. 110, Number 2, pp. 253–257). Medical Library Association. <https://doi.org/10.5195/jmla.2022.1449>
41. Rizal, M., Najmuddin, N., Iqbal, M., Zahriyanti, Z., & Elfiadi, E. (2022). Kompetensi Guru PAUD dalam Mengimplementasikan Profil Pelajar Pancasila di Sekolah Penggerak. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(6), 6924–6939. <https://doi.org/10.31004/obsesi.v6i6.3415>
42. Rolando, B., & Zahran, A. M. (2025). ANALISIS SISTEMATIS TERHADAP STANDAR METODOLOGI DAN INSTRUMEN KUALITAS DALAM RISET INTERDISIPLINER BIDANG STUDI AGAMA DI INDONESIA. In *IQRA: Inquiry on Religion and Arts* (Vol. 1, Number 1). <https://jurnal.dinamikapublika.id/index.php/iqra>
43. Rusmina Ambarwati, N., Darmiyati, D., & Rifani Syaifuddin, A. (2024). Kontribusi Kepala Sekolah terhadap Kinerja Guru dalam Pengembangan Kurikulum Merdeka Anak Usia Dini. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 5(2), 217–226. <https://doi.org/10.37985/murhum.v5i2.717>
44. Sayekti Peni Puji Lestasi, T., Ayu Nyomah Murniati, N., & Abdullah, G. (2025). *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini Peran Kepala Sekolah Sebagai Manajer, Profesionalisme Guru dan Iklim Keamanan sebagai Prediktor Kualitas Pembelajaran PAUD*. 9(6). <https://doi.org/10.31004/obsesi.v9i5.7447>
45. Singgamui, M., Dwi Lestari, G., & Widodo, W. (2024). Evaluasi Program Pendidikan dan Pelatihan Berjenjang Moda Luring Tersistem bagi Guru PAUD. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 5(1), 418–432. <https://doi.org/10.37985/murhum.v5i1.459>
46. Soffianningrum, I., & Yetti, E. (2022). *Number 1. 16*, 1693–1602. <https://doi.org/10.21009/JPUD.161.04>
47. Vijayadevar, S., Thornton, K., & Cherrington, S. (2019). Professional learning communities: Enhancing collaborative leadership in Singapore early childhood settings. *Contemporary Issues in Early Childhood*, 20(1), 79–92. <https://doi.org/10.1177/1463949119833578>
48. Whitlock, B., Eivers, A., & Walker, S. (2023). The state of play-based learning in Queensland schools. *Australasian Journal of Early Childhood*, 48(3), 247–262. <https://doi.org/10.1177/18369391231159672>
49. Xie, S., Su, B., Yang, S., Li, J., & Li, H. (2024). A Network Analysis of Emotional Intelligence in Chinese Preschool Teachers. *Behavioral Sciences*, 14(12). <https://doi.org/10.3390/bs14121132>
50. Zúñiga, D., Cerda, G., & Bustos Navarrete, C. (2025). Leadership for Educational Inclusion: Design and Validation of a Measurement Instrument. *Education Sciences*, 15(2). <https://doi.org/10.3390/educsci15020181>