



Local Wisdom in Developing Communication and Collaboration Skills of Elementary School Students in the 21st Century: A Systematic Literature Review

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Abstract

Local wisdom, as an integral part of societal development, encompasses values preserved to meet needs and interactions with the environment, serving as an identity and reflection of cultural heritage passed down through generations. This study aims to explore the role of local wisdom in developing communication and collaboration skills among elementary school students in the 21st century through a systematic literature review (SLR). The research analyzed 25 relevant articles published between 2018 and 2023, selected based on inclusion criteria such as focus on local wisdom in education, relevance to 21st-century skills, and peer-reviewed accreditation. The findings indicate that integrating local wisdom values—such as mutual cooperation (*gotong royong*), deliberation (*musyawarah*), and tolerance—enhances students' communication and collaboration abilities by fostering cultural relevance and active participation in learning. The study concludes that local wisdom-based learning strategies are essential for addressing 21st-century educational challenges, offering practical implications for curriculum design and teacher training programs rooted in cultural contexts.

Keywords: Local Wisdom; Communication Skills; Collaboration Skills; 21st Century.

Introduction

Elementary education plays a vital role in shaping students' character and essential skills that will form the foundation of their future learning. In an era marked by globalization and rapid technological change, schools are expected to not only transfer academic knowledge but also develop 21st-century skills—especially communication and collaboration—so that students are better prepared to face real-life challenges. These abilities are increasingly important, enabling young learners to adapt and actively contribute to an increasingly complex world. Therefore, the curriculum in elementary schools must be designed in such a way that what students learn is closely related to their daily experiences, with local values naturally embedded in daily lessons. Local wisdom, as part of cultural identity, carries values that have long shaped social harmony and moral order. In Indonesia, with its rich diversity of tribes, languages, and traditions, education is a key platform for building unity and tolerance among children. When local wisdom is brought into the classroom, it can reduce the potential for conflict and strengthen bonds in a diverse environment. For example, environmental values rooted in local traditions can be integrated into Problem-Based Learning (PBL), helping students develop a sense of responsibility for their environment (Damopolii *et al.*, 2024). This approach is in line with UNESCO's vision for Education for Sustainable Development, which encourages young people to make decisions that support sustainability.



Evidence from various studies shows that learning rooted in local wisdom increases student motivation and engagement. Thematic learning that refers to local culture not only helps preserve heritage but also encourages students to think critically and creatively (Najiyah *et al.*, 2023). When learning feels relevant to their lives, students tend to enjoy the process more and participate actively. However, character education currently faces serious challenges, ranging from bullying and intolerance to misuse of technology. To overcome this problem, local wisdom must be a pillar in character education (Novitasari & Walid, 2024). Values such as mutual cooperation, deliberation, and respect for others, which are deeply rooted in local traditions, have been shown to be effective in fostering ethical awareness. Character education based on culture is not just an option, but a sustainable solution to fostering a generation that excels intellectually and morally.

In addition to local wisdom, the development of communication and collaboration skills is also a major focus in modern education. In STEM learning, for example, students' ability to communicate and collaborate is essential when they are working on science projects, as it hones their critical thinking and problem-solving skills. Fun learning activities, such as educational games, also provide a relaxed atmosphere where social skills can develop (Setyawan *et al.*, 2021). Teachers can further strengthen these skills by using teaching materials that are relevant to students' cultural backgrounds. Research by Dewi & Ramadan (2021) shows that materials containing local content are more effective because they are in line with students' life experiences. Thematic resources based on local wisdom have also proven successful in the classroom (Jannah & Ramadan, 2021), especially when adapted to the local environment (Mudiartana *et al.*, 2021). Other studies have highlighted how learning models inspired by Javanese local wisdom have successfully improved students' literacy and emotional engagement (Puspita *et al.*, 2023). When students are invited to solve real-world problems related to their own communities, such as in Problem-Based Learning rooted in local wisdom, they not only achieve better academic results but also learn to think critically and find solutions (Roys *et al.*, 2023).

This study seeks to understand the role of local wisdom in developing communication and collaboration skills among today's elementary school students. The study focuses on three main questions: how is local wisdom integrated into learning; what impact does it have on students' ability to communicate and work in teams; and which teaching strategies are most effective in combining local values with modern educational needs. By periodically reviewing the current literature, this study aims to offer a strong foundation for integrating local wisdom into elementary education, as well as practical recommendations for improving curriculum and teaching that respond to cultural and global demands. The value of this research lies in its contribution to theory and practice. At the theoretical level, this research enriches the discussion on cultural approaches in 21st century education. Practically, the findings of this research can be used by teachers and policy makers as a guide to develop curriculum and teacher training programs that are rooted in local values but remain relevant to today's world. This research not only fills the gap in the existing literature but also offers concrete ways to strengthen the role of local wisdom in forming a generation that is skilled in communicating, able to collaborate, and based on strong moral values.

Literature Review

The integration of local wisdom in primary education plays a central role in reinforcing cultural relevance, moral development, and civic engagement among students from an early age. Local wisdom, derived from the values, traditions, and collective experiences of a community, serves as the foundation of a holistic education that emphasizes not only academic readiness but also social responsibility and cultural identity. These values have been proven to create contextual and meaningful learning experiences. Ye and Hu (2023) explain that strengthening traditional cultural values within the curriculum can enhance students' moral and ideological quality through the development of patriotism, resilience, and care for others. This approach is essential for cultivating individuals who are socially responsible. In a broader context, Reading and Redford (2022) assert that incorporating local languages and cultural practices in schools increases students' sense of belonging and supports the sustainability of community-based education. Amoah (2022) also highlights the importance of teacher training that explicitly integrates local narratives and knowledge systems to strengthen the relationship between schools and communities. Culture-based



education becomes more effective when teachers are regularly and continuously prepared to implement local values in the classroom. Thus, local wisdom not only enriches learning content but also forms a grounded and empowering learning ecosystem.

The development of communication and collaboration skills within the 21st-century curriculum is a key element in preparing students for the challenges of a globally connected world. Today's education focuses not only on conceptual understanding but also on the ability to interact and work collaboratively in complex social and professional contexts. Rosdiana *et al.* (2020) state that the 21st Century Skills framework, as developed by the Partnership for 21st Century Skills (P21), places communication and collaboration among the four core competencies. In Indonesia, the Merdeka Curriculum explicitly directs teachers to foster these skills through project-based learning and reflection (Swandana *et al.*, 2023). Additionally, problem-solving, decision-making, and self-management abilities have been proven to be essential for graduate preparedness in the workforce (Ismail *et al.*, 2024). Technology also plays a pivotal role in enhancing collaboration by allowing students to engage in interactive learning both inside and outside the classroom (Utari *et al.*, 2020). Studies by Odabaşı *et al.* (2023) reveal that teacher readiness in mastering and teaching communication and collaboration skills significantly influences learning effectiveness. Meanwhile, Kasap *et al.* (2024) suggest that team-based assignments and collaborative projects in curriculum can significantly boost student engagement. By adopting the 4Cs learning model (Critical Thinking, Creativity, Collaboration, Communication), educators gain a clear framework to instill 21st-century social skills across various subjects (Pardede, 2020).

Local wisdom-based learning strategies hold great potential in enhancing students' social competencies, especially in culturally diverse contexts and social interactions. The integration of Indigenous Knowledge (IK) into the curriculum has been proven effective in creating inclusive and contextually relevant education. Williams and Morris (2022) highlight the importance of incorporating Indigenous perspectives in teacher education to equip future educators with the ability to understand and respond to cultural diversity. This approach helps bridge the gap between local knowledge and Western education systems. Jackson *et al.* (2021) reinforce this urgency by supporting culturally relevant teaching, which draws upon students' lived experiences, cultural backgrounds, and community knowledge as the foundation of learning. Acharibasam and McVittie (2022) also found that integrating local ecological knowledge into environmental education strengthens students' connection with nature and their sense of responsibility. Tarisayi (2024) argues that local knowledge integration can contribute to social justice and the decolonization of education. Implementing these strategies more effectively requires close collaboration with Indigenous communities. Tarisayi (2024) emphasizes that active participation of local communities is essential to prevent tokenism and ensure authentic curriculum transformation. In this regard, Kelly and Rosehart (2020) advocate for the direct involvement of local knowledge holders in learning processes to foster transformative educational experiences. Therefore, local wisdom-based learning strategies play a vital role in shaping students with strong social competence, cultural awareness, and the ability to coexist harmoniously in pluralistic societies.

Methodology

This study employs the Systematic Literature Review (SLR) method as its primary approach to identify, analyze, and synthesize various research findings related to the integration of local wisdom in primary education, particularly in character building and the development of 21st-century skills such as communication and collaboration. The SLR method was selected because it provides a comprehensive and structured overview of previous findings while ensuring objectivity and transparency in the literature review process. Within the context of this study, SLR also facilitates the exploration of diverse perspectives on how local wisdom values are integrated into curriculum design, learning models, and character development activities for students.

The literature search was conducted by accessing various nationally and internationally accredited scholarly publications, with inclusion criteria limited to: (1) publications from the last five years (2018-2023), (2) articles written in either Indonesian or English, and (3) works explicitly discussing the integration of local wisdom in elementary education. The research methodology followed several key phases: initial problem identification and objective



formulation, comprehensive literature search and selection of relevant studies, systematic data extraction, thematic analysis and synthesis of findings, and finally conclusion formulation and recommendation development. This systematic literature review (SLR) approach provided a rigorous framework that enabled three important outcomes: identification of current research gaps in the field, highlighting of best educational practices, and strengthening of academic arguments regarding the critical need to preserve local cultural values in primary education. For data collection, the study employed a thorough documentation strategy through searches of prominent academic databases including Google Scholar, ScienceDirect, and Garuda (Indonesia's national publication portal), ensuring comprehensive coverage of relevant literature while maintaining methodological rigor.

The data collection process was conducted using keywords such as "local wisdom in elementary education," "character and local wisdom," "communication and collaboration in elementary schools," and "culture-based learning models." All retrieved articles were then rigorously selected based on inclusion and exclusion criteria, including publication year (within the last five years), content relevance to the research focus, and the methodological quality of each article. The collected data encompassed the types and forms of local wisdom values integrated into education, the learning approaches employed, as well as the outcomes and impacts on students, particularly in terms of character development, communication skills, and collaboration abilities.

The observation period in this systematic literature review (SLR) differs from traditional qualitative field research as it specifically focuses on the literature collection and analysis phase. This three-month research process, conducted from December 2024 to March 2025, was divided into distinct phases. During the first month (December 2024), researchers concentrated on comprehensive literature searches, followed by rigorous screening of abstracts and full-text articles to determine their eligibility for inclusion. The second month (January 2025) was dedicated to systematic data extraction, where key variables such as teaching methods, learning outcomes, and applied local cultural contexts were carefully documented from each selected study. The final phase (February-March 2025) involved in-depth coding and thematic analysis to identify recurring patterns, conceptual relationships, and potential contradictions across studies, enabling researchers to comprehensively assess the strengths and weaknesses of local wisdom integration in elementary education. Current statistics from Indonesia's Central Statistics Agency (BPS, 2024) reveal that while 83.4% of elementary schools have adopted localized curricula, only 39.2% systematically incorporate cultural values into character education, highlighting a significant implementation gap that calls for more contextual, culture-based pedagogical approaches to bridge this disparity in educational practice.

This study employed interpretative thematic analysis to categorize data into major themes, including: (1) *character development through local wisdom*, (2) *enhancing communication and collaboration skills in elementary education*, and (3) *culture-based learning strategies*. For instance, the character theme emerged dominantly, elucidating local wisdom's role in conflict resolution and fostering student solidarity (Syamsuar *et al.*, 2023). This finding holds particular relevance in Indonesia's multicultural context, where locally rooted education can strengthen early social cohesion. Similarly, the integration of local wisdom into problem-based learning (PBL) was shown to enhance students' environmental awareness (Damopolii *et al.*, 2024). All findings were systematically analyzed to assess the long-term impacts of implemented learning models and strategies on students' character development and social skills. Through comprehensive thematic presentation of selected articles, this study ensures robust alignment between theoretical frameworks and practical applications in culturally responsive pedagogy. The literature data will be systematically collected through comprehensive searches of prominent academic databases including Google Scholar, Scopus, ERIC, and JStor. The search will utilize specific keywords such as "Concepts and Roles of Local Wisdom in Elementary Education", "Development of Communication and Collaboration Skills in Elementary School Students", and "Effective Local Wisdom-Based Learning Strategies and Models". The article selection process will involve rigorous screening of abstracts to assess their alignment with predetermined inclusion criteria. All relevant articles will undergo full-text review, with pertinent data systematically extracted and analyzed. This research will be conducted over a four-month period from December 2024 through March 2025. Below is the inclusion/exclusion criteria table for this study:



Table 1. Inclusion and Exclusion Criteria

Aspect	Inclusion Criteria	Exclusion Criteria
Topic/Subject	Articles discussing local wisdom integration in education, particularly related to character building, digital literacy, or inclusive education.	Articles discussing local wisdom without educational context, or only covering legal/social aspects unrelated to learning.
Educational Context	Research conducted in formal education settings (elementary, junior/senior high schools) with direct relevance to classroom learning processes.	Research conducted in non-formal/informal settings without linking results to curriculum or instruction.
Publication Year	Articles published within the last 5 years (2021–2025) to align with current education policies and curricula.	Articles published before 2021, deemed less relevant to current education dynamics.
Publication Type	Peer-reviewed articles from nationally/internationally accredited journals with DOI or official ID.	Non-peer-reviewed works, essays, popular articles, or abstracts without full-text access.
21st Century Skills Relevance	Articles connecting local wisdom with 21st-century skill development (communication, collaboration, problem-solving, etc.).	Articles not linking local content to soft skills or 21st-century competencies.
Analytical Suitability	Articles with complete academic structure: abstract, introduction, methodology, results, and discussion.	Incomplete articles or brief reports/literature reviews lacking systematic academic structure.

The literature selection process in this study was conducted systematically following the PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) to ensure transparency, traceability, and accountability in identifying and selecting relevant reference sources. The process began with the initial identification of 400 articles gathered from various online academic databases. Subsequently, a rigorous pre-screening phase resulted in the exclusion of 225 articles, consisting of 150 duplicate articles, 60 articles automatically filtered out by selection tools for not meeting the established criteria, and 15 articles excluded for other reasons (such as access limitations or contextual incompatibility). This meticulous screening approach ensured that only the most relevant and high-quality studies were included for further analysis, maintaining the integrity and validity of the systematic review process. After initial screening, 175 articles entered the screening stage based on a review of the title and abstract. At this stage, 96 articles were eliminated because they did not show substantial relevance to the focus of the study. A total of 79 articles were then targeted for full-text retrieval, but only 66 articles were successfully obtained and could proceed to the eligibility assessment stage.

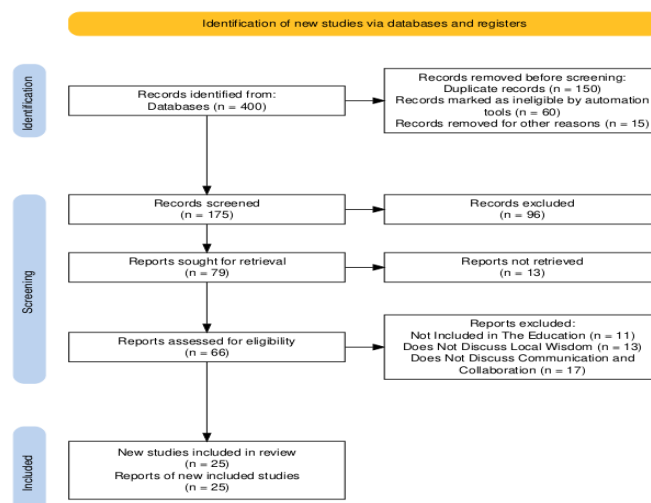


Figure 1. PRISMA



As part of the systematic literature review examining the role of local wisdom in developing communication and collaboration skills among elementary school students in the 21st century, the following table summarizes the 25 key research articles analyzed in this study. The table details essential information including authors, publication year, research titles, and main findings from each study that met the inclusion criteria. All selected articles contribute significantly to a deeper understanding of three critical aspects: (1) the effectiveness of local wisdom integration, (2) implementation challenges, and (3) contextual-cultural approaches in applying local wisdom values to enhance students' social competencies and cooperative abilities. This comprehensive compilation serves as a valuable resource for identifying evidence-based practices and research gaps in culturally responsive pedagogy for primary education.

Table 2. Literature Review

No	Author	Years	Research Title	Finding
1	Lestari, N; Suyanto, S	2024	A systematic literature review about local wisdom-based learning	Local wisdom-based learning supports communication and collaboration skills.
2	Arjaya, IBA; Subagia, IW; Redhana, IW	2024	A systematic review: The problems of the science learning process in elementary schools	Science learning lacks local value integration; requires a contextual approach.
3	Kamila, K; Wilujeng, I; Jumadi, J	2024	Analysis of Integrating Local Potential in Science Learning	Local potential integration supports collaboration and learning relevance.
4	Parhan, M; Dwiputra, DFK	2023	A systematic literature review on local wisdom values in multicultural education	<i>Gotong royong</i> (mutual cooperation) values enhance students' social skills in diversity.
5	Ariani, T; Maison, M; Purwaningsih, S	2025	Laboratory-Based Inquiry Learning Approach Integrated with Local Wisdom	Local experiments improve student cooperation and engagement.
6	Hakim, YE	2023	21st Century Learning Based on 4C Skills (Critical, Creative, Communication, Collaboration)	4C skills develop through cultural and collaborative contexts.
7	González-Pérez, LI; Ramírez-Montoya, MS	2022	Components of Education 4.0 in 21st century skills	Education 4.0 demands contextual and communicative models.
8	Wibawa, IMC; Widiana, IW	2024	How EtnoEducation is Essential and Linked to the Curriculum in Elementary Schools	Ethno-education strengthens student identity and culture-based communication.
9	Arif, M; Aziz, MKN Abd	2023	Islamic Religious Education Learning Model in the Era of Society 5.0	Local religious wisdom improves peer interaction.
10	Ilma, AZ; Wilujeng, I; Nurtanto, M	2023	A systematic literature review of STEM education in Indonesia	Local-based STEM fosters collaboration and problem-solving.
11	Arda, A; Supriyatman, S; Afadil, A	2024	A Review of Students' Critical Thinking Skills in the Era of Society 5.0	Local wisdom supports critical thinking and interpersonal communication.
12	Syuryansyah, S; Habibi, F	2024	The role of local wisdom in disaster mitigation education	Local values are relevant in action-based and collaborative learning.
13	Asror, M; Zainiyati, HS; Suryani, S	2024	The "Gusjigang" Model for Strengthening Local Values in Learning	Local models strengthen character and student interaction in elementary schools.
14	Asrori, M; Asy'arie, BF; Akhirudin, G, dkk.	2025	Islamic educational and cultural values in Indonesia	Local Islamic cultural values promote cooperative learning.



15	Sari, NI; Asy'arie, BF; Jamilah, J, dkk.	2024	Internalization of Islamic education values in character education	Internalizing local values builds empathetic communication among students.
16	Kusumaningtyas, DI; Suprpto, N; Suryanti, S	2025	Fostering Science Literacy: A Systematic Review	Contextual science based on local wisdom develops scientific communication.
17	Aryasutha, R; Kusrini, NAR; Ulya, JN, dkk.	2025	The Teacher Mover's Contribution in Enhancing Education	Teacher facilitators integrate local culture as a medium for student collaboration.
18	Listiana, D; Puspita, AMI, dkk.	2025	Project-Based Learning Model in Elementary Education	Local cultural projects enhance participation and communication.
19	Sofyan, H; Ilhamsyah, Y; Ridha, S	2024	The Urgency of Integrating Local Wisdom and Digital Literacy	Combining local wisdom and digitalization fosters collaboration.
20	Amiruddin, A; Sugianto, R, dkk.	2024	Bridging 21st-Century Skills and Pancasila Values	Pancasila values as local wisdom support cross-cultural communication.
21	Yuliyanti, N; Sarwi, S; Wardani, S, dkk.	2024	Integration of Social Science Learning Through Local Wisdom	Culture-based social studies develop classroom cooperation.
22	Azzahra, MZ; Nawahdani, AM, dkk.	2024	Science Process Skills through Local Context	Students are more active and collaborative when learning with local contexts.
23	Sriatun, N; Ardianto, D; Permana, I, dkk.	2025	Strategies for Promoting Energy Literacy in Physics Using Local Wisdom	Local-based physics improves understanding and scientific communication.
24	Nurhusain, M; Upu, H	2025	Ethnomathematics-Based Learning & the Merdeka Curriculum	Ethno-mathematics enhances group work and mutual respect.
25	González-Pérez, LI; Ramírez-Montoya, MS	2022	Components of Education 4.0 in 21st Century Skills	Culture-based 21st-century literacy strengthens collaboration.

This literature summary table not only demonstrates various approaches and findings in utilizing local wisdom to develop elementary students' communication and collaboration skills, but also highlights the contextual challenges educators face when integrating local cultural values into the learning process.

Results and Discussion

Results

The findings of this study demonstrate that the integration of local wisdom in primary education significantly enhances students' communication and collaboration skills in the 21st-century learning context. An in-depth analysis of the 25 selected articles meeting the inclusion criteria reveals that cultural values such as *gotong royong* (cooperation), *musyawarah* (deliberation), responsibility, tolerance, and other forms of local wisdom serve as crucial foundations for character-based and social competence learning. This conclusion is supported by multiple studies indicating that culturally contextual learning encourages students to actively engage in discussions, collaborate effectively, and foster mutual respect during group activities (Lestari & Suyanto, 2024); (Kamila et al., 2024); (Parhan & Dwiputra, 2023). Quantitatively, 20 out of 25 articles explicitly identify local wisdom as a key factor in developing collaborative skills, while 18 articles directly correlate the integration of local cultural values with measurable improvements in students' communication abilities. These results underscore the pedagogical value of embedding indigenous knowledge and practices into modern education frameworks to cultivate essential interpersonal competencies.



Another significant contribution of integrating local wisdom into primary education lies in its ability to strengthen scientific literacy and conceptual understanding through cultural contexts. Studies demonstrate that teaching science and physics using locally grounded approaches enhances students' learning interest, exploratory skills, and scientific comprehension by encouraging direct observation of phenomena in their immediate environment (Kamila *et al.*, 2024); (Kusumaningtyas *et al.*, 2025); (Sriatun *et al.*, 2025). Notably, 10 of the reviewed articles substantiate the claim that locally contextualized learning not only deepens conceptual mastery but also fosters scientific discussions and collaborative knowledge-building. This approach enables students to bridge academic concepts with their social realities, rendering the learning process more holistic, meaningful, and culturally relevant. This study further highlights the critical role of teachers in successfully incorporating local wisdom into the learning process. Teacher innovators (*guru penggerak*) serve as central figures in designing contextual lessons, crafting cultural narratives, and fostering collaborative, inclusive classroom environments (Aryasutha *et al.*, 2025); (Listiana *et al.*, 2025). Approximately 12 articles emphasize that educators' capacity to comprehend and adapt local values is the primary determinant of culturally rooted learning success. This finding is reinforced by 9 additional studies, which demonstrate that synergizing technology with cultural values creates adaptive, interactive, and culturally relevant learning ecosystems. This study concludes that the integration of local wisdom in elementary education positively impacts not only character development but also directly enhances students' communication and collaboration skills. These findings demonstrate that culturally rooted learning strategies offer a concrete solution to address 21st-century educational challenges. To systematically present these outcomes, the research compiles a comprehensive table summarizing literature from various studies analyzed in this systematic review, highlighting the role of local wisdom in fostering elementary students' interpersonal competencies in the modern era.

Table 3. Research Findings

No	Research Question	Summary of Findings	Articles	Authors
1	How are forms and values of local wisdom integrated into learning processes to develop elementary students' communication and collaboration skills?	Values like mutual cooperation (gotong royong), deliberation (musyawarah), tolerance, and folktales are integrated through ethno-education models, PBL, thematic, and contextual approaches. These build cultural interaction and teamwork.	6	Lestari & Suyanto (2024); Kamila <i>et al.</i> (2024); Wibawa & Widiana (2024); Parhan & Dwiputra (2023); Arif & Aziz (2023); Asror <i>et al.</i> (2024)
2	What is the impact of local wisdom-based learning on elementary students' communication and collaboration skills?	Local culture strengthens empathy, self-confidence, active participation, and effective communication. Collaboration improves through emotional engagement and cultural context in learning.	7	Sari <i>et al.</i> (2024); Amiruddin <i>et al.</i> (2024); Ilma <i>et al.</i> (2023); Aryasutha <i>et al.</i> (2025); Listiana <i>et al.</i> (2025); González-Pérez & Ramírez (2022); Yuliyanti <i>et al.</i> (2024)
3	What learning strategies are used to integrate local wisdom values to enhance elementary students' social skills?	Strategies: local e-books & e-worksheets, PjBL model, CTL, real-world PBL, inquiry learning, traditional games. Effective for building communication and group work.	6	Ariani <i>et al.</i> (2025); Roys <i>et al.</i> (2023); Rahayu & Wibowo (2023); Azzahra <i>et al.</i> (2024); Kusumaningtyas <i>et al.</i> (2025); Sriatun <i>et al.</i> (2025)
4	What challenges exist in implementing local wisdom values to develop elementary students' communication and collaboration skills?	Challenges: lack of teacher training, limited local teaching materials, time constraints & support. However, technology and local communities present opportunities for cultural-based learning development.	6	Najiyah <i>et al.</i> (2023); Setianingrum <i>et al.</i> (2023); Nurhusain & Upu (2025); Syuryansyah & Habibi (2024); Arda <i>et al.</i> (2024); Sari & Rohmani (2024)



The research findings table, organized according to this study's research questions, demonstrates consistent results across multiple analyzed studies while reinforcing the argument that integrating local wisdom values in education is not merely an alternative approach, but rather a strategic necessity for addressing 21st-century educational challenges - particularly in developing elementary students' communication and collaboration skills. The diversity of authors and the substantial number of supporting articles (6-7 per research focus) reflect broad and profound academic attention to this topic across various cultural and regional contexts. Consequently, this literature synthesis is expected to serve as a robust foundation for: (1) educational policy-making, (2) designing local culture-based teacher training programs, and (3) developing more contextual, inclusive curricula that remain culturally grounded while meeting learners' needs in our global era.

Discussion

This systematic review aims to comprehensively examine how local wisdom contributes to the development of communication and collaboration skills among elementary school students in the 21st century. In the context of primary education in Indonesia, local wisdom serves as a rich and diverse cultural foundation, embodying noble values such as *gotong royong* (mutual cooperation), *musyawarah* (deliberation), tolerance, and social responsibility. These values have proven to be effective learning mediums for fostering 21st-century social competencies. Through a systematic synthesis of 25 reviewed articles, many studies concur that integrating local cultural values into the learning process helps create collaborative, interactive, and meaningful learning environments. Local wisdom-based learning approaches effectively bridge the gap between the national curriculum and students' real-life experiences, which are deeply rooted in their cultural values (Lestari & Suyanto, 2024; Kamila *et al.*, 2024). In the context of communication, the skills of speaking, listening, and effectively expressing opinions are crucial to instill from an early age, as they help students become more confident in voicing their thoughts. When students are given tasks to explore local culture, they show significant improvement in their courage to discuss, argue, and present ideas logically (Ariani *et al.*, 2025) and (Roys *et al.*, 2023). Thus, local wisdom can serve as a relevant context for training communication and collaboration skills. The synthesis results indicate that students find it easier to cooperate when they feel culturally connected to the learning material. According to data from the Central Statistics Agency (2024), approximately 83.4% of elementary schools in Indonesia have implemented a curriculum with local content. However, only 39.2% of them systematically integrate local cultural values into the development of students' social skills (BPS, 2024). This figure highlights a gap between policy and actual implementation in the field. Therefore, more specific policy reforms are needed to encourage the comprehensive development of local wisdom-based curricula. Overall, the discussion and synthesis in this study indicate that local wisdom holds great potential as a profound, contextual, communicative, and collaborative pedagogical approach for students.

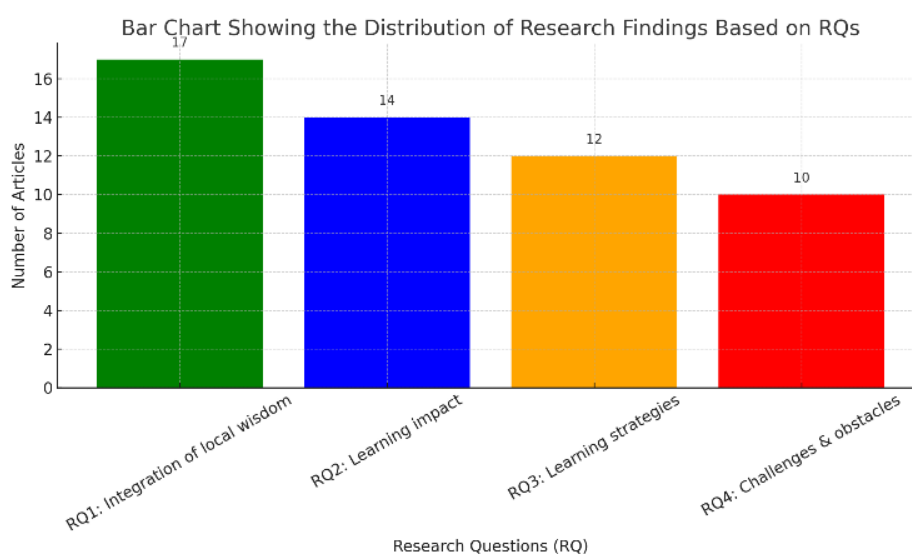


Figure 2. Distribution Chart of Findings



Based on the distribution of findings in the analyzed literature, it appears that the primary research focus has been directed more toward strategies for integrating local wisdom values in learning, particularly in relation to enhancing students' communication and collaboration skills. This is where the teacher's role as a cultural facilitator in local wisdom-based learning becomes crucial to determine the success of implementing local values in multicultural and dynamic classrooms.

Conclusion

This systematic literature review concludes that the integration of local wisdom in elementary education significantly enhances students' communication and collaboration skills, two core competencies essential for the 21st century. Thematic analysis of 25 selected scholarly articles reveals that values such as mutual cooperation (gotong royong), deliberation (musyawarah), tolerance, and responsibility are not only effective in shaping students' moral character but also instrumental in cultivating interactive and collaborative learning environments. These findings directly answer the research questions by demonstrating that: (1) local wisdom is integrated through contextual strategies such as ethno-education, PjBL, and inquiry-based learning; (2) such integration leads to improved empathy, participation, and communication; (3) diverse instructional models and teaching materials rooted in local contexts effectively promote social skills; and (4) implementation challenges—especially related to teacher capacity and material availability remain key barriers to success.

Theoretically, this review strengthens the argument for culturally responsive pedagogy by positioning local wisdom as a foundational pillar in holistic education. Practically, the results provide valuable insights for policymakers, curriculum developers, and teacher training institutions to integrate indigenous values systematically into formal education. Future research should address the limitations identified in this study, particularly the need for more empirical classroom based interventions and longitudinal evaluations. Additionally, further exploration is recommended to assess the scalability and adaptability of local wisdom-based learning models in multicultural urban school settings.

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