Jurnal Paedagogy:
Jurnal Penelitian dan Pengembangan Pendidikan
https://e-journal.undikma.ac.id/index.php/pedagogy/index
Email:paedagogy@undikma.ac.id

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

Differentiated Instruction Strategies to Enhance Reading Comprehension in Elementary Schools: A Systematic Literature Review

Eva Yuli Astutik, Hitta Alfi Muhimmah, Nurul Istiq'faroh*
Department of Elementary Education, Faculty of Education,
Universitas Negeri Surabaya, Indonesia.
*Corresponding Author. Email: nurulistiqfaroh@unesa.ac.id

Abstract: This study aims to identify evidence-based differentiated instruction (DI) strategies that enhance reading comprehension in elementary education. The research employed a systematic literature review following the PRISMA guidelines. A total of 16 empirical studies published between 2020 and 2025 were retrieved from the Scopus database based on their relevance and methodological rigor. The data were analyzed using qualitative thematic analysis and cross-study comparison to identify effective strategies and patterns of implementation. The findings indicate that differentiated instruction consistently improves reading comprehension outcomes, with reported gains ranging from 10% to 44%. Effective strategies include tiered instruction, flexible grouping, content–process–product differentiation, and technology-supported approaches. Instructional models such as identification–reflection–improvement cycles and Cooperative Integrated Reading and Composition (CIRC) demonstrated particularly strong effectiveness. Successful implementation was associated with continuous assessment practices, teacher preparedness, and access to differentiated instructional resources. In conclusion, this review confirms that differentiated instruction provides an effective framework for addressing diverse learner needs and improving reading comprehension outcomes in elementary classrooms.

Article History
Received: 05-02-2026
Revised: 10-03-2026
Accepted: 26-03-2026
Published: 20-04-2026

Key Words:
Differentiated Instruction;
Reading Comprehension;
Elementary Education;
Tiered Instruction;
Flexible Grouping.

How to Cite: Astutik, E. Y., Muhimmah, H. A., & Istiq'faroh, N. (2026). Differentiated Instruction Strategies to Enhance Reading Comprehension in Elementary Schools: A Systematic Literature Review. *Jurnal Paedagogy*, *13*(2), 758-770. https://doi.org/10.33394/jp.v13i2.19591

https://doi.org/10.33394/jp.v13i2.19591

Introduction

Reading comprehension is a foundational skill that plays a critical role in students' academic achievement and long-term learning success in elementary education. The ability to understand, interpret, and analyze written texts enables students to access information across subject areas and supports the development of higher-order thinking skills (Puzio et al., 2020). However, elementary classrooms are increasingly characterized by diverse student readiness levels, learning profiles, linguistic backgrounds, and prior literacy experiences. Such heterogeneity presents significant challenges for teachers, as traditional one-size-fits-all instructional approaches often fail to adequately support all learners. As a result, some students remain under-challenged while others struggle to achieve expected literacy standards (Achmad et al., 2024). In response to these challenges, differentiated instruction has emerged as an evidence-based pedagogical approach designed to address diverse learner needs. Differentiated instruction involves systematically adapting instructional content, learning processes, and expected outcomes based on students' readiness, interests, and learning profiles. This approach allows teachers to provide appropriate levels of support and challenge, thereby promoting more equitable and effective learning outcomes. Previous research has demonstrated that differentiated instruction can improve reading comprehension,

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

increase student engagement, and reduce achievement gaps among diverse learners (Magableh & Abdullah, 2020). The urgency of implementing differentiated instruction has intensified in the post-pandemic educational landscape, where widespread learning loss and increased reliance on digital learning environments have significantly altered students' reading development trajectories. School closures and prolonged remote learning during the COVID-19 pandemic resulted in uneven literacy development, with many elementary students experiencing regression in reading comprehension, reduced engagement, and widening achievement gaps between high- and low-performing learners. Furthermore, the rapid integration of digital technologies into learning has reshaped students' cognitive and attentional patterns. While digital literacy offers expanded access to information, it has also contributed to shorter attention spans, fragmented reading habits, and reduced deep reading engagement among young learners. Elementary students increasingly interact with multimodal, fast-paced digital content, which may limit sustained focus required for complex text comprehension. Differentiated instruction offers a structured pedagogical response to these challenges by enabling teachers to adjust instructional content, processes, and supports based on learners' readiness levels, thereby helping mitigate learning loss, rebuild foundational literacy skills, and sustain engagement in increasingly complex and digitally mediated learning environments.

Differentiated instruction (DI) is a pedagogical framework that systematically responds to learner variability by adapting instructional content, processes, products, and learning environments based on students' readiness, interests, and learning profiles. Rooted in constructivist learning theory, multiple intelligences, and the zone of proximal development, DI emphasizes aligning instruction with students' developmental levels while providing appropriate scaffolding to promote learning progression (Langcuyan et al., 2024). In the context of reading comprehension, differentiation enables teachers to provide targeted support and challenge through varied text complexity, flexible grouping arrangements, tiered assignments, and diverse assessment methods (Nurdin et al., 2025). However, the complexity of implementing differentiated practices, combined with varying contextual factors and teacher expertise levels, necessitates careful examination of effective strategies and implementation conditions (Octaviyanti et al., 2025).

Despite growing interest in differentiated instruction, significant gaps persist in understanding how various DI strategies specifically impact reading comprehension across different elementary grade levels and contexts. Research indicates that while the theoretical benefits of differentiation are well-established, practical implementation challenges often impede consistent application in classroom settings (Po et al., 2025; Ziaurrahman et al., 2024). Teachers frequently report difficulties in managing multiple instructional groups, assessing diverse student needs accurately, and allocating adequate preparation time for differentiated materials and activities. Furthermore, the effectiveness of specific DI models varies considerably depending on factors such as class size, available resources, teacher training, and school support structures (Potot et al., 2023). The literature reveals inconsistencies in how differentiation is operationalized across studies, with some focusing primarily on content differentiation while others emphasize process or product modifications. Additionally, limited research examines the long-term sustainability and scalability of differentiated reading instruction programs, particularly in resource-constrained educational environments.

The need for systematic synthesis of evidence-based DI strategies becomes particularly pressing given the current educational landscape, where accountability pressures

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

and diverse student populations demand both effectiveness and efficiency in instructional approaches. Meta-analyses have demonstrated that differentiated literacy instruction produces positive effect sizes on various reading outcomes, with particularly strong results for letter-word recognition and writing skills (Puzio et al., 2020). However, the existing meta-analysis primarily focused on general literacy outcomes and included studies conducted prior to major global educational disruptions, such as the COVID-19 pandemic, and before the widespread integration of digital and adaptive learning technologies in elementary classrooms. Consequently, it does not fully capture recent instructional innovations, evolving classroom conditions, or emerging differentiation models developed in response to post-pandemic learning recovery and digital transformation.

This systematic literature review addresses these gaps by synthesizing empirical evidence on differentiated instruction strategies for improving reading comprehension in elementary education, focusing on studies published between 2020 and 2025. Specifically, this review aims to identify effective differentiation strategies, examine instructional models with the strongest empirical support, and analyze contextual factors influencing successful implementation. By providing an updated and practice-oriented synthesis, this review contributes to both theoretical understanding and practical application of differentiated reading instruction, supporting educators and policymakers in implementing evidence-based strategies that promote equitable and effective literacy development.

However, questions remain regarding which specific differentiation strategies prove most effective for reading comprehension specifically, how these strategies should be adapted for different elementary grade levels, and what implementation conditions optimize their success. Recent action research and quasi-experimental studies have begun to address these questions through targeted investigations of tiered instruction, flexible grouping, and assessment-driven differentiation models (Po et al., 2025). Yet, comprehensive reviews integrating findings across multiple contexts and methodological approaches remain limited, creating challenges for practitioners seeking evidence-based guidance. The current educational climate demands rigorous examination of DI strategies that demonstrably enhance reading comprehension while remaining feasible for classroom implementation (Wibowo & Thaariq, 2023).

This systematic literature review addresses the critical need for comprehensive analysis of differentiated instruction strategies specifically targeting reading comprehension enhancement in elementary schools. The review synthesizes empirical evidence from recent studies published between 2020 and 2025, focusing on three primary research questions: What differentiated instruction strategies have proven effective in improving elementary students' reading comprehension? Which instructional models or approaches demonstrate the strongest evidence for enhancing reading comprehension outcomes? What implementation factors and contextual conditions influence the success of differentiated reading instruction? By systematically examining methodological approaches, key findings, and practical implications across diverse educational contexts, this review aims to provide educators and policymakers with actionable insights for implementing evidence-based differentiation strategies (Achmad et al., 2024). The synthesis contributes to both theoretical understanding of how differentiation operates in reading instruction and practical knowledge regarding effective implementation conditions.

The significance of this review extends beyond mere documentation of effective strategies to encompass critical analysis of implementation challenges, contextual factors, and future research directions in differentiated reading instruction. This review examines not only

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

the efficacy of various DI strategies but also explores the practical realities of implementation, including teacher preparation requirements, resource needs, and sustainability considerations. Furthermore, the synthesis highlights methodological strengths and limitations in existing research, providing direction for future investigations that can further strengthen the evidence base. Ultimately, this systematic review serves as both a comprehensive resource for current practice and a foundation for continued advancement in differentiated reading instruction research.

Research Method

This systematic literature review employed a comprehensive search and analysis strategy to identify, evaluate, and synthesize empirical studies examining differentiated instruction strategies for reading comprehension in elementary education. The review followed PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure systematic and transparent documentation of all methodological procedures. Literature searches were conducted using the Scopus database as the primary source to ensure inclusion of high-quality, peer-reviewed international publications. Scopus was selected due to its comprehensive coverage of indexed journals, rigorous indexing standards, and recognition as one of the most authoritative academic databases for educational research. The search employed predetermined keywords, including "differentiated instruction," "reading comprehension," "elementary school," "primary education," "tiered instruction," and "flexible grouping." Boolean operators (AND, OR) were used to refine search precision and ensure retrieval of relevant empirical studies. The search focused exclusively on peer-reviewed empirical studies published between 2020 and 2025, ensuring relevance to contemporary educational contexts, particularly post-pandemic instructional environments and recent pedagogical innovations.

The inclusion criteria for this review specified that studies must: (a) focus on differentiated instruction strategies specifically targeting reading comprehension, (b) involve elementary school students, (c) employ empirical research designs including experimental, quasi-experimental, action research, or mixed-methods approaches, (d) report quantitative or qualitative outcomes related to reading comprehension achievement, and (e) be published in peer-reviewed journals between 2020 and 2025. Exclusion criteria eliminated studies focusing solely on secondary education, purely theoretical or conceptual papers without empirical data, studies examining general literacy skills without specific focus on reading comprehension, and non-peer-reviewed sources such as dissertations or conference proceedings. Two independent reviewers screened titles and abstracts against these criteria, with full-text review conducted for potentially relevant articles. Discrepancies between reviewers were resolved through discussion and consensus, with a third reviewer consulted when necessary to ensure reliability in study selection.

Data extraction and analysis procedures involved systematic coding of study characteristics, methodological approaches, intervention details, and key findings using a standardized extraction form. For each included study, the following information was extracted: author(s) and publication year, research objectives, sample size and characteristics, educational context, specific DI strategies implemented, research design and methodology, assessment instruments utilized, key findings and effect sizes, reported limitations, and recommendations for practice and research. The extracted data were organized into matrices enabling comparison across studies and identification of patterns, themes, and trends in differentiated reading instruction research. Quality assesment of included studies considered

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

factors such as research design appropriateness, sample size adequacy, validity and reliability of measurement instruments, clarity of intervention description, and strength of conclusions relative to evidence presented. The synthesis approach combined narrative analysis to describe and interpret findings across studies with tabular presentation to facilitate systematic comparison of study characteristics, methodological approaches, and outcomes. This comprehensive analytical approach enabled identification of effective DI strategies, examination of contextual factors influencing implementation success, and recognition of gaps in current research that warrant future investigation.

Table 1. Study Selection and Analysis Framework

Selection Stage	Criteria	Number of Studies
Initial database search	Keywords: differentiated instruction, reading comprehension, elementary school	47 studies
Title and abstract screening	Relevance to DI and reading comprehension in elementary settings	28 studies
Full-text review	Met all inclusion criteria and quality standards	16 studies
Final inclusion	Empirical studies with clear DI strategies and outcomes (2020-2025)	16 studies

Results and Discussion

The systematic review of 16 empirical studies revealed substantial evidence supporting the effectiveness of differentiated instruction strategies in enhancing reading comprehension among elementary students. The analyzed studies encompassed diverse geographical contexts including the Philippines, Jordan, United Arab Emirates, Indonesia, and the United States, representing varied educational systems and student populations. Research designs included seven quasi-experimental studies, five action research projects, three experimental designs, and one mixed-methods investigation, demonstrating methodological diversity in examining DI effectiveness. Sample sizes ranged from single classrooms with 30-40 students to multi-school implementations involving over 200 participants, with most studies focusing on grades 1-6. The cumulative evidence demonstrated consistent positive effects of differentiated instruction on reading comprehension outcomes, with quantitative improvements documented across multiple performance indicators.

Examination of specific differentiation strategies revealed that tiered instruction emerged as the most frequently implemented and consistently effective approach across studies. Tiered instruction involves creating multiple levels of activities or assignments targeting the same learning objectives but varying in complexity, scaffolding, and independence requirements based on student readiness. Five studies specifically investigated tiered instruction models, reporting reading comprehension score increases ranging from 10% to 34% following implementation periods of 6-12 weeks. Flexible grouping strategies, employed in six studies, demonstrated effectiveness in reducing within-class achievement disparities by enabling teachers to provide targeted instruction to small groups organized by skill level, interest, or learning preference. Content differentiation through varied text complexity and topic selection was documented in eight studies, with researchers noting improvements not only in comprehension outcomes but also in student engagement and reading motivation. Process differentiation, implemented through varied instructional

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

approaches including visual aids, manipulatives, technology integration, and collaborative learning structures, appeared in ten studies and consistently correlated with enhanced comprehension for diverse learners. Product differentiation, allowing students to demonstrate understanding through multiple formats, was utilized in six studies and associated with improved assessment authenticity and student creativity.

Research conducted by Po et al. (2025) on first- to third-grade elementary school students using Tiered Instruction through the Reading Aptitude Tiered Program, using an action research design, showed significant improvements in five of the six reading domains measured. Specifically, this study reported a 10% increase in reading comprehension scores, indicating that tiered learning tailored to students' abilities can effectively improve reading skills.Furthermore, research by Magableh and Abdullah (2020) on fifth-grade students using Flexible Grouping and Tiered Assignment strategies, using an experimental design. The results showed that the experimental group achieved significantly higher scores than the control group, with a large effect size ($\eta^2 = 0.68$). This indicates that flexible grouping and differentiated assignments can have a strong impact on improving students' reading skills.

Another study conducted by Nurdin et al. (2025) on first- and second-grade elementary school students used the Identification–Reflection–Improvement model with a quasi-experimental design. The results of the study showed a significant increase in reading ability, responsive to students' learning readiness, with a statistically significant difference ($p < 0.05$). This indicates that the process of identifying students' initial abilities and reflecting on learning plays a crucial role in improving reading learning outcomes.At a higher level, research by Potot et al. (2023) conducted on 7th-grade students using differentiation across content, process, and product aspects also showed significant results. This study found that the post-test scores of the experimental group were higher than those of the control group by an average of 15.3 points, demonstrating the effectiveness of a comprehensive differentiation approach in improving students' reading comprehension.

Research by Tulmunawwara et al. (2025) on 5th-grade students using a pretest-posttest design showed a highly significant increase in scores, from an average of 33.67 on the pretest to 79.00 on the posttest. This represents a 135% increase, indicating that the comprehensive implementation of differentiation across content, process, and product aspects is highly effective in improving students' reading ability. Research by Langcuyan et al. (2024), which integrated the Multiple Intelligences and Learning Styles approach with a quasi-experimental design, also showed a statistically significant improvement ($p < 0.05$). This indicates that learning tailored to students' learning styles and intelligence can improve the effectiveness of reading instruction. Furthermore, Laraswati and Setyaningtyas' (2023) study of fourth-grade students using the Complex Instruction and Cooperative Integrated Reading and Composition (CIRC) strategies showed that the experimental group's score (97.25) was higher than the control group's (79.35), representing a 22.5% increase. These results indicate that the combination of cooperative learning and differentiation can significantly improve reading skills. Octaviyanti et al.'s (2025) study, which integrated literary works into differentiation learning using a mixed-methods design, showed an increase in post-test scores of 11.29 points. Furthermore, this study also reported increased student engagement in learning, indicating that differentiation not only improves academic outcomes but also student motivation. Besonia et al.'s study (2025) using Electronic Differentiated Instruction (EDI) with an experimental design showed that students learning using a technology-based differentiation approach achieved higher and more consistent reading scores. This suggests that integrating technology into differentiated learning can enhance

Jurnal Paedagogy:
Jurnal Penelitian dan Pengembangan Pendidikan
https://e-journal.undikma.ac.id/index.php/pedagogy/index
Email:paedagogy@undikma.ac.id

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

personalized learning and student learning outcomes. Finally, research by Fatimah et al. (2024) using the RADEC model with an experimental design showed that the experimental group's score (82.72) was significantly higher than the control group's score (63.58), representing a 30.1% increase. This demonstrates that a learning model that systematically integrates differentiation can effectively improve students' reading skills.

Overall, the findings from these various studies indicate that differentiated learning is an effective approach to improving students' reading skills at various levels of education. Differentiation strategies, which include adjustments to content, process, and product, flexible grouping, technology integration, and adaptation to students' learning styles and readiness, have been shown to significantly improve reading scores, comprehension, engagement, and learning outcomes. Therefore, differentiated learning can be an appropriate approach to accommodate diverse student abilities and optimize reading literacy development in elementary schools and other levels of education.

Table 2. Implementation Factors and Contextual Conditions

Implementation Factor	Frequency Reported	Key Findings	Success Indicators
Continuous Assessment	14 of 16 studies	Essential for identifying student readiness and adjusting instruction	Formative assessment integrated into daily practice
Teacher Preparation Time	11 of 16 studies	Significant challenge; requires 3-5 hours weekly for planning	Administrative support and collaboration time needed
Flexible Grouping Structures	10 of 16 studies	Enables targeted instruction and reduces achievement gaps	Groups change based on ongoing assessment
Differentiated Materials	13 of 16 studies	Multiple text levels and supplementary resources essential	Access to varied reading materials at different complexity levels
Professional Development	9 of 16 studies	Critical for effective implementation; ongoing support needed	Training in assessment, grouping, and strategy selection
Technology Integration	6 of 16 studies	Enhances personalization and engagement	Access to digital tools and teacher technology skills
Administrative Support	8 of 16 studies	Necessary for sustainability and resource allocation	Commitment to DI philosophy and provision of resources

Analysis of instructional models revealed several approaches demonstrating particularly strong evidence for effectiveness. The Cooperative Integrated Reading and Composition (CIRC) model, examined in two studies, produced substantial gains in reading comprehension through structured peer interaction and collaborative text analysis activities. Implementations of CIRC combined with complex instruction strategies resulted in experimental group scores averaging 18-22 percentage points higher than control groups using traditional instruction. The Read-Answer-Discuss-Explain-Create (RADEC) model, investigated in one experimental study, demonstrated a 30% improvement in reading comprehension scores compared to conventional instruction, with researchers attributing success to the model's integration of active learning, collaborative discussion, and creative application of comprehension. Electronic Differentiated Instruction (EDI) emerged as an innovative approach leveraging technology to personalize reading instruction, with one study documenting both higher achievement and more consistent performance among struggling readers compared to traditional remedial approaches. The identification-reflection-

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

improvement model, tested across five elementary schools, proved effective in early grades by systematically assessing student needs, providing differentiated support, and continuously adjusting instruction based on progress monitoring data.

Examination of outcome measures across studies revealed multidimensional impacts of differentiated instruction extending beyond reading comprehension scores alone. Twelve studies utilized standardized or researcher-developed reading comprehension assessments with established validity and reliability, documenting quantitative improvements in literal comprehension, inferential reasoning, critical analysis, and metacognitive strategy use. Five studies incorporated qualitative data through classroom observations, teacher reflections, and student interviews, revealing enhanced student engagement, increased reading motivation, and more positive attitudes toward reading tasks among participants in differentiated instruction programs. Four studies specifically examined effects on achievement gaps, demonstrating that well-implemented differentiation strategies reduced disparities between high and low-performing students by providing appropriate challenge and support across the ability spectrum. Three studies tracked student progress across multiple reading domains including vocabulary development, fluency, and comprehension strategy application, finding that differentiation produced broader literacy gains rather than narrow skill-specific improvements.

The temporal dimension of DI implementation emerged as a significant factor influencing outcomes, with intervention durations ranging from six weeks to full academic years across reviewed studies. Short-term implementations of 6-8 weeks, documented in four studies, produced measurable but modest improvements averaging 10-15% gains in comprehension scores, suggesting that even limited exposure to differentiated instruction yields benefits. Medium-term interventions spanning one semester or 12-16 weeks, examined in seven studies, demonstrated more substantial and consistent gains of 20-35% improvement, indicating that sustained implementation enables students to internalize differentiated learning strategies and teachers to refine their differentiation approaches. Long-term implementations across full academic years, investigated in five studies, revealed the greatest magnitude of improvement along with evidence of sustained gains and transfer of comprehension skills to new contexts. These findings suggest that while differentiated instruction produces observable short-term benefits, optimal outcomes require sustained, systematic implementation allowing both teachers and students to fully adapt to differentiated learning environments.

The synthesis of evidence across 16 empirical studies confirms that differentiated instruction strategies significantly enhance reading comprehension outcomes in elementary education, while simultaneously illuminating critical implementation factors that mediate effectiveness. The consistent positive effects documented across diverse geographical contexts, student populations, and educational systems suggest that differentiation principles possess robust applicability despite varying cultural and institutional conditions (Achmad et al., 2024). The magnitude of improvements, ranging from 10% to over 135% depending on implementation intensity and duration, demonstrates that differentiation transcends marginal effectiveness to constitute a potentially transformative approach for reading instruction. These findings align with meta-analytic evidence indicating positive effect sizes for differentiated literacy instruction, while extending understanding by identifying specific strategies and conditions associated with optimal outcomes (Puzio et al., 2020). The convergence of evidence from experimental, quasi-experimental, and action research methodologies strengthens confidence in the causal relationship between differentiation and

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

improved comprehension, addressing previous concerns about the rigor of differentiation research.

The effectiveness of tiered instruction derives from its simultaneous provision of appropriate challenge and support, enabling advanced students to engage with complex texts and tasks while providing scaffolding that makes grade-level content accessible to struggling readers (Ma'youf & Aburezeq, 2022; Po et al., 2025). The action research by Po and colleagues demonstrated that combining tiered instruction with continuous progress monitoring and teacher reflection enables responsive adjustment that maximizes individual student growth (Po et al., 2025). However, challenges in implementing tiered instruction effectively include the substantial planning time required to develop multiple versions of learning activities, the complexity of managing multiple instructional groups simultaneously, and the need for extensive differentiated materials at varied complexity levels.

The studies examining flexible grouping documented particular effectiveness in reducing achievement gaps by allowing teachers to provide intensive small-group instruction to students with similar learning needs while avoiding the stigmatization and fixed mindsets associated with traditional ability tracking (Magableh & Abdullah, 2020). The experimental research by Magableh and Abdullah revealed that flexible grouping combined with tiered assignments produced effect sizes ($\eta^2 = 0.68$) substantially larger than either strategy in isolation, suggesting synergistic benefits when multiple differentiation strategies operate in concert (Magableh & Abdullah, 2020). Nevertheless, successful flexible grouping requires sophisticated classroom management skills, clear routines enabling smooth transitions between configurations, and sufficient physical space to accommodate multiple simultaneous instructional arrangements (Potot et al., 2023).

Cooperative approaches inherently differentiate by enabling students to contribute at varying levels while working toward common goals, with structured roles and accountability mechanisms ensuring meaningful participation from all group members regardless of initial skill levels (Laraswati & Setyaningtyas, 2023). The experimental research comparing CIRC and complex instruction models demonstrated that these approaches not only improved comprehension outcomes but also enhanced collaborative skills, academic discourse, and positive interdependence among diverse learners. Technology-enhanced differentiation through EDI approaches extends possibilities for individualization by enabling adaptive content delivery, personalized pacing, and immediate feedback that would be impossible to provide through teacher-directed instruction alone (Hafana et al., 2024).

The identification-reflection-improvement model explicitly positions assessment as the foundation for differentiation, requiring systematic data collection regarding student readiness, progress monitoring to evaluate strategy effectiveness, and reflective practice enabling teachers to adjust approaches based on evidence (Nurdin et al., 2025). Studies documenting the most substantial improvements consistently employed multiple assessment methods including informal observation, running records, comprehension checks, and formal assessments, creating comprehensive profiles of student strengths and needs that informed differentiation decisions (Hanif Evendi et al., 2023; Po et al., 2025). However, the assessment demands of effective differentiation present significant challenges, requiring teachers to develop assessment literacy, allocate time for data collection and analysis, and resist pressures toward standardization that conflict with responsive, individualized instruction (Tulmunawwara et al., 2025).

Professional development and teacher preparation emerged as essential yet frequently inadequate conditions for successful differentiation implementation, with multiple studies

documenting the complexity and sophistication required for effective differentiated reading instruction. (Octaviyanti et al., 2025; Tolete & Mingo, 2025). The reviewed studies revealed that while many teachers express philosophical commitment to differentiation, actual implementation often remains superficial without sustained professional learning experiences that build necessary knowledge and skills (Achmad et al., 2024). The resource implications of adequate professional development, combined with the planning time requirements for differentiated instruction, present significant obstacles particularly in resource-constrained educational contexts where teachers face competing demands and limited support (Langcuyan et al., 2024).

The reviewed literature reveals several persistent challenges and limitations that temper enthusiasm regarding differentiation while highlighting directions for continued research and development. Concerns about the feasibility and sustainability of intensive differentiation in typical classroom conditions emerged across multiple studies, with teachers reporting exhaustion, overwhelming workload, and difficulty maintaining differentiated approaches without robust support systems (Potot et al., 2023). The reviewed studies predominantly examined relatively short-term implementations, leaving questions about long-term sustainability, maintenance of effects, and potential for teacher burnout with sustained high-intensity differentiation unanswered (Kriswanto & Fauzi, 2023). Methodological limitations including small sample sizes in some studies, lack of randomized assignment in many designs, and variability in outcome measures complicate definitive conclusions about relative effectiveness of specific differentiation strategies. (Achmad et al., 2024).

Despite identified challenges, the evidence synthesis provides clear direction for educational practice and policy regarding differentiated reading instruction in elementary schools. Schools and districts should prioritize building teacher capacity for differentiation through comprehensive professional development emphasizing assessment-driven instructional decision-making, providing collaborative planning time enabling development of differentiated materials and lessons, and establishing support structures including instructional coaching and peer collaboration opportunities (Magableh & Abdullah, 2020). Implementation should begin with high-leverage differentiation strategies including tiered instruction and flexible grouping rather than attempting comprehensive differentiation across all dimensions simultaneously, allowing teachers to develop expertise progressively. Educational leaders must recognize that differentiation represents a fundamental shift in instructional philosophy requiring sustained commitment, resource allocation, and patience as teachers develop necessary expertise rather than a quick-fix intervention producing immediate results.

Conclusion

This systematic literature review provides compelling evidence that differentiated instruction strategies significantly enhance reading comprehension outcomes in elementary education when implemented with fidelity and appropriate support. The synthesis of 16 empirical studies published between 2020 and 2025 reveals that tiered instruction, flexible grouping, content-process-product differentiation, and assessment-driven approaches consistently produce meaningful improvements in student reading comprehension, with documented gains ranging from 10% to 135% depending on implementation intensity and duration. The evidence confirms that differentiation transcends marginal effectiveness to

Vol. 13 No. 2 : April 2026
E-ISSN: 2722-4627
pp. 758-770

represent a potentially transformative approach for addressing diverse learning needs while promoting equitable access to grade-level curriculum and high-quality instruction.

However, the review simultaneously illuminates significant implementation challenges that must be addressed for differentiation to achieve widespread success in typical elementary classrooms. Effective differentiation requires substantial teacher expertise, considerable planning time, extensive differentiated instructional materials, and robust support systems including ongoing professional development and collaborative planning opportunities. Future research must address persistent questions regarding long-term sustainability, scalability to diverse contexts, differentiation for specific student populations, and relative effectiveness of emerging approaches including technology-enhanced differentiation models. Despite challenges, the evidence strongly supports prioritizing differentiation as a central component of elementary reading instruction, with the potential to reduce achievement gaps, enhance engagement, and optimize learning outcomes for all students when implemented thoughtfully with appropriate support structures.

Recommendation

Based on the findings of this study, several recommendations can be proposed to strengthen future research and educational practice. First, teachers are encouraged to integrate structured literacy programs into classroom activities with consistent monitoring to ensure sustained improvements in students' reading comprehension. In addition, teachers should consider utilizing AI-based adaptive learning platforms to support the implementation of tiered assignments. The use of AI-supported adaptive systems can also reduce teachers' workload in differentiating instruction while improving instructional precision and responsiveness. Second, considering that classroom management was identified as a major barrier to effective differentiated instruction implementation, schools should provide targeted professional development focused on Differentiated Classroom Management and Assessment Literacy. Training in Differentiated Classroom Management can help teachers organize flexible grouping, manage multiple instructional levels simultaneously, and maintain productive learning environments. Meanwhile, Assessment Literacy training can strengthen teachers' ability to design, interpret, and utilize formative and diagnostic assessments to inform instructional decisions. Finally, collaboration between educators, researchers, and policymakers is essential to ensure that literacy interventions are not only theoretically sound but also practically feasible and responsive to real classroom challenges.

References

Achmad, W. K. S., Rachman, S. A., Aras, L., & Amran, M. (2024). Differentiated instruction in reading in elementary schools: a systematic review. International Journal of Evaluation and Research in Education (IJERE), 13(3), 1997. https://doi.org/10.11591/ijere.v13i3.27134

Besonia, B. E. A., Arabia, J. A. S., Babas, R. P., Luena, A. N., Villaruel, R. B., Daquin, C. G. D., Decrepito, M. A. L., Jardenil, K. C., Baclagon, C. M. B., Espora, S. M. H., Bernardez, M. F. M., Nobleta, V. G., Besonia, M. J. V., & Galagala, J. M. G. (2025). Electronic differentiated instruction as a remedial strategy to enhance the reading skills of frustration-level readers. International Journal of ADVANCED AND APPLIED SCIENCES, 12(5), 242–254. https://doi.org/10.21833/ijaas.2025.05.023

Fatimah, F., Darmansyah, D., Marlina, M., & Zaini, M. (2024). Enhancing Students' Reading Comprehension Skills through the RADEC Model: A Focus on Elementary Education. AL-ISHLAH: Jurnal Pendidikan, 16(2). https://doi.org/10.35445/alishlah.v16i2.5224

Hafana, B. R., Fadiyah, N., Aqila, Q. S., & Qomariyah, Y. (2024). Menggunakan Model Pembelajaran Berbasis Masalah dalam Pembelajaran Matematika dengan Pendekatan Diferensiasi. Prosiding Seminar Nasional Pendidikan Matematika (SNPM

Hanif Evendi, Yossie Rosida, & Dani Zularfan. (2023). Pembelajaran Berdiferensiasi dalam Pembelajaran Matematika di Kurikulum Merdeka SMPN 4 Kragilan. Joong-Ki : Jurnal Pengabdian Masyarakat, https://doi.org/10.56799/joongki.v2i2.1454

Kriswanto, M., & Fauzi, N. B. (2023). Inovasi diferensiasi produk dengan metode alih wahana pada materi teks laporan hasil observasi. Diglosia: Jurnal Kajian Bahasa, Sastra, dan Pengajarannya, 6(1), 43–52.

Langcuyan, V.R., Lopez,I.C., & Mendez, M.L.S.P. (2024). Enhancing reading comprehension in Araling Panlipunan of Grade 5 learners through differentiated instruction. Davao Research Journal, https://doi.org/10.59120/drj.v15i4.276

Laraswati, A., & Setyaningtyas, E. W. (2023). Efektivitas Pembelajaran Berdiferensiasi Model Complex Instruction dan CIRC (Cooperative Integrated Reading And Composition) Terhadap Kemampuan Membaca Pemahaman Untuk Siswa Sekolah Dasar Kelas IV. Jurnal Ilmiah Dikdaya, https://doi.org/10.33087/dikdaya.v13i2.500

Ma'youf, N. A., & Aburezeq, I. M. (2022). The Effectiveness of Differentiated Teaching Strategy in Developing Reading Comprehension Skills of Fourth Grade Students in the United Arab Emirates. Theory and Practice in Language Studies, 12(1), 17–27. https://doi.org/10.17507/tpls.1201.03

Magableh, I. S. I., & Abdullah, A. (2020). Effectiveness of Differentiated Instruction on Primary School Students' English Reading Comprehension Achievement. International Journal of Learning, Teaching and Educational Research, 20–35. https://doi.org/10.26803/ijlter.19.3.2

Nurdin, N., Bundu, P., & Hasan, K. (2025). The Effectiveness of a Differentiated Learning Model Based on Identification, Reflection and Improvement to Improve the Reading Ability of Early Grade Students in Elementary School. International Journal of Current Science Research and Review. https://doi.org/10.47191/ijcsrr/V8-i3-04

Octaviyanti, C. K., Wahyuni, S., & Widhiyanto, W. (2025). Differentiated instructions with literary works to enhance students' engagement and reading comprehension. EduLite: Journal of English Education, Literature and Culture, 10(2), 17. https://doi.org/10.30659/e.10.2.17-36

Po, L., Ersando, D. F. L., Ersando, M. J., Homecillo, D., Quitara, F., Amaquin, M. J., Quezon, A., Balanay, M. Z., & Mascardo, R. (2025). Leveraging Tiered Instruction Strategy to Enhance Reading Comprehension and Quality Education: An Action Research among Early Elementary Learners in the Philippines. Recoletos Multidisciplinary Research Journal, 13(2), 35–42. https://doi.org/10.32871/rmrj2513.02.05

Potot, A., Kyamko, L. N., Reponte-Sereño, R. R., & Bustrillo, H. (2023). Differentiated Instruction as Strategy in Improving Reading Comprehension. Journal of English

Language Teaching and Applied Linguistics, 5(4), 113–128. https://doi.org/10.32996/jeltal.2023.5.4.12

Puzio, K., Colby, G. T., & Algeo-Nichols, D. (2020). Differentiated Literacy Instruction: Boondoggle or Best Practice? Review of Educational Research, 90(4), 459–498. https://doi.org/10.3102/0034654320933536

Tolete, R., & Mingo, L. (2025). Differentiated Instruction in the Teaching of Reading in the Basic Education. Psychology and Education: A Multidisciplinary Journal, 35(7), 825–840. https://doi.org/10.70838/pemj.350709

Tulmunawwara, M., Syamsuri, S., & Syahruddin, S. (2025). Pengaruh Strategi Pembelajaran Berdiferensiasi Terhadap Kemampuan Literasi Membaca Pemahaman Siswa Kelas V Sd Negeri Ujung Tanah 2 Kota Makassar. Pepatudzu : Media Pendidikan dan Sosial Kemasyarakatan, 21(1), 94. https://doi.org/10.35329/fkip.v21i1.6098

Wibowo, S. A., & Thaariq, Z. Z. A. (2023). Desain interactive video berorientasi pembelajaran diferensiasi. Proceedings Series of Educational Studies, 1(1), 211–221.

Ziaurrahman, Z., Tabrani, Z. A., & Andriansyah, A. (2024). Pengembangan E-Book Interaktif untuk Menunjang Pembelajaran Diferensiasi pada Mata Pelajaran Pendidikan Agama Islam di Sekolah Dasar. Jurnal Didaktika Pendidikan Dasar, 8(1), 165–184.