

# Implementing Assisted Literacy Practices to Support Early Grade Reading Development: A Classroom-Based Study in Primary Education

Ramli HR\*, Arsyad, Nur Inayah

Universitas Megarezky Makassar, Indonesia

\*ramlihr547@gmail.com

## Article Information

Submitted: 22-09-2025

Revised: 07-10-2025

Accepted: 14-11-2025

## Keywords

assisted literacy;  
early grade reading;  
primary education;  
classroom-based learning;  
reading development.

## Abstract

**Background:** Early grade reading competence forms the foundation of academic success in primary education, yet many students experience persistent difficulties in fluency, pronunciation, and comprehension due to limited structured guidance during literacy instruction. This condition underscores the urgency of classroom-based pedagogical strategies that provide continuous and contextualized support.

**Aims:** This study investigates the effectiveness of assisted literacy practices integrated into daily classroom instruction in enhancing early grade reading development, including fluency, comprehension, confidence, and learner engagement.

**Methods:** Employing a Classroom Action Research design with two instructional cycles, the study involved 26 first-grade students in a public primary school. Data were collected through reading assessments, classroom observations, and teacher interviews. Reading development was analyzed using descriptive quantitative comparisons supported by qualitative reflections to examine changes before and after implementation.

**Results:** Findings reveal substantial improvement across all reading indicators, with the overall average score increasing from 59.4% to 89.0%. Gains were evident not only in technical skills such as fluency and pronunciation accuracy, but also in confidence and motivation, indicating both cognitive and affective development.

**Conclusion:** Assisted literacy practices embedded within routine classroom instruction effectively strengthen foundational reading skills while fostering learner engagement and positive reading habits, offering a sustainable strategy for early primary literacy enhancement.

## INTRODUCTION

Reading development in the early grades plays a critical role in shaping students' long-term academic success and learning trajectories in primary education. International large-scale assessments have consistently shown that foundational reading skills remain a major challenge in

many education systems, particularly at the beginning stages of schooling where decoding and comprehension skills are first formed (Aarnoutse et al., 2001). In primary classrooms, early reading difficulties often persist when instructional practices do not provide sufficient individualized support during literacy learning processes (V. Garcia et al., 2025). This condition suggests that conventional whole-class reading instruction may not adequately address the diverse needs of early grade learners. Research in literacy education has emphasized that early intervention is essential because reading difficulties that emerge in the first years of schooling tend to compound over time if left unaddressed (Reed, 2025). In classroom contexts, the absence of structured guidance can limit students' opportunities to develop reading fluency, accurate pronunciation, and meaningful comprehension. Studies have shown that students who struggle with early reading frequently experience reduced motivation and lower engagement in literacy activities (Omar, 2025). Therefore, strengthening early grade reading through instructional approaches that emphasize continuous support and interaction has become an urgent concern in primary education research.

In addition to cognitive challenges, early grade reading difficulties are closely associated with affective factors such as confidence, motivation, and classroom participation. Literacy research indicates that students' emotional responses to reading activities strongly influence their willingness to engage with texts and persist in learning tasks (Weidlich et al., 2025). In many primary classrooms, students with limited reading proficiency tend to avoid reading aloud or participating in literacy activities, which further constrains their learning opportunities. Classroom-based studies have highlighted that supportive instructional environments can reduce anxiety and promote positive reading experiences among early learners (Khany & Barzan, 2025). Guided reading practices that emphasize interaction and feedback have been shown to foster both skill development and learner engagement when implemented consistently (Shafiee Rad, 2025). However, such practices are not always systematically integrated into daily classroom instruction, particularly in contexts with limited instructional resources. As a result, there remains a pressing need to explore literacy practices that are feasible, contextually grounded, and responsive to early grade learners' needs. Investigating assisted literacy practices within classroom settings is therefore relevant for addressing both academic and motivational dimensions of early reading development.

The rationale for this study is grounded in the need to identify instructional practices that effectively support early grade reading within authentic classroom contexts. While many literacy interventions are designed as externally driven programs, classroom-based approaches allow teachers to directly integrate literacy support into daily instructional routines. Research on literacy pedagogy emphasizes that teacher-mediated guidance plays a central role in helping young learners navigate early reading challenges (Ciampa et al., 2025). Assisted literacy practices, which involve structured guidance and ongoing support during reading activities, align with sociocultural perspectives that view learning as an interactive process (Afrilyasanti et al., 2025). Such practices enable teachers to scaffold students' reading development while gradually fostering learner independence. Empirical studies have suggested that scaffolded instruction enhances students' ability to decode texts and construct meaning during reading (Fan, 2025). Moreover, classroom-based literacy support has been associated with improvements in students' engagement and confidence when interacting with texts (Wordofa et al., 2025). These considerations highlight the relevance of

examining assisted literacy practices as a pedagogical strategy for strengthening early grade reading development.

Previous research has extensively examined various instructional approaches aimed at improving early grade reading outcomes in primary education. Studies focusing on guided reading and scaffolded instruction have demonstrated positive effects on students' reading fluency and comprehension when teachers provide targeted feedback during literacy activities (Johnston, 2025). Meta-analyses in literacy education have reported that structured reading support contributes to measurable gains in decoding accuracy and reading speed among early learners (M. Li et al., 2025). In addition, interactive literacy practices have been shown to enhance students' understanding of texts by encouraging active engagement and meaning construction (Yang, 2023a)(Minor & Muhammad, 2023). Research conducted in diverse educational contexts indicates that instructional guidance is particularly beneficial for students who initially demonstrate low reading proficiency (Minor & Muhammad, 2023a). Classroom-based interventions that emphasize teacher–student interaction have also been linked to improved reading confidence and reduced avoidance behaviors (W. Li et al., 2025). Furthermore, literacy studies highlight that consistent support during reading tasks strengthens students' self-efficacy and willingness to participate in classroom discussions. These findings underscore the potential of assisted literacy practices to address both cognitive and affective aspects of early reading development.

More recent studies have expanded the focus of early literacy research by examining the role of learner engagement and motivation in reading development. Research has shown that students who experience supportive literacy environments are more likely to develop positive attitudes toward reading (Altun et al., 2022). Instructional practices that integrate guidance and encouragement during reading activities have been found to foster sustained engagement in literacy tasks (Minor & Muhammad, 2023b). Studies in primary education contexts also suggest that classroom-based literacy support can be effectively implemented without extensive external resources when teachers adopt structured guidance strategies. International research has emphasized the importance of aligning literacy instruction with students' developmental levels, particularly in early grades where foundational skills are formed (Porter et al., 2024). Despite these advances, many studies have focused on programmatic interventions rather than everyday classroom practices. As a result, there is growing interest in examining literacy approaches that are embedded within routine classroom instruction and led by teachers. This body of literature provides a foundation for investigating assisted literacy practices as a practical strategy for supporting early grade reading development.

Although previous studies have demonstrated the effectiveness of guided and scaffolded reading instruction, limited attention has been given to assisted literacy practices implemented as part of daily classroom routines in early primary grades. Many existing studies emphasize standardized intervention programs rather than teacher-led practices that are embedded within regular instruction. As a result, there is insufficient empirical evidence on how continuous classroom-based literacy support influences both reading skills and learner engagement simultaneously. Furthermore, prior research often focuses on reading outcomes without adequately considering changes in students' confidence and participation during literacy activities. This gap suggests a need for studies that examine assisted literacy practices as an integrated pedagogical approach rather than

a standalone intervention. There is also limited documentation of how such practices function in real classroom contexts with diverse learner abilities. Addressing this gap can contribute to a more nuanced understanding of literacy support strategies that are adaptable and contextually relevant. Therefore, examining assisted literacy practices through classroom-based research is essential to strengthen the empirical foundation of early grade literacy instruction.

The purpose of this study is to examine the implementation of assisted literacy practices in supporting early grade reading development within a primary education classroom. This study seeks to explore how structured guidance during reading activities influences students' reading fluency, comprehension, and engagement. It also aims to investigate changes in students' confidence and participation in literacy activities following the implementation of assisted literacy practices. By focusing on classroom-based instruction, the study intends to provide practical insights into teacher-led literacy support strategies. The research further aims to document observable changes in students' reading behaviors across instructional cycles. Through this investigation, the study seeks to contribute empirical evidence on the effectiveness of assisted literacy practices in early grades. The findings are expected to inform teachers about feasible approaches to strengthening foundational literacy. Ultimately, this study aims to enrich the discourse on primary education literacy by highlighting classroom-embedded practices that support early reading development.

## **METHOD**

### **Research Design**

This study employed a quantitative approach using a Classroom Action Research design to examine the implementation of assisted literacy practices in early grade reading instruction. Classroom Action Research was selected because it allows systematic investigation of instructional practices within authentic classroom contexts while supporting continuous pedagogical improvement (Neitzel et al., 2022). The research was conducted in two instructional cycles, each consisting of planning, implementation, observation, and reflection stages. This cyclical design enabled the researchers to monitor changes in students' reading development and adjust instructional strategies accordingly. Assisted literacy practices were embedded into regular classroom activities rather than implemented as an external intervention. Such an approach aligns with classroom-based pedagogical research that emphasizes contextual validity and instructional relevance (Lupo et al., 2024). The design focused on capturing both process and outcome aspects of reading development during early grade instruction. Through this design, the study aimed to generate empirically grounded insights into literacy practices that are feasible for everyday primary education settings.

### **Participant**

The participants of this study were early grade students enrolled in a public primary school, specifically from Grade 1 classrooms. A total of 26 students participated in the study, consisting of learners with varying levels of initial reading ability. The selection of participants was based on classroom enrollment, ensuring that the study reflected authentic instructional conditions rather than a selective sample. Early grade students were chosen because foundational reading skills are typically developed at this stage of schooling (Zhang et al., 2025). The classroom teachers were actively involved as instructional facilitators during the implementation of assisted literacy practices.

Teacher involvement was essential to ensure instructional consistency and to support continuous guidance throughout the reading activities. Ethical considerations were addressed by obtaining institutional permission and ensuring that student participation did not disrupt regular learning processes. The participant profile allowed the study to examine reading development within a realistic primary education context.

### **Instrument**

Data were collected using multiple instruments to capture students' reading development and classroom engagement comprehensively. Reading ability tests were used to assess students' fluency, pronunciation accuracy, and comprehension of simple texts, following early literacy assessment principles (Nurmahanani, 2023). Classroom observation sheets were employed to document students' participation, confidence, and engagement during assisted literacy activities. Observational indicators focused on behavioral responses such as willingness to read aloud and interaction during guided reading sessions. In addition, semi-structured interviews with classroom teachers were conducted to gather insights into instructional implementation and observed student progress. Interview data complemented quantitative measures by providing contextual explanations of classroom dynamics (Baker et al., 2024). Field notes were also maintained to record instructional adjustments across research cycles. The use of multiple instruments enhanced the credibility of findings through methodological triangulation.

### **Analysis plan**

Data analysis was conducted using a combination of descriptive quantitative and qualitative techniques to examine changes in students' reading development. Quantitative data from reading tests were analyzed by calculating percentage scores for each reading indicator across research cycles. This approach enabled direct comparison between pre-implementation and post-implementation reading performance. Qualitative data from observations and interviews were analyzed through thematic categorization to identify patterns related to learner engagement and instructional effectiveness. Integrating qualitative insights allowed the researchers to interpret numerical changes within the context of classroom interactions (Pregoner, 2024). Data from different sources were compared to ensure consistency and to strengthen interpretive validity. Results from each cycle were reviewed collaboratively with classroom teachers to support reflective analysis. This analytic strategy provided a comprehensive understanding of how assisted literacy practices influenced early grade reading development.

Table 1. Comparison of Students' Reading Development Before and After the Implementation of Assisted Literacy Practices.

| <b>Reading Development Indicators</b>               | <b>Pre-Implementation (%)</b> | <b>Post-Implementation (%)</b> |
|-----------------------------------------------------|-------------------------------|--------------------------------|
| Reading fluency                                     | 58.0                          | 87.0                           |
| Pronunciation accuracy                              | 61.0                          | 89.0                           |
| Reading comprehension                               | 55.0                          | 84.0                           |
| Confidence in reading aloud                         | 60.0                          | 91.0                           |
| Motivation and participation in literacy activities | 63.0                          | 94.0                           |
| <b>Overall average</b>                              | <b>59.4</b>                   | <b>89.0</b>                    |

The table 1 presenting pre- and post-implementation reading indicators serves as the primary empirical evidence of the study's findings. It displays measurable changes in students'

reading performance across multiple indicators, allowing readers to directly observe the extent and direction of improvement following the implementation of assisted literacy practices. The use of percentage-based scores facilitates straightforward comparison across indicators without relying on inferential statistical testing, which is appropriate given the Classroom Action Research design. Importantly, the table demonstrates that improvement occurred not only in technical reading skills, such as fluency and pronunciation accuracy, but also in affective dimensions, including confidence and motivation. This pattern suggests that assisted literacy practices supported reading development in a holistic manner. By presenting the data separately from interpretive commentary, the table enhances transparency and analytical clarity. Placing the table at the beginning of the Results section enables readers to first engage with the objective outcomes before encountering explanatory discussion. Overall, the table functions as the empirical foundation for subsequent analysis of the effectiveness of classroom-based assisted literacy practices in early primary education.

## RESULTS AND DISCUSSION

### Results

The results of this study demonstrate clear improvements in early grade reading development following the implementation of assisted literacy practices in the classroom. Students showed measurable progress across all assessed indicators, including reading fluency, pronunciation accuracy, comprehension, confidence, and motivation. Prior to the intervention, students' reading performance reflected limited fluency and weak comprehension skills, indicating the need for structured instructional support. After the implementation phase, post-assessment results revealed substantial gains in reading-related competencies. The most notable improvements were observed in learner motivation and confidence in reading aloud. These changes indicate that assisted literacy practices influenced not only cognitive reading skills but also affective learning dimensions. The consistent application of guided reading activities contributed to a more supportive classroom learning environment. Overall, the results suggest that classroom-based assisted literacy practices effectively supported early grade reading development.

**Table 2.** Comparison of Students' Reading Development Before and After the Implementation of Assisted Literacy Practices.

| Reading Development Indicators                      | Pre-Implementation (%) | Post-Implementation (%) |
|-----------------------------------------------------|------------------------|-------------------------|
| Reading fluency                                     | 58.0                   | 87.0                    |
| Pronunciation accuracy                              | 61.0                   | 89.0                    |
| Reading comprehension                               | 55.0                   | 84.0                    |
| Confidence in reading aloud                         | 60.0                   | 91.0                    |
| Motivation and participation in literacy activities | 63.0                   | 94.0                    |
| <b>Overall average</b>                              | <b>59.4</b>            | <b>89.0</b>             |

Table 2 shows a consistent increase across all reading indicators after the implementation of assisted literacy practices. The largest gains occurred in motivation and confidence, suggesting that structured guidance positively influenced students' engagement. Improvements in fluency and comprehension indicate that the intervention supported foundational reading skills. The overall average increase reflects the cumulative effect of classroom-based literacy support.

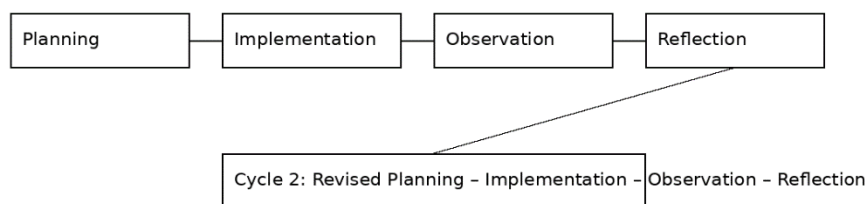


Figure 1. Two-Cycle Classroom Action Research Process for Assisted Literacy Practices.

Figure 1 illustrates the two-cycle Classroom Action Research process applied in this study. Each cycle allowed the refinement of assisted literacy practices based on observed student responses. The iterative process supported continuous instructional improvement without interrupting regular classroom activities.

## Discussion

The findings of this study align with previous research emphasizing the importance of guided and scaffolded reading instruction in early primary education. Improvements in reading fluency and comprehension observed in this study are consistent with evidence that structured literacy support enhances decoding and meaning-making processes, as reported in international literacy research such as (Gonzalez, 2025). The integration of assisted literacy practices within daily classroom instruction allowed students to receive immediate feedback, which is critical for early reading development (Smith et al., 2023). The results further support the argument that teacher-led guidance plays a central role in strengthening foundational literacy skills. By embedding assistance into routine instruction, the study reinforces classroom-based literacy models highlighted (Minor & Muhammad, 2023c). These findings confirm that early grade reading development benefits from continuous instructional support rather than sporadic interventions. The classroom context provided authentic learning conditions that enhanced the relevance of literacy activities. Consequently, this study contributes empirical support to classroom-embedded literacy instruction frameworks.

Beyond cognitive gains, the significant increase in student confidence and motivation reflects the affective impact of assisted literacy practices. Research has shown that learner engagement is closely linked to reading achievement, as discussed (Chen et al., 2022). The observed increase in students' willingness to read aloud supports findings, who emphasized the role of motivational support in literacy learning. Assisted literacy practices fostered a supportive environment that reduced reading anxiety, a factor identified (Solati et al., 2024), as critical in early literacy development. This study demonstrates that instructional guidance can positively shape students' attitudes toward reading. The results suggest that reading instruction should address emotional and behavioral dimensions alongside skill development. Such findings are consistent with sociocultural learning perspectives articulated (Smith & Storrs, 2023). Therefore, assisted literacy practices function as both instructional and motivational tools.

The improvement in reading comprehension observed in this study supports earlier findings that guided reading enhances meaning construction. Studies (Yang, 2023b), emphasize that comprehension develops through interactive reading experiences. The structured questioning and feedback provided during assisted literacy sessions enabled students to engage more deeply with texts. This aligns with the instructional principles discussed by Duke and Cartwright (2021), which highlight dialogic interaction as a key component of effective literacy instruction. The study confirms

that comprehension skills can be strengthened through consistent classroom guidance. Moreover, the results suggest that early reading comprehension should not be treated as an advanced skill but as a foundational competency. This approach resonates with international calls to strengthen early literacy instruction (OECD, 2019). Thus, assisted literacy practices offer a practical pathway for improving comprehension in early grades.

The findings also contribute to discussions on the feasibility of classroom-based literacy interventions. Unlike externally driven programs, the assisted literacy practices in this study were implemented by classroom teachers within regular instructional schedules. This supports the argument by Cochran-Smith and Lytle (2009) that practitioner-led research can generate meaningful pedagogical insights. The study demonstrates that literacy support does not require extensive resources when instructional strategies are well-structured. Previous research by Reutzel et al. (2016) similarly emphasized the effectiveness of teacher-led reading interventions. The results reinforce the practicality of classroom-embedded literacy practices. Such approaches align with the realities of primary education settings, particularly in contexts with limited resources. Consequently, this study provides evidence for scalable literacy practices that are adaptable across diverse classrooms.

Finally, the iterative nature of the Classroom Action Research design strengthened the instructional process. The reflective cycles allowed teachers to adjust literacy practices based on student responses, supporting continuous improvement as suggested by Kemmis and McTaggart (2014). This process aligns with the reflective teaching principles outlined by Schunk and Zimmerman (2012), which emphasize adaptive instruction. The sustained improvement across cycles indicates that assisted literacy practices benefit from ongoing refinement. The study adds to the literature by demonstrating how CAR can be effectively used to evaluate literacy practices. It also highlights the value of combining quantitative outcomes with qualitative classroom observations, as recommended by Miles et al. (2014). These methodological strengths enhance the credibility of the findings. Overall, the discussion underscores the pedagogical value of assisted literacy practices in early primary education.

### **Implications**

The findings of this study have important implications for primary education practice, particularly in early grade literacy instruction. Teachers can adopt assisted literacy practices as part of daily classroom routines to support diverse learner needs. The approach offers a feasible strategy for strengthening foundational reading skills without relying on external programs. Schools may incorporate guided reading support into literacy policies to promote consistent instructional practices. The results also suggest that literacy instruction should integrate cognitive and affective dimensions of learning. For teacher education programs, the study highlights the importance of preparing educators to implement classroom-based literacy support. These implications align with the journal's focus on pedagogical innovation in primary education. Overall, assisted literacy practices provide a practical framework for enhancing early reading development.

### **Limitations**

Despite its contributions, this study has several limitations that should be acknowledged. The research was conducted in a single primary school, which may limit the generalizability of the findings. The sample size was relatively small and focused on early grade students only. The study employed descriptive analysis without inferential statistical testing. Observations relied partly on

teacher-reported data, which may introduce subjective bias. The intervention duration was limited to two instructional cycles. Long-term effects of assisted literacy practices were not examined. The study did not compare assisted literacy practices with alternative instructional approaches. These limitations suggest caution in interpreting the results beyond the studied context.

### **Suggestions**

Future studies should explore assisted literacy practices across multiple schools to enhance generalizability. Comparative research designs could examine differences between assisted literacy and other reading interventions. Longitudinal studies are needed to assess the sustainability of reading improvements over time. Future research may also incorporate mixed-method designs with stronger statistical analyses. Investigating the role of parental involvement in assisted literacy practices could provide additional insights. Studies may examine how assisted literacy practices function in higher grade levels. Integrating digital literacy tools into assisted literacy instruction is another promising area. Such research would further strengthen the evidence base for classroom-based literacy practices.

### **CONCLUSION**

This study demonstrates that assisted literacy practices implemented through classroom-based instruction effectively support early grade reading development in primary education. The findings indicate consistent improvements across multiple reading indicators, including fluency, pronunciation accuracy, comprehension, learner confidence, and motivation. By embedding structured guidance within regular classroom activities, the intervention addressed both cognitive and affective dimensions of early literacy learning. The results confirm that early reading development benefits from continuous instructional support rather than isolated or short-term interventions. The classroom action research approach enabled iterative refinement of teaching practices, strengthening instructional responsiveness to students' learning needs. Importantly, the study highlights that meaningful literacy improvement can be achieved without reliance on externally driven programs or extensive resources. These findings contribute empirical evidence to the growing body of research emphasizing classroom-embedded literacy practices as a sustainable pedagogical strategy. Overall, assisted literacy practices offer a practical and contextually adaptable approach for strengthening foundational reading skills in early primary education.

### **AUTHOR CONTRIBUTION STATEMENT**

Ramli\_HR was responsible for conceptualizing the study, designing the research framework, and leading the implementation of assisted literacy practices in the classroom. Ramli\_HR also coordinated data collection, conducted classroom observations, and managed the analysis and interpretation of quantitative and qualitative data. HR contributed to instrument development, supported data collection and documentation during the research cycles, and assisted in analyzing students' reading development indicators. HR also participated in the drafting and critical revision of the manuscript to strengthen its academic clarity and coherence. Both authors collaboratively discussed the findings, refined the discussion and conclusion sections, and approved the final version of the manuscript for submission.

## REFERENCES

- Aarnoutse, C., Van Leeuwe, J., Voeten, M., & Oud, H. (2001). Development of decoding, reading comprehension, vocabulary and spelling during the elementary school years. *Reading and Writing, 14*(1–2), 61–89. <https://doi.org/10.1023/A:1008128417862>
- Afrilyasanti, R., Basthomi, Y., & Zen, E. L. (2025). Fostering creativity and critical literacy: Transforming EFL classes with engaging critical media literacy integration. *Asian Education and Development Studies, 14*(2), 133–151.
- Altun, D., Tantekin Erden, F., & Hartman, D. K. (2022). Preliterate Young Children's Reading Attitudes: Connections to the Home Literacy Environment and Maternal Factors. *Early Childhood Education Journal, 50*(4), 567–578. <https://doi.org/10.1007/s10643-021-01177-2>
- Baker, R. S., Hutt, S., Bosch, N., Ocumpaugh, J., Biswas, G., Paquette, L., Andres, J. M. A., Nasiar, N., & Munshi, A. (2024). Detector-driven classroom interviewing: Focusing qualitative researcher time by selecting cases in situ. *Educational Technology Research and Development, 72*(5), 2841–2863. <https://doi.org/10.1007/s11423-023-10324-y>
- Chen, M. R. A., Hwang, G. J., Lin, Y. H., Khalil, V. A., Li, H., & Ogata, H. (2022). A reading engagement-promoting strategy to facilitate EFL students' mobile learning achievement, behaviour and engagement. *International Journal of Mobile Learning and Organisation, 16*(4), 489. <https://doi.org/10.1504/IJMLO.2022.125968>
- Ciampa, K., Wolfe, Z., & MacDonald, E. C. (2025). AI as a Cultural Tool: Sociocultural Scaffolding and Ethical Integration in Upper Elementary Instruction. *Computers in the Schools, 1*–26. <https://doi.org/10.1080/07380569.2025.2602506>
- Fan, K. (2025). Enhancing Cognitive Reading Strategy Use for L2 Learners with Lower Working Memory through AI-Based Scaffolding. *Journal of English Language Teaching and Applied Linguistics, 7*(3), 143–151.
- Gonzalez, S. (2025). *A Case Study: The Contribution a Year-Long Professional Development in Structured Literacy Practices Has on Second-Grade Teachers, Their Reading Instructional Knowledge, and Instructional Practice* [PhD Thesis, Saint Joseph's University]. <https://search.proquest.com/openview/c79752bd3d78b4efaabd7376d5c1141e/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Johnston, T. B. (2025). *Foundational Reading Comprehension Interventions for Students in Grades K-3: A Systematic Review of Recent Research*. <https://www.kyreadingresearch.org/wp-content/uploads/2025/11/Foundational-Reading-Comprehension.pdf>

- Khany, R., & Barzan, P. (2025). The influence of classroom environment on cognitive and emotional engagement. *Journal of Cognition, Emotion & Education*, 3(2), 1–17.
- Li, M., Zhang, S., Liu, Y., Snow, C., Zhang, H., & Han, B. (2025). Using Decoding Measures to Identify Reading Difficulties: A Meta-analysis on English as a First Language Learners and English Language Learners. *Educational Psychology Review*, 37(1), 12. <https://doi.org/10.1007/s10648-025-09987-1>
- Li, W., Mohamad, M., & You, H. W. (2025). Integrating automatic speech recognition and automated writing evaluation to reduce speaking anxiety and enhance speaking competence among Chinese EFL learners. *Cogent Education*, 12(1), 2559161. <https://doi.org/10.1080/2331186X.2025.2559161>
- Lupo, S. M., Frankel, K. K., Lewis, M. A., & Wilson, A. M. (2024). Literacy Intervention in Secondary Schools Exploring Educators' Beliefs and Practices about Supporting Adolescents' Literacy Learning. *Journal of Teacher Education*, 75(1), 13–28. <https://doi.org/10.1177/00224871231156371>
- Minor, C., & Muhammad, G. (2023a). *Best practices in literacy instruction*. Guilford Publications. <https://books.google.com/books?hl=id&lr=&id=jEe7EAAAQBAJ&oi=fnd&pg=PP1&dq=Research+conducted+in+diverse+educational+contexts+indicates+that+instructional+guidance+is+particularly+beneficial+for+students+who+initially+demonstrate+low+reading+proficiency+&ots=-T8c5NLy8F&sig=iu7KGwq8fSnZujy-8OKf4X2G28c>
- Minor, C., & Muhammad, G. (2023b). *Best practices in literacy instruction*. Guilford Publications. [https://books.google.com/books?hl=id&lr=&id=jEe7EAAAQBAJ&oi=fnd&pg=PP1&dq=Instructional+practices+that+integrate+guidance+and+encouragement+during+reading+activities+have+been+found+to+foster+sustained+engagement+in+literacy+tasks+&ots=-T8c5NLB1F&sig=paKyZ2eYpjeTnrpKa\\_rDDXGrGZ0](https://books.google.com/books?hl=id&lr=&id=jEe7EAAAQBAJ&oi=fnd&pg=PP1&dq=Instructional+practices+that+integrate+guidance+and+encouragement+during+reading+activities+have+been+found+to+foster+sustained+engagement+in+literacy+tasks+&ots=-T8c5NLB1F&sig=paKyZ2eYpjeTnrpKa_rDDXGrGZ0)
- Minor, C., & Muhammad, G. (2023c). *Best practices in literacy instruction*. Guilford Publications. <https://books.google.com/books?hl=id&lr=&id=jEe7EAAAQBAJ&oi=fnd&pg=PP1&dq=By+embedding+assistance+into+routine+instruction,+the+study+reinforces+classroom-based+literacy+models+highlighted&ots=-T8c5NODay&sig=RtzGbuLi4i4aEP-KN4nvCOLq2mk>
- Neitzel, A. J., Lake, C., Pellegrini, M., & Slavin, R. E. (2022). A Synthesis of Quantitative Research on Programs for Struggling Readers in Elementary Schools. *Reading Research Quarterly*, 57(1), 149–179. <https://doi.org/10.1002/rrq.379>

- Nurmahanani, I. (2023). Effectiveness of a mixed methods-based literacy program in improving reading comprehension, vocabulary mastery, and reading fluency skills of early grade students. *International Journal of Learning, Teaching and Educational Research*, 22(7), 324–343.
- Omar, H. (2025). Enhancing reading comprehension through strategy instruction for students with Specific Learning Disabilities (SLD): Literature review. *International Journal of Inclusive Education*, 1–17. <https://doi.org/10.1080/13603116.2025.2567425>
- Porter, S. B., Odegard, T. N., Farris, E. A., & Oslund, E. L. (2024). Effects of teacher knowledge of early reading on students' gains in reading foundational skills and comprehension. *Reading and Writing*, 37(8), 2007–2023. <https://doi.org/10.1007/s11145-023-10448-w>
- Pregoner, J. D. (2024). Research approaches in education: A comparison of quantitative, qualitative and mixed methods. *IMCC Journal of Science*, 4(2), 31–36.
- Reed, W. S. (2025). *Persistent Reading Deficiencies in Early Education*. <https://digitalcommons.acu.edu/etd/850/>
- Shafiee Rad, H. (2025). Reinforcing L2 reading comprehension through artificial intelligence intervention: Refining engagement to foster self-regulated learning. *Smart Learning Environments*, 12(1), 23. <https://doi.org/10.1186/s40561-025-00377-2>
- Smith, E. E., & Storrs, H. (2023). Digital literacies, social media, and undergraduate learning: What do students think they need to know? *International Journal of Educational Technology in Higher Education*, 20(1), 29. <https://doi.org/10.1186/s41239-023-00398-2>
- Smith, R., Snow, P., Serry, T., & Hammond, L. (2023). Elementary Teachers' Perspectives on Teaching Reading Comprehension. *Language, Speech, and Hearing Services in Schools*, 54(3), 888–913. [https://doi.org/10.1044/2023\\_LSHSS-22-00118](https://doi.org/10.1044/2023_LSHSS-22-00118)
- Solati, A., Amani, A., & Armat, M. R. (2024). Impact of learning environment on reading anxiety: A study of medical students in online and traditional settings. *BMC Medical Education*, 24(1), 1502. <https://doi.org/10.1186/s12909-024-06516-6>
- V. Garcia, R. G., Mosen, J., & Therese A.P. Bustos, M. (2025). How the science of learning can strengthen inclusive literacy instruction in the Philippines. *International Journal of Developmental Disabilities*, 71(6), 896–918. <https://doi.org/10.1080/20473869.2025.2544158>
- Weidlich, J., Fink, A., Frey, A., Jivet, I., Gombert, S., Menzel, L., Giorgashvili, T., Yau, J., & Drachsler, H. (2025). Highly informative feedback using learning analytics: How feedback literacy moderates student perceptions of feedback. *International Journal of Educational Technology in Higher Education*, 22(1), 43. <https://doi.org/10.1186/s41239-025-00539-9>

- Wordofa, Y. J., Gencha, M. G., & Hadgu, A. M. (2025). Transforming reading self-efficacy in EFL classrooms: The role of task-based instruction. *Ampersand*, 100236.
- Yang, L. (2023a). An “Interactive Learning Model” to enhance EFL students’ lexical knowledge and reading comprehension. *Sustainability*, 15(8), 6471.
- Yang, L. (2023b). An “Interactive Learning Model” to enhance EFL students’ lexical knowledge and reading comprehension. *Sustainability*, 15(8), 6471.
- Zhang, H., Perry, A., & Lee, I. (2025). Developing and Validating the Artificial Intelligence Literacy Concept Inventory: An Instrument to Assess Artificial Intelligence Literacy among Middle School Students. *International Journal of Artificial Intelligence in Education*, 35(1), 398–438. <https://doi.org/10.1007/s40593-024-00398-x>