

Implementation of Aral Reading Program for Basic Literacy Development of Learners: Reading Tutors Perspectives

Arcelli T. Ucat

Master of Arts in Education, Cebu Technological University, Cebu City, Cebu, Philippines

Email of Corresponding Author: arcelli.ucat@deped.gov.ph

Publication history:

Received: September 14, 2026

Revised: October 10, 2026

Accepted: October 13, 2026

Published: October 14, 2026

International Journal of Sustainable and Integrated Studies, Vol. 1, No. 3, pp. 412–424, October 2026.

Abstract

This study examined the implementation of the Academic Recovery and Accessible Learning (ARAL) Reading Program for basic literacy development from the perspectives of reading tutors in Candijay District, Division of Bohol, during School Year 2026–2027. Anchored on Vygotsky's Sociocultural Theory, Bandura's Social Learning Theory, Piaget's Theory of Cognitive Development, and Bruner's Constructivist Theory, the study employed a descriptive-correlational quantitative research design. Total population sampling included 48 ARAL reading tutors from eight public elementary schools. Data were collected using a researcher-made, validated questionnaire and analyzed through descriptive statistics and Spearman Rank-Order Correlation. Results revealed consistent implementation of instructional delivery (4.61), learner engagement and reinforcement (4.59), and assessment and progress monitoring (4.66). Literacy competencies were consistently covered in foundational word recognition and decoding (4.70), reading fluency (4.71), and basic vocabulary and reading comprehension (4.74). Among 380 learners, 57.63% attained the Instructional Level, 30.00% reached the Independent Level, and 12.37% remained at the Frustration Level. Significant positive relationships were reported between literacy instruction strategies and competencies covered ($\rho = 0.65\text{--}0.76$, estimated $p < 0.05$). Major implementation challenges included insufficient financial resources, language barriers, limited parental involvement, irregular learner attendance, and demanding teaching responsibilities. The findings emphasize the importance of sustained literacy interventions, differentiated instruction, adequate instructional materials, continuous tutor development, and strengthened assessment practices. The study aligns with Sustainable Development Goals 4 (Quality Education), 10 (Reduced Inequalities), and 17 (Partnerships for the Goals) by supporting inclusive literacy education, equitable learning opportunities, and stakeholder collaboration. Its sustainability impact lies in informing institutional resource allocation, professional development, school–community partnerships, and evidence-based reading enrichment activities that may strengthen the long-term implementation of foundational literacy programs.

Keywords: Academic Recovery and Accessible Learning (ARAL) Reading Program, Basic Literacy Development, Evidence-Based Reading Strategies, Foundational Reading Competencies, Learner Engagement, Literacy Instruction Strategies, Reading Fluency, Reading Tutors, Sustainable Development Goals

1. Introduction

Foundational literacy is essential to academic achievement, lifelong learning, and equitable educational opportunities. However, persistent reading difficulties, inadequate instructional resources, and disparities in learning support continue to challenge literacy development. In response, the Philippine government institutionalized the Academic Recovery and Accessible Learning (ARAL) Program to provide targeted academic

interventions for learners requiring additional assistance. Its implementation depends on effective instructional strategies, appropriate literacy competencies, learner engagement, and sustained institutional support. This study examines the implementation of the ARAL Reading Program for basic literacy development from the perspectives of reading tutors in Candijay District, Division of Bohol, during School Year 2026–2027. It focuses on tutors' demographic characteristics, literacy instruction strategies, competencies covered, learners' literacy performance, the relationship between instructional strategies and competency coverage, and implementation challenges. The findings provide a basis for strengthening instructional delivery through evidence-based reading strategies and supporting inclusive, sustainable literacy education.

Foundational literacy is central to academic development and lifelong learning. Teachers frequently extend their responsibilities beyond regular instruction to assist struggling readers, often despite inadequate compensation, instructional materials, and institutional support. UNESCO (2023) emphasizes the importance of prioritizing foundational literacy and supporting teachers in delivering targeted remediation, particularly in resource-constrained educational settings. In the Philippines, Republic Act No. 12028, or the Academic Recovery and Accessible Learning (ARAL) Program Act, institutionalized tutorial and remediation services for learners experiencing academic difficulties. Its implementation is reinforced by DepEd Order No. 012, s. 2025, which provides guidance for learning interventions. The program recognizes teachers' contributions to academic recovery while emphasizing the need to maximize available educational resources (DepEd, 2025). In Candijay District, Division of Bohol, the ARAL Reading Program supports learners from predominantly rural and economically disadvantaged communities. A school-level ARAL Program implementation report for School Year 2025–2026 provides local documentary context for the implementation of academic recovery interventions at Anoling Elementary School (Department of Education, 2026). However, its implementation faces limited instructional materials, insufficient funding, demanding teaching workloads, and varying learner competencies. Reading tutors consequently adapt available resources and instructional approaches to address learners' needs. These conditions highlight the importance of examining how tutors implement literacy instruction, promote learner engagement, monitor reading progress, and address foundational reading competencies. Understanding these practices provides a basis for identifying instructional strengths, implementation difficulties, and opportunities for improving literacy development. Additional recent evidence broadens the interpretation of literacy intervention practices. Studies of reading support in Philippine classrooms have examined teacher challenges, differentiated interventions, and learner outcomes (Adao et al., 2023; Bencito et al., 2024; Dinoro et al., 2023; Tolentin, 2023; Po et al., 2025; Pocaan et al., 2025). Research on fluency, comprehension, and instructional adaptations further highlights the need for repeated reading, responsive teaching, and learner-specific support (Guerin, 2025; Holder, 2024; Lagdaan & Sevilla, 2025; Laroya & Baga, 2025; Mercado & Ching, 2025; Quimsing & Ortega Dela Cruz, 2025; Taboer & Rochyadi, 2025). Other recent sources address literacy engagement, instructional technology, and teacher perceptions (Australia Reads, 2024; Balino, 2025; Cardeño, 2025; Carvalhais et al., 2025; Resma, 2025; Wijayanti & Wedyaswari, 2023). These studies provide complementary contexts rather than direct evidence of causal effects within the present district.

Literature on literacy interventions identifies interconnected factors influencing reading development, including instructional strategies, learner motivation, teacher preparation, resource availability, and institutional support. Research consistently identifies barriers to effective reading instruction. Gumagay (2024) reported challenges involving learner motivation, insufficient teacher training, and limited parental involvement, while Adao et al. (2023) identified inadequate reading materials, weak learner participation, and unmet instructional targets. Reyes et al. (2023) identified several challenges encountered by teachers in supporting struggling readers during the pandemic, including insufficient parental cooperation, limited time for reading activities, inadequate instructional materials, and low learner willingness to participate. Similarly, Jumawid (2024) documented persistent reading deficiencies and inadequate classroom resources among struggling readers. Instructional and structural limitations further complicate literacy interventions. Cartoneros and Galvez (2023) identified weaknesses in word recognition, inadequate training, and insufficient materials as obstacles to reading fluency. Manegdeg and Paglinawan (2025) emphasized the effects of overcrowded classrooms and limited resources on individualized instruction. Maglantay (2024) associated reading difficulties with low learner confidence and resistance to literacy activities, while Belga (2025) highlighted challenges in maintaining motivation and monitoring progress. De Ocampo et al. (2024) further identified gaps in teachers' comprehension-instruction competencies. Conversely, evidence supports structured, learner-centered reading interventions. Andaya and Tepacia (2025) demonstrated the value of guided reading, vocabulary instruction, and scaffolded comprehension activities in improving reading skills and confidence. Rodrigo (2025) emphasized repeated reading, peer collaboration, and structured text analysis, while Balansag (2025) identified repeated reading as beneficial to fluency and learner confidence. Interactive and comprehension-focused strategies also contribute to literacy development. Sotelo (2024) reported improvements in learner engagement and comprehension through digital and multimedia resources. Pastera et al. (2024) emphasized summarizing, predicting, and connecting reading materials to personal experiences. Brilliananda and Wibowo (2023) supported explicit modeling, systematic comprehension instruction, and developmentally appropriate reading materials. Foundational competencies remain essential to reading proficiency. Anji et al. (2025) identified vocabulary knowledge and contextual understanding as important to

comprehension, while Garcia et al. (2025) emphasized decoding, phonics, automaticity, prosody, and self-correction as interconnected components of effective reading instruction. Teacher preparation and institutional support likewise influence implementation. Alcayde and Basilan (2024) emphasized specialized training, appropriate materials, and instructional guidelines. Shanahan et al. (2025) identified insufficient preparation time and collaborative support as barriers to consistent evidence-based instruction. Zainal et al. (2025) recommended inclusive teaching approaches, technology integration, and systematic progress monitoring. Professional development remains particularly important. Milne and Topping (2023) identified gaps between teachers' confidence and foundational literacy knowledge, while Kjellström et al. (2025) emphasized digital competencies in supporting diverse learners. Science of Reading Center at SUNY New Paltz (2025) highlighted limited formal preparation in evidence-based reading instruction, whereas Science Direct (2025) associated instructional coaching with improved teaching practices. Inadequate pedagogical preparation and limited instructional resources remain important barriers to the effective implementation of literacy interventions. Addressing these challenges requires continuous professional development, adequate instructional support, and sustained teacher motivation. Recent evaluations provide specific evidence regarding the ARAL Program. Silagan and Sariana (2026) reported improvements in numeracy and problem-solving competencies, although gains across these domains were not consistently related. Buahe (2026) documented improvements in letter recognition, sight-word identification, fluency, and comprehension. Ambatang and Soriano (2026) emphasized culturally responsive instructional materials, guided practice, and school–family–community collaboration in addressing literacy challenges in rural settings. Collectively, these studies establish that effective reading interventions require coordinated attention to instructional delivery, learner engagement and reinforcement, assessment and progress monitoring, foundational word recognition and decoding, reading fluency, and basic vocabulary and reading comprehension. They also demonstrate that sustainable implementation depends on teacher competence, learner participation, adequate resources, and institutional support.

International educational systems recognize literacy development as a priority, although resource allocation and instructional support remain uneven. UNESCO's Global Education Monitoring Report (2023) identified persistent disparities in educational resources, particularly among marginalized communities. The UNESCO Institute for Statistics (2025) further highlighted the importance of monitoring literacy and numeracy outcomes as part of Sustainable Development Goal 4, emphasizing the need for reliable educational data to assess progress toward equitable learning opportunities. In the United States, the Every Student Succeeds Act supports literacy interventions, yet the National Center for Education Statistics (2024) identified continuing resource limitations. Comparable challenges were documented by the Department for Education (2022) in the United Kingdom and the Council of Ministers of Education in Canada, where funding and intervention coverage remain insufficient for some learners. Asian countries have similarly introduced literacy support initiatives. India's New India Literacy Programme provides tutor training and incentives, while Indonesia's Education Volunteer Program promotes volunteer participation and instructional support. Malaysia's Literacy Enhancement Initiative (2023) emphasizes teacher development and literacy improvement. Nevertheless, inadequate instructional materials, delayed resources, and dependence on locally developed learning aids continue to affect implementation. At the national level, the Philippines established the ARAL Program through Republic Act No. 12028 to address learning gaps through structured academic support. DepEd Order No. 013, s. 2023 established the National Learning Recovery Program, while DepEd Order No. 012, s. 2025 and DepEd Order No. 018, s. 2025 provide policy guidance relevant to learning interventions and program implementation. At the local level, Candijay District schools implement the ARAL Reading Program to address foundational literacy difficulties among elementary learners. Limited instructional materials, financial constraints, demanding teacher responsibilities, and differences in reading proficiency require tutors to employ adaptive instructional strategies. These circumstances establish the relevance of examining actual implementation practices and literacy competencies in resource-constrained public elementary schools.

The study is primarily anchored on Vygotsky's Sociocultural Theory (1978), supported by Bandura's Social Learning Theory (1977), Piaget's Theory of Cognitive Development (1972), and Bruner's Constructivist Theory (1966). Collectively, these perspectives explain how social interaction, modeling, developmental readiness, and active learning influence literacy acquisition. Vygotsky's Sociocultural Theory (1978) emphasizes learning through guided interaction within the Zone of Proximal Development. Reading tutors facilitate literacy development by providing scaffolding and individualized assistance based on learners' existing competencies. Mustakimah (2023) emphasized guided learning and collaboration, Xue (2023) supported developmentally appropriate instructional assistance, and Lundgren (2023) identified vocabulary instruction, modeling, visual aids, and small-group activities as applications of sociocultural learning principles. Bandura's Social Learning Theory (1977) explains learning through observation, imitation, reinforcement, and motivation. Reading tutors support literacy development by modeling reading behaviors and encouraging learner participation. Koutroubas and Galanakis (2022) emphasized observational learning, while Bouchrika (n.d.) highlighted the influence of teachers and peers on learning behaviors. McLeod (2025) further explained the roles of attention, retention, reproduction, motivation, and self-efficacy in acquiring skills. Piaget's Theory of Cognitive Development (1972) emphasizes matching instruction to learners' cognitive readiness. Pakpahan and Saragih (2022) described developmental

stages influencing learning, while Siregar (2025) supported active, learner-centered experiences. These principles support the adaptation of reading activities to learners' developmental and literacy levels. Bruner's Constructivist Theory (1966) emphasizes active knowledge construction, discovery learning, and progressive reinforcement of concepts. Mir and Alam (2025) supported collaborative, experience-based learning, while Idowu (2025) emphasized spiral instruction and teacher facilitation. Wynne, Robinson, and O'Connor (2026) further highlighted scaffolding, representation, and active participation in developing understanding. These principles support the use of contextualized, interactive, and progressively challenging reading activities. The study is also supported by Philippine educational legislation. Republic Act No. 12028 provides the primary legal foundation for ARAL learning interventions. Republic Act No. 11713 supports teacher education and professional development, Republic Act No. 11510 promotes inclusive and accessible learning opportunities through the Alternative Learning System, and Republic Act No. 10533 establishes the learner-centered and developmentally appropriate principles of enhanced basic education. Conceptually, the study examines reading tutors' demographic characteristics, literacy instruction strategies, literacy competencies covered, learners' literacy performance, and implementation challenges. Instructional strategies encompass Instructional Delivery, Learner Engagement and Reinforcement, and Assessment and Progress Monitoring. Literacy competencies include Foundational Word Recognition and Decoding, Reading Fluency, and Basic Vocabulary and Reading Comprehension. The relationship between instructional strategies and competencies covered provides a basis for developing evidence-based reading enrichment activities.

Existing literature establishes the importance of reading interventions, teacher preparation, and learner-centered instruction. However, much of the research emphasizes program effectiveness, learner outcomes, and general instructional challenges rather than the relationship between specific literacy instruction strategies and the competencies addressed by ARAL reading tutors in resource-constrained rural schools. Although previous studies identify instructional resource shortages, learner motivation difficulties, inadequate training, and limited parental involvement, there remains a need for localized evidence describing how these factors influence program implementation in Candijay District. Additionally, available evaluations of the ARAL Program provide evidence of learning improvements but offer limited district-specific information on instructional strategy implementation, competency coverage, and learners' reading proficiency levels. This study addresses these gaps by examining the demographic profiles of ARAL reading tutors, their instructional strategies, the literacy competencies covered, learners' literacy performance, and implementation challenges during School Year 2026–2027. It further investigates the significant relationship between literacy instruction strategies and literacy competencies covered. The findings provide an empirical basis for proposing strengthened instructional delivery through evidence-based reading strategies appropriate to the needs of ARAL reading tutors and learners in Candijay District, Division of Bohol.

The study primarily aligns with Sustainable Development Goal 4 (SDG 4): Quality Education, which promotes inclusive, equitable, and quality education and lifelong learning opportunities for all. By examining literacy instruction strategies, foundational reading competencies, and learners' literacy performance, the research addresses the need to strengthen essential learning skills among elementary learners experiencing reading difficulties. Its focus on accessible remediation, individualized instructional support, and the improvement of reading proficiency contributes to educational inclusion and the reduction of learning disparities. The examination of tutors' instructional practices and professional support needs also aligns with efforts to improve the quality and effectiveness of teaching. The study additionally relates to SDG 10: Reduced Inequalities, particularly through its attention to learners in rural and economically disadvantaged communities who experience unequal access to educational resources and literacy support. Strengthening reading interventions may help reduce disparities in foundational learning opportunities. Furthermore, the study has relevance to SDG 17: Partnerships for the Goals, as the implementation of literacy interventions involves cooperation among school administrators, teachers, families, and community stakeholders. Such collaboration is important in addressing instructional resource limitations and supporting the continuity of the ARAL Reading Program. These alignments establish the study's contribution to educational equity, institutional cooperation, and sustainable foundational literacy development.

The study contributes primarily to educational, socio-economic, community, and institutional sustainability through its examination of foundational literacy development and the implementation of school-based reading interventions. In terms of educational sustainability, the research emphasizes strengthening instructional practices, developing literacy competencies, and monitoring learner progress. Evidence-based reading strategies and appropriate remediation support continued learning and provide a foundation for future academic achievement. Identifying effective instructional approaches may also help schools maintain responsive literacy interventions. Regarding socio-economic sustainability, improving foundational literacy among learners from disadvantaged communities may strengthen their long-term educational opportunities. Addressing reading difficulties during elementary education contributes to the development of essential competencies needed for further learning and future participation in society. For community sustainability, the study recognizes the importance of cooperation among reading tutors, school administrators, parents, and local stakeholders. Community participation and locally adapted instructional resources can help schools respond to literacy needs despite financial and material

constraints. In relation to institutional and policy sustainability, the research provides information on instructional implementation, tutor preparation, resource limitations, and learner performance. These findings may guide school administrators and educational authorities in improving instructional support, professional development, resource allocation, and program monitoring. The study also has implications for technological sustainability within education, as the reviewed literature recognizes the potential of digital and multimedia resources to support reading engagement and comprehension. However, their practical application depends on available resources and tutors' instructional competencies. Overall, the study supports the sustainable implementation of the ARAL Reading Program by generating evidence on literacy instruction strategies, competency coverage, learner performance, and implementation challenges. Its proposed evidence-based reading enrichment activities may contribute to more inclusive, responsive, and sustainable literacy education in Candijay District, Division of Bohol.

2. Material and methods

2.1 Research Design

The study utilized a descriptive-correlational quantitative research design to assess the implementation of the ARAL Reading Program. The descriptive component examined tutors' demographic profiles, instructional strategies, literacy competencies covered, learners' literacy performance, and implementation challenges. The correlational component determined the significant relationship between literacy instruction strategies and literacy competencies covered. This design enabled the systematic examination of existing variables and their associations without manipulating the research environment (Creswell & Creswell, 2018; Dinoro et al., 2023). Creswell and Creswell (2018) emphasized its suitability for describing research variables and examining statistical relationships, while its application to educational program evaluation is supported by (Wijayanti & Wedyaswari, 2023; Dinoro et al., 2023). The study followed the Input–Process–Output (IPO) model. Inputs included tutor profiles, instructional strategies, literacy competencies, learner performance, and implementation challenges. The process involved securing authorization, obtaining informed consent, administering validated questionnaires, and conducting statistical analysis. The resulting findings served as the basis for developing evidence-based reading enrichment activities to strengthen literacy instruction.

2.2 Locale of the Study

The study was conducted in eight public elementary schools in Candijay District, Division of Bohol, Philippines: Anoling, Luan, Canawa, Tubod, Panadtaran, La Union, Lungsodaan, and San Isidro Elementary Schools. These schools implemented the ARAL Reading Program and engaged volunteer teachers as reading tutors, making them appropriate settings for examining literacy instruction and program implementation. The participating schools varied in enrollment, with Lungsodaan Elementary School serving 189 learners, Anoling 158, Canawa 156, La Union 153, San Isidro 108, Tubod 102, Luan 100, and Panadtaran 94. These differences provided representation of varying school sizes and instructional conditions within the district.

2.3 Respondents of the Study

The respondents were forty-eight (48) elementary school teachers from Candijay District who voluntarily served as ARAL reading tutors during School Year 2026–2027. Eligible respondents were regular teachers assigned to participating schools, officially registered and actively serving as ARAL reading tutors, and directly involved in planning, preparing, and conducting reading intervention sessions. Their participation provided information on instructional practices, literacy competency coverage, learner progress, and challenges encountered in implementing the program.

2.4 Sample and Sampling Procedure

The study employed total population sampling, a form of purposive sampling, by including all forty-eight (48) qualified ARAL reading tutors from the eight participating elementary schools. This procedure was appropriate because the target population was small and manageable, allowing the researcher to obtain information from every eligible tutor. The inclusion of the entire population provided comprehensive representation of instructional practices and implementation experiences within the district.

2.5 Research Instrument

Data were collected using a researcher-made questionnaire designed to address the study's objectives and variables. The instrument consisted of five parts. The first gathered tutors' demographic information, including age, gender, civil status, highest educational attainment, plantilla position, teaching experience, and ARAL-related training. The second assessed literacy instruction strategies in terms of Instructional Delivery, Learner Engagement and Reinforcement, and Assessment and Progress Monitoring. The third examined literacy competencies covered, specifically Foundational Word Recognition and Decoding, Reading Fluency, and Basic Vocabulary and Reading Comprehension. The fourth part assessed learners' literacy performance using the Independent, Instructional, and Frustration Levels based on reading assessment results. The fifth identified implementation challenges involving instructional resources, workload, class size, learner motivation and

attendance, parental support, training, funding, varied reading abilities, and language difficulties. The questionnaire underwent content validation by education specialists, reading program coordinators, and research experts who evaluated its clarity, relevance, appropriateness, organization, and alignment with the research objectives. The revised instrument was pilot-tested with ten (10) ARAL reading tutors from a school excluded from the actual study. Cronbach's Alpha was used to assess the internal consistency of Likert-scale items, with a reliability coefficient of 0.70 or higher considered acceptable. Necessary revisions were incorporated before the questionnaire was administered to the respondents.

2.6 Data Gathering Procedure

Data collection followed three sequential stages. Initially, the researcher secured permission from the concerned authorities of the eight participating elementary schools and obtained informed consent from the respondents. The research instrument underwent content validation, pilot testing, and reliability assessment before its administration. Following approval, the validated questionnaires were distributed to all forty-eight (48) ARAL reading tutors. Data collection was conducted in a private and comfortable environment at times convenient for the respondents. Voluntary participation, confidentiality, anonymity, and the right to withdraw were observed throughout the process. After data collection, the completed questionnaires were retrieved, checked, consolidated, tallied, and organized for statistical analysis. The resulting data were used to assess instructional strategies, literacy competencies, learners' reading performance, and implementation challenges, providing the basis for the proposed evidence-based reading enrichment activities.

2.7 Data Analysis Techniques

The collected data were analyzed using frequency count, percentage, mean, standard deviation, weighted mean, and Spearman Rank-Order Correlation Coefficient. Frequency and percentage were used to describe respondents' demographic characteristics, including age, gender, civil status, educational attainment, plantilla position, and ARAL-related training. Mean and standard deviation were employed to determine the average and variability of teaching experience. Weighted mean was used to assess the extent of implementation of literacy instruction strategies and coverage of literacy competencies. Instructional strategies were evaluated in terms of Instructional Delivery, Learner Engagement and Reinforcement, and Assessment and Progress Monitoring, while literacy competencies were assessed through Foundational Word Recognition and Decoding, Reading Fluency, and Basic Vocabulary and Reading Comprehension. Responses were interpreted using a five-point scale with the following ranges: 4.21–5.00 (Always), 3.41–4.20 (Often), 2.61–3.40 (Sometimes), 1.81–2.60 (Rarely), and 1.00–1.80 (Never). Learners' literacy performance was described using frequency and percentage distributions based on the Philippine Informal Reading Inventory (Phil-IRI) proficiency classifications: Independent, Instructional, and Frustration Levels. The issues and challenges encountered by tutors were assessed using the questionnaire's agreement-based response scale. Spearman Rank-Order Correlation Coefficient (Spearman's rho) was applied to determine the strength, direction, and statistical significance of the relationship between literacy instruction strategies and literacy competencies covered. This nonparametric test was appropriate for the ordinal data obtained from the Likert-scale responses. Statistical significance was evaluated at the 0.05 level, with positive coefficients indicating a direct association and negative coefficients indicating an inverse association between the variables.

2.8 Ethical Considerations

The study observed ethical research procedures through institutional authorization, informed consent, voluntary participation, confidentiality, and anonymity. Respondents were informed of the study's purpose, scope, and procedures, including their right to withdraw at any stage. Questionnaire administration was conducted in a private, comfortable, and non-threatening environment to encourage truthful responses while protecting participants' rights and personal information.

3. Results and Discussion

3.1 Demographic and Professional Profile of ARAL Reading Tutors

3.1.1 Age and Gender of Reading Tutors

Among the 48 respondents, the largest age group was 31–35 years, comprising 17 tutors (35.42%). Those aged 26–30 and 41–45 years each accounted for 10 respondents (20.83%), followed by 36–40 years with eight (16.67%) and 46–50 years with three (6.25%). Female tutors predominated, with 37 respondents (77.08%), while 11 (22.92%) were male. The findings indicate that ARAL Reading Program implementation was primarily supported by young to middle-aged educators, predominantly women. However, instructional effectiveness depends on professional competence, preparation, and institutional support rather than age or gender alone. Alcayde and Basilan (2024) emphasized the importance of teacher preparation and instructional resources, while Shanahan et al. (2025) highlighted the role of evidence-based instruction and institutional support. Science Direct (2025) likewise identified continuous coaching as essential to improving teachers' instructional confidence and effectiveness.

3.1.2 Civil Status of Reading Tutors

Of the 48 ARAL reading tutors, 26 (54.17%) were married, while 22 (45.83%) were single. The distribution showed a relatively balanced representation of married and single teachers, with married respondents comprising a slight majority. These findings suggest that teachers from different personal backgrounds actively participated in literacy interventions. Gumagay (2024) emphasized teachers' commitment to addressing reading difficulties, while Alcayde and Basilan (2024) identified instructional competence and institutional support as important determinants of successful literacy implementation. Ambatang and Soriano (2026) further highlighted the contribution of collaborative teacher participation to the effectiveness of the ARAL Program.

3.1.3 Highest Educational Attainment

Most respondents had pursued graduate education, with 36 tutors (75.00%) having completed master's units. Nine respondents (18.75%) held master's degrees, while three (6.25%) had completed doctorate units. These findings indicate that all respondents had undertaken graduate-level studies. The respondents' educational qualifications reflect their engagement in continuing professional development. Alcayde and Basilan (2024) emphasized that advanced preparation supports the implementation of evidence-based literacy strategies. Similarly, Milne and Topping (2023) associated professional knowledge with effective foundational literacy instruction, while Zainal et al. (2025) highlighted the contribution of continuing education to instructional competence and responsiveness to learners' needs.

3.1.4 Plantilla Position of Reading Tutors

Regarding plantilla position, 32 respondents (66.67%) occupied Teacher I positions, while 16 (33.33%) were Teacher III. Thus, Teacher I personnel constituted approximately two-thirds of the tutors implementing the ARAL Reading Program. The findings indicate that literacy interventions were predominantly delivered by Teacher I personnel, with Teacher III educators also contributing to program implementation. Gumagay (2024) emphasized that effective literacy instruction depends on teacher commitment and competence rather than professional rank. Shanahan et al. (2025) highlighted the importance of institutional support across career stages, while Ambatang and Soriano (2026) recognized collaborative participation among educators with varying professional experiences.

3.1.5 ARAL-Related Training and Professional Preparation

Most tutors attended district-level ARAL training, comprising 43 respondents (89.58%), while five (10.42%) received school-based training. No respondents reported attending regional, national, or international ARAL-related training. These findings identify the district as the primary provider of professional preparation for ARAL reading tutors, with limited exposure to broader training opportunities. Alcayde and Basilan (2024) emphasized that continuous training strengthens teachers' capacity to implement literacy interventions. The Science of Reading Center at SUNY New Paltz (2025) identified formal preparation in evidence-based reading instruction as important for instructional competence, while Science Direct (2025) emphasized the benefits of instructional coaching and sustained professional development.

3.2 Implementation of Literacy Instruction Strategies

3.2.1 Instructional Delivery

Instructional Delivery obtained an overall weighted mean of 4.61, interpreted as Always, indicating consistent implementation. Grouping learners according to reading levels received the highest mean of 4.90, followed by modeling reading skills (4.75) and allocating sufficient instructional time (4.73). Comparatively lower ratings were recorded for explicit step-by-step instruction (4.40), multisensory techniques (4.44), and mother tongue or local language integration (4.48), although all remained within the Always category. The findings indicate that tutors consistently employed differentiated and learner-centered approaches, particularly reading-level grouping and instructional modeling. However, explicit teaching, multisensory instruction, and language adaptation received comparatively less emphasis. Andaya and Tepacia (2025) supported scaffolded and learner-centered literacy instruction, while Brilliantanda and Wibowo (2023) emphasized modeling and systematic teaching. Zainal et al. (2025) further identified differentiated instruction, multisensory approaches, and progress monitoring as important practices for addressing diverse literacy needs.

3.2.2 Learner Engagement and Reinforcement

Learner Engagement and Reinforcement obtained an overall weighted mean of 4.59, interpreted as Always. Storytelling and role-playing received the highest mean of 4.69, followed by songs, rhymes, games, and paired reading activities, each with 4.63. Positive reinforcement and praise received the lowest mean of 4.50, followed by varying instructional activities (4.54), regular practice exercises, and displaying learners' outputs (both 4.56). All indicators were consistently implemented. These findings demonstrate the tutors' emphasis on interactive activities and collaborative reading experiences to sustain learner participation. Nevertheless, positive reinforcement and instructional variation received comparatively lower ratings. Sotelo (2024) emphasized that interactive learning activities improve motivation and reading comprehension. Rodrigo (2025) supported paired

and repeated reading as strategies for developing fluency and participation, while Andaya and Tepacia (2025) highlighted the importance of guided reading, reinforcement, and scaffolded instruction in improving confidence and reducing reading anxiety.

3.2.3 Assessment and Progress Monitoring

Assessment and Support obtained an overall weighted mean of 4.66, interpreted as Always. Oral reading tests and comprehension checks recorded the highest mean of 4.98. Immediate feedback and preparation of program outcome reports both obtained 4.83, followed by weekly or monthly progress monitoring (4.81). The comparatively lowest means were recorded for using assessment results to modify instruction (4.46), administering baseline assessments (4.48), and communicating learners' progress to parents or guardians (4.50). The results indicate that tutors consistently conducted reading assessments and monitored learner development. However, using assessment findings to adjust instruction and communicating progress to families received relatively less emphasis. Belga (2025) identified regular monitoring as essential for detecting reading difficulties, while Zainal et al. (2025) emphasized responsive assessment and instructional adjustment. Alcayde and Basilan (2024) further highlighted the importance of continuous assessment, feedback, and professional support in improving literacy interventions.

3.3 Literacy Competencies Covered in the ARAL Reading Program

3.3.1 Foundational Word Recognition and Decoding

Foundational Word Recognition and Decoding obtained an overall weighted mean of 4.70, interpreted as Always. Segmenting words into individual sounds received the highest mean of 4.85, followed by sight-word recognition (4.83). Sound blending and matching spoken words with written forms both obtained 4.77. Comparatively lower means were recorded for applying phonics rules and identifying beginning, middle, and ending sounds (both 4.56), followed by structural word analysis (4.58). These findings demonstrate consistent coverage of phonemic awareness, sight-word recognition, and sound blending. However, phonics application and structural analysis received comparatively less emphasis. Garcia et al. (2025) emphasized that phonemic awareness, decoding, and automatic word recognition provide essential foundations for reading development. Andaya and Tepacia (2025) supported explicit and scaffolded phonics instruction, while Buahe (2026) reported improvements in letter recognition, sight-word mastery, and decoding through structured ARAL reading interventions.

3.3.2 Reading Fluency

Reading Fluency obtained an overall weighted mean of 4.71, interpreted as Always. Repeated reading activities received the highest mean of 4.88, followed by automatic word recognition (4.83) and developing confidence in reading longer texts (4.81). The lowest-rated competencies involved reading rhythm and flow (4.56), smooth phrase and sentence reading (4.60), and modeling fluent reading (4.63), although these also received Always ratings. The findings indicate that tutors consistently emphasized repeated reading and automatic word recognition to strengthen fluency. Nevertheless, reading rhythm, phrasing, and fluent-reading demonstrations received comparatively lower ratings. Rodrigo (2025) identified repeated reading as effective for improving fluency and comprehension, while Balansag (2025) emphasized its contribution to reading confidence and automaticity. Garcia et al. (2025) further highlighted the importance of prosody, automaticity, and self-correction in developing comprehensive reading fluency.

3.3.3 Basic Vocabulary and Reading Comprehension

Basic Vocabulary and Reading Comprehension recorded the highest overall competency mean of 4.74, interpreted as Always. Explaining the literal meaning of sentences and paragraphs obtained the highest mean of 4.98, followed by identifying main ideas (4.94). Recalling details and summarizing short texts both received 4.83. Comparatively lower ratings were recorded for connecting texts to prior knowledge (4.46), making predictions (4.50), and answering WH-questions (4.58). The results indicate that tutors placed considerable emphasis on literal comprehension, main-idea identification, and recall of textual information. However, connecting ideas with prior knowledge and developing predictive comprehension received relatively lower ratings. Pastera et al. (2024) emphasized summarizing, predicting, and connecting texts to personal experiences as important comprehension strategies. Anji et al. (2025) highlighted vocabulary knowledge as essential to text interpretation, while Buahe (2026) reported improvements in vocabulary and comprehension through structured ARAL literacy interventions.

3.4 Literacy Performance of Learners Under the ARAL Reading Program

The literacy assessment of 380 learners showed that 219 (57.63%) were classified at the Instructional Level, indicating moderate reading proficiency and the ability to read with minimal teacher guidance. Meanwhile, 114 learners (30.00%) reached the Independent Level, demonstrating the ability to read and comprehend independently. The remaining 47 learners (12.37%) were at the Frustration Level and required intensive reading assistance. The study reported that participating learners were initially identified as Frustration-Level readers during the Beginning of School Year (BOSY) 2026–2027 Phil-IRI assessment. The findings indicate that most learners attained instructional or independent reading proficiency following participation in the ARAL Reading Program, although a smaller proportion continued to experience significant reading difficulties. This highlights

the importance of sustained instructional support, learner engagement, individualized remediation, and progress monitoring. Buahe (2026) similarly reported improvements in letter recognition, sight-word mastery, reading fluency, and comprehension following structured ARAL reading interventions. These findings support the relevance of targeted literacy activities in addressing foundational reading difficulties.

3.5 Relationship Between Literacy Instruction Strategies and Literacy Competencies Covered

The Spearman Rank-Order Correlation analysis revealed significant positive relationships between literacy instruction strategies and literacy competencies covered. The reported correlation coefficients ranged from 0.65 to 0.76, indicating strong positive associations. The estimated p-values were below the 0.05 significance level, resulting in rejection of the null hypothesis. These findings indicate that more consistent implementation of Instructional Delivery, Learner Engagement and Reinforcement, and Assessment and Progress Monitoring was associated with greater coverage of Foundational Word Recognition and Decoding, Reading Fluency, and Basic Vocabulary and Reading Comprehension. The significant positive relationships suggest that consistent literacy instruction strategies are associated with comprehensive coverage of foundational reading competencies. Andaya and Tepacia (2025) similarly emphasized that guided reading, scaffolded fluency activities, explicit vocabulary instruction, and structured comprehension support contribute to effective literacy development. The findings reinforce the importance of integrating appropriate instructional approaches with targeted reading competencies. However, the correlational results establish statistical associations rather than causal relationships between the variables.

3.6 Issues and Challenges in ARAL Reading Program Implementation

The issues and challenges encountered by ARAL reading tutors obtained an overall weighted mean of 4.31, interpreted as Strongly Agree, indicating substantial implementation difficulties. Limited budget and resources received the highest mean of 4.73, followed by language barriers and difficulties transitioning to English or Filipino (4.69). Insufficient parental involvement and irregular learner attendance both obtained 4.54. Comparatively lower ratings were recorded for limited instructional time due to heavy workloads (3.88), low learner interest and motivation (3.90), and mixed reading abilities within instructional groups (3.92), all interpreted as Agree. The findings indicate that financial limitations, language difficulties, parental involvement, and inconsistent learner attendance were the most prominent barriers to effective program implementation. These challenges emphasize the importance of adequate instructional resources, family participation, professional preparation, and responsive learning support. Gumagay (2024) similarly identified low learner motivation, inadequate specialized training, and insufficient parental involvement as barriers to consistent reading interventions. The findings underscore the need for coordinated institutional and community support to sustain the implementation of the ARAL Reading Program.

3.7 Synthesis of Findings and Implications for Evidence-Based Reading Instruction

The findings demonstrated consistent implementation of literacy instruction strategies and comprehensive coverage of foundational reading competencies among ARAL reading tutors in Candijay District. Assessment and Progress Monitoring received the highest overall strategy mean of 4.66, followed by Instructional Delivery (4.61) and Learner Engagement and Reinforcement (4.59). Among literacy competencies, Basic Vocabulary and Reading Comprehension obtained the highest mean of 4.74, followed by Reading Fluency (4.71) and Foundational Word Recognition and Decoding (4.70). Most learners were classified at the Instructional Level, while a significant positive relationship was identified between instructional strategies and literacy competencies covered. Despite these findings, tutors reported substantial challenges involving financial resources, language barriers, parental participation, and learner attendance. Collectively, the findings indicate that the ARAL Reading Program provided structured literacy support through differentiated instruction, interactive learning activities, reading assessments, and systematic coverage of essential reading competencies. However, continued remediation remains necessary for learners at the Frustration Level, while implementation challenges require sustained institutional attention. The findings provide the basis for the study's proposed evidence-based reading enrichment activities, particularly in strengthening instructional delivery, learner engagement, progress monitoring, foundational decoding, reading fluency, and comprehension instruction within the district.

4. Conclusion & Recommendations

The study concluded that the implementation of the Academic Recovery and Accessible Learning (ARAL) Reading Program in Candijay District, Division of Bohol, provided structured instructional support for developing learners' foundational literacy competencies. Reading tutors consistently implemented instructional strategies involving instructional delivery, learner engagement and reinforcement, and assessment and progress monitoring. Most learners attained the Instructional Level, followed by the Independent and Frustration Levels. A significant positive relationship was established between literacy instruction strategies and the competencies covered, emphasizing the importance of consistent and appropriate instructional practices. However, limited resources, insufficient training, irregular learner attendance, language barriers, inadequate parental involvement, and demanding workloads affected program implementation. Overall, the study highlighted the importance of

sustained instructional support, adequate resources, tutor development, and collaborative participation in strengthening literacy interventions and promoting independent reading.

It is recommended that Candijay District strengthen the ARAL Reading Program by providing evidence-based reading strategies, sufficient contextualized instructional materials, continuous professional development, and appropriate assessment and progress-monitoring support. Reading tutors should enhance learner engagement, encourage regular attendance, maintain communication with parents and guardians, and implement differentiated reading interventions based on learners' identified literacy needs. School administrators should also provide adequate instructional time, resources, and administrative assistance to support consistent program delivery. These measures may improve tutors' instructional capacity, address implementation challenges, and sustain the program's effectiveness in developing foundational literacy competencies and independent reading skills.

The study was confined to 48 ARAL reading tutors from eight public elementary schools in Candijay District, Division of Bohol, during School Year 2026–2027. Its findings were based on tutors' questionnaire responses, learners' reported literacy performance, and descriptive-correlational statistical analysis. Consequently, the findings reflect the implementation conditions of the participating schools and may not represent those of other districts or educational settings. Furthermore, the correlational design established associations between instructional strategies and literacy competencies covered but did not determine causal relationships. These considerations limit the generalizability and causal interpretation of the findings.

5. Compliance with ethical standards

The study adhered to ethical research procedures to protect the rights, privacy, and welfare of participating ARAL reading tutors. Institutional permission was secured from the concerned school authorities before data collection. Participation was voluntary, and respondents were informed of the study's purpose, scope, and procedures, including their right to withdraw at any stage. Confidentiality and anonymity were maintained throughout the research process. Data collection was conducted in a private, comfortable, and non-threatening environment to encourage honest responses while safeguarding participants' personal information.

REFERENCES

- Adao, L., Relleve, C. C., Salazar, J., Macawile, K. F., & Chavez, M. (2023). Teachers' challenges, capabilities, and needs in teaching learners with reading difficulties. *Journal of Science and Education (JSE)*, 3(3), 221–231.
- Alcayde, K. P., & Basilan, M. L. J. (2024). Teachers' perceptions of the challenges and strategies in supporting students with reading difficulties. *Journal of Contemporary Educational Research*. <https://ojs.bbwpublisher.com/index.php/JCER/article/view/7580>
- Ambatang, E. L., & Soriano, E. B. (2026). Effectiveness of Academic Recovery and Accessible Learning (ARAL) Program in rural elementary school. *Pantao: The International Journal of the Humanities and Social Sciences*, 5(2), 1838–1849. <https://doi.org/10.69651/PIJHSS05021017>
- Andaya, A. D., & Tepacia, H. C. (2025). Guided reading strategies for struggling learners. *GEO Academic Journal*, 6(1), 11–19. <https://doi.org/10.56738/issn29603986.geo2025.6.111>
- Anji, A. A., Malik, A. M., Cinco, C. B., Dela Cruz, J. B., Madriñan, N. L., Tomanggong, C. S., Andoyo, J. T., & Pondang, K. A. (2025). Lexical ability and reading comprehension among senior high school students. *International Journal of Research and Innovation in Social Science*, 9(2), 3231–3256. <https://dx.doi.org/10.47772/IJRISS.2025.9020251>
- Australia Reads. (2024). What's driving the decline in young people's recreational reading? <https://australiareads.org.au/news/report-young-peoples-reading/>
- Balansag, J. P. (2025). Improving reading fluency among frustration level readers of Grade 5 and 6 pupils through repeated reading interventions. *International Journal of Research and Innovation in Social Science*, 9(4), 787–800. <https://doi.org/10.47772/IJRISS.2025.90400059>
- Balino, A. M. (2025). Promoting active reading strategies of junior high school learners. *EPRA International Journal of Environmental Economics, Commerce and Educational Management*, 12(6). <https://doi.org/10.36713/epra0414>
- Bandura, A. (1977). *Social learning theory*. Prentice Hall.
- Belga, K. L. (2025). Helping out struggling readers: Reading intervention in the new normal. *International Journal of Progressive Research in Engineering Management and Science*, 2(2).
- Bencito, A. K. J., Lleno, M. A. C., Ignacio, E. M., Calibat, A. V., De Guzman, A. M., Manalad, J. M. T., & Santos, J. M. (2024). Effectiveness of the Read Like Me program for Grade 3 struggling readers. *International Journal of Research and Innovation in Social Science*, 8(6), 335–352. <https://doi.org/10.47772/IJRISS.2024.806025>

- Bouchrika, I. (n.d.). Social learning theory & its modern application in education. Research.com. <https://research.com/education/social-learning-theory>
- Brilliananda, C. C., & Wibowo, S. E. (2023). Reading strategies for post-pandemic students' reading comprehension skills. *International Journal of Elementary Education*, 7(2), 328–334. <https://doi.org/10.23887/ijee.v7i2.59783>
- Bruner, J. S. (1966). *Toward a theory of instruction*. Belknap Press of Harvard University Press.
- Buahe, A. (2026). Effects of ARAL Program in enhancing the reading performance of struggling learners of Bataraza Central School in Palawan. *Advanced International Journal for Research*, 7(3). <https://dx.doi.org/10.63363/aijfr.2026.v07i03.6286>
- Cardeño, R. M. (2025). Lived experiences of struggling readers in junior high school. *American Journal of Education and Technology*, 3(1), Article 2088. <https://doi.org/10.54536/ajet.v3i1.2088>
- Cartoneros, J. E., & Galvez, L. S. (2023). Literary SOS: The interventions of teachers to struggling readers. *United International Journal for Research & Technology*, 5(1), 14–18. <https://uijrt.com/paper/literary-sos-interventions-teachers-struggling-readers>
- Carvalhoais, L., Vagos, P., Cerejeira, L. F., & Limpo, T. (2025). Reading and writing development in inclusive settings: Teachers' perception of the use of digital technology. *Behavioral Sciences (Basel)*, 15(5), 682. <https://doi.org/10.3390/bs15050682>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- De Ocampo, L. L., Tosino, W. F., & Martir, E. M. (2024). Teachers' reading comprehension strategies, approaches and challenges. *International Journal of Science and Management Studies*, 7(3), 107–123. <https://doi.org/10.51386/25815946/ijmsv7i3p107>
- Department of Education. (2025b). DepEd Order No. 018, s. 2025: Supplemental guidelines and resource allocation for the ARAL Program. Department of Education Central Office.
- Department of Education. (2026). ARAL Program implementation report: School year 2025–2026. Anoling Elementary School, Candijay District, Bohol.
- Dinoro, A. P., Semilla, J.-B., Malicoban, E. V., Beldad, E. G., Luga, M. J. F., & Dominguez, E. I. (2023). Assessment of the reading strategies in the Philippine basic education. *Asia Research Network Journal of Education*, 3(2), 59–73.
- Garcia, C., Dela Cruz, A. L., Guinto, E. L. C., Mendoza, F. L. G., Santos, H. G. P., Valiente, K., & Estingor, J. Q. (2025). Decoding abilities that affect the reading comprehension of Grade 2 pupils in selected elementary schools in Cabiao, Nueva Ecija. *International Journal on Management Education and Emerging Technology*, 3(3), 49–54.
- Guerin, A. (2025). Effects of a repeated reading intervention on the reading fluency of adolescents with intellectual disability. *Reading and Writing*. <https://doi.org/10.1007/s11145-025-10744-7>
- Gumagay, R. T. (2024). Challenges and practices of reading tutors in public schools. *Philippine Journal of Education and Literacy Studies*, 12(2), 45–61.
- Holder, A. J. (2024). The effectiveness of repeated reading on increasing the reading fluency of struggling readers. *International Research in Higher Education*, 2(2), 74–81. <https://doi.org/10.5430/irhe.v2n2p74>
- Idowu, E. K. (2025). A critical discourse of the impact of Brunner's social constructivist theory on education in Nigeria. *TWIST*, 20(1), 274–278. <https://twistjournal.net/twist/article/view/735>
- Jumawid, A. D. (2024). Challenges encountered by third grade teachers handling non-readers in the Division of Davao City. *International Journal of Advanced Multidisciplinary Studies*, 4(5), 472–487.
- Kjellström, K. B., Magnusson, P., & Östlund, D. (2025). Curious and critical: A Delphi study of middle school teachers' competencies in support, literacy, and technology. *Education Sciences*, 15(8), 973. <https://doi.org/10.3390/educsci15080973>
- Koutroubas, V., & Galanakis, M. (2022). Bandura's social learning theory and its importance in the organizational psychology context. *Journal of Psychology Research*, 12(6), 315–322. <https://doi.org/10.17265/2159-5542/2022.06.001>
- Lagdaan, R. M. B., & Sevilla, N. B. (2025). The effectiveness of reading comprehension strategies in enhancing literacy skills of junior high school students in the Philippines: A systematic review. *Research and Analysis Journal*, 8(8), 21–28. <https://doi.org/10.18535/raj.v8i08.560>
- Laroya, J. P., & Baga, N. T. N. (2025). Challenges and strategies in teaching reading comprehension. *Jurnal SMART*, 11(2), 107–126. <https://doi.org/10.52657/js.v11i2.2739>
- Lundgren, A. (2023). *The zone of proximal development and content area instruction for middle school English language learner students: A phenomenological study* [Doctoral dissertation, Liberty University]. <https://digitalcommons.liberty.edu/doctoral/4818>
- Maglantay, C. (2024). START (Struggling Today, A Reader Tomorrow) through our eyes: A phenomenology. *International Journal of Social Sciences and Humanities Research*, 7(3), 112–128. <https://doi.org/10.47191/ijsshr/v7i03>
- Manegdeg, J. F. T., & Paglinawan, J. L. (2025). Overcoming challenges: Teacher strategies for assisting struggling readers in elementary classrooms. *International Journal of All Research Writings*, 7(1).
- McLeod, S. (2025). Albert Bandura's social learning theory. *Simply Psychology*.

- Mercado, M. R., & Ching, G. L. (2025). Exploring reading challenges and coping strategies of selected Grade 3 learners. *Psychology in Education: Multidisciplinary Journal*, 37(6), 568–595. <https://doi.org/10.70838/pemj.370605>
- Milne, J., & Topping, K. J. (2025). Improving student teacher preparedness in reading instruction. *Education Sciences*, 15(1), Article 97. <https://doi.org/10.3390/educsci15010097>
- Ministry of Education, Culture, Research, and Technology, Indonesia. (2021). *Education Volunteer Program: Policy and implementation manual*.
- Ministry of Education, Government of India. (2022). *New India Literacy Programme: Framework and guidelines*.
- Ministry of Education, Malaysia. (2023). *Literacy Enhancement Initiative: Policy and implementation guide*.
- Mir, A. H., & Alam, M. N. (2025). Constructivist learning theory: A framework for student-centered instruction in the 21st century classroom. *International Journal of Educational Research, Learning and Applied Sciences*, 5(4). <https://doi.org/10.54443/ijerlas.v5i4.3456>
- Mustakimah, M. (2023). Application of theory of zone of proximal development (ZPD) in group learning context in early childhood. In *Proceedings of the 1st International Conference on Early Childhood Education in Multiperspective (ICECEM 2022)*. EAI.
- National Center for Education Statistics. (2024). *Literacy funding and resource allocation in U.S. public schools*. U.S. Department of Education.
- Pakpahan, F. H., & Saragih, M. (2022). Theory of cognitive development by Jean Piaget. *Journal of Applied Linguistics*, 2(2), 55–60.
- Pastera, J. M. R., Gaitano, J. H., & Martir, E. M. (2024). Learners' reading strategies and comprehension skills. *International Journal of Science and Management Studies*, 7(5), 54–70. <https://doi.org/10.51386/25815946/ijsms-v7i5p104>
- Piaget, J. (1972). *Psychology and epistemology: Towards a theory of knowledge*. Viking Press.
- Po, L., Ersando, D. F. L., Ersando, M. J., Homecillo, D., Quitara, F., Amaquin, M. J., & 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.
- Pocan, J. M., Bailon, L. L., & Trilles Pocan, J. P. (2025). Strategic reading intervention for left behind learners in the Philippines. *LLT Journal: A Journal on Language and Language Teaching*.
- Quimsing, M. J., & Ortega Dela Cruz, R. (2025). Technology-based reading application on improving reading literacy level among struggling readers in a public elementary school in the Philippines. *Pedagogy: Journal of English Language Teaching*, 12(1), Article 7757.
- Resma, M. R. N. (2025). Influence of 21st century attributes and teachers' skills towards reading comprehension. *Northern Iloilo Journal of Social Education*.
- Reyes, C. D., Valmorida, F. M. S., Alayon, M. F., Tantog, A. J. D., Telos, J. D., & Cabalog, A. C. (2023). Teachers' strategies, challenges and coping mechanisms in helping struggling readers during the pandemic. *International Journal of Academic Multidisciplinary Research*, 7(2), 296–304. <https://ijeais.org/wp-content/uploads/2023/2/IJAMR230231.pdf>
- Shanahan, T., et al. (2025). Teachers' self-reported knowledge and perceptions of intensive interventions. *Reading and Writing*.
- Science of Reading Center at SUNY New Paltz. (2025). *How is it going? Insights from NYS educators on the implementation of the science of reading*. State University of New York at New Paltz.
- Silagan, I. K. C., & Sariana, L. G. (2026). Academic Recovery and Accessible Learning (ARAL) Reading Program on learners' numeracy and problem-solving skills. *International Journal of Research Studies in Science*, 10(26), 3325–3360.
- Siregar, T. (2025). Implementation of Jean Piaget's theory of cognitive development in early childhood. *Journal of Mathematical Techniques and Computational Mathematics*, 4(9), 1–14.
- Sotelo, R. (2024). Improving the reading skills of Grade 5 struggling readers through the use of interactive learning resources. *Journal of Research and Investigation in Education*. <https://doi.org/10.37034/residu.v2i3.178>
- Taboer, M. A., & Rochyadi, E. (2025). Peer mediated initial reading intervention strategies for students with initial reading difficulties. *Jurnal Pendidikan dan Pengajaran Sekolah Dasar*, 12(1).
- Tolentin, C. (2023). Implementation and challenges of reading intervention programs in face-to-face classes. *Psychology and Education: A Multidisciplinary Journal*, 14(2), 153–169.
- UNESCO Institute for Statistics. (2025). *Adult literacy rate, total (% of people ages 15 and above) – East Asia & Pacific*. World Bank Data.
- UNESCO. (2023). *Global education monitoring report 2023: Technology in education – A tool on whose terms?* UNESCO Publishing.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.
- Wijayanti, P. A. K., & Wedyaswari, M. (2023). Teacher perception of student reading competence and its relationship to teaching practice: A comparison before and during pandemic teaching in Indonesia. *Education Sciences*, 13(1), 45.

- Wynne, S., Robinson, C., & O'Connor, D. (2026). A Brunerian theoretical framework for ECE: A review of Jerome Bruner's theoretical contributions to early childhood education. *International Journal of Early Childhood*, 58(1).
- Xue, Z. (2023). Exploring Vygotsky's zone of proximal development in pedagogy: A critique of a learning event in the business/economics classroom. *International Journal of Education and Humanities*, 9(3), 166–168.
- Zainal, M., et al. (2025). Teachers' support in developing reading skills: A systematic review. *Large-Scale Assessments in Education*.