Academic Leadership in the Digital Age: Strengthening the Implementation of the ARAL Reading Program in Basic Education

Charito E. Avila, Elisa N. Chua, PhD

0323-0254@lspu.edu.ph; elisa.chua@lspu.edu.ph

Master Teacher II, Lopez West Elementary School Bldg. I, Lopez, Quezon 4316, Philippines
Associate Professor 5, Laguna State Polytechnic University,San Pablo City, Laguna 4000, Philippines

Abstract

This study examined the literacy levels, extent of academic leadership, digital competency, and implementation of the Learning and Development (L&D) in ARAL Reading Program in public elementary schools in Lopez West District for School Year 2025-2026. A quantitative descriptive design with comparative and correlational analyses was used. The respondents included the 27 school heads and 168 ARAL tutors, teachers, and coordinators selected through total enumeration and purposive-criterion sampling. Data were gathered using CRLA and PHIL-IRI results, school profile records, and validated research-made questionnaires on academic leadership, digital competency, and L&D Plan implementation. Frequency count, percentage, mean, median, weighted average, paired sample t-test, and Spearman rho were used in analyzing the data. Findings revealed that most schools were small, had limited reading specialists, and showed moderate compliance with school-based reading programs. Literacy results improved from pretest to posttest in both CRLA and PHIL-IRI, although several learners still remained in lower reading levels. Academic leadership practices were generally effective, while ARAL teachers and coordinators were found competent in digital competency. The designed L&D Plan was highly implemented by the school heads. Significant differences were found between the pretest and posttest literacy levels, which confirmed the positive effect of ARAL on learners' reading performance. However, no significant relationship was found between literacy levels and academic leadership, nor between literacy levels and digital competency. The study concluded that a contextualized L&D Plan is needed to strengthen reading intervention, data-driven leadership, monitoring systems, and applied digital pedagogy in ARAL implementation.

Keywords: ARAL Reading Program; literacy levels; academic leadership; digital competency; learning and development plan

1. Introduction

Reading proficiency is arguably the foundation of a student's entire academic achievement and lifelong interaction with information (Dayag, 2022; Balaguer & Astillero, 2024). When learners develop strong reading skills, they gain access to complex subjects like math, science, and social studies (Bagcat, 2025) which leads to better overall academic performance and achievement (Pastera, 2024). Beyond academics, reading also simultaneously builds resilience, empathy, and a stronger sense of self (Cremin & Scholes, 2024).

In the context of the Philippines, literacy levels represent one of the most severe educational crises. From the 2018 Program for International Student Assessment (PISA), it is revealed that Filipino 15-year-olds score an average of only 340 points in reading, drastically below the OECD average of 487 (Gamazo &

Martinez-Abad, 2020). Today, over three million students enrolled in the basic education system struggle with functional literacy. The recent 2025 Second Congressional Commission on Education (EDCOM II) report noted that a massive portion of Filipino learners reach Grade 4 without basic decoding skills. From this report it was acknowledged that students were entering high school completely unable to independently process academic materials (EDCOM II, 2025). Tools like the Philippine Informal Reading Inventory (Phil-IRI) continually highlight that countless students remain at the frustration or instructional reading levels (Echavez et al., 2024). Such a national emergency is also reflected in the Lopez West District (LWD), where teachers report a rise in non-readers across all grade levels. This literacy crisis is attributed to more than the pandemic-era learning loss, but to a lack of print exposure at home, alongside with deep-seated socio-economic hurdles.

As a response, the Philippine government has implemented educational reforms. Republic Act 10533, known as the Enhanced Basic Education Act of 2013 laid the base through mandating that the K to 12 curriculum must prioritize fundamental reading fluency and critical comprehension. With the government later recognizing that standard curriculum delivery was not enough, Republic Act 12028 of 2024 was enacted, which formally institutionalizes the Academic Recovery and Accessible Learning (ARAL) Program (Republic of the Philippines, 2024). The DepEd Memorandum No. 64, s. 2025, was subsequently released to provide the exact operational guidelines for the ARAL-Reading initiative across Key Stages 1 through 3, with the aim of transforming reading recovery into a highly structured, data-driven national priority (DepEd, 2025; Malipot, 2025).

The ARAL Program is strategically positioned as a comprehensive recovery system. It shifts away from random remediation and instead relies heavily on intentional pedagogy. With this program is the central framework of a sequenced instructional design that guides teachers in 'Bridging curiosity, Revisiting prior knowledge, Immersing students in reading, Discussing meaning, Growing vocabulary and fluency, and Evaluating understanding: also known as the BRIDGE framework (DepEd, 2024). Nevertheless, deploying a massive program like ARAL relies on a school's foundational readiness.

School profile is one of the aspects for the aforementioned readiness, as it determines whether the school has the physical and human resources to pull students out of frustration levels in reading. Its elements include overall school size, the presence of specialized reading teachers, and the strength of existing school-based reading programs (EDCOM II, 2025).

Academic leadership also is considered an important aspect for ARAL. Under its guidelines, school heads are tasked with this responsibility as they are expected to organize Phil-IRI diagnostics, analyze data to form ARAL intervention groups, distribute resources and continuously monitor student gains (Whittaker & Montgomery, 2022). Several studies claim that when school leaders step away from pure administrative management and actively engage in instructional leadership such as coaching teachers and tracking assessments, student literacy outcomes improve drastically (Fernandez & Tagadiad, 2024; Ulit, 2025; Llarena, 2023; Sancada, 2022). Returning to the context of the LWD, however, there are reports of school heads struggling with competing paperwork, limited manpower, and the pressure of rapid compliance.

Digital competency is another essential consideration under the ARAL program. ARAL explicitly encourages schools to leverage digital tools to administer reading assessments, access leveled texts, and design multimodal reading activities. According to frameworks like DigCompEdu, teachers who are equipped with strong digital skills can easily blend technology with active reading strategies to create highly personalized remediation for struggling learners (JRC, 2022; Althubyani, 2024; Cabero-Almenara et al., 2023). Many educators are unfortunately lacking the confidence or the infrastructure to do so, however. In LWD, teachers openly report difficulties in using digital spreadsheets for Phil-IRI data tracking or designing tech-supported lessons because of inconsistent internet connections and severe lack of pedagogical training in technology (Cadime et al., 2022; Tolentin, 2023).

With these interconnected challenges: from the staggering reading deficits, varying school profiles, the overwhelmed academic leaders, and teachers struggling with digital integration, there is the common denominator of necessity. This is the creation of a highly contextualized Learning and Development (L&D)

Plan. Research shows that literacy programs survive when schools receive structured, continuous, and locally relevant professional development (Genciana et al., 2024). For LWD, there is a need for an explicitly designed L&D Plan to build the supervisory capacity of school heads, and train teachers in the evidence-based BRIDGE methodology and other practical digital skills. This paper considers student literacy levels, school profile, academic leadership, and teachers' digital competence in responding to the literacy crisis. An L&D Plan is then structured to facilitate a stronger educational future for elementary learners.

1.1 Statement of the Problem

This study generally explored the literacy levels, practices, academic leadership, and digital competencies in the conduct and implementation of ARAL Reading Program in Lopez West District for the School Year 2025 – 2026.

This study specifically aimed to answer the following questions:

1. What is the school profile of the public elementary schools in Lopez West District in terms of:
   1.1. school size;
   1.2. reading specialists; and
   1.3. school-based reading programs?
2. What is the ARAL literacy level of the public elementary school as determined by:
   2.1. Comprehensive Rapid Literacy Assessment (CRLA) for Grades 1-3 and
   2.2. Philippine Informal Reading Inventory (PHIL-IRI) for Grades 4-6?
3. To what extent is academic leadership practiced in the ARAL Reading Program implementation in public elementary schools in terms of:
   3.1. determination and assessment of learners;
   3.2. intervention and progress checks;
   3.3. midline assessment;
   3.4. post-assessment;
   3.5. program support; and
   3.6. monitoring and evaluation?
4. What is the level of digital competency of the ARAL teachers/coordinators focusing on ARAL implementation in public elementary in terms of:
   4.1. digital resources;
   4.2. digital assessment;
   4.3. teaching and learning;
   4.4. empowering learners; and
   4.5. facilitating learners' digital competence; and
   4.6. professional engagement?
5. To what extent is the designed learning and development plan implemented as to:
   5.1. learning assessment;
   5.2. prioritization;
   5.3. modalities;
   5.4. delivery proposal; and
   5.5. fund allocation?
6. Is there a significant difference between the ARAL literacy levels of the public elementary school learners as to their pretest and posttest assessments?
7. Is there a significant relationship between the ARAL literacy levels of the learners and academic leadership?
8. Is there a significant relationship between the learners' ARAL literacy levels and the ARAL tutors/teachers/coordinators' level of digital competence in the public elementary schools?

9. What learning and development plan can be developed to strengthen the implementation of the ARAL Program?

1.2. Research Hypotheses

Null hypotheses were used to present the direction of the study. These include the following hypotheses:

1. There is no significant difference between the ARAL literacy levels of the public elementary school learners as to their pretest and posttest assessments.
2. There is no significant relationship between the ARAL literacy levels of the learners and academic leadership.
3. There is no significant relationship between the learners' ARAL literacy levels and the ARAL tutors/teachers/coordinators' extent of digital competence in the public elementary schools.

2. Research Framework

The research is framed with a strong foundation of four educational theories: Constructive Alignment, Transformational Leadership, Technological Pedagogical Content Knowledge (TPACK), and Sociocultural Theory. These form the structure for the interpretation of different variables and the development of the proposed Learning and Development (L&D) Plan.

Biggs' Constructive Alignment Theory from 1996 is utilized to understand how school conditions and reading goals must match up to produce good literacy outcomes. The core idea with this theory is that learning works best when what is expected for students to achieve naturally aligns with how they are taught and assessed (Zhang et al., 2022; Croft, 2020) In this research, constructive alignment explains why school features (including the size of the student body or whether a school has specialized reading teachers) need to be in sync with the specific goals of the ARAL Program. The theory provides coherence on how school resources either support or hold back reading assessments like the CRLA and Phil-IRI to effectively pull students out of frustration-level reading.

In terms of the school administration, the study draws on Burns' 1978 Transformational Leadership Theory. This theory suggests that effective leaders go beyond managing paperwork and other administrative tasks. They inspire teams by showing true commitment, pushing for new ideas, and encouraging professional growth (Thompson, 2024). Garcia (2024) noted that when leaders act in this manner, they build school environments that genuinely value high-quality instruction and systematic student assessments. This particular study incorporates transformational leadership to evaluate how school principals handle the different parts of the ARAL program, from diagnosing learners and checking their progress to actually providing the resources that teachers need.

As technology is an acknowledged huge part of teaching, the Technological Pedagogical Content Knowledge (TPACK) framework is also incorporated in this study to examine teachers' digital skills. TPACK argues that authentic integration of technology into the classroom means that a teacher has to blend their technological skills with their teaching strategies and their content expertise (Bond, 2023). Studies have pointed out that teachers with a solid grasp of TPACK were able to utilize digital platforms to assist students in learning how to read, to customize lessons, and to track scores efficiently (Cabero-Almenara et al., 2023). In this particular study, TPACK is utilized to assess how ARAL teachers and coordinators leverage digital resources to monitor reading progress and assist students in building their own digital competencies.

Finally is Vygotsky's Sociocultural Theory. This emphasizes that learning is a social process and is deeply tied to a student's culture and interactions (Reyes et al., 2023). Through the concept of the Zone of Proximal Development (ZPD), the theory highlights how struggling students make progress when guided by teachers or peers. De Ocampo (2024) supports this context, showing how shared reading activities, guided

comprehension, and talking about texts are essential for reader growth. This perspective explains why the social and instructional support systems designed within the L&D Plan are necessary.

These theoretical underpinnings are put into practice through an Input-Process-Output (IPO) model, which maps out the ARAL program's flow in the Lopez West District. Fig. 1 below illustrates the research paradigm, followed

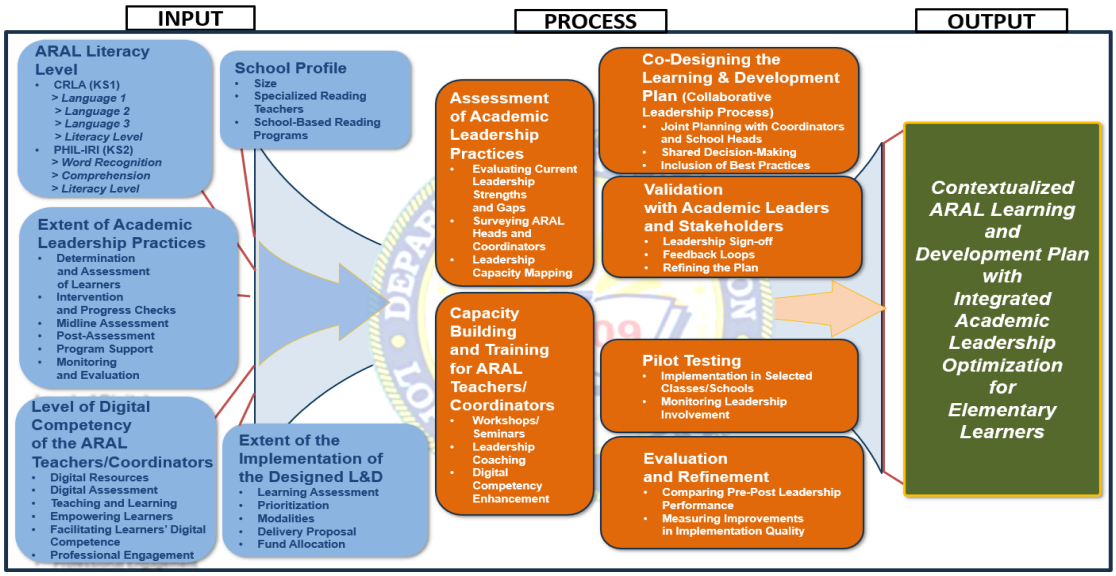

Figure 1. An IPO model of the research paradigm

The Input stage takes a broad look at the baseline data. It gathers the school profiles and measures where the students are positioned in their reading stages using CRLA for early graders and Phil-IRI for older students. It also logs the academic leadership practices of school heads and the digital skills of the teaching staff.

The succeeding Process stage involves in-depth analysis. Quantitative data from the Input stage is taken and run through rigorous statistical tests, which involve assessing the improvement of students between their pretests and posttests, alongside confirming if there are connections between the students' reading levels, the administrative leadership, and the teachers' digital competence.

The Output stage uses the data and insights from the preceding stages. A contextualized ARAL Learning and Development Plan is then developed. This district-wide roadmap is tailored specifically to improve reading assessments, strengthen teachers' digital and pedagogical skills, optimize academic leadership, and ultimately improve reading interventions for elementary students.

3. Methodology

3.1 Research Design

This study employed comparative and correlational approaches to support the descriptive results. The comparative approach determined differences in learners' literacy levels when grouped by school characteristics, while the correlational approach examined the relationship between ARAL literacy levels, academic leadership, and teachers' digital competence (Lodico et al., 2020; Privitera, 2022; Subia, 2022).

The descriptive method was first applied to summarize the school profiles, ARAL literacy levels based on CRLA and PHIL-IRI results, academic leadership practices, teachers' digital competencies, and extent of implementation of the designed L&D. The comparative approach was then used to determine whether significant differences existed in learner literacy levels when grouped by school characteristics. Finally, the correlational approach helped determine the relationship between ARAL literacy levels and two key factors: (a) the extent of academic leadership practiced of school heads, and (b) the digital competence of ARAL teachers and coordinators.

3.2. Respondents of the Study

The respondents of the study were the 27 school heads and 168 ARAL tutors from the 27 public elementary schools in Lopez West District, Lopez, Quezon. The ARAL tutors included licensed but not yet hired teachers (volunteers), regular teachers, master teachers, and coordinators who were actively involved in the implementation of ARAL sessions. These specified respondents administered either CRLA or PHIL-IRI assessments, monitored learner progress, prepared BRIDGE Framework-aligned session plans, performed midline and post assessments, and coordinated the program documentation in conformity with DepEd Memorandum No. 64, s. 2025. The selected respondents were those who did the ARAL reading intervention, digital resource integration, or instructional supervision, making sure that participants had related experiences, authority, and responsibility in performing the ARAL -related tasks.

Moreover, the 27 school heads (N=27), consisting of the entire population of school heads in the district, were involved in the study to ensure the complete representation of leadership. However, the study was limited to the Lopez West District, allowing the findings to only show the experiences of the teachers and of the school heads in that specific area. Hence, applying the results to other contexts should be done cautiously.

3.3. Sampling Technique

The purposive-criterion sampling technique was employed in this study to select the ARAL tutors as qualified respondents whose experiences in implementation, assessment, planning, and monitoring could contribute significantly to data gathering. Campbell et al. (2020) said that purposeful sampling seeks information-rich cases, which can be studied in-depth. The researcher requested the District Office to hand her the list of ARAL teachers alongside the list of 27 school heads. The complete population or total enumeration of the school heads in the district was decided due to its small and manageable size. School heads' involvement, specifically in analyzing leadership practices and organizational readiness in the ARAL program implementation, added reliability to the data.

3.4. Research Instrument

The study used one standardized assessment set through CRLA and PHIL-IRI (DepEd, 2025) and three researcher-made survey questionnaires that align with the variables of the inquiry. The first set was a standardized material, the Comprehensive Rapid Literacy Assessment (CRLA) and the Philippine Informal

Reading Inventory (PHIL-IRI), while the remaining sets were developed by the researcher, anchored on different literature and research variables. The first researcher-made instrument (Set A) was the Survey Questionnaire for School Heads, which had three parts: Part I gathered the respondents' demographic profile; Part 2 served as a School profile Checklist that described school size, number of reading specialists, and presence of school-based reading programs; Part 3 measured the Extent of Academic Leadership Practices in ARAL Reading Program Implementation (DepEd, 2025) across six domains, namely determination and assessment of learners, intervention and progress of learners, midline assessment, post assessment, program support, and monitoring and evaluation.

Similarly, the second researcher-made instrument (Set B) was the Survey Questionnaire for ARAL Teachers/Coordinators, which included Part 1 on respondent profile and Part 2 on Digital Competency (JRS, 2022), organized into digital resources, assessment, teaching and learning, empowering learners, facilitating learners' digital competence, and professional engagement.

Additionally, the third researcher-made instrument (Set C) was the Implementation Questionnaire for the designed and implemented Learning and Development Plan, which asked school heads to rate the extent of implementation of the designed L&D across five domains: learning assessment, prioritization, modalities, delivery proposal, and fund allocation (DepEd, 2020). To determine the extent of implementation and the level of competence, all researcher-made questionnaires adopted the 4-point Likert scale with 4 being the highest and 1being the lowest.

For validation, 10 external validators and 5 internal validators in their respective fields related to the study were requested to validate the researcher-made questionnaires. External validators were three (3) English Master Teachers leading the implementation of the ARAL Reading Program, one (1) PhD in Early Childhood and Development, one (1) PhD in Literacy and Literature, one (1) district supervisor, and four (4) principals. Internal validators are research professors, a statistician, and a technical editor from the Laguna State Polytechnic University, who worked on polishing the instrument. The checked instruments with the notes and suggestions of the group of evaluators were analyzed. Corrections were included in producing the final copy of the questionnaires to be distributed.

To determine the reliability of the revised instrument, pilot testing was done in a neighboring district with the ARAL teachers and coordinators and school heads with the same characteristics as the target respondents. Data gathered from the pilot testing were analyzed employing Cronbach's alpha to determine the internal consistency of the 4-point Likert scale questionnaires. Reliability testing revealed that the instruments had strong internal consistency. Reliability testing showed strong internal consistency. For academic leadership, all domains were excellent: determination and assessment ($\alpha = 0.937$), intervention and progress checks ($\alpha = 0.953$), midline assessment ($\alpha = 0.955$), post-assessment($\alpha = 0.980$), program support ($\alpha = 0.977$), and monitoring and evaluation ($\alpha = 0.952$). For digital competency, digital resources was good ($\alpha = 0.892$), while digital assessment ($\alpha = 0.912$), teaching and learning ($\alpha = 0.918$), empowering learners ($\alpha = 0.961$), facilitating learners' digital competence ($\alpha = 0.977$), and professional engagement ($\alpha = 0.932$) were excellent. For the designed L&D Plan, all domains were excellent: learning assessment ($\alpha = 0.935$), prioritization ($\alpha = 0.961$), modalities ($\alpha = 0.954$), delivery proposal ($\alpha = 0.975$), and fund allocation ($\alpha = 0.985$). The values reflect the reliability and suitability of the instruments for the study.

3.5. Research Procedure

The study followed a systematic process that began with the conceptualization of the research proposal, anchored on theories (Constructive Alignment Theory, Transformational Leadership Theory, Technological Pedagogical Content Knowledge (TPACK), and Sociocultural Theory) and a thorough literature review. After a number of consultations with the adviser, the proposed study was presented to the panel of experts, who imparted their expertise through comments and suggestions, which were considered in the refinement of the paper. Upon the approval, essential permissions from the Department of Education

(DepEd) Division Office and other school administrators in Quezon Province to conduct the study were secured. Then, validated instruments were distributed both online via Google Form and face-to-face using the printed copies to the selected respondents, and completed forms were collected, organized, and prepared for analysis as guided by ethical standards along the process (Creswell & Creswell, 2018). Participation was voluntary, with respondents free to decline or withdraw at any point without penalty. All data were used solely for academic purposes, handled with transparency, and reported honestly to uphold integrity throughout the research process.

3.6. Statistical Treatment of Data

The study employed a set of descriptive and inferential statistical treatments aligned with the nature of the data and the objectives stated in the research questions. Frequency counts and percentages were first used to analyze the school profile variables, such as school size, number of reading specialists, and existing school-based reading programs, as these indicators required simple distribution summaries appropriate for categorical data. Percentage was also used in support of the analysis of the literacy levels of the learners. Percentage formula was also applied to analyze the literacy levels of learners based on PHIL-IRI results. Weighted Average Mean (WAM), as a descriptive formula, was utilized to quantify the extent of academic leadership practices and digital competence to determine their overall levels based on the 4-point Likert scale used in the researcher-made instruments. Interpretation guidelines were applied to classify the extent of implementation or competence into meaningful categories. The same formula of WAM was also applied to analyze the extent of implementation of the designed L&D as the research output. Paired Sample t-test was used to assess the significant difference between the ARAL literacy levels of the public elementary school learners as to their pretest and posttest assessments. Spearman Rho, which is also employed, is a non-parametric statistic suitable for ordinal data derived from Likert scales to determine the strength and direction of associations between learners' ARAL literacy levels and school heads' academic leadership, as well as between literacy levels of the learners and digital competence of ARAL teachers.

4. Results and Discussion

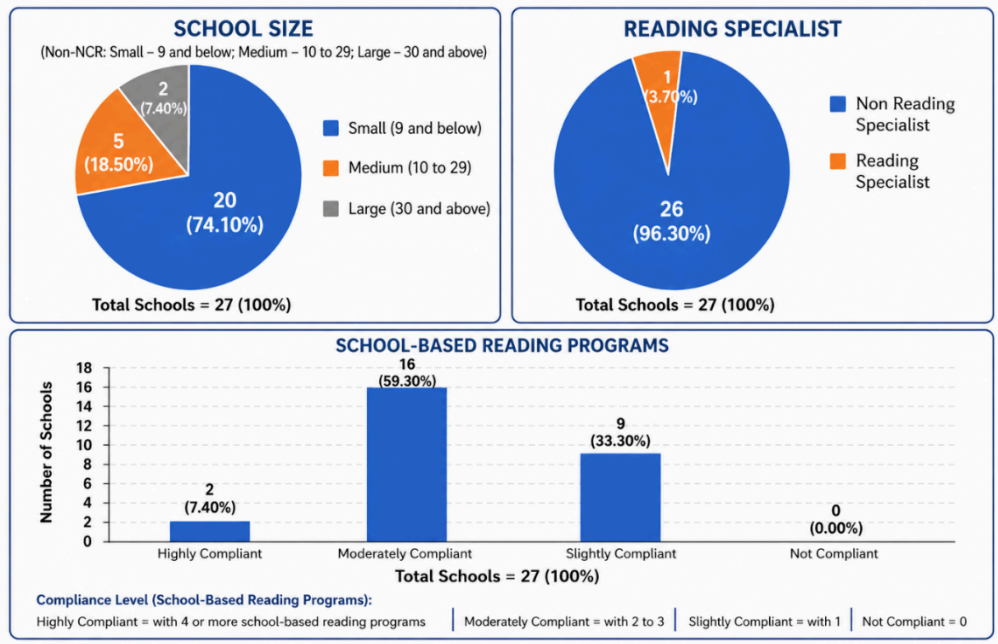

Figure 2
School Profile of the Public Elementary Schools in Lopez West District in terms of School Size, Reading Specialist, and School-Based Reading Program

Figure 2 shows the Lopez West District's (LWD) profile of 27 schools in terms of school size based on categories stated in DepEd memorandum #53, s. 2017, reading specialist, and school-based reading programs. It is shown that most of the schools in LWD are small, with 20 schools (74.105) included in this category, 5 schools (18.50%) are medium, and only 2 schools (7.40%) are large. This implies that the implementation of the ARAL Reading Program in LWD mainly takes place in smaller school settings, making the coordination, learner tracking, and teacher collaboration easier to manage. In addition, the working relationships among school heads, teachers, and learners in this setup are closer, paving way to provide a more responsive setting for recognizing struggling readers, offering them interventions, and monitoring their progress. Moreover, the figure reflects that 26 schools (96.30%) have no designated reading specialist, while only 1 school (3.70%) has a reading specialist. This implies that most schools depend on regular teachers alongside ARAL tutors or coordinators who perform administrative and other teaching duties. For this, the quality of reading assessment, learner grouping, intervention planning, and progress monitoring may vary subject to teachers' workload, training, and obtainable support. Moreso, this clearly means that the district demands to intensify capacity-building programs enabling the non-specialist teachers to develop stronger skills in diagnosing reading levels and problems of learners, remediation strategies, use of CRLA and PHIL-IRI data, and BRIDGE-based instruction. The school profile furthermore shows that most schools are moderately compliant with school-based reading programs, with 16 schools (59.30%), followed by 9 schools (33.30%) that are slightly compliant and 2 schools (7.40%) that are highly compliant. On the other hand, no school is non-compliant (0%). This connotes that there is an existing literacy support system in the district;

however, the level of implementation is not yet consistent across schools. The data also imply that ARAL may be more sustainable in schools with stronger reading programs, while those schools with less developed programs may need more guidance, materials, monitoring, and technical assistance. Therefore, the developed Learning and Development Plan should address both teacher capability and school-level readiness so that all schools can implement ARAL with greater consistency, stronger evidence-based practices, and better support for learners who continue to struggle in reading, and resource provision to improve literacy outcomes across all schools.

Table 1
ARAL Literacy Level of the Public Elementary Schools as Determined by the Comprehensive Rapid Literacy Assessment (CRLA) for Grades 1-3

CRLA MPS	Pretest				Posttest				CRLA Verbal Interpretation
	Language 1 (Mother Tongue)	Language 2 (Filipino)	Language 3 (English)	General	Language 1 (Mother Tongue)	Language 2 (Filipino)	Language 3 (English)	General	
81-100 %	6.78%	14.85%	18.65%	13.87%	24.16%	23.86%	18.65%	24.73%	**Reading at Grade Level**
61-80 %	9.21%	27.47%	40.40%	26.76%	41.65%	41.05%	40.40%	32.72%	**Transitioning Reader**
41-60 %	14.77%	21.21%	13.65%	16.73%	12.03%	13.12%	13.65%	15.05%	**Developing Reader**
21-40 %	9.76%	3.82%	10.88%	7.98%	4.87%	5.27%	10.88%	8.42%	**High Emerging**
0.-20 %	59.49%	32.66%	16.43%	34.66%	17.30%	16.70%	16.43%	19.07%	**Low Emerging**

Table 1 presents the ARAL literacy level of the public elementary schools in Lopez West District as determined by the Comprehensive Rapid Literacy Assessment (CRLA) for Grades 1 to 3. Noticeable changes from the pretest to posttest across three languages (L1 or Mother Tongue, L2 or Filipino, and L3 or English) and the general results are shown. As to "Reading at Grade Level," Language 1 increased from 6.78% to 24.16%, Language 2 increased from 14.85% to 23.86%, Language 3 remained at 18.65%, while the general result increased from 13.87% to 24.73%. As to "Transitioning Reader", Language 1 increased from 9.21% to 41.65%, Language 2 increased from 27.47% to 41.05%, while Language 3 remained at 40.40%, and the general result increased from 26.76% to 32.72%. These results depict that more learners advanced closer, or reached the targeted reading level after implementing the ARAL intervention.

Moreover, the lower reading categories present a generally agreeable decline. As to "Developing Reader," Language 1 decreased from 14.77% to 12.03%, Language 2 decreased from 21.21% to 13.12%, Language 3 remained at 13.65%, while the general result also decreased from 16.73% to 15.05%. As to "High Emerging," Language 1 decreased from 9.76% to 4.87%, Language 2 slightly increased from 3.82% to 5.27%, Language 3 remained at 10.88%, while the general result slightly increased from 7.98% to 8.42%. As to "Low Emerging," Language 1 sharply dropped from 59.49% to 17.30%, while the general result decreased from 34.66% to 19.07%. These results indicate that the greatest improvement happened in Language 1 and Language 2, whereas Language 3 did not show any advancement across categories.

Furthermore, the findings imply that the ARAL Program helped many learners move from the lowest reading level toward more advanced literacy categories, especially in Mother Tongue and Filipino. The sharp decrease in Low Emerging readers and the increase in Transitioning Readers suggest that early identification, grouped intervention, teacher guidance, and repeated reading practice supported learner progress. However, the unchanged percentages in English may indicate that learners still need more focused support in English reading, especially in vocabulary, decoding, fluency, and comprehension. This means that the future ARAL

sessions should strengthen language-specific interventions rather than apply the same reading support across all languages.

The present findings support Garcia and Cain (2023), who emphasized that accurate identification of reading levels helps teachers provide appropriate interventions and improve learner outcomes. The decrease in Low Emerging Readers and the increase in higher levels also align with Rivera et al. (2025), who stressed the importance of assessment-based intervention in improving literacy performance. Similarly, Kim and Quinn (2022) noted that sustained and structured reading interventions help struggling readers progress. The results also relate to Crawford et al. (2024) and Phillips (2022), who explained that decoding and word recognition are important foundations of reading development. These studies support the present result, especially the observed progress in Mother Tongue and Filipino, while also showing the need for more intensive English-focused reading support.

Table 2
ARAL Literacy Level of the Public Elementary Schools as Determined by Philippine Informal Reading Inventory (PHIL-IRI) for Grades 4-6

PHIL-IRI	Pretest		Posttest		PHIL – IRI Verbal Interpretation
	English	Filipino	English	Filipino	
Word Recognition (98% - 100%); Comprehension (80% - 100%)	21.73%	35.65%	33.95%	42.98%	**Independent**
Word Recognition (90% - 97%); Comprehension (51% - 79%)	42.56%	43.63%	41.17%	38.64%	**Instructional**
Word Recognition (89% and below); Comprehension (50% and below)	35.72%	20.72%	24.88%	18.38%	**Frustration**

Table 2 shows the ARAL literacy level of the public elementary schools in Lopez West District as determined by the Philippine Informal Reading Inventory (PHIL-IRI) for Grades 4 to 6. The results show an upward movement in learners' reading performance from pretest to posttest in both English and Filipino. For the "Independent" level, English increased from 21.73% to 33.95%, while Filipino increased from 35.65% to 42.98%. This indicates that more learners were able to read with stronger word recognition and comprehension after the ARAL intervention.

Moreover, a slight decrease in the "Instructional" level both in English (from 42.56% to 41.17%) and Filipino (from 43.63% to 38.64%) occurred. The decrease may be viewed favorably since some learners show movement from the instructional level to the independent level. The "Frustration" level likewise decreased from 35.72% to 24.88% in English, and from 20.72% to 18.38% in Filipino. This points out that fewer learners remained in the lowest reading category after the ARAL intervention, despite the fact that there is a higher percentage of frustration-level readers in English compared with Filipino.

Furthermore, the findings suggest that the ARAL program positively contributed to the Grades 4 to 6 readers' reading proficiency development as more learners move toward independent reading. Meanwhile, guided reading sessions, level-based grouping, regular assessment, and teacher support were viewed as vital in the readers' decrease in frustration level. Nevertheless, continued support in terms of structured reading lessons (Sandicho & Padilla, 2022; Rmelah, 2023) must be extended to the remaining learners in the instructional and frustration levels, especially in English, where intervention will focus more on comprehension, vocabulary, and word recognition.

Table 3
Summary of the Extent of Academic Leadership in ARAL Program Implementation in the Public Elementary School

	Domains	M	SD	VI
1.	Determination and Assessment of Learners	3.60	0.385	Highly Effective
2.	Intervention and Progress Checks	3.48	0.434	Effective
3.	Midline Assessment	3.49	0.383	Effective
4.	Post-Assessment	3.53	0.396	Highly Effective
5.	Program Support	3.47	0.405	Effective
6.	Monitoring and Evaluation	3.37	0.674	Effective
	Overall	**3.49**	**0.446**	**Effective**

Legend: 3.50-4.0 (Highly Effective); 2.50-3.49 (Effective);1.50-2.49 (Slightly Effective); 1.0-1.49 (Not Effective).

Table 3 presents the summary of the level of academic leadership in ARAL program implementation in the public elementary schools. The results generally reveal that academic leadership was observed as effective, with an overall mean of M=3.49 (SD = 0.446). The highest-rated domain was recorded in "determination and assessment of learners" (M = 3.60, SD = 0.385), interpreted as highly effective, while the lowest-rated domain was "monitoring and evaluation" (M = 3.37, SD = 0.674), interpreted as effective.

The overall mean suggests that leadership practices evidently carried out the ARAL program across the schools, although not all domains reached the same level of strength. In general, the table suggests that the implementation of ARAL program in the Lopez West District is supported by school leaders who are already engaged in major program responsibilities, especially those related to assessment and post-assessment, but some leadership areas still need to be lightened for fuller and more consistent implementation as proven by school records such as CRLA and PHIL-IRI assessment results, learner reading profiles, teacher accomplishment reports, and documentation of ARAL-related activities that all showed improvements.

Moreover, the "determination and assessment of learners" (M 3.60, SD = 0.385) interpreted as highly effective, as the highest-rated indicator, was followed by post-assessment (M = 3.53, SD = 0.396), also interpreted as highly effective, and midline assessment (M = 3.49, SD = 0.383), interpreted as effective. These top-scored domains suggest that the strongest leadership practices are focused on assessment-related functions, that is, from identifying learner needs at the beginning until the checking of gains at the last part of the intervention cycle. On the contrary, "monitoring and evaluation" (M = 3.37, SD = 0.674) as the lowest-rated domain, interpreted as effective, remains a favorable result, suggesting more continuous and evidence-based leadership, more particularly in tracking implementation and utilizing monitoring records for improvement.

Additionally, the findings point out that academic leadership in ARAL is the strongest in areas of the program where school heads organize, classify, and review learner performance. Provided DepED tools and timelines have made this happen since assessment activities were guided by these, making the school heads efficiently supervise and standardize across schools. School leaders also happened to give more attention to assessment since these tasks produce distinguishable outputs like reading profiles, reports, and performance comparisons, unlike monitoring and evaluation, which may require a more constant system of classroom visitations and follow-ups, coaching, data use over time, and documentation review, which school leaders found hard to maintain because they are burdened by other responsibilities. This suggests the need to strengthen the follow-through mechanisms, though the district already has a strong assessment base, to sustain improvement.

The summary leads to balancing the whole leadership cycle of the ARAL program. Though strong learner assessment and post-assessment are important, this could be more substantial when partnered with equally significant strong support during the intervention, closer monitoring of implementation, and usual

evaluation of knowing what works and what does not work. A more balanced leadership across all domains can guarantee that the focused learners are not just properly identified and tested but also constantly supported at full length during the intervention process. Furthermore, this can advance teachers' pedagogical approach, make reading support more responsive, and help the school respond faster to learners who are manifesting slow progress or risk of regression. Likewise, this may help ARAL implementation be less dependent on confined efforts and more anchored in a balanced and reliable school-wide system. Even parents and the wider community may benefit when academic leadership is strong, because communication becomes clearer and support for reading development becomes more coordinated both in the school.

The present findings are consistent with the literature showing that academic leadership is central to turning ARAL from policy into actual classroom practice. Chacko (2022) and Whittaker and Montgomery (2022) describe academic leadership as a collaborative and values-driven process that protects instructional quality and learner support, which is reflected in the generally positive results across all domains. The strong rating for the determination and assessment of learners supports the findings of Sadvik (2024) and Lipaopao (2025), who found that schools with stronger leadership in assessment and data use achieved better literacy outcomes. Meanwhile, the lower rating for monitoring and evaluation suggests that this domain may still need greater attention, even though the literature shows that strong monitoring systems lead to better literacy outcomes over time (Sandvik, 2024). Overall, the Lopez West District is already performing well in several critical areas of academic leadership, as confirmed by the data presented.

Table 4
Summary of the Level of the Digital Competency of ARAL Teachers / Coordinators Focusing on ARAL Implementation in the Public Elementary School

Domains	M	SD	VI
1. Digital Resources	3.20	0.521	Competent
2. Digital Assessment	3.16	0.597	Competent
3. Teaching and Learning	3.10	0.604	Competent
4. Empowering Learners	3.06	0.652	Competent
5. Facilitating Learners' Digital Competence	3.02	0.701	Competent
6. Professional Engagement	3.27	0.639	Competent
Overall	**3.14**	**0.619**	**Competent**

Legend: 3.50-4.0 Highly Competent (HC); 2.50-3.49 Competent (C); 1.50-2.49 Slightly Competent (SC); 1.0-1.49 Not Competent (NC).

Table 4 shows the summary of the digital competency among ARAL teachers and coordinators in public elementary schools. Overall, the educators demonstrated a "competent" level of digital proficiency, with an overall mean score of 3.14. This indicates that they generally have the necessary skills to integrate technology into their reading instruction, assessments, and daily communication.

On a closer look at the specific areas, teachers scored highest in professional engagement (M=3.27), followed by their ability to manage digital resources (M=3.20) and conduct digital assessments (M=3.16). The data reveals, however, a noticeable gap when it comes to the students. The lowest score was in facilitating the learners' own digital competence (M=3.02). This indicates that teachers are quite comfortable using technology for their own administrative and teacher-centered tasks, but they face challenges when trying to help students to develop independent digital skills.

These findings align well with recent educational literature. For instance, teachers who are equipped with strong digital skills can effectively leverage multimedia tools to enhance literacy development

(Neumann, 2022; Sari & Wahyudi, 2023). In the Philippines specifically, digital readiness helps educators organize their lessons and support varied learning tasks (Alea et al., 2020; Comendador et al., 2023).

Nevertheless, the results also highlight common frustrations concerning physical barriers. As noted by Tondeur et al. (2022) and Alea et al. (2020), limited ICT infrastructure, poor internet connectivity, and gaps in digital pedagogy continue to restrict how technology can be utilized in classrooms. While ARAL coordinators and teachers have a solid, functional baseline of digital skills, it is therefore noted that they need targeted support to shift from simply using tech for instruction toward creating truly interactive, learner-centered digital experiences.

Table 5
Summary of the Extent of Implementation of the Designed Learning and Development Plan

Domains	M	SD	VI
1. Learning Assessment	3.86	0.274	Highly Implemented
2. Prioritization	3.90	0.194	Highly Implemented
3. Modalities	3.87	0.188	Highly Implemented
4. Delivery Proposal	3.90	0.193	Highly Implemented
5. Fund Allocation	3.88	0.261	Highly Implemented
Overall	**3.88**	**0.222**	**Highly Implemented**

Legend: 3.50-4.0 Highly Implemented (HI); 2.50-3.49 Implemented (I); 1.50-2.49 Less Implemented (LI); 1.0-1.49 Not Implemented (NI).

Table 5 presents the summary of the extent of implementation of the designed learning and development plan across five domains: learning assessment, prioritization, modalities, delivery proposal, and fund allocation. The results reveal that all domains obtained mean scores ranging from 3.86 to 3.90, with corresponding verbal interpretation of 'Highly Implemented" (HI). This indicates a consistently high level of implementation across all key components of the plan.

Among the domains, "prioritization" and "delivery proposal" recorded the highest mean scores (M = 3.90, SD = 0.194 and 0.193, respectively), suggesting that these aspects are the most strongly executed areas of the plan. This implies that the identification of needs and the structuring of implementation strategies are well-established and effectively carried out. On the other hand, "learning assessment" obtained the lowest mean score (M = 3.86, SD = 0.274), although still within the "Highly Implemented" range, indicating that while assessment practices are evident, they may require further strengthening compared to other domains.
Furthermore, the table displays a shared perception regarding the high-level implementation as seen in its low standard deviation values (SD = 0.188 to 0.274) across all domains, which mirrored the common understanding and experience among respondents in relation to the rendering of the learning and development plan.

Generally, the 3.88 overall mean (SD = 0.222), interpreted as "Highly Implemented", shows the effective and consistent implementation of the designed learning and development plan across all domains. This proposes that the program was well-managed, sufficiently supported, and congruent with its targeted objectives, hence, contributing significantly to its overall success.

Table 6
Paired Samples t-test on the Significant Difference between the ARAL Literacy Levels of the Public Elementary School Learners as to their Pretest and Posttest Assessments

PRETEST-POSTTEST	statistic	df	p	Pretest Mean	Posttest Mean	Mean difference	SE difference	Remarks
CRLA	-9.85	26.0	<.001	**0.556**	**2.704**	-2.148	0.218	Significant
PHIL-IRI	-5.20	26.0	<.001	**1.296**	**1.926**	-0.630	0.121	Significant

Note. H_a $\mu_{Measure\ 1\ -\ Measure\ 2} \neq 0$

Legend: Significant @ p< 0.05

Table 6 presents the results of the paired samples t-test conducted to determine whether there is a significant difference between the ARAL literacy levels of the learners in the pretest and posttest assessments. The data shows a statistically significant jump in literacy levels across the board. For early graders (Grades 1 to 3), the CRLA scores surged from a pretest mean of 0.556 to a posttest mean of 2.704. The older students (Grades 4 to 6) also progressed on the Phil-IRI, with a movement from a 1.296 pretest average to 1.926. Since both tests had a p-value of less than .001, these gains imply that the ARAL program was effective.

Notably, the younger students experienced a much sharper increase in scores. This means that ARAL's foundational interventions were achieved for early graders, whereas older students might need more time or more intensive support to have the same conditions.

These positive results resonate with what is seen in current research. When schools use structured, data-guided interventions, student performance naturally goes up (Cabañero, 2023). Moreover, parking regular assessments with responsive teaching improves reading comprehension (Green, 2022) and overall student outcomes (Rivera et al., 2025). Essentially, tackling decoding, fluency, and comprehension in an integrated manner results in significant gains in learners' overall literacy (Anaya, 2025).

Table 7
Correlation Results on the Significant Relationship between the ARAL Literacy Levels of the Learners and Academic Leadership

ARAL Literacy Level	Academic Leadership					
	Determination and Assessment of Learners	Intervention and Progress Checks	Midline Assessment	Post – Assessment	Program Support	Monitoring and Evaluation
CRLA	0.068	-0.092	0.036	-0.145	-0.095	-0.182
PHIL-IRI	0.184	0.251	0.331	0.201	0.264	0.208

***Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).*

Verbal Interpretation of r-value: +1.0 Perfect positive +/- association +0.8 to +1.0 Very strong +/- association +0.6 to +0.8 Strong +/- association +0.4 to +0.6 Moderate +/- association +0.2 to +0.4 Weak +/- association 0.0 to +0.2 Very weak +/- or no association

Table 7 presents the correlation results on the significant relationship between the ARAL literacy levels of the learners and academic leadership. The data reveal that there is no significant relationship among the variables, as indicated in the note under the table. In general, the correlation values range only from very weak to weak association, whether positive or negative. This means that the literacy levels of learners, as measured through CRLA and PHIL-IRI, did not show a statistically significant connection with the six domains of academic leadership in this dataset. Generally, the findings suggest that although academic leadership is important in ARAL implementation, its direct measurable relationship with learner literacy outcomes was not established in the present study. Additionally, the indirect nature of academic leadership may influence the

result since leadership practices often back up teachers, schedules, resources, and monitoring systems instead of directly impacting learner scores in a short period. Moreso, other factors like learner attendance, prior reading ability, teacher delivery, home reading support, language exposure, and intervention duration are viewed as having a stronger impact on CRLA and PHIL-IRI results. Therefore, though academic leadership remains significant in administering the ARAL program, the data offer the reality that its relationship with learner literacy levels was not strong enough to be statistically significant in this study.

For the CRLA results, the correlations with the six domains of academic leadership were all very weak and mostly negative. In the determination and assessment of learners, the correlation was (r = 0.068), which indicates a very weak positive or no association. In intervention and progress checks, the coefficient was (r = -0.092), interpreted as a very weak negative or no association. In midline assessment, the value was (r = 0.036), which again shows a very weak positive or no association. In post-assessment, the relationship was (r = -0.145), while in program support, it was (r = -0.095), and in monitoring and evaluation, it was (r = -0.182). All of these values remain within the very weak negative or no association range. Taken together, these results show that the CRLA literacy outcomes of Grades 1 to 3 learners were not meaningfully associated with academic leadership across the six domains which also accepts the null hypothesis that there is no significant relationship among the variables.

Similarly, for the PHIL-IRI results, the pattern was slightly more positive, although the relationships still remained weak and not significant. In the determination and assessment of learners, the correlation was (r = 0.184), which indicates a very weak positive or no association. In intervention and progress checks, the coefficient was (r = 0.251), interpreted as a weak positive association. In midline assessment, the value was (r = 0.331), also interpreted as a weak positive association. In post-assessment, the relationship was (r = 0.201), while in program support, it was (r = 0.264), and in monitoring and evaluation, it was (r = 0.208). These values fall under either very weak positive or no association or weak positive association. All of these also accept the null hypothesis indicating no significant relationship among the variables. This means that the PHIL-IRI results of Grades 4 to 6 learners showed slightly more favorable links with academic leadership than the CRLA results, but these were still not strong enough to be considered significant.

These presented findings imply that learner literacy outcomes may depend on several other conditions aside from academic leadership alone. This may have happened because reading performance is influenced by many factors such as learner readiness, teaching quality, home support, availability of materials, attendance, intervention intensity, and language background. In this case, academic leadership may still help create favorable conditions for ARAL implementation, but its effect may be indirect and may pass through other school and classroom processes before it appears in learner performance. This also suggests that improving literacy outcomes may require a more integrated effort that combines leadership support with stronger classroom instruction, sustained learner intervention, and active family and school participation. Moreover, the weak and non-significant correlations do not mean that academic leadership has no value in ARAL. Instead, they suggest that leadership may function more as a support system that strengthens implementation quality rather than as a direct statistical predictor of literacy scores.

The present findings are related to studies that describe academic leadership as an enabling factor in literacy programs, even if its effect is not always seen as a strong direct correlation. Chacko (2022) and Whittaker and Montgomery (2022) explained that academic leadership mainly works through coordination, support, and improvement of instructional quality, which supports the possibility of an indirect influence. In the Philippine setting, Lipaopao (2025) reported that leadership in assessment and monitoring was associated with better literacy performance, while Sandvik (2024) stressed the importance of leaders using assessment data for instructional decisions. The current findings do not show the same strong connection, since both CRLA and PHIL-IRI remained non-significant, although PHIL-IRI displayed slightly more positive

coefficients. This means that the present results do not fully contradict the literature, but rather suggest that in this study, the influence of academic leadership on literacy may be shaped by other mediating factors such as intervention quality, learner engagement, and school context.

Table 8
Correlation Results on the Significant Relationship between the Learners' ARAL Literacy Levels and the ARAL Tutors/Teachers/Coordinators' Level of Digital Competence in the Public Elementary Schools

ARAL Literacy Level	Digital Competence					
	Digital Resources	Digital Assessment	Teaching and Learning	Empowering Learners	Facilitating Learners' Digital Competence	Professional Engagement
CRLA	-0.303	-0.192	-0.086	-0.089	-0.112	-0.147
PHIL-IRI	-0.255	-0.166	-0.142	-0.202	-0.165	-0.147

***Correlation is significant at the 0.01 level (2-tailed).* **Correlation is significant at the 0.05 level (2-tailed).*

Verbal Interpretation of r-value: +1.0 Perfect positive +/- association +0.8 to +1.0 Very strong +/- association +0.6 to +0.8 Strong +/- association +0.4 to +0.6 Moderate +/- association +0.2 to +0.4 Weak +/- association 0.0 to +0.2 Very weak +/- or no association

Table 8 reveals that there is no significant relationship among the variables, as stated in the note under the table. In general, all correlation coefficients are low and negative, falling within the range of very weak to weak negative or no association. This means that the learners' literacy levels, as measured through CRLA and PHIL-IRI, did not show a statistically significant connection with the six domains of digital competence. Overall, the findings show that although the digital competence of ARAL teachers is important in supporting the implementation of the ARAL program, it did not appear as a direct statistical factor associated with learner literacy outcomes in this inquiry. This is explained by the low and negative correlation values between the ARAL learners' literacy levels and the digital competence domains of ARAL tutors, teachers, and coordinators. This result may have been impacted by the supporting function of the digital competence in the ARAL implementation, wherein digital skills primarily aid teachers in the preparation of materials, communicating updates, organizing instructional resources, and recording assessment data as opposed to directly determining learners' reading scores. Additionally, reading practice, attendance in ARAL sessions, home support, teacher guidance, availability of printed reading materials, and language exposure were viewed as learner-centered and school-based factors that may have had a direct effect on CRLA and PHIL-IRI results. Thus, while digital competence remains useful in strengthening ARAL delivery, the data suggest that it did not show a significant direct relationship with learner literacy levels in this study.

In terms of CRLA results, the correlations with the six domains of digital competence were all negative and weak at most. In digital resources, the coefficient was (r = -0.303), which is interpreted as a weak negative association. In digital assessment, the value was (r = -0.192), interpreted as a very weak negative or no association. In teaching and learning, the coefficient was (r = -0.086), while in empowering learners, it was (r = -0.089), both of which indicate a very weak negative or no association. The same pattern appears in facilitating learners' digital competence (r = -0.112) and professional engagement (r = -0.147), which also fall under very weak negative or no association. Taken together, these results show that the CRLA literacy levels of Grades 1 to 3 learners did not have a meaningful relationship with the digital competence domains of ARAL personnel.

As to PHIL-IRI results, the pattern remains negative across all domains, although the coefficients stay within the same weak range. In digital resources, the correlation was (r = -0.255), interpreted as a weak negative association. In digital assessment, the coefficient was (r = -0.166), which indicates a very weak negative or no association. In teaching and learning, the value was (r = -0.142), while in empowering learners,

it was (r = -0.202), interpreted respectively as a very weak negative or no association and a weak negative association. The same very weak negative or no association is seen in facilitating learners' digital competence (r = -0.165) and professional engagement (r = -0.147). As a whole, these results show that the PHIL-IRI literacy levels of Grades 4 to 6 learners were also not significantly related to the digital competence of ARAL tutors, teachers, and coordinators.

The analysis of the findings implies that learner literacy outcomes may not automatically improve simply because teachers and coordinators are digitally competent. This may have happened because reading performance is shaped by many other conditions, such as the quality of direct instruction, learner motivation, regular attendance, home support, access to reading materials, and the intensity of intervention sessions. It is also possible that the available digital practices in schools are still more supportive than transformative, meaning that technology may help with preparation, communication, or record-keeping, but may not yet be deeply integrated into the actual literacy learning experience of learners. In this case, the contribution of digital competence to ARAL implementation was indirect, without implying a strong statistical relationship with literacy outcomes.

Likewise, it should be deemed that the non-significant and negative results should not be viewed as digital competence has no worth in ARAL. This encourages ARAL school heads and teachers to make closer connections between technology-related competencies and learner-centered reading strategies so as to see the positive effect of digital competence on literacy performance. The foundational reading growth of the younger learners under CRLA still depends more on basic decoding practice, print exposure, and direct teacher guidance than on digital modes. On the other hand, digital competence among teachers of PHIL-IRI learners is evident in their teaching practice, yet the practice is not strong enough to come up with measurable gains in reading outcomes. This suggests considering the improvement of teachers' use of digital tools for actual reading instruction, and not merely for enhancing digital competence in crafting plans.

The findings, as supported by related studies, point out that digital competence could be a supportive gauge for literacy instruction, though its impacts are not always visible in learner scores. The JRC (2020) explained that the influence of digital competence may function in several ways since it is a wide scope involving communication, assessment, instruction, and learner support. Similarly, Alea et al. (2020) and Comendador et al. (2023) commented on the importance of digital competence to teachers in organizing their lessons, supporting learning tasks, and communicating more effectively while stressing that there are practical barriers that can limit the meaningful use of technology. When applied to teaching reading, the teacher may use the technology; however, proper guidance to both teachers and learners should be taken into consideration to make learning with technology more meaningful. In connection to this, Tondeur et al. (2022) commented that being digitally literate does not necessarily result in a strong classroom impact when pedagogy, infrastructure, and training remain limited. This further reminds the balance of being digitally competent and having a supportive environment in performing the intervention to reap the targeted gains.

Table 9
Summary of the Present Research Findings as Basis for the Learning and Development Plan Proposal to Strengthen the Implementation of the ARAL Program

Variables	Domains	Research Results	Findings Needed to be Addressed	Proposed Action / Focus for L&D
ARAL literacy level (CRLA) Pretest Mean = 0.556; Posttest Mean = 2.704; Significant difference	Grades 1–3 CRLA literacy levels improved from pretest to posttest	There was a significant improvement in CRLA results after ARAL implementation. However, posttest data still show learners remaining in low emerging and developing reader levels.	General posttest still has 19.07% low emerging and 15.05% developing readers. Reading at grade level is still only 24.73%.	Strengthen early grade literacy intervention through training on foundational reading instruction, differentiated small-group remediation, decoding and fluency support, and bridging struggling readers toward grade-level reading.

ARAL literacy level (PHIL-IRI) Pretest Mean = 1.296; Posttest Mean = 1.926; Significant difference	Grades 4–6 PHIL-IRI literacy levels improved from pretest to posttest	There was a significant improvement in PHIL-IRI results after ARAL implementation. However, many learners still remain at the frustration and instructional levels.	Posttest still shows 24.88% frustration in English and 41.17% instructional in English; 18.38% frustration and 38.64% instructional in Filipino.	Include L&D sessions on comprehension strategies, fluency-building, vocabulary development, intermediate reading intervention, and use of post-assessment data to intensify support for struggling readers.
Academic Leadership Overall = 3.49, Moderately Practiced	Determination and Assessment of Learners = 3.60, Highly Practiced	Strongest domain in academic leadership	Verifying the accuracy of class reading profiles submitted by teachers (M = 3.48, Moderately Practiced)	Focus on data quality assurance, validation of class reading profiles, and accurate learner profiling using Phil-IRI/CRLA results.
	Intervention and Progress Checks = 3.48, Moderately Practiced	Leadership support in intervention is present but can still improve	Reviewing learner progress data to evaluate the effectiveness of interventions (M = 3.33, Moderately Practiced)	Provide training on progress monitoring, data-based decision making, use of progress data for adjusting interventions, and teacher feedback systems.
	Midline Assessment = 3.49, Moderately Practiced	Midline checks are functioning but need stronger follow-through	Revising intervention plans based on the midline findings (M = 3.30, Moderately Practiced)	Include workshops on midline data interpretation, revising reading plans, regrouping learners, and using MOSY results for timely instructional adjustment.
	Post-Assessment = 3.53, Highly Practiced	Post-assessment is one of the stronger leadership areas	Documenting successful ARAL practices for future use (M = 3.37, Moderately Practiced)	Develop sessions on documentation of best practices, knowledge management, school-based action research, and using post-assessment results for next-cycle planning.
	Program Support = 3.47, Moderately Practiced	School-based support is evident but external linkage is weaker	Building partnerships with LGUs and stakeholders for literacy support (M = 3.19, Moderately Practiced)	Focus on partnership building, resource mobilization, stakeholder engagement, and community-supported reading interventions.
	Monitoring and Evaluation = 3.37, Moderately Practiced	This is the lowest academic leadership domain	Reviewing documentation and intervention logs (M = 3.26, Moderately Practiced) and evaluating teachers' ARAL duties and responsibilities (M = 3.26, Moderately Practiced)	Include L&D on monitoring tools, intervention logs, M&E systems, feedback conferences, and use of monitoring data for school ARAL action plans.
Digital Competency Overall = 3.14, Competent	Digital Resources = 3.20, Competent	Teachers are competent in using digital resources, but resource organization is weaker	Maintaining a digital library of leveled reading materials (M = 2.86, Competent)	Train teachers on digital curation, building leveled digital reading banks, organizing e-resources, and offline/online access strategies.
	Digital Assessment = 3.16, Competent	Basic digital assessment is present, but more advanced assessment tools are less used	Administering ARAL reading assessments using alternative mobile apps or digital timers (M = 3.02, Competent)	Strengthen digital assessment literacy, including Google Forms, mobile assessment apps, digital timers, spreadsheets, and dashboard-based progress review.

	Teaching and Learning = 3.10, Competent	Technology is used in teaching, but interactive learner-centered use is lower	Supporting small-group reading through tablet-based activities (M = 2.87, Competent)	Conduct L&D on interactive digital instruction, tablet-based guided reading, multimedia for decoding and fluency, and technology-supported differentiated reading tasks.
	Empowering Learners = 3.06, Competent	Digital tools for learner empowerment are moderately used	Supporting learner reflection through digital journals (M = 2.89, Competent)	Include sessions on learner autonomy, digital reflection tools, self-paced reading apps, digital storytelling, and gamified reading motivation.
	Facilitating Learners' Digital Competence = 3.02, Competent	This is the lowest digital competency domain	Helping learners troubleshoot basic device or app issues (M = 2.89, Competent)	Focus on basic learner digital skills, digital navigation, safe platform use, troubleshooting basics, and teaching learners to manage simple e-books and reading files.
	Professional Engagement = 3.27, Competent	Strongest domain in digital competency, but training participation is slightly lower	Attending virtual training sessions on literacy instruction (M = 3.20, Competent)	Support online professional learning communities, virtual LAC participation, digital communication etiquette, and continuous literacy-related e-training.
L&D Plan Implementation Overall = 3.88, Highly Implemented	Learning Assessment = 3.86, Highly Implemented	Strong assessment base for the L&D plan	Classifies needs into knowledge, skills, and attitudes (M = 3.78, Highly Implemented)	Refine the L&D by making the KSA classification of needs more explicit and aligned with ARAL teacher and leadership competencies.
	Prioritization = 3.90, Highly Implemented	Strong prioritization component	Applies NEAP-aligned criteria for priority setting (M = 3.78, Highly Implemented)	Make NEAP-based prioritization criteria more visible in the final L&D structure.
	Modalities = 3.87, Highly Implemented	Modalities are highly implemented and flexible	Complies with CPD and NEAP accreditation requirements (M = 3.74, Highly Implemented)	Ensure clearer CPD/NEAP compliance, and design a blended modality package with LAC, coaching, mentoring, and school-based sessions.
	Delivery Proposal = 3.90, Highly Implemented	Delivery system is clear and feasible	Presents realistic timelines aligned with ARAL cycles (M = 3.85, Highly Implemented); Provides mechanisms for coaching and follow-through (M = 3.85, Highly Implemented)	Refine implementation through clear ARAL-based timelines, coaching cycles, follow-through monitoring, and risk management procedures.
	Fund Allocation = 3.88, Highly Implemented	Funding component is highly implemented	Includes contingency provisions for implementation (M = 3.81, Highly Implemented)	Add stronger contingency budgeting, backup resource plans, and clearer sustainability funding strategies.
Correlation with Academic Leadership No significant relationship	CRLA and PHIL-IRI vs. academic leadership domains	No significant relationship among variables	Weak to very weak associations suggest that leadership practices need stronger translation into classroom impact	L&D should focus on bridging leadership actions to instructional outcomes, especially through data use, coaching, monitoring, and intervention follow-through.

Correlation with Digital Competence No significant relationship	CRLA and PHIL-IRI vs. digital competence domains	No significant relationship among variables	Weak to very weak negative associations suggest that digital skills are not yet being maximized for direct literacy gains	L&D should focus on applied digital pedagogy for reading, not just tool use, through technology-integrated reading intervention, digital assessment use, and learner-centered digital literacy support.

Table 9 presents the summary of the research findings that served as the basis for the developed Learning and Development (L&D) Plan to strengthen the implementation of the ARAL Program. The results show that the program already produced significant literacy gains in both CRLA and PHIL-IRI, yet many learners still remained in the lower reading levels after the intervention period. This means that ARAL is already helping learners improve, but the gains are not yet enough to move a larger share of learners to the expected proficiency levels. This implication is consistent with the work of Green (2022) and Anaya (2025), which showed that reading interventions can lead to significant improvement, but sustained and more focused support is still needed for learners who remain behind. In the current study, this supports the need for the L&D Plan to include stronger training on foundational reading instruction, comprehension support, fluency-building, and differentiated remediation for both early and intermediate grade learners.

The summary also shows that academic leadership was observed at a Moderately Practiced overall (M = 3.49, SD = 0.446), with stronger ratings in determination and assessment of learners and post-assessment, but lower ratings in monitoring and evaluation, program support, intervention and progress checks, and midline assessment. This suggests that school leaders are stronger in beginning and closing the intervention cycle than in the follow-through processes that keep instruction responsive while the program is ongoing. The implication here is that the L&D Plan should strengthen data quality assurance, progress monitoring, use of midline findings, documentation, coaching, and partnership-building so that leadership practices can move beyond assessment compliance and produce stronger classroom impact. This is aligned with Chacko (2022), Whittaker and Montgomery (2022), Sandvik (2024), and Lipaopao (2025), who all emphasized that academic leadership matters most when it supports instructional decisions, teacher guidance, and continuous improvement rather than isolated management tasks.

In the same way, digital competency was rated at the competent level overall (M = 3.14, SD = 0.619), with relatively stronger results in professional engagement, digital resources, and digital assessment, but lower results in facilitating learners' digital competence, empowering learners, and some aspects of teaching and learning. This pattern suggests that ARAL teachers and coordinators are already able to use digital tools for communication, preparation, and basic assessment tasks, yet they are less strong in using technology to build learner independence and more interactive reading experiences. The implication is that the L&D Plan should not stop at basic technology use, but should instead focus on applied digital pedagogy for reading, including digital curation, learner-centered digital tasks, tablet-based guided reading, digital reflection tools, and digital support for struggling readers. This direction is backed up by JRC (2020), Alea et al. (2020), Comendador et al. (2023), and Tondeur et al. (2022), who all suggest the need to directly connect technology to pedagogy, learner engagement, and actual literacy improvement to make digital readiness more meaningful.

It is found that the designed L&D Plan was generally highly implemented (M = 3.88, SD = 0.222). This communicates the credibility and workability of the L&D. However, to make the implementation more systematic and sustainable, some refinements should be considered, particularly in the areas of KSA classification of needs, NEAP-based prioritization, CPD/NEAP compliance, coaching and follow-through timelines, and contingency budgeting. Furthermore, the final L&D output should focus on the refinement of its internal structure, not merely on addressing its weaknesses to ascertain intense delivery and continuity. This is parallel to the findings of Cabañero (2023), Prudente et al. (2024), Li (2023), Madera (2024), and the Teachers' Continuing Professional Development Research Team (2021) on how professional development

plans become more effective if they are needs-based, contextualized, well-prioritized, viable in delivery, and financially reasonable.

In response to the identified monitoring gaps, the L&D will focus on the Monitoring and Evaluation Strengthening Program, which will be implemented systematically following specific steps, namely orientation on the proper use of ARAL monitoring tools, regular review of teacher documentation and intervention logs, scheduled classroom observation of ARAL sessions, feedback conferences with ARAL teachers and coordinators, and the use of monitoring data in revising school-level ARAL action plans. This is significant because monitoring and evaluation, particularly in reviewing documentation and intervention logs and evaluating teachers' ARAL duties and responsibilities, documented the least academic leadership results. School heads are required to spearhead the conduct of monthly ARAL implementation checks, consolidate learner attendance and progress data, review intervention records, and lead short coaching sessions based on observed gaps, making monitoring more systematic, evidence-based, and connected to actual instructional targeted improvement. Coaching, mentoring, LAC sessions, and follow-through mechanisms will be intensified to reflect such steps as indicated in the L&D, ensuring its alignment with the study's direction on how to improve data-driven decision-making, monitoring and evaluation systems, and classroom-based ARAL implementation.

Finally, despite the generally positive ratings, both academic leadership and digital competence had no significant relationship with learner literacy levels. This implies that leadership and digital skills may work more as enabling conditions, and less as direct predictors of reading performance. This explains further that their effect may be evident and pass through intervention quality, learner motivation, teacher practice, access to materials, home support, and attendance. The current study implies that L&D should work on bridging this gap by assisting the school leaders and teachers in linking their leadership actions and digital competencies more intentionally and directly to reading pedagogy, learner monitoring, and classroom intervention outcomes.

Figure 3
Visual Presentation of the Proposed L&D based on the Research Findings

Presented in Figure 3 is the mapping of the proposed Learning and Development (L&D) Plan, which serves as a blueprint for the improvement of the ARAL Program. The figure organizes findings from three major areas: school profile and academic leadership, digital competence, and L&D plan implementation. Identified strengths and gaps are converged at the center to design a more responsive training model.

As the diagram flows downward towards actual implementation, it connects the structural inputs directly to student outcomes. It tracks reading progress using the CRLA for early graders and the Phil-IRI for older students. Despite the significant improvements, the figure also flags that some learners are still stuck in lower reading tiers.

To address these persistent gaps, the L&D framework pushes for highly targeted capacity-building for both school heads and teachers. It also places a strong emphasis on strengthening foundational reading instruction, improving data-driven decision-making, enhancing monitoring and evaluation systems, and integrating digital tools effectively in reading interventions. It ultimately promotes hands-on, practical solutions which include regular coaching, mentoring, LAC sessions, and tech-supported lessons. Meaningful literacy growth is thus shown, through this framework, to incorporate strong leadership, capable teachers, and sustained implementation support with the already established structured interventions.

5. Summary of Findings and Recommendations

The study investigated the implementation of the Academic Recovery and Accessible Learning (ARAL) Reading Program in the Lopez West District by evaluating school profiles, learner literacy, academic leadership, and teachers' digital competence. In response to the aforementioned research questions of the study, the following findings are drawn:

1. The majority of the public elementary schools in the Lopez West District are small, with no specialized reading teacher, and with existing school-based reading programs that are mostly at the moderate level of compliance.
2. The ARAL literacy levels of learners improved from pretest to posttest based on both CRLA and PHIL-IRI results. However, some learners still remained in the lower reading levels and needed continued reading support.
3. Academic leadership practices in the ARAL Reading Program was generally effective. It was highly effective in determining and assessing learners and in post-assessment, while monitoring and evaluation needed the most improvement.
4. ARAL teachers and coordinators were generally competent in digital competency. They were strongest in professional engagement, while facilitating learners' digital competence needed further strengthening.
5. The designed Learning and Development Plan was highly implemented in all areas, with its strongest parts being prioritization and delivery proposal, while learning assessment still needed refinement.
6. There was a significant difference between the learners' ARAL literacy levels in the pretest and posttest assessments, indicating that the ARAL Reading Program contributed to learners' reading improvement.
7. There was no significant relationship between learners' ARAL literacy levels and academic leadership, showing that leadership practices were not directly associated with the learners' literacy results in this study.
8. There was no significant relationship between learners' ARAL literacy levels and the digital competence of ARAL teachers, tutors, and coordinators. This means that digital competence was not directly associated with learners' literacy results in this study.

9. A Learning and Development Plan was proposed to strengthen ARAL implementation. The plan focused on reading intervention, academic leadership, assessment use, monitoring and evaluation, partnership building, digital competence, and sustained implementation support.

Based on the findings of the study, it is concluded that there is a significant difference between the ARAL literacy levels of public elementary school learners when comparing their pretest and posttest assessments, leading to the rejection of the null hypothesis. This indicates that the intervention or program implemented had a measurable impact on improving learners' literacy levels. It is important to consider, however, that there is no significant relationship between the learners' ARAL literacy levels and academic leadership, which supports the null hypothesis. The null hypothesis is also supported in concluding that there is no significant relationship between the learners' ARAL literacy levels and the extent of digital competence of ARAL tutors, teachers, and coordinators in public elementary schools. Hence, it is suggested that while learner performance improved, there is no direct attribution between the improvement and the academic leadership or the digital competence of educators involved in the program.

The following are recommended to further strengthen the ARAL program in response to the conclusion:

For learners, there is a recommendation to actively engage in ARAL sessions and to maintain consistent practice with both digital and printed materials to achieve grade-level reading proficiency.

For ARAL teachers, prioritizing differentiated instruction, small-group mediation, and continuous progress monitoring to better support struggling readers is recommended. Along with coordinators, they should also continuously refine and utilize the proposed L&D Plan to align with actual implementation needs.

For school leaders and administrators, there is an urgency to intensify monitoring and coaching efforts to guide teachers in effectively utilizing assessment data. They are also advised to strengthen academic leadership through improving documentation, monitoring, and evaluation.

For schools, there is a need to institutionalize the developed L&D Plan to boost educators' digital competence to ensure that they can seamlessly integrate interactive, learner-centered technologies into reading instruction.

For external stakeholders, including parents, local government units (LGUs), and community partners, collaboration with schools by supplying necessary resources and reinforcing reading habits outside the classroom is recommended.

Finally, for future researchers, there is a need to investigate other underlying factors that influence literacy outcomes and explore the long-term impacts of ARAL interventions across diverse educational contexts.

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