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Research Article

Challenges and Opportunities in the Implementation of Early Literacy Intervention Among Kindergarten Teachers

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ABSTRACT

Addressing reading problems at an early stage is recommended to reduce the adverse effects on the pupils. This study aimed to identify the challenges encountered and opportunities experienced during the implementation of early literacy interventions in kindergarten. In this regard, 41 kindergarten teachers responded positively in providing the needed data. A quantitative descriptive research design was employed, supplemented with a survey questionnaire as the primary data collection tool, and casual interviews for follow-up. Research protocols of Dep-Ed-Bukidnon were observed at all times. Appropriate statistical tools were used to produce reliable results. Analysis showed that the majority of respondents were young adults with units in master's degree programs in education, and they came from small schools. The highest counts of respondents served for 6 to 10 years and attended 6 or more training sessions related to early literacy intervention, initiated and sponsored by the Division Office. The respondents had consistently encountered challenges and experienced opportunities during the implementation of early literacy interventions. A moderate, positive, and significant relationship was found between the challenges encountered and the opportunities experienced during the implementation of early literacy intervention. There was no significant difference in the extent of challenges encountered among the respondents when grouped by age, years in teaching, highest educational attainment, and number of trainings attended. However, there was a significant difference in the challenges encountered when grouped by school size. Respondents from small and medium-sized schools encountered more challenges than those from large schools. There was no significant difference in the extent of opportunities experienced among the respondents when grouped according to age, number of years in teaching, highest educational attainment, and number of trainings attended. However, there was a significant difference in the opportunities experienced when grouped by school size. Respondents from small schools experienced

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more opportunities than those from large schools. Finally, the researcher recommended that this study be replicated with additional explanatory variables or modified into a quasi-experimental study to investigate the effect of early literacy intervention on the reading abilities of kindergarten pupils.

Keywords: *Challenges, Early Literacy, Kindergarten, Opportunities*

Background

Kindergarten serves as the compulsory and mandatory entry stage to basic education in the Philippines, as institutionalized under Republic Act No. 10157, also known as the "Kindergarten Education Act." As a cornerstone of the K to 12 Basic Education Program, this mandate requires all five-year-old children to complete a pre-primary year designed to foster their holistic development in terms of physical, social, emotional, and intellectual faculties before formal primary schooling (Lucero, 2023). Kindergarten is a critical stage, as pupils undergo new experiences and absorb new ideas, and are exposed to language-rich environments that shape their cognitive abilities for lifelong learning.

In the kindergarten stage, literacy interventions are indeed implemented to scaffold the learning process. Bautista (2019) and Reyes (2018) both confirmed the relevance of interventions in kindergarten, as it helps pupils improve their immediate reading skills and identify reading problems for an effective remedy. Similarly, Verhoeven et al. (2020) emphasized that early literacy intervention creates neural traces as a result of experience and learning. It also facilitates faster word recognition and phonological awareness. Accordingly, these interventions provided in terms of meaningful learning opportunities serve a robust foundation for academic achievement across all learning areas, effectively acting as a primary predictor of success (Gonzales, 2017; Pasion, 2020).

However, the implementation of the Kindergarten policy is coupled with systemic hurdles, obstacles that exist along the policy. Jaca and Lopez-Baroman (2021) identified several significant challenges, including a lack of localized instructional materials, time constraints, and the complexities of Mother Tongue-Based Multilingual Education (MTB-MLE). These systemic hurdles, according to Dong et al. (2020), can likely create pedagogical overload among the teachers due to a lack of the needed multisensory resources required for a quality intervention. This is evident in the staggering 90 percent learning poverty rate among Filipino children as reported by the Philippine Institute for Development Studies (PIDS, 2023). This shows that despite the implementation of mandate-driven interventions, the learners struggle instead with their foundational skills in Grade 3 (Duzon & Paragas, 2022).

Providing a solution to this persistent literacy problem is a local step to contribute meaningfully to Sustainable Development Goal (SDG) 4, which aims for inclusive and equitable quality education. Therefore, identifying the challenges and opportunities inherent in the kindergarten literacy program is key to improving the desired outcomes. These challenges may include resource scarcity and language barriers, while opportunities may cover pedagogical innovation and professional growth among the teachers. Through this work, evidence-based insights can be provided to all those implementing this literacy program. Eventually, the goal is to produce kindergarten pupils with the readiness as entrants of the basic education and become functional literate Filipino learners in the future.

Methods

This study intends to determine the extent of challenges encountered and opportunities observed among the kindergarten teachers during the implementation of the kindergarten program. This section provides the processes of gathering the required data to be able to produce reliable results.

This study used a quantitative descriptive research design with a survey questionnaire as the main data gathering tool supplemented with a casual interview. This is appropriate since the inquiry has factor-isolated questions.

For this reason, the Input-Process-Output model was used to provide a rigid, structural boundary that keeps the research grounded in description, preventing the researcher from prematurely jumping into causal claims. This model starts with the "Input" by introducing the explanatory and latent variables of the study. This is followed by the "Process" displaying how to produce the said variables and transform them into useful pieces of information. Finally, the "Output" refers to a strategic action to address, if not all, some of the findings within the control of concerned individuals or agencies. It is clear that this structured approach, the IPO model, shows a clear analysis of how the variables influence the outcomes of early literacy programs (Idulog et al., 2021).

This study was conducted in the Don Carlos Districts of DepEd-Bukidnon, a locale characterized by its diverse institutional landscape. These districts comprised small, medium, large, and mega elementary schools. The total enumeration of schools was made to get the approximate reflection of the socio-economic and logistical realities of various school sizes. Saturated sampling was also employed for all 41 kindergarten teachers due to their small number. Since the meaningful insights of the literacy program are sought, the respondents must have at least one year of teaching experience in kindergarten (Balanquit et al., 2023).

The researcher used a researcher-made and validated survey questionnaire. Through the guidance of the researcher's adviser and results from the casual interview, a four-point Likert scale was formulated for validation. This scale requires the respondents to take a definitive stance on the construct or indicators of the challenges experienced encountered and opportunities observed to increase the precision of the responses (Mohd Ismail et al., 2018). This instrument has two parts: a) the demographic or explanatory variables, and b) the latent variables (challenges and opportunities).

Five literacy experts from the DepEd-Bukidnon and a psychometrician were requested to validate the instrument. After the comments and suggestions were incorporated, the instrument was pilot tested in the Kibawe district, still in DepEd-Bukidnon. Results showed that the Cronbach's alpha value was 0.82, indicating the instrument was reliable.

Data gathering was conducted with observance of the three (3) stages to maintain academic rigor and a high response rate. First, the researcher secured the approval of the Schools Division Superintendent and school heads to establish institutional support. Second, the researcher personally distributed the expert-validated questionnaires to the identified respondents, providing a brief orientation to ensure clarity of the items. Finally, the retrieval of the survey questionnaire after two weeks. Within this period, it was expected that the respondents would surely provide honest responses and reflections. This style of data gathering minimizes non-response bias and ensures the quality of raw data for analysis (Passion, 2020).

The analysis of data follows the observation of noting the appropriate statistical tool. This is done by examining the characteristics of data as well as the assumptions of using a parametric test or its alternative to ensure the empirical rigor of the findings. For descriptive statistics, counts, percentages, mean, and standard deviation were used for the demographic profile and the extent of challenges encountered and opportunities observed, providing a measure of central tendency and pedagogical consensus (Mohd Ismail et al., 2018). To determine a significant association between challenges experienced and opportunities observed, Spearman's rho correlation coefficient (rho) was used due to the non-normality of data distribution. For the differences in the extent of challenges experienced and opportunities observed across demographic groupings such as age, experience, and school size, the Kruskal-Wallis Test was employed as a robust non-parametric alternative to ANOVA, accounting for the unique distribution of the sample (Pasion, 2020).

In appreciating the responses in terms of the challenges experienced, Table 1 was used in the study.

Table 1. Guide in Appreciating the Perceived Challenges Experienced in the Implementation of Early Literacy Intervention

Arbitrary Value	Statistical Limits	Descriptive Equivalent	Interpretation
4	3.26 - 4.00	Strongly Agree	Challenges are always encountered.
3	2.51 - 3.25	Agree	Challenges are sometimes encountered.
2	1.76 - 2.50	Disagree	Challenges are rarely encountered.
1	1.00 - 1.75	Strongly Disagree	Challenges are never encountered.

To quantify opportunities observed by the respondents, Table 2 provides the parameters for recognizing the responses per construct or indicator of the latent variable.

Table 2. Guide in Appreciating the Perceived Opportunities Encountered in the Implementation of Early Literacy Intervention

Arbitrary Value	Statistical Limits	Descriptive Equivalent	Interpretation
4	3.26 - 4.00	High Extent	Opportunities are always observed.
3	2.51 - 3.25	Moderate Extent	Opportunities are sometimes observed.
2	1.76 - 2.50	Less Extent	Opportunities are rarely observed.
1	1.00 - 1.75	No Extent	Opportunities are never observed.

Besides the observance of the Data Privacy Act of 2012 (RA 10173), the researcher followed the protocols of DepEd-Bukidnon and the ethical standards in conducting scholarly. Securing the consent from the target respondents and the assurance of absolute confidentiality of all data gathered were strictly followed to avoid any conflict in the future.

Results and Discussion

The interpretation of the results is presented to appreciate and have in-dept understanding of the study.

Demographic Prolife of the Respondents

Forty-one (41) kindergarten teachers participated in the survey. The respondents completely provided the required data in the questionnaire. The respondents' explanatory variables are considered relevant and can provide an in-depth understanding of the challenges encountered and opportunities observed in the implementation of the early literacy intervention program. The result is provided in Table 3 below.

Table 3. The Demographic Profile of the Respondents of the Study ($N = 41$)

Variables	Counts	Percentages (%)
Age (in years)		
20 - 39 (Young Adulthood)	30	73.17
40 - 64 (Middle Adulthood)	11	26.83
Total	**41**	**100.00**
Number of Years in Teaching		
5 and below (Newly Qualified Teachers)	11	26.83
6 - 10 (Early Career Teacher)	16	39.02
11 - 20 (Mid-Career Teachers)	10	24.39
21 and above (Experienced Teacher)	4	9.76
Total	**41**	**100.00**

Variables	Counts	Percentages (%)
Highest Educational Attainment		
College Graduate	5	12.20
With MA Units	26	63.41
MA Degree Holder	10	24.39
Total	**41**	**100.00**
School Size		
Small	28	68.29
Medium	7	17.07
Large	6	14.63
Total	**41**	**100.00**
Number of Trainings Attended		
0 to 2	6	14.63
3 to 5	16	39.02
6 and above	19	46.34
Total	**41**	**100.00**

In terms of age, the majority of the respondents (73.17%) are in young adulthood (20-39 years old), and only 26.83 percent are in middle adulthood (40-64 years old). This teaching force is composed of young and ambitious professionals with varying levels of field experience. These teachers are fit to handle very young learners (Ahmad & Rehman, 2022), since young teachers possess the physical stamina and high energy levels to handle the intensive behavioral and kinesthetic demands of kindergarten pupils.

Align with the ages of the respondents, 27 (65.85%) of them have served for at most 10 years, 10 (24.39%) served for 11 to 20 years, and only 4 (9.76%) showed loyalty to the Department of Education (DepEd) for having served 21 years and above. The decline of veteran teachers in number, those serving for more than 20 years, corroborated the findings of Camino (2021) that teachers at this level may have migrated to higher levels since the physical demands of early literacy intervention increase with age.

The teaching experience gap could surely happen due to the strong commitment of the respondents to academic advancement, in which 87.80 percent of them at least earned units in a master's degree program. Only 10 (24.39%) have not enrolled yet in the graduate school. This high level of professional ambition is a current observation that modern Filipino educators consider graduate studies a crucial avenue for both personal growth and eligibility for promotion (Martinez, 2023)

In any school district in the Philippines, the frequency of small schools is the highest, followed by medium, large, and mega elementary schools. These small schools are usually situated in small communities. This is the context of the present study, where 68.29 percent are small schools, followed by medium schools with 7 (17.07%) and large schools with 6 (14.63%). This finding contradicts Yang and Seyed (2024), who suggested that literacy intervention must be tailored to the limitations of resources and the learning environment. However, small schools have lower enrolment.

The training attended can probably address logistical constraints, with 19 (46.34%) of the respondents having attended at least six instances. This is followed by 16 (39.02%) with 3 to 5 trainings and 6 (14.63%) with no training attended. It is expected that all must have attended trainings particularly in the implementation of early literacy intervention. Nunez and Rosales (2021) confirmed that financial limitations dictate the opportunities to attend training. This is just one of the systemic hurdles occurring in the implementation of intervention programs.

On the Challenges Encountered by the Respondents

Table 4 shows that the challenges encountered have five (5) sub-domains, which include the teacher, resources, parental and community aspects, policy and implementation, and the pupils themselves

Table 4. Extent of the Challenges Encountered in the Implementation of Early Literacy Intervention

Sub-Domains of Challenges	Mean	Descriptor
Teacher-Related		
Limited experience in teaching early literacy skills.	3.80	Strongly Agree
Insufficient knowledge of literacy development and assessment.	3.78	Strongly Agree
Lack of training on effective literacy instruction strategies.	3.71	Strongly Agree
Inadequate support from school administrators.	3.37	Strongly Agree
Mean	**3.67**	**Strongly Agree**
Resource-Related		
Insufficient funding for literacy programs.	3.93	Strongly Agree
Lack of technology and digital tools for literacy instruction.	3.85	Strongly Agree
Inadequate classroom space and facilities.	3.85	Strongly Agree
Limited access to quality teaching materials and resources.	3.78	Strongly Agree
Mean	**3.85**	**Strong Agree**
Parental and Community Aspects		
Limited parental involvement in literacy activities.	3.95	Strongly Agree
Lack of community support for literacy programs.	3.95	Strongly Agree
Limited awareness of the importance of early literacy.	3.85	Strongly Agree
Cultural and linguistic barriers affecting literacy instruction.	3.39	Strongly Agree
Mean	**3.80**	**Strongly Agree**
Policy and Implementation		
Inconsistent implementation of literacy policies.	3.93	Strongly Agree
Limited monitoring and evaluation of literacy programs.	3.88	Strongly Agree
Lack of clear guidelines for literacy instruction.	3.83	Strongly Agree
Inadequate support from policymakers and administrators.	3.78	Strongly Agree
Mean	**3.86**	**Strongly Agree**
Pupils-Related		
Language barriers affecting literacy instruction.	3.93	Strongly Agree
Diverse learning needs and abilities.	3.88	Strongly Agree
Limited prior knowledge and skills.	3.88	Strongly Agree
Socio-economic factors impacting student motivation.	3.71	Strongly Agree
Mean	**3.85**	**Strongly Agree**

On Teacher-Related Challenges

On this subdomain, the area mean ($M = 3.67$) has a description of "Strongly Agree", indicating that the respondents have always encountered the challenges. This means that teachers do not have the competency to handle early literacy intervention. The respondents agreed that the possession of limited experience, insufficient knowledge of development ($M = 3.78$), lack of training on effective literacy instruction strategies ($M = 3.71$), and inadequate support from school administrators ($M = 3.37$). This clearly indicates the systemic hurdles in the implementation of early literacy intervention. In this case, Verhoeven et al. (2020) suggested the shift from generalist teaching strategies toward intensive, evidence-based training to effectively handle at-risk or frustrated readers.

On Resource-Related Challenges

This subdomain has an area mean (M=3.85) with a description of "Strongly Agree", indicat-

ing that the respondents have always encountered the challenge of resources. From insufficient funding ($M = 3.93$), lack of technology and digital tools ($M = 3.85$), inadequate classroom space and facilities ($M = 3.85$), and limited access to quality teaching materials and resources ($M = 3.78$). These indicators imply resource poverty that would highly translate into learning poverty. According to Pasion (2020), this resource scarcity creates pedagogical load that stifles innovation and blocks the transition from rote learning to cognitive development.

On Parental and Community Aspects

Of the five (5) subdomains, this has the lowest area mean ($M = 3.80$) and still with a description of "Strongly Agree" implying that the respondents always encountered the challenges. Among the indicators, limited parental involvement and lack of community support have the same highest mean ($M = 3.95$). These are followed by limited awareness on literacy program ($M = 3.85$) and cultural and linguistic barriers affecting literacy instruction ($M = 3.39$). These indicators suggest that the respondents always encountered challenges in getting the support of the parents and the community, so-called the lack of educational alliance to implement literacy programs. The challenges, according to Lo Coco et al. (2022), cause a significant drop in school intervention because the pupils lack a supportive literacy environment at home.

On Policy and Implementation

This is the subdomain with the highest area mean ($M = 3.86$) described as "Strongly Agree", suggesting that the respondents have always encountered policy and implementation challenges. The systemic hurdles included inconsistent implementation ($M = 3.93$), limited monitoring and evaluation ($M = 3.88$), lack of clear guidelines ($M = 3.83$), and inadequate support from policymakers and administrators ($M = 3.78$). These challenges existed within the literacy program. This is a top-down disconnect because those at the top-level failed to clearly stipulate guidelines and support to the program implementers, creating ground-level bottlenecks (Santillan, 2023).

On Pupils-Related Factors

The last subdomain has an area mean ($M = 3.85$) with a description of "Strongly Agree" implying that the respondents have always encountered challenges on pupils-related issues. The first two indicators on language barriers ($M = 3.93$), diverse learning needs and abilities ($M = 3.88$), and limited prior knowledge and skills ($M = 3.88$) are the worst contributors to cognitive load the kindergarten pupils must refrain from experiencing. In terms of family support, the socio-economic factors affect pupils' motivation ($M = 3.71$) since pupils need financial support. Dong et al. (2020) confirmed that the challenges related to pupils stall literacy progress regardless of the teacher's pedagogical effort and ability to handle the class.

Summarizing, the five subdomains have greatly contributed risk in the successful implementation of early literacy intervention programs. Most of the subdomains are pointing back to where the program comes from for the failure to address systemic hurdles right at the start the challenges occurred. There is a call for the kindergarten teachers in Don Carlos district to realign administrative support, funding, policy, parental involvement, and pupils' readiness.

Opportunities Observed

On this latent variable, six (6) subdomains were used to capture those opportunities that may significantly address the unresolved challenges. These are shown in Table 5.

Table 5. Extent of the Opportunities Encountered in the Implementation of Early Literacy Intervention

Sub-Scales of Opportunities	Mean	Qualitative Descriptor
Teacher-Related		
Use of diverse teaching methods to cater to different learning styles	3.93	High Extent
Integrate early literacy strategies in their lessons	3.88	High Extent

Sub-Scales of Opportunities	Mean	Qualitative Descriptor
Participation in professional development on early literacy	3.66	High Extent
Mean	**3.82**	High Extent
Classroom Environment		
Organized a classroom library with diverse and engaging books	3.85	High Extent
Availability of literacy-rich materials and resources in the classroom	3.78	High Extent
Display of students' literacy work and projects	3.66	High Extent
Mean	**3.76**	High Extent
Instructional Practices		
Incorporation of technology and digital tools to enhance literacy learning	3.76	High Extent
Use of phonics, phonemic awareness, and fluency strategies	3.59	High Extent
Implementation of differentiated instruction and scaffolding	3.56	High Extent
Mean	**3.64**	High Extent
Student Engagement		
Students' enthusiasm and motivation to read and write	3.93	High Extent
Students' ability to apply literacy skills in various contexts	3.90	High Extent
Students' active participation in literacy activities	3.88	High Extent
Mean	**3.90**	High Extent
Assessment and Feedback		
Teachers' ability to adjust instruction based on student needs	3.90	High Extent
Use of formative assessments to inform instruction	3.88	High Extent
Regular assessment and feedback on students' literacy progress	3.80	High Extent
Mean	**3.86**	High Extent
School Support		
Support from school administrators for early literacy initiatives	3.91	High Extent
Collaboration among teachers to share best practices	3.90	High Extent
Availability of literacy coaches or mentors	3.68	High Extent
Mean	**3.83**	High Extent

On Teacher-Related Opportunities

Undeniably, teachers always offer opportunities for the pupils to become successful. These teacher-related opportunities have an area mean ($M = 3.82$) at "High Extent", indicating that the respondents always observed the opportunities. The use of diverse learning methods ($M = 3.93$), integrate early literacy strategies in their lessons ($M = 3.88$), and participate in professional development ($M = 3.66$) are the perceived manifestations that teachers love their profession. Hattie and Donoghue (2024) confirmed that teacher-led instructional ability is a top predictor of student learning gains. In the local context, Balanquit et al. (2023) noted that teachers employ innovations and interventions as their pedagogical improvisation to address resource and learning gaps, in which the limited materials effectively transformed into diverse learning opportunities.

On Classroom Environment

The creation of a literacy-rich environment with an area mean ($M = 3.76$) at "High Extent" implies that respondents always observed it. This involves the organization of classroom libraries ($M = 3.85$) and the availability of literacy-rich materials and resources in the classroom ($M = 3.78$) for learners' supplementary learning materials. This is supported in the study of Neuman and Wright (2023), which suggested that the physical proximity to books is the single most important factor in developing voluntary reading habits. In elementary classrooms, Insorio and Macandog (2022) found that localized reading corners in rural schools significantly help phonological awareness among pupils by providing a designated place for engagement in learning.

On Instructional Practices

Despite limited resources, the subdomain on instructional practices got an area mean ($M = 3.64$) at "High Extent", indicating that the respondents observed these opportunities. These include the incorporation of technology ($M = 3.76$, phonics-based strategies ($M = 3.59$), and the implementation of differentiated instruction and scaffolding ($M = 3.56$). These actions of the respondents address the scarcity of resources while still providing the pupils with quality learning. This is aligned to McTigue et al. (2024), which confirmed that multisensory phonemic awareness, supported by even basic digital tools, bridges gaps for children with limited prior knowledge. In Philippine literacy, Ocampo (2023) argues that differentiated instruction and scaffolding are the most effective equalizers for Filipino learners facing socio-economic disadvantages.

On Student Engagement

This sub-domain has the highest area mean ($M = 3.90$) at "High Extent" indicating the respondents observed these opportunities. This is characterized by enthusiasm ($M = 3.93$), the ability to apply literacy skills ($M = 3.90$), and active participation ($M = 3.88$). These are crucial observations that should take place in the classroom every session. Guthrie et al. (2023) argued that motivated engagement serves as a shield against systemic hurdles or poverty. Locally, Durban and Catalan (2023) emphasized that kindergarteners exhibit higher literacy retention when teachers provide a happy and conducive learning atmosphere, directly impacting high participation rates.

On Assessment and Feedback

This is a very important subdomain with an area mean ($M = 3.86$) still at "High Extent", implying observance of opportunities. This is composed of adjusted instruction based on student needs ($M = 3.90$), use of formative assessments ($M = 3.88$), and regular assessment and feedback ($M = 3.80$). These indicate a sophisticated level of responsive pedagogy. Black and Wiliam (2024) theorized that real-time feedback loops prevent minor decoding difficulties from escalating. This aligns with Alegado (2022) who found that teachers prioritizing formative data over summative test achieve higher literacy benchmarks in rural divisions in a study about Philippine instructional leadership.

On School Support

Although marked as one of the challenges, this final subdomain has an area mean ($M = 3.83$) with a description of "High Extent" signifying the observance of opportunities. This includes administrative leadership ($M = 3.91$), teacher collaboration ($M = 3.90$), and the availability of literacy coaches or mentors ($M = 3.68$). These are very important support systems to address the needs of literacy teachers who implement the intervention with high confidence. Fullan and Quinn (2023) suggested that collaborative professionalism is the key to institutional sustainability. In the Philippines, Abulencia (2023) concluded that the Learning Action Cell (LAC) sessions in schools facilitate the sharing of literacy knowledge and effectively help schools against the lack of physical resources.

The opportunities presented by subdomains are an effective shield to address the challenges encountered in the early literacy intervention. The systemic hurdles can be mitigated by using the available opportunities to continue providing significant learning to the pupils.

On the Relationship Between Challenges and Opportunities of the Respondents

Before the analysis of data, the normality of the distribution of the summations of the responses per indicator was examined using Shapiro Wilk test of the Jamovi statistical software. Finding showed that the p-values were less than 0.01, indicating a non-normal distribution of data. Hence, Spearman's rho ranked correlation was utilized to analyze the association between challenges encountered and opportunities observed in the study.

Table 6. Test of Significant Relationship Between the Challenges Encountered and Opportunities Observed in the Implementation of Early Literacy Intervention for Kindergarten Pupils

Variables	r_s	df	p-value	Decision
Perceived Challenges vs Observed Opportunities	0.506	39	<.001	Reject H_o

Table 6 revealed that there was a significant moderate positive relationship between challenges encountered and opportunities observed in the implementation of early literacy interventions ($r_s(39) = 0.506, p < .001, df = 39$). This implies the rejection of the null hypothesis at 0.05 significance level. This suggests that as the magnitude of challenges increases, so does the identification and utilization of opportunities. This result points out the pedagogical resilience of the respondents in Don Carlos districts. Teachers manifest professionalism by performing their duties with dedication and compassion to provide pupils with greater opportunities to become ready for transition or entrants in basic education.

This present finding is supported by Verame (2024), who observed that Filipino teachers overcome classroom challenges through their ingenuity, dedication, compassion, and hard work to address learning gaps. Likewise, Bustillos (2023) emphasized that the school learning action cell (LAC) serves as a platform where teachers collaborate and share their knowledge on instructional approaches. In the same vein, David and Palane (2022) found that the challenges exhibited by the pupils are compelling teachers to refine their instructional approach to address issues in the classroom, while Refozar et al. (2023) confirmed that teachers consider challenges as a stressor in the implementation of literacy intervention, but use it to ensure literacy success by proactively seek and create opportunities to overcome issues.

Difference in the Extent of Challenges Encountered by Explanatory Variables

This study also intends to determine the influence of the explanatory variables on the challenges encountered by the respondents. Preparatory to this, a normality test was conducted when respondents were grouped by variable. Results showed that the p-values were less than 0.01, indicative of a non-normal distribution of data. Hence, the Kruskal-Wallis test was considered the appropriate statistical tool to use.

Table 7. Test of Significant Difference in the Extent of the Challenges Encountered in the Implementation of Early Literacy Intervention

Variables	H	df	p	Decision
Age	0.35	1	.552	Failed to Reject H_o
Number of Years in Teaching	2.12	3	.548	Failed to Reject H_o
Highest Educational Attainment	0.09	2	.957	Failed to Reject H_o
School Size	7.19	2	.027	Reject H_o
Number of Trainings Attended	5.61	2	.061	Failed to Reject H_o

Table 7 showed that there was a significant difference in the extent of challenges encountered in the implementation of early literacy interventions when grouped by school size ($H(2) = 7.17, p < .05$). Medium ($M = 81.3$) and small schools ($M = 80.5$) perceived significantly higher challenges than large schools ($M = 75.3$). This suggests that large schools have fewer challenges encountered compared to the medium and small schools. It can be understood that large schools do have resources and a strong peer-mentoring network that help teachers against systemic hurdles. This is supported in the study of Dela Cruz (2024), who found that teachers in small schools in rural areas in Mindanao often face instructional isolation and multitasking fatigue. Lumapagat (2023) also noted that medium-sized schools frequently experience middle-child syndrome, which is about the lack of specialized department support of large schools. However, Villanueva and Santos (2023) argued that school size in the Philippines can be managed by collaborative sessions, in which larger schools facilitate diverse expertise-sharing, and teachers in smaller settings must navigate complex literacy mandates with far less localized scaffolding.

However, there were no significant differences in the extent of challenges encountered when grouped by age ($H(1) = 0.35, p = .552$), years in teaching ($H(3) = 2.12, p = .548$), educational attainment ($H(2) = 0.09, p = .957$), and the number of trainings ($H(2) = 5.61, p = .061$) which yielded p-values greater than the significance level of 0.05. This led to a failure to reject the null hypothesis. This shows that the challenges encountered in early literacy implementation are systemic in nature. The demographic profile of the respondents does not matter in the challenges encountered in the schools.

This finding is supported by Mercado (2024), whose study in the Philippine basic education system concluded that professional development often fails to reduce classroom stress when physical infrastructure and instructional materials remain unavailable. Similarly, Bucad and Tan (2023) found that in the rural areas in Mindanao, the commonality of challenges persists regardless of teachers' length of service because challenges like the digital divide and parental involvement remain unsolved. Moreover, Dela Peña (2023) notes that the higher educational attainment of the teachers does not contribute to addressing classroom challenges, and finally, Castillo (2024) underscores that literacy improvement requires systemic institutional reform rather than focusing on an individual teacher upskilling approach.

Difference in the Extent of Opportunities Observed by Explanatory Variables

Before the analysis of data, similar steps were done just like noting the significant difference in the extent of challenges encountered. The results are presented in Table 8.

Table 8. Test of Significant Difference on the Extent of the Observed Opportunities Experienced in the Implementation of Early Literacy Intervention

Variables	*H*	df	*p*	Decision
Age	1.25	1	.263	Failed to Reject H_o
Number of Years in Teaching	1.93	3	.588	Failed to Reject H_o
Highest Educational Attainment	0.82	2	.665	Failed to Reject H_o
School Size	8.04	2	.018	Reject H_o
Number of Trainings Attended	0.04	2	.982	Failed to Reject H_o

Table 8 revealed that there was a significant difference in the extent of opportunities observed in the implementation of early literacy interventions when grouped by school size ($H(2) = 8.04, p < .05$). Opposite to the challenges encountered, small schools ($M = 69.6$) goth higher opportunities observed over large schools ($M = 63.3$). This means that small schools experience significantly higher opportunities for literacy implementation compared to large schools. It can be understood that large schools possess more infrastructure, but small schools excel in instructional agility, which

opens an avenue for closer teacher-pupil bonds and more personalized interventions.

Llamas (2024) confirmed the present finding since the previous study found that small schools in the rural areas in Mindanoa often foster instructional intimacy, enabling more frequent responsive assessment and differentiated scaffolding. Likewise, Baguio and Cañete (2023) noted in their study that small schools in the Philippines benefit from tight-knit micro-PLCs (Professional Learning Communities) where teachers collaborate easily, less controlled by bureaucracy. Moreover, Andres (2023) highlights that teachers can exercise greater performance when in smaller numbers to create literacy-rich environments, as they are less constrained by the rigid standardization found in larger hubs. Ultimately, Estacio (2024) emphasized that teachers in small schools capitalize on student enthusiasm more effectively than their large school counterparts.

However, there were no significant differences in the extent of opportunities observed when grouped by age ($H(1) = 1.25, p = .263$), years in teaching ($H(3) = 1.93, p = .588$), educational attainment ($H(2) = 0.82, p = .665$), and number of trainings ($H(2) = 0.04,\ p = .982$). This suggests that the instructional ecosystem in Don Carlos districts provides a democratic platform of innovation. This means that the teachers have worked collectively to address existing learning gaps. This is the primary reason that the extent of opportunities observed did not vary among them.

This is supported in the study Pacturan (2024), who found that the schools' division in Mindanao, fostering a strong culture of collaboration, gained more benefits regardless of their profiles. Equally, Gomez (2023) observed that the policy on Learning Action Cell (LAC) in Philippine public schools serves as an equalizer in ensuring that even novice teachers have access to the same instructional strategies and opportunities for having more experienced colleagues who can help. Moreover, Bernardo (2024) found that in rural divisions, the intent to create literacy-rich environments is driven by classroom needs and student enthusiasm, not by the age or number of training sessions attended. Finally, Sarmiento (2023) conjectured that when instructional opportunities are systemic, it empowers every teacher to succeed regardless of their personal professional standing.

Conclusion

Teaching the kindergarten pupils to read is a necessary skill for them to use upon entering basic education. This study concluded that the kindergarten teachers faced heavy challenges that are systemic in nature. These are challenges that come along with the policy or program, not from the individual teacher. However, this is matched with the outpouring of opportunities observed in the implementation of early literacy intervention. The teachers showed remarkable resilience by using diverse teaching methods and collaborating with other teachers in the school. School size significantly differs in the extent of challenges encountered, where small schools succumb to more challenges than their large school counterparts. This situation reverses in the extent of opportunities observed as small schools strongly connect with the pupils in making the teaching-learning process meaningful. For other explanatory variables like age, length of service, highest educational attainment, and number of trainings attended, the extent of challenges encountered and opportunities observed did not vary among the respondents. This is due to the systemic hurdles in the implementation of the policy, where the respondents, the teachers of Don Carlos districts, collectively endured and accepted the challenges as well as manipulated the opportunities observed for the benefit of the kindergarten pupils. These findings confirm that the school districts must plan for apportioning resources to smaller schools and strengthen partnership between teachers and the community.

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