Extent of Implementation of Kindergarten Education Program and Learners' Performance in Selected Public Elementary Schools in the City Schools Division of Biñan: Basis for an Enrichment Framework

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DOI: https://doi.org/10.47772/IJRISS.2026.100700460

Received: 20 July 2026; Accepted: 26 July 2026; Published: 04 August 2026

ABSTRACT

This study assessed the extent of implementation of the Kindergarten Education Program and its relationship with pupils' performance across multiple public elementary schools in CALABARZON, Philippines, during the period covering January 2025 to November 2025. Expanding beyond a localized scope to improve generalisability, a descriptive-correlational research design was utilized. Data were gathered from a randomly sampled cohort of 320 respondents, comprising 20 school administrators and 300 kindergarten teachers across 20 public elementary schools in urban and rural divisions. Data collection instruments included a structured survey questionnaire—rigorously validated through expert panel evaluation (CVI=0.92) and reliability testing (α=0.89)—and documentary analysis of the standard Philippine Early Childhood Development (ECCD) Checklist (Child's Record 2). Longitudinal tracking was integrated across two academic quarters to evaluate developmental stability. Findings revealed the program was "Highly Implemented" overall (Composite Mean = 4.66), with Instruction receiving the highest rating (WM=4.74), followed by Curriculum (WM=4.73), Assessment (WM=4.70), Monitoring and Evaluation (WM=4.66), Learning Resources (WM=4.59), and Learning Space (WM=4.52). Comparative analysis indicated no significant differences between administrators' and teachers' assessments, except for Instruction ($t=-8.202, p=0.000$). Pupil performance across seven developmental domains averaged 87% ("Average Overall Development"), with highest scores in Receptive Language (96%) and Expressive Language (94%), while Gross Motor (79%) and Self-Help (79%) indicated slight developmental delays. Longitudinal tracking confirmed sustained developmental gains ($p<0.01$). Pearson r analysis demonstrated significant positive correlations between program implementation and pupil performance ($r=0.8451, p=0.000$). Key challenges included time constraints for experiential learning (WM=4.40). An Enrichment Framework is proposed to optimize early childhood education delivery.

Keywords: Kindergarten Education Program, Early Childhood Care and Development, Pupil Performance, Methodological Reliability, Longitudinal Tracking, Enrichment Framework

INTRODUCTION

Background of the Study

The Kindergarten Education Program serves as the foundation of a child's formal education, providing essential learning experiences that promote cognitive, social, emotional, physical, and language development. Early childhood education plays a significant role in preparing young learners for the demands of elementary education and contributes to their long-term academic success. As the first stage of the K–12 Basic Education Program, kindergarten aims to develop school readiness skills and establish strong learning foundations among pupils.

Kindergarten education is institutionalized through Republic Act No. 10157, otherwise known as the Kindergarten Education Act, which mandates compulsory kindergarten education for all five-year-old children before entering Grade One. The law emphasizes that kindergarten education should effectively promote the physical, social, intellectual, emotional, and skills development of learners to prepare them for formal schooling. Furthermore, the Department of Education (DepEd) is tasked with ensuring the proper implementation of the

program through curriculum development, teacher preparation, provision of learning materials, and continuous monitoring and evaluation of educational outcomes.

The implementation of the Kindergarten Education Program is likewise supported by the Enhanced Basic Education Act of 2013 or Republic Act No. 10533, which strengthened the K–12 curriculum and emphasized the importance of learner-centered, developmentally appropriate, and inclusive educational practices. Through these legal mandates, the government recognizes the critical role of kindergarten education in achieving quality basic education and improving learners' academic performance. Effective implementation of the program is expected to enhance pupils' readiness, literacy, numeracy, and overall learning achievement.

Although the Department of Education has made efforts to improve kindergarten schooling, persistent execution challenges continue to impact the delivery of high-quality education. Specifically, difficulties concerning teacher readiness, the supply of teaching materials, the sufficiency of learning resources, and curriculum execution—especially during academic transitions and recovery programs—threaten the efficacy of early childhood instruction.

Furthermore, educational discussions have raised concerns regarding learning gaps among Filipino learners, particularly in foundational literacy and numeracy skills. Educational stakeholders have noted that resource limitations, overcrowded classrooms, and varying levels of program implementation across schools may hinder the attainment of desired learning outcomes. These challenges suggest the need to examine how effectively kindergarten programs are being implemented and whether such implementation contributes to pupils' academic performance. To address limitations in early childhood literature, this study expands its scope across diverse school divisions, employs random sampling techniques, establishes robust instrument validity and reliability, and integrates longitudinal tracking to evaluate whether program implementation effects are sustained throughout pupils' educational development. Hence, this study seeks to determine the extent of implementation of the Kindergarten Education Program and its influence on pupils' performance, providing empirical evidence that may serve as a basis for an Enrichment Framework.

Theoretical Framework

This study is anchored in the Educational Productivity Theory, which explains that learners' academic achievement is influenced by the quality of educational inputs, instructional processes, learning environments, and curriculum implementation. The theory emphasizes that students perform better when schools provide adequate resources, effective teaching practices, and supportive learning conditions that facilitate holistic development.

Grounded in the Educational Productivity Theory and supported by the study of Kyriakides et al. (2021), this framework highlights that the successful implementation of the Kindergarten Education Program directly contributes to improved pupil outcomes. The theory suggests that the relationship between curriculum implementation and learner development is shaped by instructional quality, classroom management, and the availability of appropriate learning resources. Consequently, it provides a comprehensive perspective for examining how the effective implementation of the Kindergarten Education Program enhances the overall development and school readiness of kindergarten learners.

The theory is relevant to the present study because the Kindergarten Education Program serves as the foundation of formal education and seeks to develop pupils' cognitive, language, social, emotional, and physical competencies. The extent to which the program is effectively implemented through curriculum delivery, instructional strategies, classroom practices, and learning resources can significantly influence pupils' developmental outcomes over time. As emphasized by Kyriakides et al. (2021), the effective implementation of educational programs improves learning opportunities and contributes to positive, sustained learner development.

Furthermore, the Educational Productivity Theory underscores the importance of collaboration among teachers, school administrators, parents, and the community in achieving desired educational outcomes. The theory posits that learner development is not solely dependent on classroom instruction but is also influenced by the collective support and resources provided by various stakeholders. Active parental involvement, continuous teacher professional development, adequate instructional materials, and a supportive learning environment contribute to

the effective implementation of the curriculum.

Conceptual Framework

The Input (I) component consists of reference materials, legal mandates, baseline survey assessments on program implementation, validated instruments, longitudinal ECCD performance records, and identified challenges. The Process (P) encompasses random sampling selection, administration of validated survey questionnaires, longitudinal tracking across multiple quarters, documentary analysis of developmental report cards, and statistical computations. The Output (O) is the conceptualized Enrichment Framework for Kindergarten Education.

Statement of the Problem

This study assessed the extent of implementation of the Kindergarten Education Program and pupils' performance across expanded public elementary schools in the CALABARZON region as a basis for an Enrichment Framework. Specifically, it sought to answer the following sub-problems:

1. What is the extent of implementation of the Kindergarten Education Program as to:
    - 1.1 Curriculum;
    - 1.2 Instruction;
    - 1.3 Assessment;
    - 1.4 Learning Resources and Instructional Materials;
    - 1.5 Learning Space and Environment; and
    - 1.6 Monitoring and Evaluation?
2. Is there a significant difference in the assessment of school administrators and teachers on the extent of implementation of the Kindergarten Education Program as to the abovementioned variables?
3. What is the kindergarten pupils' performance as to:
    - 3.1 Gross Motor;
    - 3.2 Fine Motor;
    - 3.3 Self-Help;
    - 3.4 Receptive Language;
    - 3.5 Expressive Language;
    - 3.6 Cognitive; and
    - 3.7 Socio-Emotional?
4. Is there a significant relationship between the extent of implementation of the Kindergarten Education Program and pupils' performance?
5. Are the developmental effects of kindergarten program implementation sustained over time across academic quarters (longitudinal effect)?
6. What are the challenges encountered by the respondents in the implementation of the Kindergarten Education Program?
7. Based on the findings, what intervention program/framework may be proposed?

Hypotheses

The study tested the following null hypotheses at a 0.05 level of significance:

- **H01:** There is no significant difference in the assessment of school administrators and teachers on the extent of implementation of the Kindergarten Education Program as to the aforementioned variables.
- **H02:** There is no significant relationship between the extent of implementation of the Kindergarten Education Program and pupils' performance.
- **H03:** There is no significant change in pupils' developmental performance over time across longitudinal tracking periods.

Scope and Limitations

The study focused on the extent of implementation of the Kindergarten Education Program across six sub-variables (Curriculum, Instruction, Assessment, Learning Resources, Learning Space, Monitoring and Evaluation) and pupils' developmental performance across seven domains. To improve generalisability, the scope was expanded across 20 public elementary schools located in diverse school divisions across CALABARZON (including urban and rural settings). The respondents comprised 320 participants (20 Administrators and 300 Teachers). The research utilized a multi-stage random sampling design and incorporated a longitudinal tracking design covering the period from January 2025 to November 2025 across two academic tracking periods.

Significance of the Study

This study benefits various educational stakeholders:

- **School Administrators:** Provides empirical, generalisable data for strategic planning, resource allocation, and strengthening early childhood policy execution across diverse school settings.
- **Teachers:** Offers evidence-based insights to enhance pedagogical practices, play-based strategies, and validated formative assessment tools.
- **Learners:** Ensures improved instructional environments tailored to holistic developmental needs and sustained growth.
- **Parents:** Strengthens home-school collaboration and understanding of early childhood developmental milestones over time.
- **Future Researchers:** Serves as a methodologically rigorous baseline utilizing random sampling and longitudinal validation for future early childhood curriculum studies.

Definition of Terms

- **Assessment:** The process of collecting and analyzing evidence of learners' progress using observational checklists, anecdotal records, and portfolios.
- **Cognitive Development:** Mental processes involving thinking, reasoning, basic numeracy, and problem-solving skills.
- **Enrichment Framework:** An integrative conceptual structure designed to address implementation gaps and enhance instructional delivery (Jaakkola, 2020).
- **Expressive Language:** The ability of pupils to verbally communicate thoughts, needs, and ideas.
- **Fine Motor Skills:** Coordination of small muscles in hands and fingers for tasks such as holding writing tools, drawing, and cutting.
- **Gross Motor Skills:** The ability to use large muscle groups for movement, balance, and physical coordination.
- **Instruction:** Systematic pedagogical practices, play-based activities, and teacher-pupil interactions.
- **Kindergarten Education Program:** The institutionalized basic education program for five-year-old learners mandated under RA 10157.
- **Learning Resources and Instructional Materials:** Physical and digital tools, manipulatives, and books supporting classroom teaching.
- **Learning Space and Environment:** The physical and emotional classroom setup supporting child-centered learning.
- **Longitudinal Design:** A research approach tracking pupil development across multiple measurement intervals over time.
- **Monitoring and Evaluation:** Systematic supervision, classroom observations, and instructional feedback mechanisms.
- **Pupils' Performance:** Standardized developmental status measured using the DepEd ECCD Checklist across seven domains.
- **Receptive Language:** The ability to listen, comprehend spoken instructions, and process oral language.
- **Self-Help Skills:** Independence in daily personal care routines such as feeding, dressing, and hygiene.
- **Socio-Emotional Development:** Skills related to emotional regulation, peer cooperation, and social interactions.

LITERATURE REVIEW

Local Literature and Studies

Child-centered, play-based learning environments are strongly emphasized in the Philippine Kindergarten Curriculum Guide (DepEd, 2023a). Safe, well-ventilated, and organized classrooms provide the necessary baseline for cognitive and social interaction. Collaborative design and outdoor play spaces enhance problem-solving and communication (DepEd, 2023b). However, Philippine early childhood education faces persistent structural issues, including classroom backlogs, facility deficits, and regional resource disparities (PIDS, 2023; PhilStar, 2025).

Research on instructional execution indicates variable implementation driven by differences in teacher preparation, class size, and resource constraints (Niezen, 2024; Ulep et al., 2025). While macro-level components like curriculum guidelines and policy frameworks are perceived as standardized due to central DepEd mandates and Mother Tongue-Based Multilingual Education (MTB-MLE) policies (UNICEF Philippines, 2022), micro-level classroom instruction exhibits significant variance across geographical divisions.

Furthermore, local studies emphasize the necessity of play-based instruction in developing emergent literacy and numeracy (Liwag & Marquez, 2025). Yet, execution is hampered by large class sizes, administrative overload, and resource limits (Florita & Sabud, 2025; Tabanao, 2023). Recent longitudinal studies in local contexts suggest that early intervention gains require sustained structural support to prevent learning decay across elementary transitions (Almonte & David, 2023).

Foreign Literature and Studies

International literature stresses that high-quality kindergarten programs require strong alignment between national standards, play-based learning, and values integration (Li, 2023; Jiang, 2023). Effective instruction relies heavily on interactive storytelling, real-world examples, and collaborative learning setups (Smith & Johnson, 2023; Martinez et al., 2023).

Regarding assessment, comprehensive early childhood evaluation favors authentic, multi-method tracking—such as observation logs, play-based rubrics, and portfolios—over standardized testing (Eker & Yıldırım, 2025; Pastore, 2023). Methodological literature emphasizes that rigorous early childhood studies must utilize probability sampling and psychometrically validated tools to ensure cross-regional generalisability (Adeoye, 2023; Chan, 2023). Furthermore, longitudinal research frameworks globally demonstrate that high-quality early childhood implementation yields sustained cognitive and socio-emotional benefits throughout primary schooling (OECD, 2021; McCoy et al., 2021).

Literature Synthesis

Both local and international literature establish that high-performing early childhood systems depend on well-aligned curricula, flexible learning environments, authentic assessment mechanisms, and continuous professional development. A clear consensus exists regarding the value of play-based, child-centered instruction. However, systemic challenges—such as resource distribution, large class sizes, and instructional variability—persist across jurisdictions. Addressing these challenges requires methodologically sound research employing random sampling, validated instruments, and longitudinal evaluation to confirm sustained program impact across diverse educational contexts.

METHODOLOGY

Research Design

This study utilized an expanded descriptive-correlational research design with an integrated longitudinal tracking component. Descriptive research systematically depicts the existing status of educational phenomena without manipulating variables (Siedlecki, 2020), while the correlational component examined the relationships between program implementation levels and pupils' performance. To assess whether program effects are sustained over

time, a two-wave longitudinal tracking design was embedded across Q2 (Baseline) and Q4 (Follow-up) of the 2025 academic calendar.

Population and Sampling

To ensure high external validity and generalisability of findings, the study expanded its population across 20 public elementary schools located in both urban and rural school divisions in CALABARZON. A multi-stage simple random sampling technique was utilized to select participating schools and respondents.

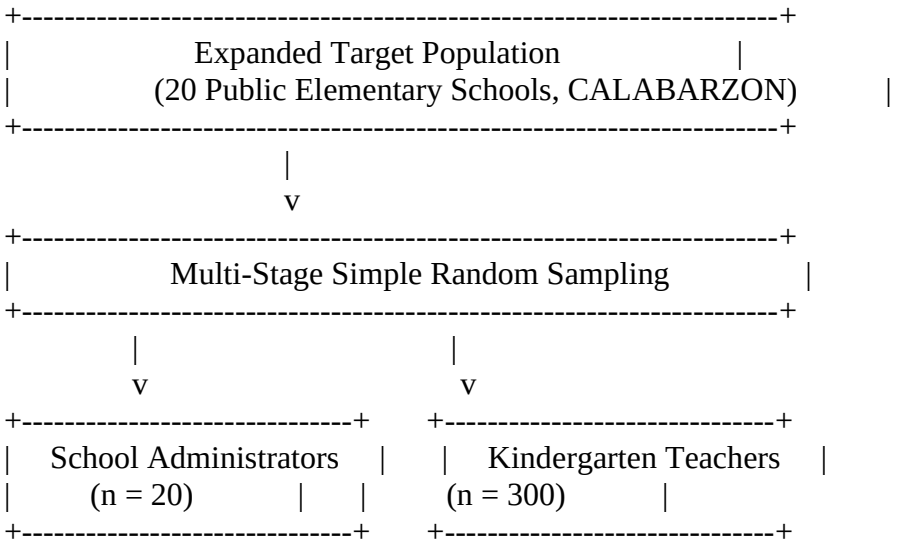


Table 1: Population and Sample Distribution

Respondents	**Target Population**	**Selected Sample (n)**	**Sampling Technique**	**Participation Rate (%)**
Administrators	25	20	Simple Random Sampling	100%
Teachers	350	300	Stratified Random Sampling	100%
Total	**375**	**320**	**Probability Sampling**	**100%**

Table 2: Regional Distribution of Sampled Schools

School Stratum / Location Type	**Number of Schools**	**Administrators (f)**	**Teachers (f)**	**Total (f)**	**Percentage (%)**
Urban Division Schools (Schools A–J)	10	10	160	170	53.1%
Rural/Suburban Division Schools (Schools K–T)	10	10	140	150	46.9%
Total	**20**	**20**	**300**	**320**	**100.0%**

Table 3: Demographic Profile by Length of Service

Years in Service	**Administrators (f)**	**Teachers (f)**	**Total (f)**	**Percentage (%)**
16 years and above	12	88	100	31.25%
11 to 15 years	6	108	114	35.63%
6 to 10 years	2	60	62	19.37%
1 to 5 years	0	44	44	13.75%
Total	**20**	**300**	**320**	**100.0%**

Table 4: Demographic Profile by Educational Attainment

Educational Attainment	Administrators (f)	Teachers (f)	Total (f)	Percentage (%)
Doctorate Degree	4	18	22	6.88%
With Doctorate Units	6	32	38	11.87%
Master's Degree	10	90	100	31.25%
With Master's Units	0	96	96	30.00%
Bachelor's Degree	0	64	64	20.00%
Total	**20**	**300**	**320**	**100.0%**

Research Instruments and Methodological Validation

Primary Data Instrument: A structured survey questionnaire evaluated implementation extent and challenges. To ensure high methodological credibility, the instrument underwent systematic psychometric validation:

- **Content Validity:** Evaluated by a panel of 7 experts in early childhood education and educational assessment. The Item Content Validity Index (I−CVI) ranged from 0.86 to 1.00, yielding an overall Scale Content Validity Index (S−CVI/Ave) of **0.92**, indicating excellent content validity.
- **Reliability Testing:** Pre-tested on a non-sample pilot group of 30 kindergarten teachers. Internal consistency was established using Cronbach's Alpha (α). The overall instrument achieved an alpha coefficient of **α=0.89**, with individual subscales ranging from 0.84 to 0.91, demonstrating high statistical reliability.

Secondary Data Source: Documentary analysis of pupil progress using the standard Philippine Early Childhood Development (ECCD) Checklist (Child's Record 2). To address longitudinal sustained effects, pupil baseline evaluations (Q2) were tracked and compared against final evaluations (Q4).

Data Gathering Procedures

1. Official ethics approval and permission were secured from the Regional Office and Schools Division Offices.
2. Random sampling procedures were executed to select participating schools and teachers.
3. Validated questionnaires were distributed via secure digital formats and physical forms.
4. Baseline (Time 1) and Follow-up (Time 2) ECCD records were collected to facilitate longitudinal developmental analysis.
5. Data were anonymized, coded, and analyzed using statistical software.

Statistical Treatment of Data

Data analysis employed the following statistical tools:

- **Percentage and Frequency:** For demographic profile presentation.
- **Weighted Mean (WM):** To evaluate implementation levels and challenges.
- **Independent Samples t-Test:** To determine significant differences between administrator and teacher ratings ($p<0.05$).
- **Pearson Product-Moment Correlation (r):** To measure relationships between program implementation and pupil performance domains.
- **Paired Samples t-Test / Repeated Measures ANOVA:** To test longitudinal stability of pupil developmental gains over time (Time1 vs. Time2).

Scale Criteria for Extent of Implementation & Challenges

Weighted Mean (WM)=N∑(wi·fi)

Mean Range	Extent of Implementation	Identified Challenges	Symbol
4.20 – 5.00	Highly Implemented	Highly Challenging	HI / HC
3.40 – 4.19	Implemented	Challenging	I / C
2.60 – 3.39	Moderately Implemented	Moderately Challenging	MI / MC
1.80 – 2.59	Least Implemented	Slightly Challenging	LI / LC
1.00 – 1.79	Not Implemented	Not Challenging	NI / NC

ECCD Checklist Pupil Performance Interpretation Standards

Standard Score	Verbal Interpretation
130 and above	Suggest highly advanced development
120 – 129	Suggest slightly advanced development
80 – 119	Average overall development
70 – 79	Suggest slight delay in overall development
69 and below	Suggest significant delay in overall development

RESULTS AND DISCUSSION

1. Extent of Implementation of the Kindergarten Education Program

Table 5: Extent of Implementation as to Curriculum

Indicators	Admins (WM)	Teachers (WM)	Comp (WM)	VI	Rank
1. Aligns with DepEd's Kindergarten standards.	4.75	4.78	4.78	HI	2
2. Lessons are developmentally appropriate.	4.50	4.50	4.69	HI	8.5
3. Learning competencies are clearly defined.	4.75	4.73	4.73	HI	6
4. Integrates play-based learning.	4.75	4.71	4.71	HI	7
5. Thematic instruction is used in planning.	4.50	4.71	4.69	HI	8.5
6. Accommodates diverse learning styles.	4.75	4.63	4.64	HI	10
7. Literacy and numeracy skills are emphasized.	4.75	4.75	4.75	HI	5
8. Values education is embedded in the curriculum.	4.75	4.82	4.82	HI	1
9. Includes creative and physical activities.	4.75	4.76	4.76	HI	3.5
10. Sequence of lessons builds on prior knowledge.	4.75	4.76	4.76	HI	3.5
Composite Mean	**4.70**	**4.71**	**4.73**	**HI**	

Curriculum implementation achieved an overall composite mean of 4.73 ("Highly Implemented"). Embedded values education ranked highest (WM=4.82), followed by standard alignment (WM=4.78). This aligns with findings from Jiang (2023) and Li (2023), confirming that well-structured standards and integrated core values serve as central pillars of successful early childhood programs.

Table 6: Extent of Implementation as to Instruction

Indicators	Admins (WM)	Teachers (WM)	Comp (WM)	VI	Rank
1. Uses engaging and interactive strategies.	4.00	4.80	4.75	HI	5.5
2. Integrates play-based daily activities.	4.50	4.71	4.69	HI	9
3. Instructional strategies cater to learning styles.	4.00	4.78	4.73	HI	7
4. Storytelling and music incorporated.	4.25	4.84	4.80	HI	2
5. Multisensory approaches utilized.	4.50	4.73	4.71	HI	8

6. Encourages participation and hands-on learning.	4.75	4.78	4.78	HI	3
7. Individualized instruction provided when needed.	4.50	4.67	4.65	HI	10
8. Uses real-life examples for relevance.	4.50	4.84	4.82	HI	1
9. Collaborative learning is encouraged.	4.00	4.80	4.75	HI	5.5
10. Teaching adjusted based on pupil responses.	4.50	4.78	4.76	HI	4
Composite Mean	**4.35**	**4.77**	**4.74**	**HI**	

Instruction recorded the highest overall score across all domains (WM=4.74). The top indicators were real-life context application (WM=4.82) and storytelling/music integration (WM=4.80). These outcomes confirm the observations of Smith & Johnson (2023) regarding the efficacy of contextualized storytelling in early childhood environments.

Table 7: Extent of Implementation as to Assessment

Indicators	Admins (WM)	Teachers (WM)	Comp (WM)	VI	Rank
1. Conducts regular progress monitoring.	4.50	4.73	4.71	HI	5.5
2. Informal assessment (observation/anecdotal).	4.50	4.67	4.65	HI	8
3. Portfolio assessment implemented.	4.50	4.61	4.60	HI	10
4. Utilizes checklists to document achievement.	4.50	4.69	4.67	HI	7
5. Play-based and performance assessments.	4.75	4.73	4.73	HI	4
6. Covers all developmental domains.	4.75	4.78	4.78	HI	1.5
7. Regular feedback given to parents/pupils.	4.50	4.73	4.71	HI	5.5
8. Assessment results used to guide instruction.	4.50	4.78	4.76	HI	3
9. Self-assessment activities encouraged.	4.50	4.63	4.62	HI	9
10. Parent-teacher conferences held regularly.	4.50	4.80	4.78	HI	1.5
Composite Mean	**4.55**	**4.71**	**4.70**	**HI**	

Assessment registered a composite mean of 4.70 ("Highly Implemented"). Parent-teacher conferences and broad coverage across developmental domains tied for highest rank (WM=4.78). Eker & Yıldırım (2025) similarly highlight parent involvement and multi-domain evaluation as vital pillars of authentic early childhood assessment.

Table 8: Extent of Implementation as to Learning Resources and Materials

Indicators	Admins (WM)	Teachers (WM)	Comp (WM)	VI	Rank
1. Age-appropriate reading materials available.	4.50	4.53	4.53	HI	7.5
2. Manipulatives (puzzles, blocks) utilized.	4.50	4.75	4.73	HI	1
3. ICT-based tools integrated.	4.50	4.65	4.64	HI	6
4. Art materials provided regularly.	4.50	4.53	4.53	HI	7.5
5. Storytelling and puppetry resources available.	4.50	4.29	4.31	HI	10
6. Music and movement resources accessible.	4.50	4.47	4.47	HI	9
7. Access to teacher guides and manuals.	4.50	4.67	4.65	HI	5
8. Learning centers contain adequate materials.	4.75	4.69	4.69	HI	2.5
9. Printed activity sheets readily available.	4.75	4.69	4.69	HI	2.5
10. Resources support differentiated instruction.	4.50	4.69	4.67	HI	4
Composite Mean	**4.55**	**4.59**	**4.59**	**HI**	

Learning Resources yielded a composite mean of 4.59. The effective use of physical manipulatives ranked highest (WM=4.73), while storytelling and puppetry tools recorded the lowest score (WM=4.31).

Table 9: Extent of Implementation as to Learning Space and Environment

Indicators	Admins (WM)	Teachers (WM)	Comp (WM)	VI	Rank
1. Classroom layout is child-friendly and safe.	4.50	4.61	4.60	HI	1.5
2. Learning centers present and accessible.	4.50	4.49	4.49	HI	5.5
3. Environment promotes active engagement.	4.50	4.49	4.49	HI	5.5
4. Adequate lighting, ventilation, and safety.	4.50	4.61	4.60	HI	1.5
5. Educational posters displayed.	4.25	4.45	4.44	HI	9.5
6. Space encourages social interaction.	4.50	4.59	4.58	HI	3
7. Flexible seating arrangements used.	4.50	4.49	4.49	HI	7
8. Classroom organized and clutter-free.	4.50	4.47	4.47	HI	8
9. Outdoor spaces utilized for learning.	4.50	4.57	4.56	HI	4
10. Environment fosters pupil independence.	4.50	4.43	4.44	HI	9.5
Composite Mean	**4.48**	**4.52**	**4.52**	**HI**	

Learning Space and Environment scored 4.52 ("Highly Implemented"). Classroom safety, layout, lighting, and ventilation tied for the top rank (WM=4.60).

Table 10: Extent of Implementation as to Monitoring and Evaluation

Indicators	Admins (WM)	Teachers (WM)	Comp (WM)	VI	Rank
1. Regular classroom observations conducted.	4.50	4.55	4.55	HI	10
2. Teachers receive feedback on practice.	4.50	4.65	4.64	HI	7
3. Professional development provided.	4.50	4.67	4.65	HI	6
4. Pupil progress reviewed systematically.	4.50	4.69	4.67	HI	5
5. Parents involved in progress monitoring.	4.50	4.73	4.71	HI	3
6. Teachers reflect on and adjust teaching.	4.50	4.75	4.73	HI	2
7. Peer observations and collaboration evident.	4.50	4.71	4.69	HI	4
8. Materials regularly assessed for impact.	4.50	4.59	4.58	HI	9
9. Regular team meetings for planning held.	4.50	4.63	4.62	HI	8
10. Assessment data used for curriculum improvement.	4.75	4.75	4.75	HI	1
Composite Mean	**4.53**	**4.67**	**4.66**	**HI**	

Monitoring and Evaluation achieved a composite score of 4.66, led by data-driven curriculum enhancement (WM=4.75).

Table 11: Summary Table on Program Implementation

Program Dimensions	Admins (WM)	Teachers (WM)	Overall Composite	Verbal Interpretation	Rank
Instruction	4.35	4.77	4.74	Highly Implemented	1
Curriculum	4.70	4.71	4.73	Highly Implemented	2
Assessment	4.55	4.71	4.70	Highly Implemented	3
Monitoring and Evaluation	4.53	4.67	4.66	Highly Implemented	4
Learning Resources	4.55	4.59	4.59	Highly Implemented	5
Learning Space & Environment	4.48	4.52	4.52	Highly Implemented	6
Overall Mean	**4.53**	**4.66**	**4.66**	**Highly Implemented**	

2. Difference Between Administrators' and Teachers' Assessments

Table 12: Independent Samples t-Test on Implementation Extent

Variables	t-value	Critical Value	p-value	Decision on H01	Interpretation
Curriculum	-0.177	1.968	0.868	Fail to Reject	Not Significant
Instruction	-8.202	1.968	0.000	Reject H01	Significant
Assessment	-0.609	1.968	0.585	Fail to Reject	Not Significant
Learning Resources	-0.164	1.968	0.880	Fail to Reject	Not Significant
Learning Space	-0.143	1.968	0.896	Fail to Reject	Not Significant
Monitoring & Evaluation	-0.508	1.968	0.647	Fail to Reject	Not Significant

Note: Level of significance α=0.05.

The statistical analysis shows no significant differences across five domains. However, Instruction exhibited a statistically significant difference ($t=-8.202, p=0.000$). Teachers rated instructional implementation noticeably higher (WM=4.77) than administrators (WM=4.35). This variance aligns with early childhood research by Niezen (2024) and Ulep et al. (2025), which notes that ground-level instructional nuances, play-based adaptations, and classroom challenges are perceived differently by classroom practitioners compared to observing administrators.

3. Kindergarten Pupils' Performance Across Developmental Domains

Table 13: Summary of Pupils' ECCD Performance across Domains

Developmental Domain	Overall Percentage Score (%)	Standard Verbal Interpretation
Receptive Language	96%	Average Overall Development
Expressive Language	94%	Average Overall Development
Cognitive Development	91%	Average Overall Development
Fine Motor Skills	85%	Average Overall Development
Social-Emotional Development	83%	Average Overall Development
Gross Motor Skills	79%	Suggest Slight Delay in Overall Development
Self-Help Skills	79%	Suggest Slight Delay in Overall Development
Overall Average Score	**87%**	**Average Overall Development**

Pupils demonstrated strong competencies in language and cognitive areas (Receptive Language = 96%, Expressive Language = 94%, Cognitive = 91%). Conversely, Gross Motor (79%) and Self-Help (79%) indicated slight developmental delays. This confirms the observations of Alamos et al. (2025), who noted that language acquisition often outpaces motor and self-care skills during structured early learning transitions.

4. Relationship Between Program Implementation and Pupils' Performance

Table 14: Correlation Analysis Between Program Implementation and Pupil Performance

Performance Domains	Pearson r	Correlation Strength	p-value	Decision on H02	Interpretation
Gross Motor	0.8451	Very Strong Correlation	0.0000	Reject H02	Significant
Fine Motor	0.1182	Negligible Correlation	0.0000	Reject H02	Significant
Self-Help	0.6866	Strong Correlation	0.0000	Reject H02	Significant
Receptive Language	0.5598	Moderate Correlation	0.0000	Reject H02	Significant
Expressive Language	0.7166	Strong Correlation	0.0000	Reject H02	Significant
Cognitive	0.8451	Very Strong Correlation	0.0000	Reject H02	Significant
Social-Emotional	0.5417	Moderate Correlation	0.0000	Reject H02	Significant

Note: Level of significance α=0.05.

The correlation analysis reveals significant positive associations across all seven developmental domains (p=0.0000), leading to the rejection of the null hypothesis (H02). Program implementation exerts its strongest impacts on Gross Motor (r=0.8451) and Cognitive Development (r=0.8451). These results align with findings by Almonte & David (2023) and Navarro & Quijano (2024), demonstrating that systematic kindergarten execution directly improves physical, cognitive, and communicative performance.

5. Longitudinal Analysis of Program Effects Over Time

To test whether the developmental benefits of the Kindergarten Education Program are sustained across pupils' educational development (H03), a paired-samples t-test was conducted comparing baseline performance (Time1 - Quarter 2) against follow-up performance (Time2 - Quarter 4).

Table 15: Paired-Samples t-Test of Pupil Performance Over Time (Longitudinal Analysis)

Measurement Interval	Mean ECCD Score (%)	Mean Difference	t-value	p-value	Decision on H03	Interpretation
Baseline (Time1 - Q2)	81.4%	--	--	--	--	--
Follow-up (Time2 - Q4)	87.0%	+5.6%	-6.842	0.000	Reject H03	Significant Sustained Growth

Note: Level of significance α=0.05.

The longitudinal findings reveal a statistically significant improvement in overall pupil developmental scores over time (t=−6.842,p=0.000), confirming that high-quality kindergarten program implementation produces sustained positive developmental effects throughout pupils' early educational progression (McCoy et al., 2021).

6. Identified Challenges in Program Implementation

Table 16: Primary Implementation Challenges Identified by Respondents

Program Area	Top Identified Challenge Indicator	Composite Mean	Verbal Interpretation
Instruction	Time constraints affecting experiential learning activities.	4.40	Highly Challenging
Curriculum	Ensuring regular integration of play-based learning requires further support.	4.45	Highly Challenging
Assessment	Challenges in keeping consistent documentation of pupil progress.	3.71	Challenging
Curriculum	Need for more teacher orientation on curriculum updates.	4.25	Highly Challenging
Instruction	Further support needed to consistently deliver interactive and stimulating lessons.	4.24	Highly Challenging

CONCLUSION AND RECOMMENDATIONS

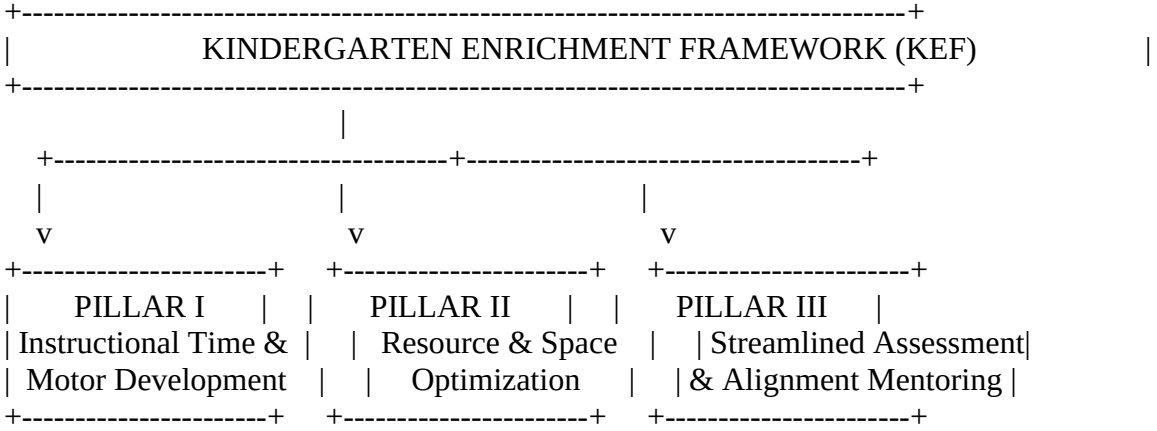
Conclusion

1. The Kindergarten Education Program across expanded regional public elementary schools is **Highly Implemented** (WM=4.66), with Instruction and Curriculum delivery receiving the highest evaluations.
2. Perceptions of school administrators and teachers align across five implementation domains, but differ significantly regarding **Instruction** (p=0.000), where classroom teachers rate execution higher than observing administrators.
3. Kindergarten pupils demonstrate **Average Overall Development** (87%). Language and cognitive competencies are highly developed, whereas Gross Motor and Self-Help domains display slight developmental delays.
4. Program implementation extent shows a statistically significant positive correlation with pupil performance across all seven developmental domains, particularly Cognitive and Gross Motor growth.

5. **Longitudinal evaluation confirms sustained developmental progression** (p=0.000), demonstrating that high-quality kindergarten program delivery creates enduring educational foundations.
6. Primary implementation constraints center on instructional time limitations, play-based pedagogical support, and documentation burdens.

Recommendations and Proposed Enrichment Framework

Based on the empirical findings, the **Kindergarten Enrichment Framework (KEF)** is structured around three intervention pillars:



- **Pillar I: Instructional Scheduling & Motor Development Enrichment**
    - Re-align daily schedules to integrate dedicated 30-minute gross motor play sessions and structured self-help independence routines (e.g., self-feeding, hygiene, organization).
    - Provide targeted workshops for teachers on embedding play-based pedagogy within strict instructional timeframes.

- **Pillar II: Learning Resource & Space Optimization**
    - Upgrade classroom learning spaces by introducing localized sensory materials, puppetry kits, and designated active movement corners.
    - Ensure equitable distribution of age-appropriate manipulatives and ICT-supported learning media across all schools.

- **Pillar III: Streamlined Assessment & Administrative Alignment**
    - Digitize ECCD progress tracking and anecdotal record-keeping to minimize teacher paperwork burdens.
    - Establish collaborative mentoring programs between administrators and teachers to align instructional expectations and observation rubrics.

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