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Developing Foundational Numeracy Skills Among Kindergarten Learners Through Inquiry-Based Learning

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ABSTRACT

This study determined the extent to which inquiry-based learning was utilized in developing the foundational numeracy skills of kindergarten learners. Specifically, it described the profiles of teacher- and learner-respondents; determined the extent of inquiry-based learning utilization in terms of guided exploration, questioning and discovery, learner participation and engagement in problem-solving tasks, and opportunities to explain and reflect on mathematical thinking; assessed the level of foundational numeracy skills; examined the relationship between learner profile variables and numeracy skills; and identified issues and concerns encountered by teachers. The study employed a descriptive-correlational research design involving two teacher-respondents and 75 kindergarten learner-respondents. Data were gathered through researcher-made instruments and analyzed using frequency, percentage, weighted mean, standard deviation, ranking, and the chi-square test of association. Findings showed that inquiry-based learning was highly utilized, while learners demonstrated an outstanding level of foundational numeracy skills. Gender had a significant relationship with numeracy skills, while age, parental educational attainment, and number of siblings showed no significant relationship. Limited instructional materials and large class sizes were among the concerns identified. An Enhanced Numeracy Development Program was proposed.

KEYWORDS

Inquiry-based learning, foundational numeracy, kindergarten learners, mathematical exploration, guided activities, questioning and discovery

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1. Introduction

Developing foundational numeracy skills during early childhood is important for preparing learners for later academic achievement (Laxman, 2024). In kindergarten, children begin acquiring basic mathematical knowledge through skills such as recognizing and naming numbers, comparing quantities, identifying greater or smaller quantities, and solving simple mathematical situations through counting strategies (Fahlevi, 2024). Duncan et al. (2020) stressed that early numeracy abilities strongly contribute to children's future achievement in mathematics and other related areas of learning. When learners establish strong foundational numeracy skills during the early years, they are more likely to engage actively in mathematics activities, understand numerical relationships, and develop confidence in completing simple mathematical tasks.

Within the Philippine basic education context, early numeracy continues to be a concern among teachers, school administrators, and other education stakeholders. The Department of Education (2023), through its learning recovery initiatives, reported that many learners in the early grades still encounter difficulties in number sense, counting, and basic problem-solving. Bernardo and Ismail (2021) likewise explained that early weaknesses in numeracy may persist in succeeding grade levels when they are not properly addressed during the early years of schooling. This highlights the important role of kindergarten instruction in establishing the essential mathematical competencies needed for future learning.

This concern is also relevant in the local context of Liburon Elementary School. In the kindergarten classroom, teachers may observe that some learners can recite numbers orally but still have difficulty identifying printed numerals or matching numbers with the correct quantity of objects. There may also be learners who can count with assistance but are not yet able to determine which group has more or fewer objects. During numeracy activities, some children may hesitate to answer, wait for the teacher's direct instruction, or copy the responses of classmates instead of explaining their own thinking. These situations show that while learners

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may be exposed to basic mathematics concepts, there remains a need to strengthen their understanding through more active, meaningful, and learner-centered experiences.

The existing classroom situation further shows the need to examine how numeracy instruction is being carried out. In some instances, mathematics lessons for young learners may still rely heavily on direct teaching, repetition, memorization, and worksheet-based activities. Although these strategies may help learners remember numbers, they may not always provide enough opportunities for children to explore mathematical ideas, ask questions, manipulate objects, discover patterns, explain their answers, and reflect on how they arrived at a solution. Lazonder and Harmsen (2020) explained that inquiry-based learning encourages learners to investigate concepts, ask questions, and discover solutions through guided exploration. This makes the approach useful in helping children develop a deeper understanding rather than merely memorizing procedures.

Inquiry-based learning offers a possible response to these concerns because it encourages learners to explore, question, investigate, participate, and reflect. In early childhood education, inquiry-based activities may include allowing learners to group objects, compare quantities, count classroom materials, solve simple real-life problems, and explain what they notice. Kim and Choi (2021) found that inquiry-based mathematics instruction helped improve young learners' conceptual understanding and engagement during numeracy lessons. Similarly, Santos and Torres (2022) stated that inquiry-oriented strategies in early mathematics instruction can foster learner participation and improve learners' ability to explain mathematical ideas. Instead of simply telling learners the answer, the teacher guides them through questions and activities that help them construct their own understanding.

In the local classroom setting, inquiry-based learning may be especially helpful because kindergarten learners naturally learn through curiosity, play, exploration, and interaction with their surroundings. Garcia and Bautista (2023) noted that inquiry-based learning environments help learners develop stronger number sense and problem-solving skills. For example, when learners are asked to compare two groups of objects, count classroom materials, or explain why one group has more than the other, they are not only practicing counting but also developing reasoning and communication skills. These activities make numeracy learning more meaningful because children are actively involved in discovering mathematical relationships.

However, the use of inquiry-based learning in developing foundational numeracy skills may also present challenges for teachers. Teachers may encounter issues such as limited instructional time, insufficient learning materials, large class sizes, varied learner readiness, limited training on inquiry-based strategies, and difficulty in managing active classroom activities. Rivera and Mendoza (2022) emphasized that identifying the challenges encountered by teachers in implementing innovative teaching strategies is necessary for improving instructional practices and providing appropriate support for educators. These concerns may affect how inquiry-based learning is implemented in actual classroom situations; thus, it is important to determine not only the extent of its utilization but also the issues and concerns experienced by teachers.

There is a need to investigate these issues because early numeracy difficulties, when not properly addressed, may affect learners' performance in later mathematics learning. If kindergarten learners are not able to build strong foundations in number recognition, quantity comparison, and simple problem-solving, they may experience greater difficulty as they move to higher grade levels where mathematical concepts become more complex. The Department of Education (2023) emphasized the importance of strengthening foundational skills as part of learning recovery and basic education improvement. Understanding the local situation at Liburon Elementary School will help identify the specific needs of learners and teachers and provide a basis for planning appropriate instructional support.

Therefore, this study determined the effectiveness of inquiry-based learning as a teaching strategy in developing the foundational numeracy skills of kindergarten learners. Specifically, it sought to describe the relevant profiles of the teacher and learner respondents, determine the extent of inquiry-based learning utilization in numeracy instruction, assess the level of learners' foundational numeracy skills, examine the significant relationship between learner profile variables and numeracy skills, identify the issues and concerns encountered by teachers, and propose an enhanced numeracy development program using inquiry-based learning. Through this study, the researchers aimed to provide a localized, evidence-based foundation for strengthening kindergarten numeracy instruction and supporting young learners in building essential mathematical foundations.

2. Literature Review

Inquiry-based learning in early mathematics emphasizes active exploration, questioning, discovery, discussion, and opportunities for children to construct mathematical understanding through meaningful experiences. In kindergarten, this approach can be implemented through guided activities in which teachers provide appropriate materials, ask purposeful questions, and encourage learners to investigate different ways of solving mathematical tasks. Skene et al. (2022) found that guided play can positively support children's learning and development when adults provide direction while maintaining children's active participation. The use of manipulatives can likewise encourage learners to explore mathematical relationships, although children's perceptions of these materials may influence how effectively they use them for learning (Donovan & Alibali, 2021). Connecting concrete objects with mathematical symbols can also strengthen children's understanding by helping them move from physical representations toward more abstract mathematical ideas (Donovan & Fyfe, 2022). Mathematical language is another important element because children's ability to discuss quantities, relationships, and mathematical processes is associated with their developing mathematical

abilities (Turan & De Smedt, 2023). Experimental evidence has also shown that structured interventions combining numerical and geometric experiences can improve preschool children's mathematical knowledge (Taborda-Osorio & Otálora, 2023). Similarly, O'Rear et al. (2023) demonstrated the relevance of manipulatives in assessing and supporting preschool numeracy and geometry performance. Karakuş et al. (2024) further showed that well-designed preschool mathematics interventions can produce positive learning outcomes among young children. Collectively, these studies support inquiry-oriented instruction that encourages exploration, questioning, participation, problem solving, explanation, and reflection during kindergarten numeracy lessons.

Foundational numeracy involves children's ability to understand numbers, compare quantities, recognize numerical relationships, and use counting strategies to solve simple mathematical situations. These competencies provide an important foundation for subsequent mathematical learning. Hutchison et al. (2022) showed that understanding numerical order develops from kindergarten to first grade and extends beyond simply reciting the counting sequence. Träff et al. (2023) likewise demonstrated that domain-specific number abilities contribute significantly to early arithmetic development, while Mononen and Niemivirta (2023) found that symbolic numerical magnitude processing is an important predictor of early mathematics performance. Numeracy development is also connected with spatial and representational experiences. Gilligan-Lee et al. (2022) argued that spatial thinking represents an important component of mathematics curricula, particularly because spatial reasoning supports several mathematical domains. Supporting this view, Hawes et al. (2022) found through meta-analysis that spatial training can positively affect mathematics performance. Accurate assessment is equally important in identifying young learners' mathematical strengths and difficulties; Outhwaite et al. (2024) emphasized the need for psychometrically sound early mathematics assessments and screeners. Ruiz et al. (2024) further established that domain-specific mathematical skills acquired at the beginning of formal schooling can predict later mathematics achievement. More recently, Liu et al. (2025) confirmed through longitudinal meta-analysis that early numeracy has substantial predictive importance for later mathematical development. These findings indicate that inquiry-based learning may provide an appropriate instructional context for strengthening number identification, quantity comparison, counting, problem solving, and mathematical reasoning among kindergarten learners.

3. Methodology

This study employed a descriptive-correlational research design to determine the extent of utilization of inquiry-based learning and its relationship with the foundational numeracy skills of kindergarten learners at Liburon Elementary School during the 2025–2026 school year. The descriptive component was used to present the profiles of teachers and learners, determine the extent of inquiry-based learning utilization, assess learners' foundational numeracy skills, and identify issues encountered by teachers. The correlational component examined whether selected learner profile variables were significantly related to learners' foundational numeracy skills. The respondents included two kindergarten teachers and 73 kindergarten learners, for a total of 75 participants, selected through purposive sampling. Parents provided learner profile information, while teachers answered the questionnaire on inquiry-based learning utilization and assessed learners' numeracy skills. The adapted questionnaire measured four dimensions of inquiry-based learning: encouraging mathematical exploration through guided activities, promoting questioning and discovery, facilitating participation in problem-solving tasks, and providing opportunities for learners to explain and reflect on their mathematical thinking. Foundational numeracy skills were assessed in terms of identifying and naming numbers, comparing quantities and recognizing greater or smaller quantities, and solving simple mathematical situations using counting strategies. Data gathering was conducted in three stages. During the preliminary stage, the researchers secured permission from school authorities, coordinated with teachers, and validated the instruments. During data gathering, teachers completed the inquiry-based learning questionnaire, and learners underwent numeracy assessment. After data collection, responses were checked, coded, tabulated, analyzed, and interpreted. Frequency and percentage were used to describe respondent profiles and reported issues. Weighted mean and standard deviation determined the extent of inquiry-based learning utilization and the variability of responses, while Pearson's product-moment correlation was used to test for significant relationships between learner profile variables and foundational numeracy skills.

4. Results

Table 1. Extent of Utilization of Inquiry-Based Learning in Developing the Numeracy Skills of kindergarten Learners in Terms of Encouraging Learners to Explore Mathematical Ideas Through Guided Activities

S/N	Indicators	WM	SD	Verbal Description
1	The teacher provides guided activities that allow learners to explore numbers and quantities.	4.50	0.71	Highly Utilized

S/N	Indicators	WM	SD	Verbal Description
2	The teacher presents numeracy tasks that encourage learners to investigate mathematical ideas.	4.00	1.41	Utilized
3	The teacher facilitates activities where learners discover number relationships through guided exploration.	4.00	1.41	Utilized
4	The teacher designs learning experiences that allow learners to manipulate objects to understand numbers.	4.50	0.71	Highly Utilized
5	The teacher encourages learners to observe patterns and relationships during numeracy activities.	4.00	1.41	Utilized
6	The teacher provides step-by-step guidance while learners explore mathematical concepts.	4.50	0.71	Highly Utilized
7	The teacher organizes learning tasks that allow learners to experiment with counting and number concepts.	4.50	0.71	Highly Utilized
8	The teacher uses structured activities that promote exploration of mathematical ideas.	4.00	1.41	Utilized
9	The teacher provides learning opportunities that allow learners to explore quantities and number relationships.	4.00	1.41	Utilized
10	The teacher supports learners in discovering mathematical ideas through guided numeracy activities.	4.50	0.71	Highly Utilized
	Aggregate Mean	4.25		Highly Utilized
	Aggregate Standard Deviation		1.06	

Table 1 shows that inquiry-based learning was highly utilized in encouraging kindergarten learners to explore mathematical ideas through guided activities, with an aggregate mean of 4.25 and a standard deviation of 1.06. Teachers frequently used guided tasks, manipulatives, step-by-step support, and counting activities to promote exploration of numbers and quantities. This implies that inquiry-based practices are already integrated into numeracy instruction and may strengthen learners' active participation,

mathematical curiosity, and conceptual understanding. Continued use of structured exploration and hands-on activities can further support foundational numeracy development.

Table 2. Extent of Utilization of Inquiry-Based Learning in Developing the Numeracy Skills of kindergarten Learners in Terms of Promoting Questioning and Discovery During Numeracy Lessons

S/N	Indicators	WM	SD	Verbal Description
1	The teacher asks questions that encourage learners to think about mathematical ideas.	4.50	0.71	Highly Utilized
2	The teacher uses guiding questions to help learners discover number relationships.	4.00	1.41	Utilized
3	The teacher promotes curiosity by asking learners to explain their observations during numeracy activities.	4.50	0.71	Highly Utilized
4	The teacher encourages learners to ask questions related to numbers and counting.	4.50	0.71	Highly Utilized
5	The teacher provides opportunities for learners to discover answers through guided questioning.	4.50	0.71	Highly Utilized
6	The teacher uses open-ended questions during numeracy lessons.	4.00	1.41	Utilized
7	The teacher stimulates learners' thinking by asking questions about quantities and numbers.	4.00	1.41	Utilized
8	The teacher encourages learners to predict outcomes during numeracy activities.	4.50	0.71	Highly Utilized
9	The teacher uses questioning techniques that guide learners toward mathematical discovery.	4.50	0.71	Highly Utilized
10	The teacher encourages learners to explore different answers through guided questioning.	4.00	1.41	Utilized

S/N	Indicators	WM	SD	Verbal Description
	Aggregate Mean	4.30		Highly Utilized
	Aggregate Standard Deviation		0.99	

Table 2 shows that inquiry-based learning was highly utilized in promoting questioning and discovery during numeracy lessons, with an aggregate mean of 4.30 and a standard deviation of 0.99. Teachers frequently encouraged learners to think, ask questions, make predictions, and discover answers through guided questioning. This implies that questioning strategies are actively integrated into numeracy instruction and may strengthen learners' curiosity, reasoning, and mathematical understanding. Continued use of open-ended and discovery-based questions can further develop learners' confidence and participation in mathematical activities.

Table 3. Extent of Utilization of Inquiry-Based Learning in Developing the Numeracy Skills of kindergarten Learners in Terms of Facilitating Learner Participation and Engagement in Problem-Solving Tasks

S/N	Indicators	WM	SD	Verbal Description
1	The teacher provides numeracy activities that encourage active learner participation.	4.50	0.71	Highly Utilized
2	The teacher engages learners in solving simple mathematical situations.	4.00	1.41	Utilized
3	The teacher facilitates tasks that require learners to participate in counting activities.	4.50	0.71	Highly Utilized
4	The teacher encourages learners to participate in solving number-related tasks.	4.50	0.71	Highly Utilized
5	The teacher provides opportunities for learners to work together in solving numeracy activities.	4.50	0.71	Highly Utilized
6	The teacher encourages learners to participate in hands-on mathematical tasks.	4.50	0.71	Highly Utilized
7	The teacher designs numeracy activities that actively involve learners in problem solving.	4.00	1.41	Utilized
8	The teacher encourages learners to take part in identifying solutions to simple mathematical situations.	4.00	1.41	Utilized

S/N	Indicators	WM	SD	Verbal Description
9	The teacher engages learners in activities that require participation in counting and comparing quantities.	4.50	0.71	Highly Utilized
10	The teacher provides problem-solving activities that stimulate learners' participation during numeracy lessons.	4.50	0.71	Highly Utilized
	Aggregate Mean	4.35		Highly Utilized
	Aggregate Standard Deviation		0.92	

Table 3 shows that inquiry-based learning was highly utilized in facilitating learner participation and engagement in problem-solving tasks, with an aggregate mean of 4.35 and a standard deviation of 0.92. Teachers frequently involved learners in counting, hands-on activities, collaborative tasks, and number-related problem solving. This implies that inquiry-based strategies effectively promote active participation and meaningful engagement during numeracy lessons. Continued use of interactive and problem-centered activities may further strengthen learners' confidence, reasoning abilities, and application of foundational numeracy skills.

Table 4. Extent of Utilization of Inquiry-Based Learning in Developing the Numeracy Skills of kindergarten Learners in Terms of Providing Opportunities for Learners to Explain and Reflect on Their Mathematical Thinking

S/N	Indicators	WM	SD	Verbal Description
1	The teacher provides opportunities for learners to explain their answers during numeracy activities.	4.00	1.41	Utilized
2	The teacher encourages learners to describe how a mathematical answer was obtained.	4.00	1.41	Utilized
3	The teacher allows learners to share their ideas about numbers and quantities.	4.50	0.71	Highly Utilized
4	The teacher encourages learners to reflect on their solutions to simple mathematical tasks.	4.50	0.71	Highly Utilized
5	The teacher asks learners to explain their thinking after completing numeracy activities.	4.00	1.41	Utilized
6	The teacher provides opportunities for learners to discuss their answers with classmates.	4.50	0.71	Highly Utilized

S/N	Indicators	WM	SD	Verbal Description
7	The teacher encourages learners to explain counting strategies used during activities.	4.00	1.41	Utilized
8	The teacher allows learners to express their ideas about solving mathematical situations.	4.50	0.71	Highly Utilized
9	The teacher encourages learners to reflect on different ways of solving numeracy tasks.	4.00	1.41	Utilized
10	The teacher provides opportunities for learners to evaluate their own answers in mathematical activities.	4.00	1.41	Utilized
	Aggregate Mean	4.20		Utilized
	Aggregate Standard Deviation		1.13	

Table 4 shows that inquiry-based learning was utilized in providing opportunities for kindergarten learners to explain and reflect on their mathematical thinking, with an aggregate mean of 4.20 and a standard deviation of 1.13. Teachers encouraged learners to share ideas, discuss answers, reflect on solutions, and explain how they solved mathematical problems. This implies that reflective and communicative practices are present during numeracy instruction, although they may still be strengthened. More consistent opportunities for explanation, self-evaluation, and discussion can deepen learners' reasoning, confidence, and conceptual understanding.

Table 5 shows that the kindergarten learners demonstrated an outstanding level of foundational numeracy skills, with an aggregate mean of 4.23 and a standard deviation of 0.72. The skill of identifying and naming numbers received the highest rating, followed by comparing quantities and recognizing equal quantities. Solving simple mathematical situations using counting strategies received the lowest rating, although it remained very satisfactory. This implies that learners possess strong basic number knowledge, but additional practice in applying counting strategies to problem-solving situations may further strengthen their numeracy development.

Table 5. Level of Foundational Numeracy Skills of kindergarten Learners

S/N	Indicators	WM	SD	Verbal Description
1	Identifying and Naming Numbers (Recognizing and naming numbers 0–20)	4.63	0.63	Outstanding
2	Comparing Quantities (Identifying more or less between two groups of objects)	4.31	0.72	Outstanding
3	Recognizing Equal Quantities (Identifying groups with the same number of objects)	4.29	0.65	Outstanding

S/N	Indicators	WM	SD	Verbal Description
4	Solving Simple Mathematical Situations Using Counting Strategies	3.77	0.81	Very Satisfactory
5	Using Counting to Represent Quantities in Simple Situations	4.16	0.77	Very Satisfactory
	Aggregate Mean	4.23		Outstanding
	Aggregate Standard Deviation		0.72	

Table 6. Test of Relationship Between Learner Profile Variables and Numeracy Skills

Variables	χ^2-value	df	p-value	Decision	Remarks
Age and Numeracy Skills	1.065	2	0.587	Do not reject H_0	Not Significant
Gender and Numeracy Skills	6.501*	2	0.039	Reject H_0	Significant
Mother's Highest Educational Attainment and Numeracy Skills	2.755	6	0.839	Do not reject H_0	Not Significant
Father's Highest Educational Attainment and Numeracy Skills	7.020	6	0.319	Do not reject H_0	Not Significant
Number of Siblings and Numeracy Skills	16.176	10	0.095	Do not reject H_0	Not Significant

Significant at $p < 0.05$.

Table 6 shows that only gender had a significant relationship with numeracy skills, with a p-value of 0.039, leading to the rejection of the null hypothesis. Age, maternal educational attainment, paternal educational attainment, and number of siblings were not significantly related to numeracy skills because their p-values exceeded 0.05. This implies that most learner profile variables were not associated with numeracy performance, although gender differences may warrant closer attention when designing inclusive and responsive numeracy activities for kindergarten learners.

Table 7. Issues and Concerns Encountered by Teachers in Implementing Inquiry-Based Learning Strategies

Issues and Concerns	f	Rank
Lack of sufficient instructional materials to support inquiry-based learning.	2	2
Large class size affecting facilitation of inquiry-based learning.	2	2
Learners' short attention span during exploratory activities.	1	5.5
Limited training or professional development on inquiry-based learning.	1	5.5
Difficulty in encouraging learners to explain their mathematical thinking.	1	5.5
Limited instructional time to conduct inquiry-based numeracy activities.	1	5.5

Table 7 shows that the most commonly encountered concerns were the lack of sufficient instructional materials and large class sizes, both reported by two teachers. Other concerns included learners' short attention spans, limited professional development, difficulty encouraging learners to explain their mathematical thinking, and limited instructional time. This implies that effective implementation of inquiry-based numeracy instruction may be constrained by both classroom and teacher-related factors.

Providing adequate materials, manageable learning activities, relevant training, and sufficient instructional time may help teachers implement inquiry-based strategies more effectively.

5. Discussion

The findings indicate that inquiry-based learning was generally well integrated into kindergarten numeracy instruction. Teachers frequently used guided exploration, questioning, hands-on activities, collaborative problem solving, and opportunities for mathematical discussion. Among the dimensions assessed, learner participation and engagement in problem-solving tasks emerged as one of the strongest aspects of implementation, showing that teachers actively involved learners in counting, comparing quantities, working with objects, and solving number-related tasks. Guided exploration and questioning were also strongly utilized, suggesting that learners were regularly encouraged to investigate mathematical ideas, make predictions, and discover number relationships. However, opportunities for learners to explain and reflect on their mathematical thinking were comparatively less emphasized. This suggests that while inquiry-based learning is already present in classroom practice, teachers may need to provide more consistent opportunities for learners to verbalize strategies, evaluate their answers, and reflect on alternative ways of solving mathematical tasks. Strengthening these reflective components may further deepen conceptual understanding and mathematical reasoning.

The learners' foundational numeracy skills were generally strong, particularly in identifying and naming numbers, comparing quantities, and recognizing equal quantities. Their comparatively lower performance in solving simple mathematical situations using counting strategies suggests that applying number knowledge in problem-solving contexts remains an area for further development. The relationship analysis further showed that gender was significantly associated with numeracy skills, while age, parents' educational attainment, and number of siblings were not. This indicates that most demographic characteristics examined were not strongly associated with numeracy outcomes, although gender-related differences may deserve closer classroom attention. At the same time, teachers reported implementation challenges involving limited instructional materials, large class sizes, short learner attention spans, limited professional development, difficulty encouraging learners to explain their mathematical thinking, and insufficient instructional time. These findings imply that sustaining inquiry-based numeracy instruction requires not only appropriate teaching strategies but also adequate classroom resources, teacher training, manageable activities, and sufficient time for exploration and reflection. Addressing these concerns may help strengthen the effectiveness of inquiry-based learning in developing kindergarten learners' foundational numeracy skills.

6. Conclusion

Based on the findings, inquiry-based learning was highly utilized in developing the foundational numeracy skills of kindergarten learners, particularly through active participation, questioning and discovery, guided exploration, and opportunities for mathematical explanation and reflection. The learners demonstrated an outstanding level of foundational numeracy skills, particularly in identifying and naming numbers, comparing quantities, and recognizing equal quantities, while the use of counting strategies in simple mathematical situations showed a comparatively greater need for continued development. The findings further showed that gender was significantly related to numeracy skills, whereas age, parents' educational attainment, and number of siblings were not significantly related to the measured skills. The findings suggest that inquiry-based learning provides a meaningful approach for engaging kindergarten learners in foundational numeracy through exploration, questioning, participation, problem solving, and reflection. At the same time, successful implementation requires attention to practical concerns such as the availability of instructional materials, class size, learner attention, teacher professional development, instructional time, and learners' ability to communicate mathematical thinking. Strengthening these areas through a structured Enhanced Numeracy Development Program Using Inquiry-Based Learning can provide teachers with practical strategies for sustaining learners' numeracy development and supporting the continued acquisition and application of foundational mathematical skills.

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