

Inquiry-Based Learning Approach and Learners' Academic Achievement in District 1, Division City Schools, Manila: Basis for a Continuity Program

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ABSTRACT

Inquiry-Based Learning (IBL) promotes active questioning, problem-solving, collaboration, and the meaningful application of knowledge. This study examined the implementation of IBL and its relationship with learners' academic achievement in 12 public elementary schools in District 1, Division of City Schools, Manila. A quantitative descriptive-comparative-correlational design involved 335 education personnel comprising six supervisors, 12 school heads, and 317 teachers. Results showed that IBL implementation was highly evident overall (WM = 4.32). Significant differences were found among respondent groups across all five IBL dimensions, with large effect sizes ($\eta^2 = .353-.700$); Tukey-Kramer comparisons generally showed higher teacher ratings than those of supervisors and school heads. Learners' Mean Percentage Score declined from 49.67 in School Year 2023–2024 to 42.99 in 2024–2025, resulting in a two-year average of 46.33, classified as Low Proficient. Exploratory school-level regression indicated that the IBL dimensions collectively explained a substantial proportion of variation in achievement ($R^2 = .699$, adjusted $R^2 = .449$), with real-life application showing the strongest unique positive association. These estimates, however, should be interpreted cautiously because the analysis involved only 12 schools and multiple predictors. Implementation challenges were generally less encountered (WM = 1.99), while the proposed IBL Enhancement Program was highly acceptable (WM = 4.78). The findings highlight the value of structured, guided, and context-responsive inquiry and underscore the need to strengthen real-life applications, targeted academic support, and further investigation using larger school-level samples.

Keywords: academic achievement, elementary education, inquiry-based instruction, inquiry-based learning, learner-centered instruction, teacher professional development

INTRODUCTION

The demands of contemporary education require learners to develop critical thinking, problem-solving, collaboration, creativity, and the ability to apply knowledge in meaningful situations. Inquiry-Based Learning (IBL) supports these competencies by engaging learners in questioning, investigation, evidence use, explanation, and reflection rather than positioning them only as recipients of information.

Inquiry is most productive when learners receive purposeful guidance, scaffolding, feedback, and opportunities to explain their reasoning. Evidence from discovery- and inquiry-oriented instruction shows that minimally guided approaches are less consistently effective than structured forms of inquiry in which teachers support learners' cognitive processes and gradually transfer responsibility (Alfieri et al., 2011; Lazonder & Harmsen, 2016).

In the Philippines, IBL is supported by Republic Act No. 10533, or the Enhanced Basic Education Act of 2013, which promotes constructivist, inquiry-based, reflective, collaborative, and integrative pedagogies. DepEd Order No. 42, s. 2016 likewise positions teachers as facilitators who employ varied instructional and formative-assessment strategies. In practice, however, inquiry may be constrained by limited preparation time, instructional materials, teacher training, classroom-management demands, and assessment concerns (Al Maharma & Abusa'alek, 2022).

The study is grounded in constructivist and sociocultural perspectives. Piaget (1973) explains that learners construct knowledge by connecting new experiences with existing cognitive structures, while Vygotsky (1978) emphasizes the role of language, social interaction, collaboration, and scaffolding in cognitive development. Together, these perspectives support inquiry activities that are developmentally appropriate, socially organized, and guided by teachers and peers.

The need to strengthen instruction is underscored by the 2022 Programme for International Student Assessment, in which learners in the Philippines performed below the OECD average in mathematics, reading, and science (Organisation for Economic Co-operation and Development [OECD], 2023). Although those national findings do not explain the achievement pattern in the present elementary-school sample, they reinforce the importance of instruction that develops reasoning and application alongside foundational knowledge.

Previous research has linked inquiry-oriented instruction with critical thinking, academic performance, and learner participation. However, limited evidence addresses how IBL is implemented and associated with school-level achievement in high-density urban public elementary schools in Manila. Differences in class size, instructional resources, teacher preparation, learner readiness, and school context may shape both implementation and outcomes.

Accordingly, this study examined IBL implementation and learners' academic achievement in selected public elementary schools in District 1, Division of City Schools, Manila. It assessed respondent-group perceptions, examined differences among supervisors, school heads, and teachers, described learners' academic achievement, explored the school-level relationship between IBL dimensions and achievement, identified implementation challenges, and developed an IBL Enhancement Program. The demands of contemporary education require learners to develop critical thinking, problem-solving, collaboration, creativity, and the ability to apply knowledge in meaningful situations. Inquiry-Based Learning (IBL) supports these competencies by engaging learners in questioning, investigation, evidence use, explanation, and reflection rather than positioning them only as recipients of information.

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METHODOLOGY

This study employed a quantitative descriptive–comparative–correlational research design. The descriptive component determined the extent of IBL implementation, learners' Mean Percentage Score (MPS), implementation challenges, and program acceptability. The comparative component examined differences among the assessments of supervisors, school heads, and teachers, while the correlational component explored the school-level association between IBL implementation and learners' academic achievement. Because the variables were examined under naturally occurring conditions, the findings are interpreted as descriptive and associative rather than causal.

The respondents comprised 335 education personnel from a population of 1,542: six supervisors, 12 school heads, and 317 elementary school teachers. All supervisors and school heads were included through total enumeration. The teacher sample was determined using Slovin's formula at a 0.05 margin of error from a population of 1,524 teachers, and simple random sampling was used to select 317 teachers.

Data were collected using a researcher-developed structured questionnaire aligned with the study objectives and relevant literature. The instrument measured five IBL dimensions—encouraging learners to ask questions, using problem-solving activities, promoting group work and discussions, applying real-life situations, and guiding reflection and reasoning—together with implementation challenges and program acceptability. Responses used five-point weighted-mean scales. The questionnaire underwent expert validation and pilot testing for clarity, content validity, and internal consistency. Learners' academic achievement was obtained from authorized school-level MPS records for School Years 2023–2024 and 2024–2025.

Ethical standards were observed throughout the study. Permission to conduct the research and access academic-performance records was secured from the appropriate education offices and school authorities. Ethical clearance was obtained before data collection.

Respondents were informed of the study's purpose, procedures, risks, benefits, voluntary nature, and right to withdraw. Informed consent was obtained, confidentiality and anonymity were maintained, and results were reported in aggregate form.

Descriptive statistics summarized weighted-mean ratings, MPS, implementation challenges, and program acceptability. The retained ANOVA output corresponds to 30 item-level aggregate observations per IBL dimension (10 item means for each of three respondent groups), yielding $df = 2$ and 27. Accordingly, these comparisons are interpreted at the item-aggregate level rather than as individual-level tests across all 335 respondents.

Significant omnibus tests were followed by Tukey–Kramer pairwise comparisons, and η^2 was reported as the omnibus effect size. At the school level, an exploratory multiple linear regression examined the five IBL dimensions in relation to the two-year MPS across 12 schools.

Because five predictors were fitted to only 12 school observations, regression estimates were treated as exploratory and potentially unstable. Statistical tests used $\alpha = .05$.

RESULTS AND DISCUSSION

Extent of Inquiry-Based Learning Implementation

Table 1. Assessment of Inquiry-Based Learning (IBL) Implementation

Criteria	Supervisors		School Heads		Teachers		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Encouraging Learners to Ask Questions	4.42	HE	4.19	E	4.87	HE	4.49	HE	1
Using Problem-Solving Activities	3.87	E	3.88	E	4.79	HE	4.18	E	5
Promoting Group Work and Discussions	3.73	E	4.06	E	4.86	HE	4.22	HE	4
Applying Real-Life Situations	3.65	HE	4.60	HE	4.88	HE	4.38	HE	2
Guiding Reflection and Reasoning	4.00	E	4.22	HE	4.82	HE	4.35	HE	3
Overall Weighted Mean	3.93	E	4.19	E	4.82	HE	4.32	HE	

Table 1 shows that IBL implementation was rated Highly Evident overall (composite WM = 4.32). Teachers gave the highest overall rating (WM = 4.82), while school heads (WM = 4.19) and supervisors (WM = 3.93) rated implementation as Evident. Encouraging learners to ask questions ranked first (WM = 4.49), followed by applying real-life situations (WM = 4.38), guiding reflection and reasoning (WM = 4.35), and promoting group work and discussions (WM = 4.22). Using problem-solving activities received the lowest composite rating (WM = 4.18), although it remained Evident.

The pattern suggests that inquiry practices are most visible in questioning, authentic application, and reflective reasoning, whereas structured problem-solving warrants additional attention. Meta-analytic evidence indicates that inquiry is most effective when learners receive purposeful guidance and scaffolding rather than minimal support (Furtak et al., 2012; Lazonder & Harmsen, 2016).

The higher teacher ratings relative to supervisory ratings also indicate a need for common observation criteria, collaborative lesson review, and shared exemplars of high-quality elementary IBL. In the Philippine context, Santos and Boyon (2020) likewise reported improved learning competencies following structured inquiry lessons organized around the 5E learning cycle.

Differences in Respondent-Group Assessments

Table 2. Comparison of Respondent-Group Assessments of Inquiry-Based Learning

IBL Dimension	N	df	F	p	η^2	Decision
Encouraging learners to ask questions	30	2, 27	13.02	< .001	.491	Significant
Using problem-solving activities	30	2, 27	13.68	< .001	.503	Significant
Promoting group work and discussions	30	2, 27	22.70	< .001	.627	Significant
Applying real-life situations	30	2, 27	31.47	< .001	.700	Significant
Guiding reflection and reasoning	30	2, 27	7.38	.003	.353	Significant

Note. Analytic observations are 30 item-level aggregates per dimension (10 item means $\times$ 3 respondent groups); $df = 2, 27$. $F_{critical}(2, 27), \alpha = .05 = 3.35$. The inferential scope is limited to these aggregates rather than all 335 individual respondents

Table 3. Tukey–Kramer Post Hoc Comparisons

Dimension	Comparison	Mean Diff.	q	p_adj	Result
Questioning	Supervisors – School Heads	0.23	2.40	.225	NS
Questioning	Supervisors – Teachers	-0.45	4.69	.007	Sig.
Questioning	School Heads – Teachers	-0.68	7.09	< .001	Sig.
Problem-solving	Supervisors – School Heads	-0.01	0.07	.999	NS
Problem-solving	Supervisors – Teachers	-0.92	6.44	< .001	Sig.
Problem-solving	School Heads – Teachers	-0.91	6.37	< .001	Sig.
Group work/discussion	Supervisors – School Heads	-0.33	2.71	.153	NS
Group work/discussion	Supervisors – Teachers	-1.13	9.28	< .001	Sig.
Group work/discussion	School Heads – Teachers	-0.80	6.57	< .001	Sig.
Real-life situations	Supervisors – School Heads	-0.95	8.24	< .001	Sig.
Real-life situations	Supervisors – Teachers	-1.23	10.67	< .001	Sig.
Real-life situations	School Heads – Teachers	-0.28	2.43	.217	NS
Reflection/reasoning	Supervisors – School Heads	-0.22	1.41	.586	NS
Reflection/reasoning	Supervisors – Teachers	-0.82	5.25	.003	Sig.
Reflection/reasoning	School Heads – Teachers	-0.60	3.84	.030	Sig.

Note. Mean difference = first group minus second group. Adjusted p-values are from the Tukey–Kramer studentized-range procedure using the retained ANOVA error terms. NS = not significant; Sig. = significant.

The omnibus comparisons were significant for all five IBL dimensions, $F(2, 27) = 7.38\text{--}31.47$, $p \leq .003$, with large effect sizes ($\eta^2 = .353\text{--}.700$). The largest group effect occurred for applying real-life situations ($\eta^2 = .700$), followed by group work and discussions ($\eta^2 = .627$).

Tukey–Kramer comparisons showed that teachers rated questioning, problem-solving, group work, and reflection significantly higher than supervisors. Teachers also rated these dimensions significantly higher than school heads, except for real-life situations, where school heads and teachers did not differ significantly. Supervisors rated real-life application significantly lower than both school heads and teachers.

These role-based differences may reflect different levels of exposure to classroom practice and different standards for judging inquiry quality. However, because the retained ANOVA uses item-level aggregates rather than independent respondent-level observations, the inferential results should be interpreted cautiously and ideally reanalyzed using the original respondent-level dataset.

Learners' Academic Achievement

Table 4 Learners' Academic Achievement Across Two School Years

School	MPS SY 23/24		MPS SY 24-25		General Average	
	Rating	VI	Rating	VI	Rating	VI
Magat Salamat ES	55.12	Nearly Proficient	43.24	Low Proficient	49.18	Low Proficient
Isabelo Delos Reyes ES	54.20	Nearly Proficient	41.52	Low Proficient	47.86	Low Proficient
Timoteo Paez Integrated School ES	46.21	Low Proficient	40.26	Low Proficient	43.24	Low Proficient
Jose P. Rizal ES	47.39	Low Proficient	39.26	Low Proficient	43.33	Low Proficient
Rosauro Almario ES	41.08	Low Proficient	37.44	Low Proficient	39.26	Low Proficient
Jose Corazon De Jesus ES	54.98	Nearly Proficient	48.58	Low Proficient	51.78	Nearly Proficient
Amado V. Hernandez ES	47.65	Low Proficient	46.16	Low Proficient	46.91	Low Proficient
Manuel L. Quezon ES	47.10	Low Proficient	47.29	Low Proficient	47.20	Low Proficient
Emilio Jacinto ES	52.70	Nearly Proficient	46.28	Low Proficient	49.49	Low Proficient
Teodoro R. Yangco ES	51.87	Nearly Proficient	43.90	Low Proficient	47.89	Low Proficient
Arsenio H. Lacson ES	51.16	Nearly Proficient	43.20	Low Proficient	47.18	Low Proficient
Gen. Vicente Lim ES	46.58	Low Proficient	38.69	Low Proficient	42.64	Low Proficient
Overall	49.67	Low Proficient	42.99	Low Proficient	46.33	Low Proficient

Table 4 shows that the overall MPS decreased by 6.68 points, from 49.67 in School Year 2023–2024 to 42.99 in 2024–2025, with a two-year average of 46.33; all three district-level values fall within the study's Low Proficient classification. Six schools were Nearly Proficient in 2023–2024, whereas all 12 schools were Low Proficient in 2024–2025. Jose Corazon De Jesus Elementary School recorded the highest two-year average (51.78), while Rosauro Almario Elementary School recorded the lowest (39.26). Manuel L. Quezon Elementary School was the only school with a slight year-to-year increase (47.10 to 47.29).

The decline should not be attributed to IBL alone. The two school years may involve different learner cohorts, assessment forms, curriculum pacing, attendance patterns, remediation exposure, and school-level conditions. MPS is therefore best treated as a contextual outcome rather than a direct causal indicator of one instructional approach. The broader national context also shows persistent learning challenges in mathematics, reading, and science (OECD, 2023).

The findings support targeted remediation and instruction that combines foundational teaching with guided inquiry. Evidence on inquiry indicates that achievement gains depend substantially on the quality of guidance and task design (Lazonder & Harmsen, 2016).

Exploratory Relationship Between IBL and Academic Achievement

Table 5. Exploratory Multiple Linear Regression of IBL Dimensions on Learners' Academic Achievement

Model statistic	Value
School-level N	12
Predictors (k)	5
R ²	.6994
Adjusted R ²	.4489
Residual standard error	2.6155
F statistic	F(5, 6) = 5.58
Model p-value	.029
Cohen's f ²	2.33 (large)

Exploratory coefficient estimates

Predictor	B	βstd	t	p	Partial r
Intercept	50.518	—	1.191	.279	.437
Encouraging learners to ask questions	-45.046	NR	-1.454	.196	-.510
Using problem-solving activities	-0.498	NR	-0.022	.983	-.009
Promoting group work and discussions	23.017	NR	1.348	.226	.482
Applying real-life situations	60.880	NR	3.142	.020	.789
Guiding reflection and reasoning	-39.140	NR	-1.437	.201	-.506

Note. Residual *df* = 6 because *N* = 12 and *k* = 5 predictors.

Table 5 shows that the five IBL dimensions collectively explained 69.94% of the variation in learners' academic achievement ($R^2 = .6994$), with an adjusted R^2 of .4489. The overall regression model was statistically significant, $F(5, 6) = 5.58$, $p = .029$, with a large effect size (Cohen's $f^2 = 2.33$).

Among the predictors, only applying real-life situations showed a statistically significant positive unique association with academic achievement ($B = 60.880$, $t = 3.142$, $p = .020$, partial $r = .789$). After controlling for the other IBL dimensions, greater emphasis on connecting classroom learning with authentic and practical situations was associated with higher academic performance. Encouraging learners to ask questions, using problem-solving activities, promoting group work and discussions, and guiding reflection and reasoning did not make statistically significant unique contributions.

Overall, the findings suggest a potentially important role for real-life application in the relationship between IBL implementation and learner achievement.

Challenges in Implementing Inquiry-Based Learning

Table 6. Challenges Encountered by the Respondents in the Inquiry-Based Learning Approach

Indicators	Supervisors		Principals		Teachers		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. The teacher encounters difficulty in motivating learners to ask meaningful and relevant questions.	4.33	HE	1.92	LE	1.11	VLE	2.45	LE	1
2. The teacher encounters difficulty in designing problem-solving activities suited to pupils' abilities.	2.83	ME	1.50	VLE	1.18	VLE	1.84	LE	8
3. The teacher encounters difficulty in managing time while facilitating inquiry-based lessons.	2.50	LE	2.25	LE	1.07	VLE	1.94	LE	6
4. The teacher encounters difficulty in ensuring the active participation of all pupils during group activities.	1.50	VLE	2.92	ME	1.14	VLE	1.85	LE	7
5. The teacher encounters difficulty in connecting lesson content to real-life situations.	2.50	LE	1.42	VLE	1.22	VLE	1.71	VLE	9
6. The teacher encounters difficulty in providing adequate instructional materials for inquiry tasks.	3.00	ME	1.67	VLE	1.32	VLE	2.00	LE	5
7. The teacher encounters difficulty in assessing pupils' performance in inquiry-based activities.	3.00	ME	2.17	LE	1.68	VLE	2.28	LE	2
8. The teacher encounters difficulty in guiding pupils to reflect and reason critically.	2.67	ME	2.25	LE	1.16	VLE	2.02	LE	4
9. The teacher encounters difficulty in maintaining classroom order during open-ended discussions.	3.33	ME	2.33	LE	1.11	VLE	2.26	LE	3
10. The teacher encounters difficulty in balancing inquiry activities with curriculum requirements.	1.50	VLE	1.83	LE	1.22	VLE	1.52	VLE	10
Overall Weighted Mean	2.72	ME	2.03	LE	1.22	VLE	1.99	LE	

Table 6 shows that implementation challenges were Less Encountered overall (composite WM = 1.99). Supervisors reported the highest level of difficulty (WM = 2.72, Moderately Encountered), followed by school heads (WM = 2.03, Less Encountered) and teachers (WM = 1.22, Very Less Encountered).

The most prominent concerns were motivating learners to ask meaningful questions (WM = 2.45), assessing inquiry-based performance (WM = 2.28), and maintaining classroom order during open-ended discussions (WM = 2.26). These concerns point to practical needs in questioning routines, performance assessment, and facilitation rather than to broad resistance to IBL.

The least encountered concerns were balancing inquiry with curriculum requirements (WM = 1.52) and connecting lessons to real-life situations (WM = 1.71). This pattern is consistent with the strong implementation ratings for authentic application.

Professional development should therefore prioritize guided question formulation, concise performance rubrics, time-bounded inquiry routines, and classroom-management structures for group investigations. Research on inquiry implementation similarly emphasizes the importance of guidance, appropriate materials, and teacher preparation (Al Maharma & Abusa'aleek, 2022; Lazonder & Harmsen, 2016).

6. Based on the findings, what Intervention Program may be proposed?

Based on the findings, the proposed program, “Enhancing Inquiry-Based Learning through Collaborative, Real-Life, and Reflective Strategies,” is designed to strengthen elementary teachers’ use of structured questioning, problem-solving, collaborative inquiry, authentic application, reflection, and assessment. The program combines short professional-learning sessions, collaborative lesson design, classroom implementation, coaching, and monitoring so that inquiry remains practical, guided, and aligned with curriculum expectations.

Table 7. Illustrative IBL Enhancement Program Activities

Activity	Elementary Classroom Procedure	Expected Evidence
Question Launch: Notice–Wonder–Investigate	Present a local photo, object, short text, or simple phenomenon. Learners list what they notice and wonder, classify questions as answerable through observation/research, select one priority question, and plan a short investigation with teacher scaffolds.	Learner-generated questions, investigation plan, exit reflection
Community Problem-Solving Mini-Inquiry	Small groups examine an age-appropriate school issue such as water use, waste segregation, playground safety, or canteen choices. Learners gather simple data, compare options, and propose a solution supported by evidence.	Group data sheet, proposed solution, short oral explanation
Claim–Evidence–Reasoning Reflection Carousel	After an inquiry task, groups write a claim, cite two pieces of evidence, and explain their reasoning. Groups rotate to give one question and one suggestion, then learners revise and complete an individual reflection.	CER card/rubric, peer feedback, revised response

The activities may be adapted across elementary learning areas and grade levels, with task complexity, reading load, materials, and teacher scaffolds adjusted to learners’ developmental needs. The program should be implemented with baseline measures, implementation-fidelity checks, teacher reflection logs, and periodic review of learner work and MPS trends.

Acceptability of the Proposed Program

Table 8. Acceptability of the Proposed Intervention Program

Indicators	Supervisors		School Heads		Teachers		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	

1. The Proposed Intervention Program has adequate provision for flexibility and is cost-effective.	4.50	HA	5.00	HA	4.96	HA	4.82	HA	2
2. The Proposed Intervention Program provides completeness of facts presented.	4.67	HA	4.83	HA	4.87	HA	4.79	HA	3
3. It is practical enough to warrant adaptation and implementation.	5.00	HA	4.67	HA	4.96	HA	4.88	HA	1
4. The Proposed Intervention Program will benefit in terms of identifying the weaknesses of school performance and organizational productivity.	5.00	HA	4.25	HA	4.87	HA	4.71	HA	4
5. The Proposed Intervention Program will assist the implementers in developing and enhancing policy guidelines.	5.00	HA	4.17	A	4.95	HA	4.70	HA	5
Overall Weighted Mean	4.83	HA	4.58	HA	4.92	HA	4.78	HA	

The proposed program was Highly Acceptable overall (composite WM = 4.78). Teachers provided the highest overall assessment (WM = 4.92), followed by supervisors (WM = 4.83) and school heads (WM = 4.58). Practicality for adoption ranked first (WM = 4.88), followed by flexibility and cost-effectiveness (WM = 4.82) and completeness of information (WM = 4.79).

All five indicators were rated favorably, indicating that respondents viewed the program as feasible and relevant. These ratings establish perceived acceptability, not program effectiveness; effectiveness should be evaluated after implementation using predefined process and learner-outcome indicators.

Accordingly, program implementation should include baseline measures, implementation-fidelity checks, teacher reflection logs, and periodic review of learner work and MPS trends.

CONCLUSIONS

1. Inquiry-oriented instructional practices are strongly practiced and integrated in the teaching-learning process in District 1, Division of City Schools, Manila.
2. The three groups of respondents do not share a uniform assessment of the Inquiry-Based Learning Approach across the identified indicators, indicating differences in their perception and evaluation regarding its implementation in the classroom.
3. The learners' academic achievement in the selected public elementary schools generally falls within the low proficiency range, with a declining trend in performance observed in the succeeding school years.
4. The findings suggest that the use of the Inquiry-Based Learning variables shows some potential to explain learners' academic achievement; they show a weak and inconsistent relationship with learners' academic achievement, indicating limited predictive strength.
5. The three groups of respondents report minimal difficulties in implementing the Inquiry-Based Learning approach within the context of classroom instruction.
6. The implementation of the proposed Inquiry-Based Learning Enhancement Program emerges as a vital initiative in strengthening instructional practices and improving learners' academic achievement in the public elementary schools of District 1, Division of Manila. It addresses existing challenges in the implementation of the Inquiry-Based Learning approach while promoting effective teaching strategies, collaborative professional engagement, and the development of learners' critical thinking and problem-solving skills.

7. The Proposed Inquiry-Based Learning Enhancement Program is considered a highly appropriate initiative for implementation, as it closely aligns with its objectives, intended beneficiaries, and the particular needs of schools within the Division of Manila.

RECOMMENDATIONS

1. School administrators may consider adopting and implementing the proposed Inquiry-Based Learning (IBL) Enhancement Program in selected public secondary schools within the Schools Division of Manila. Its expansion to other districts is likewise encouraged to promote instructional innovation, strengthen stakeholder engagement, and improve overall educational outcomes across the division.
2. School administrators and supervisors may continuously support and closely monitor the implementation of the Inquiry-Based Learning approach by providing regular feedback, instructional coaching, and relevant professional development opportunities to ensure the effective integration of inquiry-based strategies in classroom instruction.
3. Supervisors, principals, and teachers may engage in collaborative discussions and joint evaluation activities to ensure a shared understanding of the approach, align instructional practices, and promote consistency in the implementation of inquiry-based strategies across classrooms.
4. School administrators and teachers may implement targeted academic interventions, remedial programs, and differentiated instructional strategies to address areas of low proficiency, with continuous monitoring to enhance learners' performance and close learning gaps.
5. Teachers and curriculum coordinators may strengthen the use of Inquiry-Based Learning strategies in lesson planning and classroom implementation, emphasizing activities that foster critical thinking, problem-solving, and active learner engagement to improve academic outcomes.
6. School administrators and supervisors may provide ongoing support, mentoring, and resource provision to teachers to maintain the minimal challenges experienced in implementing IBL and to encourage continued confidence and effectiveness in its application.
7. School administrators and program implementers may establish a dedicated Monitoring and Evaluation (M&E) system to track key performance indicators, maintain implementation fidelity, and pinpoint areas needing improvement. Such a system is crucial for ensuring the program's continued relevance, effectiveness, and long-term sustainability.
8. Teachers may use the findings to improve the implementation of Inquiry-Based Learning by adopting innovative strategies, engaging in professional development, and collaborating with colleagues, thereby enhancing student engagement, critical thinking, and overall learning outcomes.
9. Future research may apply the same parameters across a larger number of schools or in different educational contexts, such as elementary schools or private institutions, to strengthen the generalizability and reliability of the findings and support broader efforts in educational innovation.

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