



## Strengthening Supervisory Competence through Project RESET: A Mixed Methods Action Research Study of Secondary Science Instructional Leaders

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### ABSTRACT

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This study is grounded on the premise that instructional leadership and supervision influence the quality of teaching and student learning. It employed Ivankova's multistrand Mixed Methods Action Research (MMAR) framework to strengthen the supervisory competence of instructional leaders in secondary science through the Project RESET (Reflect, Empower, Supervise, Engage, Transform) initiative. 31 purposefully selected participants, who function as instructional leaders in the school, participated in the study. The study was implemented following the MMAR iterative processes: diagnosis, reconnaissance, planning, acting, evaluating, and monitoring. Quantitative findings and qualitative insights revealed that Project RESET resulted in a statistically significant improvement in supervisory competence from competent to highly competent, and participants' reflections on improved supervisory approaches, including structured practices, clarity in the use of tools, and more relational/emphatic supervision, supported this. The study concluded that Project RESET strengthened the supervisory competence and practices of secondary science instructional leaders, bridging gaps in instructional supervision, providing a replicable, needs-based model for professional development.

### KEYWORDS:

mixed methods action research, supervisory competence, secondary science, instructional leader

### 1. INTRODUCTION

The quality of its instructional leadership shapes teaching quality and curriculum implementation and engages teachers in continuous improvement and professional growth. Hence, with the increasing demands for quality education, the competence of instructional leaders in carrying out their supervisory roles remains a central concern.

Although the purpose of instructional supervision is to support teacher growth, it is often viewed as a way of controlling the classroom or even the school, rather than as a professional support and learning process [1]. Some studies have found that classroom observations and supervisory tasks are often associated with authority, judgment, and performance appraisal, creating discomfort and limiting open professional conversation [1]-[4]. Also, for instructional leaders, when supervision focuses on

evaluation over guidance, its potential to enhance instructional competence and teaching practices is diminished [5].

Globally, Sustainable Development Goal (SDG) 4 calls for educational institutions to align their priorities to inclusive and equitable quality education and lifelong learning opportunities for all [6], emphasizing that strong school leadership is a key to improving teaching and learning. Moreover, classroom instruction has the greatest influence on student learning, while school leadership falls second [7]; both are interconnected and indispensable. Hence, instructional leadership requires the setting of strategic directions and goals for fostering a conducive learning environment and positive school culture while implementing policies that enhance teaching and learning [8][9].

The evolution of school leadership illustrates diverse frameworks. Although this paper is anchored on instructional leadership, where schools with strong leadership exhibit four fundamental dimensions of effective leadership: establishing clear, ambitious, and equity-oriented goals; prioritizing learning through supervision and resource optimization; building collaborative networks among educators, students, and families for resilience; and

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nurturing professional development to boost motivation and teaching excellence [10], it is noteworthy considering the leadership for learning model, which argues that leadership is contextual, shaped by the leader's personal values and beliefs and the specific school environment [11]. This model believes that improvement happens when school conditions, such as culture, capacity, and processes, are addressed. While leadership for learning addresses some gaps in terms of focusing on the school context, its application in this study is limited by the difficulty in measuring long-term systemic conditions against the immediate demands of instructional supervision and accountability.

School leadership is multifaceted, but what makes it unique among other leadership roles is the instructional leadership that is strongly connected to the goal of improving teaching competence and learning outcomes through instructional supervision. Hence, instructional supervision, as a subset of instructional leadership, plays a critical role in this process. DepEd defines instructional supervision as a structured support mechanism designed to guide teachers through professional growth by providing timely, relevant, and collaborative feedback [12]. Supervisory competence is the integrated set of knowledge, skills, and attitudes that enable educational supervisors to effectively plan, execute, and assess supervision activities for better teaching outcomes [13]. As used in this study, it refers to the knowledge, skills, and abilities of instructional leaders in effectively planning, implementing, and evaluating supervisory activities aimed at improving teaching practices and learning outcomes. It is measured by levels, with "highly competent" being the highest level, and expected of master teachers and head teachers.

The Governance of Basic Education Act of 2001 emphasizes the dual role of the school head, who may be assisted by an assistant school head, as both an instructional leader and administrative manager. Hence, the school comprises teams with specified instructional and management roles. There shall be a team in charge of the delivery of quality educational programs, projects, operations, and services, and a group of non-teaching personnel who shall handle the school's administrative, fiscal, and ancillary services. Instructional leaders, such as master teachers and head teachers, are primarily responsible for instructional supervision. Also, the Philippine Professional Standards for Teachers (PPST) and the Philippine Professional Standards for School Heads (PPSSH) clearly articulate the role of instructional leaders, and their expected competence is indicated in the Performance Management and Evaluation System (PMES).

Hence, in DepEd's organizational structure, the school heads are the primary instructional leaders and supervisors in schools. Considering the wide scope of responsibilities of school heads, such as leading strategically, managing school operations and resources, focusing on teaching and learning,

developing self and others, and building connections [12], master teachers and head teachers share the same roles and responsibilities as the school heads as instructional leaders and supervisors in schools. They are expected to serve as instructional leaders and instructional supervisors in schools. MTs and HTs are in Career Stage 3 of the PPST, described as "Highly Proficient" or "Distinguished Teachers." Teachers at this level are not only experts in their classrooms but also leaders in their schools. Their roles include mentoring beginning and proficient teachers, sharing expertise in seminars and workshops, leading school-based innovations, and serving as role models in teaching practice [14].

Therefore, they must demonstrate competence in both the technical and interpersonal aspects of instructional supervision. However, gaps may still exist between standards and actual supervisory competence and practice in schools. Studies reveal that despite the availability of standardized tools, like Classroom Observation Tools (COT), their direct impact on learning is yet to be determined, but reports show that there is a gap in policy and actual practice of teachers in the classrooms [15]-[17], [29].

Moreover, the Second Congressional Commission on Education (2026) identified gaps in the utilization of tools and implementation of systems supporting instructional supervision. Specifically, in Priority Area 25, the integrated performance management and accountability system findings revealed that "the Philippine education sector's performance management system represents a critical implementation anomaly; while consuming substantial administrative resources through multilayered monitoring systems, it demonstrably fails to translate performance data into learning improvements" (p. 356). Likewise, it recommends the formulation of an instructional leadership framework to clearly delineate the roles and responsibilities of instructional leaders [18], which is crucial in maintaining efficient and effective transformation of standards into actionable insights.

Furthermore, the challenges in science achievement have been persistent throughout the years. In the 2024 Grade 12 National Achievement Test (NAT), this division got a mean percentage score (MPS) of 32.97 in science, which means low proficiency, ranked 11th out of 13 divisions in the region, and was included in the bottom 3 SHS subjects, together with Language and Communications and Mathematics, in the overall national, regional, and division results. This has been one of the significant considerations for why science was the chosen learning area to be studied, and with the various professional development programs and policies in the science curriculum, instructional supervision remains the core of quality science education. It is critical to investigate and understand how it is currently carried out, to identify areas that require strengthening, and

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to determine appropriate interventions to improve instructional leadership competence.

Hence, in consonance with the department's mandate and addressing the need to continuously improve secondary school instructional leaders', such as master teachers' and head teachers' competence and effectiveness in instructional supervision, this study aims to strengthen the competence of instructional leaders. Specifically, (1) determine the baseline supervisory level of competence of the instructional leaders; (2) develop an intervention to strengthen the supervisory level of competence of instructional leaders; (3) determine the supervisory level of competence of the instructional leaders after undergoing Project RESET; (4) test the difference between the participants' supervisory level of competence before and after Project RESET; (5) describe the instructional leaders' experiences with Project RESET; and (6) integrate quantitative and qualitative results to derive meta-inferences for the iteration of the action research cycle.

The study tests the null hypothesis: There is no significant difference in the supervisory level of competence of secondary science instructional leaders before and after Project RESET implementation at a 0.05 level of significance.

## II. METHODOLOGY

### *Research Design*

The multistrand Mixed Methods Action Research (MMAR) framework by Ivankova (2015) was applied in this study. This framework reflects six phases in the action research cycle: diagnosing, reconnaissance, planning, acting, evaluation, and monitoring and defines key methodological and procedural steps for each phase in an MMAR study [19].

The approach is most suitable for this study because it integrates both quantitative and qualitative data to capture not only quantifiable results but also the meanings and experiences behind them. The iterative process of action research was observed when the quantitative data collected through pre- and post-intervention surveys were analyzed to determine whether the instructional leaders' baseline supervisory level of competence improved after an intervention. The qualitative data gathered from feedback and reflection through unstructured interviews supported the quantitative data and deepened the understanding of the actual school context.

It also involved diagnosing and identifying the problem in the first phase of research, a characteristic of descriptive research. Then it proceeded with the design, validation, and implementation of the intervention and tested its effectiveness, demonstrating the action research cycle. The process was also consistent with the principles of participatory action research, since each phase involved

collaboration with the same research participants who were also the sources of both data sets.

Finally, meta-inferences from the integration of quantitative and qualitative analyses were provided, explaining how Project RESET strengthened instructional leaders' competence.

### *Sources of Data*

31 participants, composed of 14 head teachers and 17 master teachers in secondary science, were involved in this study. PPST described them as instructional leaders; they are not only experts in their classrooms but also leaders in their schools. Their roles include mentoring beginning and proficient teachers, sharing expertise in seminars and workshops, leading school-based innovations, and serving as role models in teaching practice [19]. Their teaching experience ranged from 9 to 35 years; instructional leadership experience ranged from less than 1 year to 15 years; and the number of teachers supervised ranged from 4 to 27.

In the development and implementation of the intervention to strengthen instructional supervisory competence, the same group of 31 instructional leaders served as the primary data source. These participants were actively engaged in a series of professional learning and supervisory activities under Project RESET. They were involved in implementing, validating, and evaluating the intervention inherent to the mixed-methods action research design. Secondary sources of data as contextual support for program design include official DepEd guidelines and performance management systems.

The pre- and post-intervention surveys generated quantitative data, and unstructured interviews, monitoring observations during the training period, validation activities, and personal reflections submitted by the participants provided qualitative data, all aligned with the participatory principles of mixed-methods action research.

This study protects the rights, dignity, and welfare of the participating instructional leaders by ensuring that ethical considerations are observed throughout the study. Informed consent, where participants received clear information on the background, purpose, and anticipated benefits of the research, followed by agreeing (or disagreeing), was required. To ensure the confidentiality and anonymity of all participants in all data records and reporting, codes were assigned. Although one of the researchers is herself an instructional leader (school head), the researcher holds no direct supervisory authority over any of the participating head teachers or master teachers, and all participation remained strictly voluntary and anonymous.

### *Research Instrument*

In this study, qualitative data were gathered through unstructured interviews, observation notes, and reflections, while quantitative data were collected using a researcher-

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developed survey questionnaire. The questionnaire, administered before and after the intervention, was adapted from the Standards of Instructional Supervision [20] and the Philippine Professional Standards for Teachers [14], which reflect the standards and processes of instructional supervision in the Philippine basic education context.

To ensure clarity, relevance, and reliability of instruments, content was validated by the Division Science Coordinator, the dissertation panel, and a third-party evaluator, followed by administration of a pilot test to a small group of instructional leaders with similar profiles outside the actual sample. Cronbach’s alpha yielded a reliability of 0.845, indicating good reliability.

### Data Collection

The study went through multistrand MMAR processes. The data collection begins with determining the current (baseline) supervisory level of competence of instructional leaders using the pre-intervention survey questionnaire (diagnosis phase). The quantitative data generated were analyzed. Subsequently, the gap review and analysis revealed the problems and improvement needs (reconnaissance phase).

After identifying the competencies requiring improvement, Project RESET was designed (planning phase), and the ADDIE model [21] was used in developing the instructional supervision toolkit. Then the training for instructional leaders was implemented (acting phase). The processes and participants’ responses and feedback during the training were noted (evaluation and monitoring phase). After the training, a post-intervention survey was conducted using the same survey questionnaire, generating quantitative data (evaluation phase).

Then, to test whether there is a difference in instructional leaders’ level of competence before and after the intervention, the pre- and post-intervention results were compared. Qualitative data, through unstructured interviews, were also collected from participants’ reflections, observation notes, and feedback (evaluation phase).

The completion of the action research cycle informs meta-inferences for the next iteration. The multistrand phases follow one another iteratively within a cycle, indicating a continuous process.

### Data Analysis

To determine the instructional leaders' baseline supervisory level of competence, quantitative analysis of weighted mean

and standard deviation was employed. The scale below was used to interpret the data:

Scale	Level of Competence
4.50 - 5.00	Highly Competent
3.50 - 4.49	Competent
2.50 - 3.49	Moderately Competent
1.50 - 2.49	Less Competent
1.00 - 1.49	Not Competent

The indicators were ranked from highest to lowest mean scores. Problems were identified by isolating indicators with the lowest weighted means, representing the gaps. The identified problems provided both the empirical and theoretical bases for developing the intervention to strengthen the instructional leaders’ supervisory competence.

To determine the instructional leaders’ supervisory level of competence after Project RESET, quantitative analysis of the post-intervention survey’s weighted mean and standard deviation was done. Cohen’s d effect size was also computed to validate the observed pre-post change.

Furthermore, given that the competence scores were ordinal and violated the assumption of normality, the Wilcoxon signed-rank test was employed to determine whether statistically significant differences existed between the pre- and post-intervention levels of supervisory competence at the 0.05 level of significance.

In describing the instructional leaders’ Project RESET experiences, thematic analysis of their feedback was applied. Lastly, to integrate the quantitative and qualitative findings in deriving meta-inferences, joint displays [22] [24] and successive integration of claims [25] were employed.

### III. RESULTS

This section presents the quantitative and qualitative findings on the instructional leaders’ supervisory competence. The MMAR phases are explicitly indicated to illustrate the multistrand processes.

#### Baseline Supervisory Competence

Evaluating the supervisory level of competence is crucial for instructional leaders as it qualifies them to effectively support and assist teachers, ultimately enhancing the quality of instruction and learning outcomes. Table 1 presents the instructional leaders’ baseline supervisory level of competence.

**Table 1: Instructional Leaders’ Baseline Supervisory Level of Competence**

Indicators	WM	SD	Interpretation
1. Assists teachers in reviewing learning standards to make the curriculum relevant for learners.	3.77	0.62	Competent
2. Provides technical assistance to teachers on teaching standards and pedagogies within and across learning areas.	3.97	0.60	Competent
3. Uses validated feedback obtained from learners, parents, and other	3.61	0.80	Competent

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Indicators	WM	SD	Interpretation
stakeholders.			
4. Utilizes learning outcomes in developing data-based interventions.	3.52	0.63	Moderately Competent
5. Provides technical assistance in using learning assessment tools and strategies consistent with curriculum requirements.	3.71	0.86	Competent
6. Manages a learner-friendly, inclusive, and healthy learning environment.	4.23	0.67	Competent
7. Ensures integration of career awareness and opportunities in providing learning experiences aligned with the curriculum.	3.90	0.79	Competent
8. Implements learner discipline policies that are developed collaboratively with stakeholders.	3.71	0.69	Competent
9. Distinguishes the supervisory needs of teachers.	3.81	0.65	Competent
10. Identifies the appropriate approaches to supervision in addressing the diversity of the supervisory needs of teachers.	3.42	0.67	Moderately Competent
11. Addresses the diversity of teachers' needs by shifting from one approach to another according to the needs and context of the teachers.	3.42	0.67	Moderately Competent
12. Builds a professional learning community in school.	4.03	0.91	Competent
13. Reflects and assesses own practices in aspiring personal growth and professional development.	4.03	0.75	Competent
14. Provides a clear developmental procedure in supervisory activities.	3.35	0.66	Moderately Competent
15. Utilizes classroom observation tools for instructional supervision.	4.19	0.79	Competent
16. Supports teachers' professional growth and development to improve the teaching-learning process and learning outcomes.	4.03	0.71	Competent
<b>Overall Weighted Mean</b>	<b>3.79</b>	<b>0.57</b>	<b>Competent</b>

It can be seen that instructional leaders are competent in managing a learner-friendly, inclusive, and healthy learning environment and utilizing classroom observation tools for instructional supervision; supporting teachers' professional growth and development to improve the teaching-learning process and learning outcomes; building a professional learning community in school; reflecting and assessing their own practices in aspiring personal growth and professional development; providing technical assistance to teachers on teaching standards and pedagogies within and across learning areas; ensuring integration of career awareness and opportunities in providing learning experiences aligned with the curriculum; distinguishing the supervisory needs of teachers; assisting teachers in reviewing learning standards to make the curriculum relevant for learners; providing technical assistance in using learning assessment tools and strategies consistent with curriculum requirements; implementing learner discipline policies that are developed collaboratively with stakeholders; and using validated feedback obtained from learners, parents, and other stakeholders.

They are moderately competent in utilizing learning outcomes in developing data-based interventions; providing a clear developmental procedure in supervisory activities; addressing the diversity of teachers' needs by shifting from one approach to another according to the needs and context of the teachers; and identifying the appropriate approaches

to supervision in addressing the diversity of the supervisory needs of teachers.

Overall, the LDNA revealed that the instructional leaders'

supervisory level of competence is 3.79, or "competent," with SD = 0.57, which means they generally agree with the statements and have consistent ratings across the indicators. This result shows a competence gap, since instructional leaders are expected to be "highly competent" (PPST, 2017). After the diagnosis, the reconnaissance phase follows, where the indicators were ranked from highest to lowest, and the ones that got the lowest weighted means were analyzed to determine the competence gaps and establish the problems. Then, data triangulation was done to validate the identified problems. The results informed the next phase, which is presented in the succeeding sections.

**Development and Implementation of Project RESET**

The planning phase commenced after the analysis of quantitative data from the pre-intervention survey. Findings revealed that the areas needing improvement in instructional supervisory competence are providing a clear developmental procedure in supervisory activities, addressing the diversity of teachers' needs by shifting from one approach to another according to the needs and context of the teachers, and identifying the appropriate approaches to supervision in addressing the diversity of the supervisory needs of teachers.

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In the classroom observation practice, the following gaps were identified: understanding fully the content of the COT-RPMS rubrics, including the clarifications and features of practice for each indicator; reviewing the results and agreements made in the previous observation to identify the focus and area for improvement during the teaching-learning process; discussing clearly with the teacher the content of the classroom observable indicators, including the clarifications and features of practice per indicator; writing observation notes accurately following the STAR structure/framework; and providing feedback and technical assistance appropriate to the teacher to enhance classroom practices and performance along the different PMES-PPST indicators.

Overall, the findings highlight the need for a structured, targeted, and focused training program that directly responds to the identified gaps in instructional supervision. A targeted program is therefore emphasized to develop competencies that need improvement. In response, Project RESET (Reflect, Empower, Supervise, Engage, Transform), a training program following the researcher’s framework, was designed, validated, and implemented. It is delivered through Google Classroom as a self-paced online training course, primarily designed to strengthen the supervisory competence and practices of instructional leaders.

The main learning resource was the researcher-developed Instructional Supervision Toolkit, containing training modules, activity sheets, and guided reflection materials. It underwent several rounds of validation and revision before it was approved and marked as passed by the SDO-LRMDS.

The toolkit focuses on the competencies identified as needing improvement and is organized into five modules: Module 1, Identifying Appropriate Supervisory Approaches, guides instructional leaders in selecting supervision strategies that are responsive to teachers’ confidence, competence, and concern; Module 2, Writing Observation Notes Using the STAR Framework, develops objective and evidence-based notetaking skills so that records are based on clear and verifiable classroom observation; Module 3, Applying Performance Management and Evaluation System, Classroom Observation Tools (PMES-COT), deepens understanding of the rubrics and guides instructional leaders in interpreting indicators and identifying evidence that

reflects specific teaching practices. Module 4, Using the Performance Monitoring and Coaching Form (PMCF), explains the purpose and importance of tracking teacher performance, monitoring follow-through, setting developmental targets, and planning coaching interventions. Module 5, Giving Feedback, improves and sustains the ability to deliver constructive and evidence-based feedback with emphasis on clarity, timeliness, balance, and self-reflection. Generally, these modules suggest that supervisory competence and practice can be strengthened by aligning supervisory approaches to individual teacher needs, improving communication and interpersonal skills, and utilizing standardized tools correctly.

After the development and validation of an appropriate intervention, the acting phase began. This involved the actual implementation and monitoring of Project RESET, which was carried out in three phases: pre-implementation, implementation, and post-implementation. The pre-implementation phase involves the steps for planning, beginning with the assessment of learning and development needs, followed by data analysis, reporting, identification of competency gaps, designing the training program, preparation of a proposal, review and approval, and toolkit validation. The implementation phase explains the implementation and instructional aspects, which include preparing the training platform, calling for registration and participation, delivering self-paced online training over 3 months, and collecting required outputs such as assessments, activity sheets, reflections, classroom observations, toolkit validation, and documentation. Post-implementation includes the evaluation and feedback process, such as administering a post-implementation survey, gathering feedback from participants to identify areas for improvement, and reporting results and recommendations.

***Post-Intervention Supervisory Competence of Instructional Leaders***

Post-intervention assessment follows the completion of the intervention. As shown in Table 2, the results present the instructional leaders’ level of competence after undergoing Project RESET.

**Table 2: The Instructional Leaders’ Supervisory Level of Competence After Project RESET**

Indicators	WM	SD	I
1. Assists teachers in reviewing learning standards to make the curriculum relevant for learners.	4.42	0.50	Highly Competent
2. Provides technical assistance to teachers on teaching standards and pedagogies within and across learning areas.	4.52	0.51	Highly Competent
3. Uses validated feedback obtained from learners, parents, and other stakeholders.	4.52	0.51	Highly Competent
4. Utilizes learning outcomes in developing data-based interventions.	4.52	0.51	Highly Competent

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5. Provides technical assistance in using learning assessment tools and strategies consistent with curriculum requirements.	4.55	0.51	Highly Competent
6. Manages a learner-friendly, inclusive, and healthy learning environment.	4.48	0.51	Competent
7. Ensures integration of career awareness and opportunities in providing learning experiences aligned with the curriculum.	4.48	0.51	Competent
8. Implements learner discipline policies that are developed collaboratively with stakeholders.	4.55	0.51	Highly Competent
9. Distinguishes the supervisory needs of teachers.	4.68	0.48	Highly Competent
10. Identifies the appropriate approaches to supervision in addressing the diversity of the supervisory needs of teachers.	4.77	0.43	Highly Competent
11. Addresses the diversity of teachers' needs by shifting from one approach to another according to the needs and context of the teachers.	4.71	0.46	Highly Competent
12. Builds a professional learning community in school.	4.52	0.51	Highly Competent
13. Reflects and assesses own practices in aspiring personal growth and professional development.	4.55	0.51	Highly Competent
14. Provides a clear developmental procedure in supervisory activities.	4.68	0.48	Highly Competent
15. Utilizes classroom observation tools for instructional supervision.	4.65	0.49	Highly Competent
16. Supports teachers' professional growth and development to improve the teaching-learning process and learning outcomes.	4.48	0.51	Competent
<b>Overall Weighted Mean</b>	<b>4.57</b>	<b>0.20</b>	<b>Highly Competent</b>

After Project RESET, instructional leaders are “highly competent” in almost all indicators. It can be noted that they got the highest mean scores in indicators targeted by Project RESET, such as identifying the appropriate approaches to supervision in addressing the diversity of the supervisory needs of teachers (4.77); addressing the diversity of teachers' needs by shifting from one approach to another according to the needs and context of the teachers (4.71); distinguishing the supervisory needs of teachers and providing a clear developmental procedure in supervisory activities (both with 4.68); and utilizing classroom observation tools for instructional supervision (4.65).

However, they remain at a “competent” level in managing a learner-friendly, inclusive, and healthy learning environment; ensuring the integration of career awareness and opportunities in providing learning experiences aligned with the curriculum; supporting teachers' professional growth and development to improve the teaching-learning process and learning outcomes; and assisting teachers in reviewing learning standards to make the curriculum relevant for learners.

Overall, the post-intervention survey revealed that the instructional leaders' supervisory level of competence after Project RESET is 4.57, described as "highly competent," with a very low overall standard deviation of 0.20. This indicates high consistency in ratings, showing that participants generally agreed in their ratings across all 16 indicators.

**Pre- and Post-Project RESET Difference in Supervisory Competence**

The instructional leaders' supervisory level of competence

before and after Project RESET was compared, analyzed, and tested for statistical significance using the Wilcoxon signed-rank test, as shown in Table 3.

**Table 3: Difference Between the Supervisory Level of Competence Before and After Project RESET**

Statistical Bases	Level of Competence
Computed Wilcoxon Statistic	496.0
P-value	0.000
Cohen's <i>d</i> Effect Size (very large)	1.14
Decision on H <sub>0</sub>	Reject
Remarks	Significant

Note. Test of median = 0.000000 versus median ≠ 0.000000, N = 31, α = 0.05

The computed Wilcoxon statistics were 496.0. The associated p-value was 0.000, which is less than the predetermined significance level of α = 0.05. Thus, the null hypothesis was rejected. The results indicate a statistically significant difference in the level of competence before and after Project RESET. Thus, the findings suggest that the implemented intervention was highly effective in strengthening participants' overall supervisory competence. Furthermore, to validate the magnitude of the effect of the change in supervisory competence before and after Project RESET, Cohen's *d* was computed, producing a value of 1.14. This establishes that the pre- and post-intervention means differ by 1.14 standard deviations, interpreted as a very large effect size [23], indicating that Project RESET had a substantial and practically meaningful effect on instructional leaders' supervisory competence.

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*The Instructional Leaders' Experiences with Project RESET*

To further evaluate the effect of Project RESET, qualitative data were gathered from the participants' feedback and reflections through unstructured interviews to support the quantitative findings. Table 4 summarizes the areas where supervisory competence was evident.

The following themes emerged from the participants' feedback and insights thematic analysis: adoption of

differentiated supervisory approaches, enhanced classroom observation and documentation skills, improved feedback delivery, strengthened professional relationships and collaboration, and improved follow-up mechanisms.

**Table 4: Thematic Analysis of Qualitative Feedback on the Impact of Project RESET**

Key Themes	Sub-Themes	Evidence
Adoption of Differentiated Supervisory Approaches	Application of the 3Cs Framework	77% (24 participants) indicated that tailoring styles using the 3Cs (Competence, Confidence, Concern) was useful for clarifying technical support.
	Adjustment of strategies based on teacher needs	"The supervisory approach that I used to practice may not be suited to other teachers. I treated, especially new teachers, the same way. So, it was eye-opening." – IL1
	Reduction of bias and subjective judgments	"The supervisory approach decision matrix helped my planning by providing objective criteria instead of opinion or judgment." – IL7
Enhanced classroom observation note-taking skill	Deeper understanding and application of PMES-COT rubrics	65% (20 participants) reported observation practices became more organized and shifted from "unintentionally subjective" to "verifiable and data-driven".
	Use of the STAR framework for note-taking	"Now that I am using the STAR framework... I have more concrete evidence to share with the teacher. And I noticed they respond better." – IL3
	Evidence-based, objective observation records	Instead of a generalized statement, I see the value of being specific and noting measurable remarks. This reduced "gut feeling" (IL2) and "guesses in rating" (IL4).
Improved Feedback Delivery	Use of the 5-Step Feedback Process	48% (15 participants) found the Prepare, Present, Discuss, Develop, Follow Up process helpful for constructive conversations.
	Actionable, balanced, and collaborative conversations	"The module... reminded me to balance positive feedback with areas needing improvement. Now I begin the conversation with their strengths." – IL6
	Development of trust and responsiveness between observer and teacher	Feedback became a "two-way dialogue" (IL8) and a "collaborative conversation" (IL9, IL18, & IL23).
Strengthened Professional Relationships and Collaboration	Collegial interactions through empathy and acknowledgement	39% (12 participants) reported that starting with acknowledgement and empathy led to more positive responses from teachers.
	Shift from hierarchical to partnership-based supervision	"I am more confident in dealing with my fellow teachers, and I am trying to build a more positive relationship." – IL12
	Creation of psychologically safe and open communication spaces	Participants noted the toolkit reduced tension and created a "safe environment" by shifting dynamics from "hierarchical to partnership."
Improved Follow-Up Mechanisms	Effective use of PMCF	26% (8 participants) noted the toolkit clarified the importance of the PMCF for documenting and tracking progress.
	Systematic tracking of teacher progress	"The sample indicators ensured my scoring is fair, accurate, and consistent... [it] helped me during my post-conference." – IL13
	Clear documentation	Results showed the toolkit allowed leaders to "connect individual classroom observations to... broader institutional objectives."

The participants identified the adoption of differentiated supervisory approaches as the most common key area that was helpful. They mentioned that a tailored supervisory

style on individual teacher needs, using the 3Cs (Competence, Confidence, Concern) framework, was useful. They also noted that understanding these supervisory styles

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clarified the technical support they should offer.

Conversely, participants also identified a few areas for further toolkit refinement, such as issues with overall ease of use, the need to provide more contextualized examples, and expanding the capacity of the toolkit to adapt to diverse instructional contexts and needs.

In terms of participation, excessive administrative and supervisory workloads have been identified as the major challenge in fully participating in Project RESET. This was also the top reason why some participants failed to finish the intervention. Heavy workloads have been a systemic issue for decades, not only for teachers but also for instructional leaders. The impact of workloads on instructional supervision may not be included in this study, but during interviews and reflections, it was consistently mentioned by the participants.

Despite this experience at the onset of intervention, an unexpected turn occurred towards the end of Project RESET. Participants reported in their post-intervention reflections that managing supervisory tasks became efficient due to the toolkit’s self-paced and practical approach. The decision matrix, note-taking strategies, and feedback processes helped them better understand the guidelines and utilize standardized tools effectively. Their access to the toolkit is advantageous as a reference. A few participants even printed and compiled the modules and suggested that it

would be more beneficial to all instructional leaders in the division if printed copies were distributed. Hence, the researcher revised the toolkit to be appropriate for offline use, and after its publication, printed copies will be shared with interested instructional leaders in the division.

Generally, the toolkit has been effective in guiding them to perform their supervisory tasks. Participants reflected that despite the challenges at the beginning of the intervention due to excessive workloads and responsibilities, the self-paced approach and practical frameworks introduced by Project RESET enhanced their competence as instructional leaders.

**Integration of Quantitative and Qualitative Findings**

This section discusses the monitoring and reflection phase. In this multistrand MMAR study, meta-inferences serve as the link between separate strands of quantitative and qualitative findings, systematically integrated to discover the broader implications of Project RESET on instructional leaders’ supervisory competence and practices to inform the iteration of this action research cycle. Table 5 illustrates the joint display matrix of the integration of quantitative and qualitative findings and the derived meta-inferences and insights vis-à-vis objectives.

**Table 5. Project RESET Joint Display Matrix**

Focus	Quantitative Findings	Qualitative Insights	Meta-Inferences
Supervisory Competence	Improved from “competent” (pre-) to “highly competent” (post-intervention).	Participants reported increased clarity in supervision, better use of tools, and more confidence in conducting observations.	Structured, targeted rather than generic intervention enhances both perceived and demonstrated supervisory competence.
Intervention: Project RESET	Observable gains in both competence and practice indicators after implementation.	Participants emphasized that training was needs-based, practical, and directly applicable to their context.	Contextualized and need-driven interventions are more effective than generic professional development.
Pre-Post Intervention Difference	Statistical tests showed significant differences in both competence and practice (pre vs. post).	Participants recognized noticeable personal and professional growth after the intervention.	Quantitative improvements are validated by lived experiences, confirming real change beyond the data gains.
Effectiveness of Project RESET	Overall improvement in competence and practice across indicators and an increase in test scores in all modules.	Reflections highlighted improved supervisory approaches and bridging of theory and practice.	Project RESET effectively bridges the theory–practice gap in instructional supervision.
Participants’ Reflections		Emphasis on empathy, acknowledgment, structured feedback, and simplified tools.	Human-centered supervision complements technical competence, thus enhancing effectiveness.

The most notable quantitative result is the significant increase in the pre-post intervention overall mean from 3.79 to 4.57, with a Cohen’s *d* = 1.14. This improvement was

attributed to the participants’ adoption of concrete, actionable frameworks (3Cs, STAR, and 5-step feedback process). These gains and feedback were precisely in the indicators the toolkit had targeted since they got the lowest

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means in the diagnosis phase: identifying appropriate approaches (+1.35), responding to diverse teacher needs (+1.29), and establishing clear developmental procedures (+1.33).

Several participants noted that before the training, they used to treat all teachers the same way and apply the same supervision approach, even to the new ones. Mostly, relying on their previous experiences and “usual” routines. The 3Cs framework (competence, confidence, and concern) and the 5-step feedback helped them adjust their perspective and approach without feeling inconsistent. These findings explain the complementarity of the very large effect size to why participants described the change as both useful and “eye-opening.”

The shift from “competent” to “highly competent” supervisory level demonstrated a change in how instructional leaders plan and document classroom supervision practices. Pre-intervention, participants described their observation feedback as “unintentionally subjective” and influenced by “gut feeling” and “past experiences.” Post-intervention, they reported using measurable and verifiable phrases such as “25 out of 30 students showed interest by participating in classroom activities” instead of “the majority of students” and noted that teachers “respond better” to concrete evidence and objective feedback. These results demonstrate convergence between the improvement of the overall competence means and the shift in participants’ perspectives and practices from experience-based judgments to systematic, evidence-grounded observations.

One of the most unexpected but meaningful findings was the sharp decline in variability: the standard deviation fell from 0.57 pre-intervention to 0.20 post-intervention. Simultaneously, participants spoke about changing their approach from a “hierarchical” to a “partnership-based” one, starting post-observation conversations with acknowledgement and empathy and creating “psychologically safe” spaces.

The decrease in standard deviation may be influenced by their different personal standards pre-intervention and developing a common professional language and shared standards post-intervention. These results show the complementarity of a unified understanding of supervisory competence among instructional leaders and the relational safety that teachers feel during supervision.

Consistency and responsiveness often cause dilemmas and internal debate among instructional leaders. Project RESET proposed frameworks to address this issue. The utilization of PMCF and PMES-COT rubrics showed high post scores (4.55–4.68), supporting the importance of the tools for documenting and tracking progress. Quantitatively, all 16 indicators improved, including those not directly targeted by the modules. Qualitatively, the toolkit guided

leaders to “connect individual classroom observations to broader institutional objectives.”

These findings demonstrate convergence between the standardized processes, such as the PMCF for documentation, the PMES-COT rubrics for observation, and clear developmental procedures, and the participants’ use of decision-making frameworks, including the 3Cs matrix, STAR, and 5-step feedback process, to address individual teacher needs.

Finally, the data heads toward a deeper shift beyond quantitative measures. Non-targeted indicators also improved substantially: building a professional learning community, reflecting one’s own practices, and supporting teachers’ professional growth. In the interviews, participants shared not only about enhanced supervisory skills but also about changed self-perceptions: increased confidence in dealing with colleagues, a desire to “build a more positive relationship,” and reframing supervision as developmental rather than purely evaluative.

Project RESET guided instructional leaders toward developing or reframing their leadership identity. They were given both the technical tools and a language of partnership and reflection, allowing them to see themselves differently.

These results show divergence between participants’ prior perspective and practice as observers and evaluators of teachers’ performance and their reported shift to more collaborative partners in professional growth.

## IV. DISCUSSION

### *The Need to Strengthen the Competence of the Instructional Leaders*

The quality of instructional supervision directly influences the quality of classroom instruction. The LDNA results showed that the current supervisory level of competence of instructional leaders is “competent.” While this finding demonstrates proficiency, it still shows a professional gap, as they are expected to be “highly competent,” considering their roles in providing the necessary technical assistance to teachers.

It assumes that they are focused on compliance, considering it as support for teachers’ professional growth. On the other hand, the lowest-rated competencies—identifying appropriate supervisory approaches, adapting approaches according to teachers’ diverse needs, and providing clear developmental procedures—not only require supervisory knowledge but also strong communication and interpersonal skills. This means that while instructional leaders are technically proficient in their administrative functions, they sometimes struggle with the “human” element of supervision, which requires going beyond the policies and standardized tools.

These findings support the principles of differentiated and developmental supervision, where teachers’ diverse backgrounds and developmental stages call for tailored

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supervisory approaches and strategies that balance the technical nature of instructional supervision with leadership functions [26] and the need for training focused on coaching and mentoring to bridge competence, instructional leadership, and teachers' performance [27][28].

These results underscore the value of developmental supervision, as a one-size-fits-all approach may miss addressing individual differences and potential growth opportunities. Hence, instructional supervision must be tailored to individual needs to be effective and enhance competence.

### *Project RESET: An Intervention Strengthening the Supervisory Level of Competence of Instructional Leaders*

The pre-intervention assessment identified five critical competence gaps: adapting appropriate supervisory approaches, understanding and applying the PMES-COT rubrics, writing observation notes using the STAR framework, performance monitoring and tracking through PMCF, and constructive feedback delivery. The implementation of Project RESET emphasizes the importance of addressing these gaps.

By providing targeted and focused interventions, Project RESET was purposely designed to tackle these diagnosed needs through a toolkit in instructional supervision. This toolkit consists of five modules that prioritize practical skill-building rather than broad theories focused on identifying appropriate supervisory approaches, writing observation notes using the STAR framework, applying PMES-COT rubrics and features of practice, using the PMCF, and giving feedback.

The toolkit was utilized in a self-paced online training, delivered through Google Classroom, which enabled participants to engage and utilize materials at their own pace while completing structured activities, reflections, and assessments. This flexibility was adopted to cope with the heavy administrative and supervisory loads of the participants and increase their participation and commitment to this undertaking. However, these challenges remain systemic and a significant barrier to consistent focus on their primary duty as instructional leaders.

Project RESET aligns with and attempts to alleviate the existing concerns where leaders often struggle with transforming policies into consistent, evidence-based practices [29][30], the need for reflective and collaborative dialogue [31], and tailored supervisory strategies [32]. This suggests that while instructional supervision exists and classroom observers are familiar with rubrics and frameworks, the competence, mastery, and consistency in application remain limited and need support.

Furthermore, this intervention offered a solution to the argument that COT utilization often fails to affect teacher proficiency [33]. It also responded to the call of the EDCOM II to capacitate instructional leaders by strengthening supervisory tools and practices, shifting from

compliance to developmental, results-oriented support; and balancing COT integration with effective communication and relationship-building [18].

This study suggests that effective instructional leadership is anchored in developmental supervision because when instructional leaders carefully assess and respond to diverse teachers' profiles and needs, they foster a community that balances support with professional autonomy.

### *Analysis of Post-Intervention Competence*

The post-intervention assessment revealed a considerable shift in instructional leaders' supervisory competence, from "competent" to "highly competent" levels. The most pronounced improvements were observed in identifying and adapting supervisory approaches to meet diverse teacher needs and providing clear developmental procedures.

This suggests that the needs-focused intervention of Project RESET effectively filled the gaps identified in the pre-intervention phase and improved instructional leaders' competence. However, certain competencies, such as managing inclusive environments, career integration, and support for improvement of the learning outcomes, remain at a "competent" level. This indicates that while they are consistent in these areas, instructional leaders did not experience the same high-level improvement, suggesting these areas are more resistant to short-term intervention or might require a different pedagogical approach.

The results of Project RESET proved that structured and focused programs, particularly utilizing practical tools and frameworks, significantly enhance teacher professionalism [34], and proper assessment and communication are core elements of effective leadership [35]. While a significant improvement was attained, a previous study reported only moderate overall efficacy [30]; they confirmed a significant effect of instructional supervision techniques, principles, and approaches on variations in teachers' learning models and materials. However, the effectiveness of supervision programs remains "questionable" in practice. This finding indicates that statistically significant results do not always lead to consistent implementation. This gap may result from limitations and challenges, such as inconsistent follow-through, resource constraints, and heavy workloads, which participants in this study also identified.

Therefore, this study suggests that enhancing supervisory competence requires not only policy development but also the provision of specific frameworks to facilitate policy implementation. Furthermore, future programs should prioritize inclusive environment management, career integration, and learning outcomes. Although these areas were not addressed by the current intervention, they warrant further attention.

*The Effect of Project RESET on the Competence of Instructional Leaders*

Comparative analysis of quantitative and qualitative data revealed significant evidence that Project RESET contributed to strengthening instructional supervision competence. Instructional leaders demonstrated marked improvement in previously lower-scoring areas, reaching a highly competent level.

Participants demonstrated strong abilities to identify and adapt supervisory approaches to address diverse teacher profiles and needs, to provide clear developmental procedures, and to distinguish among specific supervisory strategies. These results indicate that Project RESET effectively addressed pre-existing gaps in the interpersonal aspects of leadership by positioning supervision as a collaborative and reflective process rather than solely a compliance or evaluation mechanism.

By prioritizing reflective dialogue and collaborative processes, Project RESET aligns with the democratic supervision model [36] and established trust-building frameworks and strategies [37]. Evidence from this study suggests that structured and tailored supervision extends beyond oversight, empowering leaders to enhance classroom engagement [38][34]. These findings contrast with previous research asserting that COT lacks meaningful impact on teacher proficiency [33] and challenge the EDCOM II report's claim that current monitoring systems fundamentally fail to drive learning [18]. The results indicate that the primary gap lies not in the tool itself, but in the absence of focused, need-driven, and practical training for its effective implementation.

This research demonstrates that instructional supervision can be transformed from a compliance-driven practice into a process fostering authentic professional growth. Such a transition enhances leadership credibility. As educators value actionable transparency and feedback [39], Project RESET equips leaders to deliver these insights with objective clarity.

By embedding developmental principles into a practical toolkit, this intervention offers a tangible mechanism for implementing EDCOM II recommendations on integrating performance management and accountability, as well as for formulating an instructional leadership framework that clearly delineates the roles and responsibilities of instructional leaders. However, despite measurable gains, persistent structural and systemic barriers remain. Participants identified resource constraints, heavy workloads, and workplace interpersonal dynamics as factors limiting the consistency of developmental supervision. Both the present and previous studies [40] indicate that an excessive focus on COT integration may be perceived by teachers as hierarchical and burdensome, potentially affecting interpersonal relationships unless balanced with strong communication and relational skills.

*Meaning-Making of Experiences in Project RESET*

Project RESET's participants experienced technical skill development as seen in the quantitative gains in their level of competence, such as the mean increase, significant difference, and very large effect size. Beyond the data, the researcher intends to make meaning of this process. For decades, instructional supervision has been viewed negatively as a mechanism of control and evaluation rather than as professional support and a reflective process [1][3][41].

As mentioned, Project RESET targeted competence gaps. Its focus on providing structured, practical, and need-driven intervention aims to close these gaps so that instructional supervision leads to improved teacher performance, more effective teaching, and better learner outcomes.

Generally, Project RESET enabled instructional leaders to understand their roles better. It was repeatedly described as "eye-opening" because, for years, some of them had unconsciously adopted the default one-size-fits-all approach and were too complacent or too exhausted to make changes. Project RESET provided them with both practical decision tools and a venue to express their views. At the beginning of the intervention, they shared their challenges as instructional leaders. The limited support for instructional resources, excessive workloads, and "generic and redundant" training were the most pressing concerns mentioned in their reflections. While Project RESET is not designed to address them directly, its utilization may somehow alleviate some worries.

For instance, the challenge in managing time and workloads may have been a factor in the onset of Project RESET, but surprisingly, it has an opposite impact on those who stayed in the program. They have realized that using the toolkit made their classroom observation activities easier. The suggested frameworks and feedback-giving strategies, backed by sample scenarios, sample observation notes, and a decision-making matrix, allowed them to work efficiently or prompted them to make improvements. Also, Project RESET unintentionally responded to the remark on "generic and redundant" training. Since it was focused on targeted competencies, and each module was specifically designed based on their needs, the participants found its content relatable and meaningful.

Participants also reported that during conferences, teachers responded better when their feedback was based on concrete data and verifiable reports. This approach establishes fairness and increases the credibility of the leader. Possibly, the most insightful outcome of this study is the shift in interpersonal relationships of instructional leaders and observed teachers.

As mentioned, instructional supervision is commonly viewed negatively by teachers. Reframing pre- and post-observation conferences from pure evaluation into reflective

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and collaborative dialogues demonstrates empathy and psychological safety. Participants shared that this dynamic created “safe environments” and “reduced tension.” They also realized that it is not only beneficial for teachers but for them as well, making them confident in giving feedback and maintaining healthy relationships with teachers. This relational shift aligns with the democratic supervision model and trust-building frameworks [36][37].

As a result, an unexpected transformational leadership identity happened to some, if not all, participants of Project RESET. Hence, the researcher believes that strengthened competence is not just about the application of tools and frameworks and technical proficiency but, more importantly, the willingness to change character as an instructional leader. To create and sustain change observed in this study, professional development initiatives must intentionally address both competence and interpersonal attributes.

### *Integration of Quantitative and Qualitative Insights*

The integration of quantitative and qualitative findings revealed that Project RESET created change beyond the statistical gains in supervisory competence and classroom observation practices. This integration derived meta-inferences and insights vis-à-vis objectives. Then, these meta-inferences are arranged into sub-themes, informing the implications for policy, practice, and future research.

*Targeted Intervention and Practical Frameworks.* The alignment between diagnosed needs and intervention has a clear message for professional development design. When training begins with a precise gap analysis rather than a generic selection of topics, the results are both statistically strong and relatable to the practitioners doing the work. The selection of content, approach, and structure is crucial for a practical framework. With vast information at one click, cognitive overload and distraction are the most common challenges to learning nowadays. Hence, practical, straightforward, and relatable frameworks are most likely effective intervention designs.

*Shift from Subjective to Evidence-Based Supervisory Practices.* Once instructional leaders treat classroom observation as a data-gathering process rather than a judgment opportunity, the entire supervisory process changes tone and purpose. When they are trained in structured and intentional supervision, their credibility in the whole supervisory process is strengthened. The teacher trusts the leader and responds to feedback positively. Over time, this credibility improves the professional learning culture within the school.

*Relational Shift in Supervisory Dynamics.* When instructional leaders speak the same language of supervision and apply appropriate systems or procedures, the supervision experience becomes less about authority and more about collaborative problem-solving. Without proper

communication skills, leaders may be misunderstood because they cannot say what they really mean, and teachers may misinterpret instructions or feedback. The intervention emphasizes the significance of setting clear and realistic expectations to maintain both the quality and relational health between the instructional leaders and teachers.

*Standardization that Enables Differentiation.* The findings encourage the practice of structured processes and standardized tools. As prescribed, standardized tools must be utilized in supervisory processes. However, it must not limit creativity and innovations; instead, when the standardized elements of supervision are treated as tools for scaffolding, they are more likely to produce both reliable and adaptive supervision, a balance that policymakers often pursue.

*Leadership Identity Development.* A leader’s role is beyond competence; the leadership for learning model demonstrates leadership practice as shaped by the leader’s competence, character, and experience. Therefore, in a healthy supervisory environment, teachers experience supervision as supportive rather than counteractive. When knowledge, expertise, and competence are paired with interpersonal skills, values, and reflective actions, these, in turn, could influence teacher performance, willingness to take instructional risks, and ultimately the quality of classroom practice. Hence, in strengthening competence and practice, humane practice must complement technical competence.

These meta-inferences suggest that Project RESET not only resulted in quantitative gains but also provided leaders with both the technical tools and the relational skills. The next action-research cycle will test whether these gains are sustainable over time and whether the toolkit, suitably adapted, can produce comparable shifts in other learning areas and divisions.

## V. CONCLUSION

Project RESET strengthened the supervisory competence of instructional leaders. Specifically, the instructional leaders’ baseline supervisory level of competence before an intervention is “competent,” exhibiting a professional gap since the PPST requires them to be highly competent. After the diagnosis and reconnaissance, problems and gaps were identified. Project RESET, a structured, targeted, and need-focused training program, directly responding to the identified gaps in instructional supervision, was designed, validated, and implemented. After Project RESET, the quantitative and qualitative data revealed that the instructional leaders’ supervisory level of competence shifted from “competent” to “highly competent.” The test of difference using descriptive and inferential statistics revealed that there is a significant difference in the competence and practice of instructional leaders before and after Project RESET, bridging the theory-to-practice gap.

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The participants' reflections and feedback highlighted improved supervisory approaches, including structured practices, clarity in the utilization of tools, and more relational/emphatic supervision.

Based on the findings and conclusions of this study, the following are recommended to sustain gains: the division may adopt similar interventions or embed Project RESET in the professional development programs in the division. A face-to-face or blended session modality may also be considered to increase real-time guidance and feedback-giving. While a standardized observation protocol is in place, strategies may be explored, such as allowing contextual adaptation responsive to teachers' needs and profiles and institutionalizing need-based, actionable frameworks using simplified tools and focusing on the identified needs rather than generic training; strengthening the human aspect of supervision by balancing the technical nature of supervision with relationship-building, interpersonal, and communication skills to lessen the hierarchical stigma and promote a psychologically safe environment; and future research may explore the sustainability of gains through longitudinal study to correlate the competence and practice of instructional leaders and/or improved supervisory competence with student learning outcomes, refine and test the toolkit in other divisions or learning areas to determine applicability to various school contexts, and investigate non-targeted variables for a more comprehensive understanding of how supervisory competence and practice shape schools with different contexts.

### VI. DISCLOSURE

The authors declare no financial or material interests related to the research in this paper that could create a conflict of interest.

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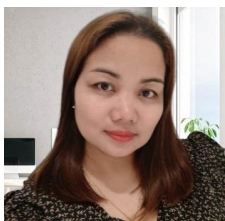
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