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Strengthening Math Instructions Through Supervisory Support of School Head in Implementing Collaborative Learning Strategies and Academic Performance of Key Stage 2 Learners

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Abstract — This study evaluates the extent of supervisory support of school head in implementing collaborative learning strategies to strengthen Math instructions and academic performance of key stage 2 learners. A descriptive-correlational research design utilizing a survey adapted and modified from the study of Alkrdem & Mofareh (2015) in assessing school heads' supervisory support provided to the teachers in the implementation of collaborative learning strategies such as resource provider, instructional specialist, curriculum specialist, learning facilitator, and school leader. Further, to measure the extent of implementation of collaborative learning strategies, the researcher utilized the instruments used by Vijayalakshmi & Kanchana (2019) in their study, "Evaluating the effectiveness of the collaborative learning in fashion studies". Finally to measure the academic performance of key stage 2 learners, the researcher gathered the quarter 4 average grade of key stage 2 learners. The study revealed no significant relationship between the extent of supervisory support of school head and implementation of collaborative learning strategies in teaching Math. This finding suggests that school heads' supervisory support—such as feedback, monitoring, coaching, and resource provision—may not be influencing how teachers implement collaborative learning strategies in Math. Meaning, teachers' use of collaborative methods (e.g., group work, peer learning, math discussions) might be influenced more by personal beliefs, teaching style, training, curriculum demands, or available time and resources, rather than direct supervision from the school head. On the other hand, a weak but significant relationship revealed between the extent of implementation of collaborative learning strategies and academic performance of key stage 2 learners in Math. This means that while collaborative learning does have a positive influence on learners' Math performance, the strength of that influence is relatively small. This could indicate that collaborative strategies alone are not enough to drive substantial gains in Math performance for Key Stage 2 learners, or that implementation quality, learner readiness, and subject complexity may be affecting results.

Keywords — Strengthening Math Instructions, Supervisory Support, School Head, Implementing Collaborative Learning Strategies, Academic Performance, Key Stage 2 Learners

I. Introduction

The constant challenge of enhancing mathematics performance among learners continues to be a critical issue in elementary education. Based on the result of Mathematics assessment in every school, data revealed that most of the learners continue to underachieve owing to a range of instructional, motivational, and contextual reasons (OECD, 2023). Though the Department of Education increasingly promoting leaner-centered pedagogies like collaborative learning, which promotes greater understanding through peer interaction, group problem-solving, and collective accountability (Gillies, 2016). In line with the MATATAG agenda of the former secretary of Department of Education that learners must be provided with alternative learning intervention to address the problems on literacy and numeracy among Filipino learners. With the implementation of the Enhanced K to 10 Curriculum of the Department of Education, collaborative teaching and learning has been one of the interventions that teachers implement.

In recent years, there has been a rise in popularity for collaborative learning as a mode of academic instruction. The process of having more than one instructor work collaboratively on the preparation, delivery, and evaluation of lessons is referred to as "collaborative teaching," and the phrase is used to define this approach. The effectiveness of collaborative teaching approaches in terms of improving teachers' competence and learners' academic performance is the primary emphasis of this research.

The importance of the quality in mathematics education and re-orienting mathematics instruction in the class are the issues that need to be addressed (Bonner et al., 2020). Various efforts to improve the quality of mathematic instruction have been conducted through many different approaches, strategies, and methods in the implementation of education (Aravena & Gonzales, 2021); however, the essential matter which was very crucial and had not yet been considered is the academic supervision management on mathematics teachers.

Collaboration in the classroom is becoming increasingly common as teachers become more aware of the ways in which it can enhance their students' educational experiences. Teachers that work in an environment that encourages collaboration share their knowledge and experiences with one another, which results in students having access to a learning environment that is both more robust and diverse. This strategy also helps to make the classroom a more welcome place for children with a variety of skills and experiences to collaborate, grow, and value one another as they interact with one another. Although there are many benefits associated with collaborative learning, its implementation might be challenging at times. Limitations on time, ineffective communication and coordination, opposition to change, and an inability to evaluate the effectiveness of collaborative instructional strategies are just a few of the challenges that must be overcome.

Collaborative learning is a teaching method that is carried out by more than two learners, the resources are shared in certain times, different abilities and skills of the learners are required during the activities completion in order to achieve certain goals or learning objectives through

interactions, exchanges of experiences or changes of roles within the group in which all of these will impacted the achievement of the learners (Chu et al., 2017; Foldnes, 2016; Goodrich, 2018; Hwang & Chen, 2019; Li et al., 2023; Lim et al., 2023; Moreno-Guerrero et al., 2020). Shimazoe and Aldrich (2010) provides several benefits on the use of collaborative learning method for students. First, collaborative learning promotes deep learning of materials. Second, students achieve better grades in collaborative learning compared to competitive or individual learning. Third, students learn social skills and civic values. Fourth, students learn higher-order, critical thinking skills. Fifth, cooperative learning promotes personal growth. Finally, students develop positive attitudes toward autonomous learning. It is based in the idea that students learn best by interacting with each other and sharing their knowledge and ideas (Hsu & Shiue, 2018; Shi et al., 2020). As, a result, group members who work in collaborative groups outperform students who work by themselves or in a competition with each other (as seen in competitive conventional classrooms) (Chen et al., 2018; Jeong et al., 2019; Johnson & Johnson, 2019; Law et al., 2017; Maharani et al., 2020; Sun et al., 2021).

School heads are responsible in ensuring that collaborative learning strategies are not just implemented but also maintained and refined with time. Bush (2020) asserts that instructional leadership is the single most significant factor in determining teaching and learning achievements. When school leaders provide consistent supervisory support—through coaching, mentoring, capacity building, and monitoring—they empower teachers to refine their instructional approaches and adopt innovative methods like collaborative learning (Zepeda, 2017).

Recent findings emphasize that supervisory support enhances teacher confidence, facilitates professional collaboration, and promotes reflective teaching practices—all essential for improving mathematics instruction (Arong & Ogbadu, 2022). Furthermore, the Department of Education's Learning Recovery and Continuity Plan (DepEd, 2022) underscores the need for strategic instructional leadership to bridge learning gaps in key subject areas, particularly mathematics. Hence, it is in this premise that the researcher decided to conduct this study to evaluate the supervisory support of school head in implementing collaborative learning strategies that strengthen Math instructions of teachers and academic performance of key stage 2 learners. A proposed instructional supervision plan will be formulated based on the findings of the study.

This study evaluates the extent of supervisory support of school head in implementing collaborative learning strategies to strengthen Math instructions and academic performance of key stage 2 learners of Doos Elementary School, Hindang District, Leyte Division. The findings of the study will be the basis for the proposed improvement plan.

Further, it seeks to answer the following sub-problems:

1. What is the extent of supervisory support of school head provided to teachers in strengthening Math instructions?

2. What is the level of implementation of collaborative learning strategies in teaching Math?
3. What is the academic performance of key stage 2 learners in Math?
4. Is there a significant relationship between the extent of supervisory support of school head and implementation of collaborative learning strategies in teaching Math?
5. Is there a significant relationship between the extent of implementation of collaborative learning strategies and academic performance of key stage 2 learners in Math?
6. What intervention plan can be proposed based on the findings of this study?

II. Methodology

Design. This study employs a descriptive-correlational research design to evaluates the extent of supervisory support in implementing collaborative learning strategies to strengthen Math instructions of teachers. This study is descriptive because it describes the variables- extent of supervisory support of school heads, extent of implementing collaborative learning strategies in teaching Math and performance of teachers through instructional supervision utilizing the Classroom Observation Tool (COT). Further, this is also correlational because it finds the relationship between the dependent and independent variables. The locale of this study is Doos Elementary School, one of the schools of Hindang District, Schools Division of Leyte. It is a monograde elementary school in the municipality of Hindang which was established in 1936. The school is located at Barangay Doos del Norte in the northern part of the municipality. It is three (3) kilometers from the town proper and is accessible to any means of transportation. The school is categorized as medium, in terms of its size and population, and managed by a School Head. It is composed of eight (8) Teacher III and a (1) (Master Teacher I). The school is equipped with an internet connection, and we typically use the principal's office for teacher meetings. There is also a designated playground area and an oval plaza where various school programs and activities take place. All classrooms are well-organized and maintained by the teachers. Garbage bins are strategically placed throughout the school to encourage students to maintain a clean and tidy environment.

Sampling. The respondents of this study are nine (9) teachers, one (1) school head and 100 selected learners enrolled in the identified locale. Complete enumeration in choosing the respondents of the study will be employed.

Research Procedure. After the research was approved, data gathering followed. Letter requests to conduct the study were submitted to the proper authorities for approval. First, a letter request was submitted to the Schools Division Superintendent for approval to proceed with data gathering among the identified respondents. After the approval of the SDS, permission letters were also submitted to the Public Schools District Supervisor and the School Principal of the school.

After approval, the researcher proceeded with data gathering. The researcher conducted an orientation for the respondents. During the orientation, the respondents were informed about the study's goals and their right to confidentiality. Anonymized data were used solely for research, minimizing any burden on participants. Data were stored securely and were accessible only to the research team, reinforcing confidentiality. Participation was purely voluntary, with the freedom to withdraw at any time. The presentation of findings maintained strict transparency, highlighting participants' views without bias or alterations. Furthermore, a permit from the respondents was obtained, which stipulated their consent to be included in the study. After the orientation, survey questionnaires were distributed to the respondents. The respondents were given ample time to complete the survey. After accomplishing the survey, the questionnaires were collected, tallied, and submitted for statistical treatment.

Ethical Issues. The researcher obtained the necessary written permission from the authorities to conduct the study. While developing and checking the survey used in the study, the use of offending, discriminatory, or other undesirable terminology was eschewed. The names of the respondents and other personal information were not included in this study to ensure confidentiality. The respondents were also voluntarily participating. Orientation was done for the respondents. During orientation, concerns and issues were clarified, and consent to be part of the study was signed. The researcher-maintained objectivity in discussing and analyzing the results. All authors whose works were cited in this study were correctly quoted and were acknowledged in the reference.

Treatment of Data. The quantitative responses were tallied and tabulated. The data were treated statistically using the following tools: The Simple Percentage and Weighted Mean were employed to evaluate the extent of supervisory support of school heads, the extent of implementing collaborative learning strategies in teaching Math, and the performance of teachers through instructional supervision utilizing the Classroom Observation Tool (COT). Pearson r was used to determine the significant relationship between the dependent and independent variables.

III. Results and Discussion

Table 1
Extent of Supervisory Support of School Heads

	Resource Provider	Weighted Mean	Interpretation
1	demonstrates effective use of time and resources.	5.00	Always
2	plan, organizes, schedule, and prioritize work to be done.	5.00	Always
3	delegates work as appropriate.	4.67	Always
4	assigns staff members according to their strengths.	4.67	Always
5	establishes ongoing process for planning and making necessary changes within the school.	5.00	Always
6	creates a positive climate and nurture creative approaches to change.	5.00	Always
7	demonstrates the ability to motivate teachers.	4.67	Always

8	knows the teachers' strengths about instructional resources that may be helpful to them.	5.00	Always
	Mean	**4.88**	**Always**
	B. Instructional Specialist		
1	demonstrates the ability to evaluate and reinforce appropriate and effective instructional strategies.	5.00	Always
2	uses knowledge and skill in effective instructional strategies.	5.00	Always
3	supervises the teachers using strategies that focus on the improvement of instruction	5.00	Always
4	provides teachers with evidence of continuity between clinical supervision observations.	4.67	Always
5	develops intervention procedures designed to identify strengths and remediate weaknesses.	5.00	Always
6	conducts conferences effectively with teachers regarding performance	5.00	Always
7	knows the importance of student learning objectives to the implementation of the instructional	5.00	Always
8	communicates to staff and community the extent to which learning objectives for the school have been mastered	5.00	Always
	Mean	**4.96**	**Always**
	C. Curriculum Specialist		
1	focuses on knowledge, skills and ability towards curriculum improvement and staff development	5.00	Always
2	displays mastery in the discussion of curriculum planning and implementation.	4.33	Often
3	guides teacher in delivering accurate and updated content knowledge using appropriate methodologies, approaches, and strategies.	5.00	Always
4	helps teacher to select, prepare, and utilize available technology and other instructional materials appropriate to the learners and the learning objectives.	5.00	Always
5	assists the teacher to align the lesson objectives, teaching methods, learning activities and instructional materials or resources appropriate to the learners.	4.67	Always
6	develops and organize in-service training programs for teachers and provide continuous and effective professional development.	5.00	Always
7	develops and use a variety of appropriate curriculum assessment strategies to monitor and evaluate teaching and learning.	5.00	Always
8	creates and utilizes appropriate instructional planning and implementation.	5.00	Always
	Mean	**4.88**	**Always**
	D. Learning Facilitator		
1	monitors teachers to determine instruction that include elements of effective instruction.	5.00	Always
2	engages teachers in mutual inquiry which aims for the improvement of instruction.	5.00	Always
3	shares the responsibility of the instructional supervision and teaching improvement.	4.67	Always
4	intensifies the conduct of instructional supervision to include all school aspects.	5.00	Always
5	provides teachers with an adequate amount of information to become familiar with the supervisory process.	4.67	Always
6	makes efforts to reduce teachers' level of anxieties concerning the supervisory practices.	5.00	Always
7	ensures that all teachers in the school receive supervisory feedback.	5.00	Always
8	helps teachers to identify appropriate teaching and learning processes.	4.67	Always

	Mean	**4.88**	**Always**
	E. School Leader		
1	places priority on curriculum and instruction issues.	5.00	Always
2	creates a climate of high expectations characterized by a tone of respect for teachers, students, parents, and community.	5.00	Always
3	functions as a leader with direct involvement in instructional policy by communicating the school policies.	5.00	Always
4	demonstrates commitment to academic goals, ability to develop and articulate a clear vision of long-term goals for the school.	4.67	Always
5	monitors student progress toward school achievement and teacher effectiveness in achieving goals.	5.00	Always
6	consults with others by involving the faculty and other groups in school decision processes.	5.00	Always
7	mobilizes resources such as materials, time, and support to enable the school and its personnel to meet academic goals.	5.00	Always
8	works cooperatively with the staff and the community to develop clear goals that relate to the organization's mission.	5.00	Always
	Mean	**4.96**	**Always**
	Grand Mean	**4.91**	**OFTEN**

Legend: 4.21- 5.00 – Always
3.41- 4.20 – Often
2.61-3.40 - Sometimes
1.81- 2.60- Rarely
1.00-1.80- Never

The data gathered on the instructional supervision roles of school leaders showed consistently high ratings across all dimensions, with a grand mean of 4.91, interpreted as Always, based on the weighted mean scale. The Resource Provider role obtained a mean of 4.88 (Always), indicating that school leaders consistently demonstrated effective resource management, particularly in motivating teachers and fostering a positive climate. The Instructional Specialist role recorded the highest mean of 4.96 (Always), reflecting the strong application of effective instructional strategies and performance monitoring. The Curriculum Specialist and Learning Facilitator roles both obtained a mean of 4.88 (Always), highlighting consistent efforts in curriculum improvement, staff development, and providing instructional support. Similarly, the School Leader role received a mean of 4.96 (Always), affirming that school leaders actively prioritized curriculum, instruction, and collaborative goal-setting. These results imply that school leaders performed their instructional supervision roles to a very high degree, which is likely to contribute positively to teaching quality and student performance.

Table 2

Extent of Teachers' Practices in Addressing Literacy Challenges

	A. Planning and Implementation of Reading Instruction	**Weighted Mean**	**Interpretation**
1	If I use cooperative learning, the students tend to veer off task	3.5	Agree
2	I understand cooperative learning well enough to implement it successfully	4.5	Strongly Agree
3	The costs involved in implementing cooperative learning are great.	4.5	Strongly Agree
4	Competition best prepares students for the real world.	5.00	Strongly Agree
5	The amount of cooperative learning training I have received has prepared me to implement it successfully	4.5	Strongly Agree
6	Cooperative learning holds bright students back.	2.5	Disagree
7	There are too many demands for change in education today.	2.5	Disagree
8	Cooperative learning is consistent with my teaching philosophy	4.5	Strongly Agree
9	My students presently lack the skills necessary for effective cooperative group work	4.5	Strongly Agree
10	For me to succeed in using cooperative learning depends on receiving support from my colleagues	4.5	Strongly Agree
11	Using cooperative learning is likely to create too many disciplinary problems among my students	**3.5**	Agree
12	Using cooperative learning enhances my career advancement	4.5	Strongly Agree
13	For me to succeed in using cooperative learning requires support from the school administration.	4.5	Strongly Agree
14	Cooperative learning contradicts parental goals	3.5	Agree
15	Cooperative learning is a valuable instructional approach.	4.5	Strongly Agree
16	Peer interaction helps students obtain a deeper understanding of the material.	4.5	Strongly Agree
17	My training in cooperative learning has not been practical enough for me to implement it successfully	2.5	Disagree
18	Cooperative learning is appropriate for the grade level I teach.	4.5	Strongly Agree
19	If I use cooperative learning, too many students expect other group members to do the work.	4.5	Strongly Agree
20	It is impossible to implement cooperative learning without specialized materials.	4.5	Strongly Agree
21	I feel pressured by the administration to use cooperative learning.	2.5	Disagree
22	Cooperative learning places too much emphasis on developing students' social skills.	5.00	Strongly Agree
23	I believe I can implement cooperative learning successfully.	4.5	Strongly Agree
24	I have too little teaching experience to implement cooperative learning successfully.	2.5	Disagree
25	Engaging in cooperative learning enhances students' social skills	5.00	Strongly Agree
26	It is impossible to evaluate students fairly when using cooperative learning.	3.5	Agree
27	There is too little time available to prepare students to work effectively in groups.	3.5	Agree
28	There are too many students in my class to implement cooperative learning effectively	3.00	Disagree
29	Using cooperative learning promotes friendship among students.	4.5	Strongly Agree
30	My students are resistant to working in cooperative groups.	3.5	Agree
32	. Engaging in cooperative learning interferes with students' academic progress.	4.5	Strongly Agree
33	Implementing cooperative learning requires a great deal of effort.	1.5	Strongly Disagree

34	Cooperative learning is inappropriate for the subject I teach	4.5	Strongly Agree
35	Cooperative learning enhances the learning of low-ability students.	1.5	Strongly Disagree
36	I feel pressured by other teachers to use cooperative learning.	4.5	Strongly Agree
37	Cooperative learning is an efficient classroom strategy.	3.00	Agree
38	Cooperative learning helps meet my school's goals.	3.00	Agree
39	Implementing cooperative learning takes too much class time.	3.00	Agree
40	Using cooperative learning fosters positive student attitudes towards learning.	1.5	Strongly Disagree
41	I find that cooperative learning is too difficult to implement successfully.	1.00	Strongly Disagree
42	Cooperative learning would not work with my students.	1.00	Strongly Disagree
43	I prefer using familiar teaching methods over trying new approaches	1.00	Strongly Disagree
44	If I use cooperative learning, my classroom is too noisy.	4.5	Strongly Agree
45	I believe I am a very effective teacher.	1.00	Strongly Disagree
46	I feel a personal commitment to using cooperative learning.	4.00	Agree
47	Cooperative learning gives too much responsibility to the students.	2.5	Disagree
48	The physical set-up of my classroom is an obstacle to using cooperative learning.	2.00	Disagree
	Mean		**Strongly Agree**
	Grand Mean	**3.46**	**AGREE**

Legend: 4.21- 5.00 – Strongly Agree
3.41- 4.20 – Agree
2.61-3.40 - Undecided
1.81- 2.60- Disagree
1.00-1.80- Strongly Disagree

The data gathered on the planning and implementation of reading instruction, specifically regarding the use of cooperative learning, revealed an overall Grand Mean of 3.46, interpreted as Agree based on the weighted mean scale. This indicates that teachers generally hold a positive attitude towards cooperative learning and acknowledge its relevance in their instructional practices. Notably, several indicators such as the belief that cooperative learning enhances students' social skills, promotes friendship, and is consistent with teaching philosophy received high ratings, reflecting strong agreement with its benefits. However, concerns were also evident regarding classroom management, student resistance, and practical challenges such as large class sizes, lack of materials, and time constraints, which contributed to lower ratings on specific items. The mixed responses imply that while teachers recognize the value of cooperative learning in enhancing student engagement and learning, successful implementation requires adequate training, administrative support, manageable class conditions, and continuous capacity building to address perceived obstacles and maximize its effectiveness in reading instruction.

Table 3
Academic Performance of Learners

No.	Interpretation	Scale	Frequency	Percentage
5	Outstanding	90-100	35	35
4	Very Satisfactory	85-89	50	50
3	Satisfactory	80-84	15	15
2	Fairly Satisfactory	75-79	0	0
1	Did Not Meet Expectations	Below 75	0	0
	Total		100	100
	Average		88.02	Very Satisfactory

The data on teacher performance revealed an overall average rating of 88.02, which falls under the Very Satisfactory category based on the given interpretation scale. The majority of teachers, or 50%, achieved a Very Satisfactory rating, indicating that most consistently meet the expected standards of performance. Meanwhile, 35% of teachers were rated as Outstanding, reflecting excellent performance that exceeds expectations. The remaining 15% received a Satisfactory rating, suggesting that while minimum standards were met, there is room for improvement. Notably, no teachers fell under the Fairly Satisfactory or Did Not Meet Expectations categories, which reflects positively on the overall competence of the teaching staff. These results imply that while the general performance is commendable, targeted efforts to further support and develop teachers could help increase the proportion of Outstanding ratings, ultimately enhancing the overall quality of instruction.

Table 4
Test Of Relationship

Variables Correlated	r	Computed value or t	Table Value @.05	Decision on Ho	Interpretation
Extent of Supervisory Support and Implementation of Learning Strategies	0.00	1.671	2.556	Accept Ho	No Significant Relationship
Implementation of Learning Strategies vs Academic Performance of Learners	0.32	2.513	2.442	Reject Ho	Significant Relationship (Weak)

The results of the correlation analysis revealed that the extent of supervisory support and the implementation of learning strategies yielded an r-value of 0.00 and a computed t-value of 1.671, which is lower than the table value of 2.556 at a 0.05 level of significance. This led to the acceptance of the null hypothesis (Ho), indicating no significant relationship between supervisory support and the implementation of learning strategies. On the other hand, the relationship between the implementation of learning strategies and the academic performance of learners resulted in an r-value of 0.32 and a computed t-value of 2.513, which exceeds the table value of 2.442, leading to the rejection of the null hypothesis (Ho). This suggests a significant but weak relationship between the implementation of learning strategies and learners' academic performance. These

findings imply that while supervisory support does not appear to have a direct influence on how learning strategies are implemented, the way these strategies are carried out plays a meaningful, albeit weak, role in shaping learners' academic outcomes.

IV. Conclusion

The findings of the study underscore the important link between the implementation of learning strategies and the academic performance of learners. While supervisory support did not exhibit a direct significant relationship with the application of learning strategies, the data revealed that the effective implementation of these strategies plays a key role in improving learners' academic outcomes, albeit to a modest extent. The high ratings across the various dimensions of instructional supervision—such as resource provision, instructional guidance, curriculum support, and leadership—further reflect the strong commitment of school leaders to fostering a positive teaching and learning environment. Teachers likewise demonstrated a generally favorable perception of cooperative learning as an instructional approach, though practical challenges such as classroom management, student readiness, and resource limitations were noted. These findings imply that while instructional supervision and cooperative learning are being actively promoted, ensuring their success requires not only consistent administrative and peer support but also targeted efforts to build teacher capacity, address implementation barriers, and equip students with the necessary skills for active engagement. Ultimately, a holistic approach that combines effective leadership, continuous teacher development, and responsive instructional practices is vital to enhancing student performance and fostering meaningful learning experiences.

V. Recommendations

1. Apply the recommended instructional supervision plan to attain the research goal.

2. School heads should realign their supervisory support to be more instruction-focused, specifically targeting how collaborative learning strategies can be effectively applied in teaching Math. This can include classroom observations, modeling collaborative techniques, co-planning sessions, and post-conference feedback that centers on student-centered, interactive instruction.

3. Teachers should be provided with targeted professional development on designing and managing collaborative learning activities in Math, ensuring that they not only use the strategy but apply it effectively with the right structure, scaffolding, and formative assessments.

4. Since collaborative strategies have a positive but weak impact, focus should be on improving the quality of implementation. Emphasize conceptual understanding, problem-solving, and peer-to-peer discussion, especially in mathematically challenging tasks that promote higher-order thinking.

5. Include specific indicators for collaborative teaching practices in supervision tools and classroom observation checklists. This ensures that instructional leaders can give more relevant and specific feedback to improve teachers' collaborative teaching practices in Math.

6. Given the weak effect size, it is recommended that collaborative learning be complemented by other evidence-based strategies such as explicit instruction, guided practice, math games, differentiated tasks, and formative assessment techniques, to enhance learning outcomes.

7. Form Math-focused learning action cells (LACs) or communities of practice where teachers can share strategies, analyze student work, and co-develop collaborative activities suited to Math content and learner needs, and

8. Future researchers are encouraged to replicate this study to incorporate other locales and other variables beyond the ones identified in this study.

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AUTHOR'S PROFILE

MS. FATIMA B. BERDOS

Fatima B. Berdos, born on September 9, 1993, in Brgy San Vicente, Hindang, Leyte, is a dedicated educator known for her commitment to nurturing continuous learning and empowerment among her students. Her journey in education began at Doos Elementary School, followed by her secondary education at Bontoc National High School. Throughout her academic journey, Fatima's determination to succeed was unwavering. Supported by her parents, who funded her education from early years through to college, she was able to pursue her studies with commitment and dedication. Her strong resolve to complete her education, despite challenges, shaped her path and molded her character. The experiences she gained through her academic pursuits and the support of her family enriched her growth, fostering resilience and perseverance along the way. Fatima continued her academic journey at Saint Michael College, Inc., where she earned her Bachelor of Elementary Education, major in General Education, in 2013. That same year, she passed the Licensure Examination for Teachers (LET), marking the official start of her teaching career. Fatima has consistently pursued professional growth with a strong commitment to lifelong learning. Her passion for advancing her education led her to enroll in the Master of Arts in Education (MAEd) program, majoring in School Administration and Supervision. With dedication and perseverance, she successfully completed the academic requirements for her MAEd in July 2025. This achievement is a reflection of her diverse experiences and the invaluable support she received from various individuals and groups throughout her academic journey. Fatima is currently an esteemed Grade 5 teacher at Doos Elementary School, Hindang, Leyte. Her unwavering dedication to education and active involvement in the community continue to inspire both her students and peers, underscoring her commitment to making a meaningful impact in the educational field.