

Original Article

Collective Innovativeness and Quality Teaching Standards Performance of Public Elementary School Teachers

Jaycel Kinatagcan ¹, Josephine Baguio ^{1,*}

Received: 03 May 2026; Revised: 29 May 2026;

Accepted: 03 June 2026; Published: 06 June 2026

DOI: <https://doi.org/10.66074/Y1Q9Z4M8>

Abstract

This study examined the relationship between teachers' collective innovativeness and quality teaching standards performance among public elementary school teachers in Mati Central District, Division of the City of Mati. A quantitative descriptive-correlational design was used with 125 full-time classroom teachers selected from a population of 210 through simple random sampling. Data were collected through adapted standardized survey questionnaires that measured collective innovativeness in curriculum, learning methods/approaches, and subject matter scope, and quality teaching standards performance in teaching planning, lesson implementation, and learning assessment. The instruments were reviewed by experts and pilot tested, with reliability coefficients of 0.930 for collective innovativeness and 0.966 for quality teaching standards performance. Data were analyzed through mean, standard deviation, Pearson product-moment correlation, and multiple regression. Results showed that collective innovativeness was very high overall ($M = 4.23$, $SD = 0.61$), with subject matter scope obtaining the highest domain mean ($M = 4.26$, $SD = 0.60$). Quality teaching standards performance was also very high overall ($M = 4.39$, $SD = 0.57$), with learning assessment obtaining the highest domain mean ($M = 4.45$, $SD = 0.52$). Collective innovativeness had a high positive relationship with quality teaching standards performance ($r = 0.78$, $R^2 = 0.61$, $p\text{-value} = 0.000$). Regression analysis further showed that curriculum, learning methods/approaches, and subject matter scope significantly influenced quality teaching standards performance, with curriculum as the

¹ Graduate School,
Rizal Memorial
Colleges, Inc., Davao,
Philippines
* josephinebbaguio@
outlook.com

strongest predictor ($B = 0.48$, $\beta = 0.42$). The findings show that shared teacher innovation is an important professional condition linked to stronger standards-based teaching performance.

Keywords: collective innovativeness, elementary teachers, innovation, teaching performance, teaching standards

1. Introduction

Quality teaching remains central to basic education because it connects curriculum standards, classroom practice, assessment, and learner development. In public elementary schools, teaching quality is not limited to lesson delivery. It includes coherent planning, clear learning outcomes, responsive pedagogy, inclusive classroom practice, fair assessment, and the ethical use of evidence to improve instruction. The Philippine Professional Standards for Teachers provides a national reference point for these expectations, as it defines what teachers should know, value, and demonstrate at different career stages. Within this standards-based environment, teachers are expected to translate policy into classroom decisions that improve learning for diverse children.

Recent curriculum reform has added urgency to the need for teachers to work as adaptive professionals rather than as isolated implementers. The MATATAG Curriculum requires schools to reconsider content priorities, learning competencies, instructional pacing, and assessment practices. This type of reform places pressure on teachers to interpret new directions, compare them with existing classroom realities, and create workable responses for learners. The OECD has also emphasized that strong education systems depend on teachers who collaborate, exercise professional judgment, and contribute to productive school environments. These conditions make teacher collaboration and innovation highly relevant to the quality of classroom practice.

Collective innovativeness refers to the shared capacity of teachers to notice, discuss, test, adapt, and apply new ideas in their professional work. It is different from individual creativity because the innovation is created, examined, and strengthened through collegial exchange. Buyukgoze et al. (2024) linked collective teacher innovativeness with professional collaboration and distributed leadership, showing that innovation is more likely to develop in schools where teachers have opportunities to work together. Parlar et al. (2020) similarly found that professional learning communities help shape climates that support school innovativeness. In the elementary school context, this shared innovation may appear in curriculum enrichment, the selection of learning approaches, and the expansion or localization of subject matter.

Curriculum is a major domain of collective innovativeness because curricular change requires more than technical compliance. Teachers must understand revisions,

determine their advantages and limits, and convert them into lessons that are coherent for children. When teachers collaborate on curriculum matters, they can clarify standards, identify practical barriers, develop shared resources, and ensure continuity across grade levels. Such collaboration is especially important during reform periods, when uncertainty may affect teaching consistency. Through professional dialogue, teachers can move from passive awareness of policy changes to active curriculum adaptation that supports learner-centered instruction.

Learning methods and approaches form a second domain of collective innovativeness. Elementary teachers face varied learner readiness, language backgrounds, interests, and home conditions, and they must select strategies that make lessons accessible and meaningful. Collaborative work allows teachers to evaluate which methods fit specific learning goals, such as inquiry-based tasks, differentiated instruction, peer collaboration, performance tasks, and the careful use of digital tools. Garcia-Martinez et al. (2021) showed that teacher collaboration is closely connected with school success because it helps educators share practices and solve instructional concerns. In this sense, innovation in learning methods becomes a shared professional response to classroom diversity.

Subject matter scope is a third domain because teachers often need to clarify the depth, breadth, sequence, and contextual relevance of content. A prescribed curriculum may identify essential competencies, but teachers determine how content will connect with local realities, prior knowledge, and real-life examples. Shared work on subject matter scope can help teachers extend content without losing alignment with standards. It can also support interdisciplinary links, cultural relevance, and better progression across lessons. Such work strengthens the fit between what is taught and what learners need to understand.

Quality teaching standards performance in this study is viewed through three domains: teaching planning, lesson implementation, and learning assessment. Al-Rsa'i et al. (2024) used these domains to evaluate teaching performance quality and showed that professional experience and training matter in the development of teaching performance. Planning reflects how teachers set outcomes, select strategies, structure learning, and prepare assessments. Lesson implementation reflects the ability to translate plans into engaging, organized, and responsive instruction. Learning assessment reflects the alignment, fairness, variety, feedback quality, and instructional use of assessment evidence.

The link between collective innovativeness and teaching standards performance is theoretically and practically plausible. Teachers who discuss curriculum change, test methods together, and refine subject matter coverage may also show stronger performance in planning, implementation, and assessment. Yu and Chao (2023) emphasized that professional learning communities can encourage collaborative teacher activities, while Sims et al. (2025) argued that effective professional development supports changes in teacher practice when it develops insight, goals, techniques, and practice. However, empirical evidence on the relationship between collective innovativeness and quality teaching standards performance remains limited

in local public elementary school contexts, especially in the Division of the City of Mati.

This study addressed this gap by examining collective innovativeness and quality teaching standards performance among public elementary school teachers in Mati Central District. Specifically, it determined the level of collective innovativeness in curriculum, learning methods/approaches, and subject matter scope; assessed the level of quality teaching standards performance in teaching planning, lesson implementation, and learning assessment; tested the relationship between the two variables; and identified which domains of collective innovativeness significantly influenced quality teaching standards performance. The study contributes local empirical evidence on how shared teacher innovation is associated with standards-based teaching practice in public elementary education.

2. Methodology

This study used a quantitative descriptive-correlational research design to examine the relationship between teachers' collective innovativeness and quality teaching standards performance. The design was appropriate because the study described the current levels of the two variables and tested the extent to which they were statistically associated without manipulating the school setting or assigning teachers to treatment conditions. The study was conducted in public elementary schools in Mati Central District, Division of the City of Mati, during school year 2025-2026. The respondents were 125 full-time public elementary school teachers drawn from a population of 210 teachers. The sample size was determined through the Slovin formula with a 0.05 margin of error, and the respondents were selected through simple random sampling so that each eligible teacher had an equal chance of inclusion.

Respondents were included when they were full-time classroom teachers assigned to public elementary schools in the district during the study period and had at least three consecutive years of teaching service. Teachers assigned mainly to administrative or non-instructional duties, such as principals and coordinators, were excluded. Teachers with less than three years of teaching experience and those on extended leave during data collection were also excluded. These criteria helped ensure that the responses reflected the perceptions and practices of teachers with sustained classroom exposure and direct responsibility for curriculum delivery, lesson implementation, and assessment.

Data were collected through an adapted standardized survey questionnaire composed of two major scales. The first scale measured teachers' collective innovativeness across curriculum, learning methods/approaches, and subject matter scope. The second scale measured quality teaching standards performance across teaching planning, lesson implementation, and learning assessment. Items were rated on a five-point Likert scale ranging from strongly disagree to strongly agree. The instrument was examined by three specialists for content relevance, clarity, and alignment with the study objectives. A pilot test was conducted with 30 teachers who

were not part of the final sample. Reliability analysis showed strong internal consistency, with a Cronbach alpha of 0.930 for the collective innovativeness scale and 0.966 for the quality teaching standards performance scale.

Before the survey was administered, permission was sought from the Graduate School, the Schools Division Superintendent, and the concerned school heads. The researcher coordinated with school administrators to schedule data collection in a manner that would not disrupt classes or official duties. Respondents received information about the purpose of the study, the voluntary nature of participation, the estimated time required, and the way their responses would be protected. Informed consent was secured before participation. No identifying information was reported in the analysis, and completed questionnaires were handled with confidentiality.

The study observed research ethics requirements through institutional ethics review and by applying safeguards for autonomy, privacy, and confidentiality. Participation was voluntary, and respondents were informed that they could refuse or withdraw without penalty. Data were used only for the purposes of the study and were stored securely. Results were reported in aggregate form, which protected individual teachers and schools from identification. These procedures helped maintain trust and reduce potential harm to respondents.

The data were coded, tabulated, and analyzed using descriptive and inferential statistics. Mean and standard deviation were used to describe the levels of collective innovativeness and quality teaching standards performance. Descriptive levels followed the scale interpretation used in the study, where higher mean scores reflected higher levels of agreement and stronger manifestation of the variable. Pearson product-moment correlation was used to test the relationship between collective innovativeness and quality teaching standards performance. Multiple regression analysis was used to identify which domains of collective innovativeness significantly influenced quality teaching standards performance. Statistical decisions were made at the 0.05 level of significance.

3. Results

Table 1 presents the summary of teachers' collective innovativeness. Subject matter scope obtained the highest mean ($M = 4.26$, $SD = 0.60$), followed by learning methods/approaches ($M = 4.22$, $SD = 0.62$) and curriculum ($M = 4.20$, $SD = 0.61$). The overall level of collective innovativeness was very high ($M = 4.23$, $SD = 0.61$).

Table 1. Summary of the level of teachers' collective innovativeness.

Domain	SD	Mean	Descriptive Level
Curriculum	0.61	4.20	Very High
Learning Methods/Approaches	0.62	4.22	Very High
Subject Matter Scope	0.60	4.26	Very High
Overall	0.61	4.23	Very High

Table 2 presents the summary of quality teaching standards performance. Learning assessment obtained the highest mean ($M = 4.45$, $SD = 0.52$), followed by lesson implementation ($M = 4.40$, $SD = 0.58$) and teaching planning ($M = 4.31$, $SD = 0.60$). The overall level of quality teaching standards performance was very high ($M = 4.39$, $SD = 0.57$).

Table 2. Summary of the level of quality teaching standards performance.

Domain	SD	Mean	Descriptive Level
Teaching Planning	0.60	4.31	Very High
Lesson Implementation	0.58	4.40	Very High
Learning Assessment	0.52	4.45	Very High
Overall	0.57	4.39	Very High

Table 3 presents the relationship between teachers’ collective innovativeness and quality teaching standards performance. The correlation coefficient was $r = 0.78$, with $R^2 = 0.61$ and $p\text{-value} = 0.000$. The null hypothesis was rejected.

Table 3. Correlation results.

Variables	r	p-value
Collective Innovativeness	0.78	0.000
Quality Teaching Standards Performance		

Table 4 presents the regression analysis of the domains of collective innovativeness as predictors of quality teaching standards performance. All three domains were significant predictors: curriculum ($B = 0.48$, $BE = 0.43$, $\beta = 0.42$, $t = 4.20$, $p\text{-value} = 0.000$), learning methods/approaches ($B = 0.44$, $BE = 0.40$, $\beta = 0.38$, $t = 3.89$, $p\text{-value} = 0.000$), and subject matter scope ($B = 0.39$, $BE = 0.37$, $\beta = 0.33$, $t = 3.21$, $p\text{-value} = 0.002$). The regression equation was $\text{Quality Teaching Standards Performance} = 1.41 + 0.48(\text{Curriculum}) + 0.44(\text{Learning Methods/Approaches}) + 0.39(\text{Subject Matter Scope})$. The model statistics were $R = 0.850$, $R^2 = 0.723$, adjusted $R^2 = 0.716$, standard error of estimate = 0.30346, $F(3, 121) = 81.630$, $p\text{-value} = 0.000$, regression sum of squares = 22.589, residual sum of squares = 11.164, and total sum of squares = 33.753.

Table 4. Regression results.

Predictor	B	SE	Beta	t	p-value
Constant	1.41	0.39		3.62	0.000
Curriculum	0.48	0.43	0.42	4.20	0.000
Learning Methods/Approaches	0.44	0.40	0.38	3.89	0.000
Subject Matter Scope	0.39	0.37	0.33	3.21	0.002

4. Discussion

The very high level of collective innovativeness indicates that teachers in the district reported active engagement with curriculum, learning methods/approaches, and subject matter scope. This pattern is consistent with the view of Buyukgoze et al. (2024) that collective teacher innovativeness develops in professional environments where teachers collaborate and leadership is shared across the school. The highest domain mean for subject matter scope suggests that teachers were particularly attentive to content depth, scope, and classroom application. This is important in a reform context because the Department of Education (2024) has set policy directions for the MATATAG Curriculum that require teachers to align practice with revised content expectations. When teachers examine content changes together, they are more likely to create coherence across lessons and avoid fragmented implementation.

The high score for learning methods/approaches also reflects a professional orientation toward instructional adaptation. Garcia-Martinez et al. (2021) argued that teacher collaboration supports school success because it provides a structure through which educators exchange practices and refine solutions. In the present study, teachers reported attention to new methods, study of their theoretical bases, selection of appropriate materials, and classroom application. These findings align with Parlar et al. (2020), who showed that professional learning communities can function as an intermediary condition for innovativeness in schools. The result also suggests that teachers may value innovation not as a single personal trait but as a shared process of discussion, selection, and trial.

Quality teaching standards performance was also very high, with learning assessment as the strongest domain. This result is meaningful because assessment is the part of teaching that connects evidence of learning with instructional decisions. Andrade and Brookhart (2020) emphasized that classroom assessment supports learning when teachers and students use evidence to regulate progress toward goals. The high mean for self-reflection, feedback, alignment, and assessment data use indicates that teachers reported assessment practices that go beyond scoring. It also aligns with Al-Rsa'i et al. (2024), whose teaching performance scale recognizes planning, implementation, and assessment as major domains of teaching quality.

The very high scores in lesson implementation and teaching planning show that teachers perceived themselves as capable of converting plans into organized and responsive classroom practice. Lesson implementation had a higher mean than planning, which may reflect the daily visibility of classroom interaction, class management, fairness, real-life connection, and learner participation. Engida et al. (2024) linked teaching quality with student achievement, which supports the educational relevance of strong implementation practices. At the same time, the relatively lower item in differentiation within lesson implementation suggests an area for more focused professional support, because diverse elementary classrooms require teachers to adjust tasks, pacing, materials, and assessment conditions.

The correlation result shows a high positive relationship between collective innovativeness and quality teaching standards performance. This finding supports the idea that shared teacher innovation is not separate from standards-based teaching; rather, it may serve as a professional pathway through which standards become more attainable in practice. Yu and Chao (2023) found that professional learning communities can encourage collaborative teacher activities, and the present result provides local evidence that such shared professional behavior is associated with stronger performance in teaching standards. The relationship also fits the OECD (2020) position that effective school environments rely on collaborative work, professional tasks, and teacher participation in decisions that affect teaching.

The regression results provide a more detailed interpretation of the relationship. Curriculum was the strongest predictor of quality teaching standards performance, followed by learning methods/approaches and subject matter scope. This result implies that teachers' shared attention to curriculum change may have the closest link with their capacity to plan lessons, implement instruction, and assess learning. The finding is reasonable because curriculum guides the selection of outcomes, content, teaching strategies, and assessment targets. The significant effect of learning methods/approaches also supports Sims et al. (2025), who argued that professional development affects practice when it develops concrete techniques and purposeful goals. Subject matter scope remained significant as well, which shows that content breadth and depth are also connected with standards-based performance.

These findings have practical implications for school leadership and teacher development. School heads can strengthen teaching performance by creating structures for collective curriculum review, lesson study, peer coaching, collaborative assessment design, and professional learning communities. Bellibas et al. (2021) emphasized that leadership can influence professional learning and instructional practice, which means school leaders should protect time for collaboration rather than treat it as an added task. The Department of Education (2017) also framed teacher standards as a guide for continuing professional development, so professional learning activities in the district can be aligned with the domains where teachers innovate and where standards performance can still improve.

The findings should be interpreted with appropriate caution. The descriptive-correlational design does not establish causality, and the survey relied on self-reported responses. Teachers may have rated their practices positively because of professional expectations or their own perceptions of classroom effectiveness. Despite these limitations, the study provides useful local evidence that collective innovativeness is strongly associated with quality teaching standards performance. Future studies may add classroom observations, learner outcome data, qualitative interviews, or longitudinal designs to determine how collaborative innovation translates into observable instructional improvement.

5. Conclusion

The study concludes that public elementary school teachers in Mati Central District demonstrated very high collective innovativeness and very high quality teaching standards performance. Collective innovativeness was strongest in subject matter scope, while quality teaching standards performance was strongest in learning assessment. These findings indicate that teachers reported strong shared engagement with content adaptation and strong performance in assessment-related classroom practices.

The study further concludes that collective innovativeness has a high positive relationship with quality teaching standards performance. The regression results showed that curriculum, learning methods/approaches, and subject matter scope significantly influenced teaching standards performance, with curriculum as the strongest predictor. Thus, when teachers collectively attend to curriculum changes, examine new instructional approaches, and refine subject matter scope, their standards-based teaching performance is likely to be stronger.

The findings point to the value of school-based systems that make teacher collaboration routine, purposeful, and connected to standards. Schools may strengthen quality teaching by institutionalizing collaborative curriculum review, peer-supported lesson planning, shared assessment development, and professional learning communities. Such efforts should be tied to the Philippine Professional Standards for Teachers and to current curriculum reform so that innovation remains aligned with teaching quality and learner needs.

Acknowledgment

Sincere appreciation is given to all peer reviewers for their valuable comments and suggestions, which helped the author to improve the quality of the manuscript.

Conflict of Interest Statement

The authors declare no conflict of interest.

References

- Al-Rsa'i, M., Waswas, D., Altawah, A., & Al-Rowad, F. (2024). Evaluating the quality of teaching performance among Jordanian teachers in light of certain demographic variables. *International Electronic Journal of Elementary Education, 16*(3), 295-309.
<https://doi.org/10.26822/iejee.2024.332>
- Andrade, H. L., & Brookhart, S. M. (2020). Classroom assessment as the co-regulation of learning. *Assessment in Education: Principles, Policy & Practice, 27*(4), 350-372.
<https://doi.org/10.1080/0969594X.2019.1571992>
-

- Bellibas, M. S., Kilinc, A. C., & Polatcan, M. (2021). The moderation role of transformational leadership in the effect of instructional leadership on teacher professional learning and instructional practice: An integrated leadership perspective. *Educational Administration Quarterly*, 57(5), 776-814. <https://doi.org/10.1177/0013161X211035079>
- Buyukgoze, H., Caliskan, O., & Gumus, S. (2024). Linking distributed leadership with collective teacher innovativeness: The mediating roles of job satisfaction and professional collaboration. *Educational Management Administration & Leadership*, 52(6), 1388-1409. <https://doi.org/10.1177/17411432221130879>
- Cui, R., & Teo, P. (2023). Thinking through talk: Using dialogue to develop students' critical thinking. *Teaching and Teacher Education*, 125, Article 104068. <https://doi.org/10.1016/j.tate.2023.104068>
- Department of Education. (2017). DepEd Order No. 42, s. 2017: National adoption and implementation of the Philippine Professional Standards for Teachers. <https://www.deped.gov.ph/2017/08/11/do-42-s-2017-national-adoption-and-implementation-of-the-philippine-professional-standards-for-teachers/>
- Department of Education. (2024). DepEd Order No. 010, s. 2024: Policy guidelines on the implementation of the MATATAG Curriculum. <https://www.deped.gov.ph/2024/07/23/july-23-2024-do-010-s-2024-policy-guidelines-on-the-implementation-of-the-matatag-curriculum/>
- Engida, M. A., Iyasu, A. S., & Fentie, Y. M. (2024). Impact of teaching quality on student achievement: Student evidence. *Frontiers in Education*, 9, Article 1367317. <https://doi.org/10.3389/educ.2024.1367317>
- Garcia-Martinez, I., Montenegro-Rueda, M., Molina-Fernandez, E., & Fernandez-Batanero, J. M. (2021). Mapping teacher collaboration for school success. *School Effectiveness and School Improvement*, 32(4), 631-649. <https://doi.org/10.1080/09243453.2021.1925700>
- OECD. (2020). TALIS 2018 results (Volume II): Teachers and school leaders as valued professionals. OECD Publishing. <https://doi.org/10.1787/19cf08df-en>
- Parlar, H., Polatcan, M., & Cansoy, R. (2020). The relationship between social capital and innovativeness climate in schools: The intermediary role of professional learning communities. *International Journal of Educational Management*, 34(2), 232-244. <https://doi.org/10.1108/IJEM-10-2018-0322>
- Sims, S., Fletcher-Wood, H., O'Mara-Eves, A., Cottingham, S., Stansfield, C., Goodrich, J., Van Herwegen, J., & Anders, J. (2025). Effective teacher professional development: New theory and a meta-analytic test. *Review of Educational Research*, 95(2), 213-254. <https://doi.org/10.3102/00346543231217480>
- Yu, T. K., & Chao, C. M. (2023). Encouraging teacher participation in professional learning communities: Exploring the facilitating or restricting factors that influence collaborative activities. *Education and Information Technologies*, 28(5), 5779-5804. <https://doi.org/10.1007/s10639-022-11376-y>

Author Contributions: Kinatagcan, J., Baguio, J.; Study design, method conception, data collection, data analysis and manuscript writing