

Original Article

Professional Expertise and Knowledge Sharing Behavior of Public Elementary School Teachers

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Received: 05 January 2026; Revised: 15 February 2026;
Accepted: 19 February 2026; Published: 22 February 2026

DOI: <https://doi.org/10.66074/JU09K187>

Abstract

This study examined the relationship between professional expertise and knowledge sharing behavior among public elementary school teachers in Mati Central District, Division of Mati City. Using a descriptive-correlational design, 198 teachers completed standardized questionnaires measuring professional expertise and knowledge sharing behavior. Descriptive statistics showed very extensive professional expertise and very extensive knowledge sharing behavior. Pearson correlation indicated a high, significant positive relationship between professional expertise and knowledge sharing behavior. Multiple linear regression further showed that all four domains significantly predicted knowledge sharing behavior, with the model explaining 51.8% of variance. Findings underscore the value of strengthening teachers' expertise to sustain collaborative knowledge exchange in public elementary schools. School leaders should institutionalize mentoring and learning communities systematically.

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Volume 2, Issue 2,
June 2026

Keywords: descriptive-correlational, knowledge sharing behavior, professional expertise, public elementary school, teachers

1. Introduction

Knowledge sharing among teachers is closely tied to instructional improvement, curriculum enrichment, and sustained student learning gains, yet many school contexts still experience weak knowledge exchange because of motivation issues, limiting organizational culture, and few structured collaboration opportunities.

When teachers treat knowledge as an individual asset, collaboration declines, professional growth slows, and schools lose practical insights that could otherwise upgrade classroom strategies and learning outcomes.

International accounts describe how barriers emerge when collaboration is not intentionally supported. In the United States of America, institutional conditions can produce isolated teaching practices rather than shared expertise (Hargreaves, 2021). In China, technology and platforms may exist but are not always leveraged to translate best practices into routine peer-to-peer learning (Li & Jin, 2022). These patterns suggest that knowledge sharing is not automatic; it is shaped by both capability and context.

Professional expertise can serve as a strong driver of knowledge exchange because highly competent teachers often become informal mentors and trusted sources of guidance, which naturally increases consultation, peer learning, and shared problem-solving (Palacio & Digo, 2024; Prenger et al., 2021). In contrast, teachers who feel less confident may avoid sharing due to fear of judgment, uncertainty about the value of their contributions, or a preference to focus on private improvement first (Moffett et al., 2022; Nguyen & Ng, 2022). This difference matters because expertise is not only a personal resource but also a potential school-wide catalyst for collective efficacy and continuous improvement.

In the Philippines, constraints such as heavy workload, uneven professional development access, and limited incentives for collaboration can weaken knowledge sharing behavior. Context-specific work notes how hierarchical structures and weak mentoring pathways may discourage open dialogue and peer coaching (Anero & Tamayo, 2023), while resource constraints and limited professional learning communities can further narrow sustained knowledge exchange (Tayag & Ayuyao, 2020). Without deliberate support, innovation diffusion becomes slow and schools struggle to scale effective practices (Aliazas et al., 2021).

At the same time, evidence indicates that culture and leadership support can strengthen sharing even when expertise levels vary. Trust, collaboration norms, and supportive environments are associated with stronger knowledge sharing cultures (Alshwayat et al., 2021), and structured support can enable educators to sustain communication and mentoring (van Lankveld et al., 2021). Professional expertise, therefore, may act both directly (through capability and confidence) and indirectly (through networks and influence) in shaping knowledge exchange.

This study focuses on Mati Central District, Division of Mati City, where the extent of knowledge sharing behavior and its relationship with professional expertise had remained underexamined. Specifically, it examines the extent of teachers' professional expertise and knowledge sharing behavior, tests their relationship, and identifies which domains of professional expertise significantly influence knowledge sharing behavior.

2. Methodology

The study employed a descriptive-correlational research design, suitable for describing current conditions and testing statistical relationships among variables without manipulating them. The primary variables were professional expertise (with four domains) and knowledge sharing behavior (with four domains). The design aligned with the goal of determining whether professional expertise is significantly associated with, and predictive of, knowledge sharing behavior among teachers.

The locale was Mati Central District, Division of Mati City, focusing on public elementary schools in that district. The respondents were 198 public elementary school teachers, selected to represent the teaching workforce in the district. The sample size supported stable estimates for descriptive statistics and inferential testing, particularly correlation and multiple regression analyses.

Two standardized instruments were used. The Professional Expertise questionnaire was adapted from Nguyen and Nguyen (2023) and covered four domains: knowledge and understanding, professional action skills, social relations skills, and self-development skills. The Knowledge Sharing Behavior questionnaire was adapted from Yu et al. (2022) and measured written contributions, organizational communications, personal interactions, and communities of practice. Both tools were structured to capture teachers' perceived practices in routine school settings.

Responses were gathered using a Likert-type scaling approach. Domain scores and overall scores were summarized using weighted means and standard deviations, and descriptive interpretations were applied consistent with the study's scaling guide (e.g., levels such as "Very Extensive"). This allowed the study to quantify the extent to which the target behaviors and competencies were observed among respondents.

Instrument quality was supported through reliability checking. The adapted questionnaires underwent reliability testing, yielding very high internal consistency values, indicating that the items consistently measured their intended constructs.

For data gathering, administrative permission was secured through formal communication with relevant education authorities and school heads. Questionnaires were distributed to teacher-respondents following approved procedures, with clear instructions, voluntary participation expectations, and safeguards for confidentiality. Completed instruments were retrieved, checked for completeness, and encoded for analysis.

For data analysis, the study used descriptive statistics (mean, standard deviation) to summarize each domain and overall variable levels. Pearson product-moment correlation tested the relationship between professional expertise and knowledge sharing behavior. Multiple linear regression then identified which professional expertise domains significantly predicted knowledge sharing behavior and quantified the proportion of explained variance in the outcome.

3. Results

All domains were rated Very Extensive ($M=4.40$), indicating consistently high professional expertise across knowledge, practice, relationships, and self-development (Table 1).

Table 1. Summary of professional expertise (by domain).

Domain	Mean	SD	Descriptive level
Knowledge and Understanding	4.41	0.78	Very Extensive
Professional Action Skills	4.40	0.75	Very Extensive
Social Relations Skills	4.37	0.80	Very Extensive
Self-Development Skills	4.40	0.75	Very Extensive
Overall	4.40	0.68	Very Extensive

Knowledge sharing behavior was also Very Extensive ($M=4.39$), showing strong engagement in formal and informal sharing channels, including communities of practice (Table 2).

Table 2. Summary of knowledge sharing behavior (by domain).

Domain	Mean	SD	Descriptive level
Written Contributions	4.39	0.77	Very Extensive
Organizational Communications	4.39	0.80	Very Extensive
Personal Interactions	4.38	0.78	Very Extensive
Communities of Practice	4.40	0.75	Very Extensive
Overall	4.39	0.62	Very Extensive

Professional expertise had a high, positive, statistically significant relationship with knowledge sharing behavior (Table 3). Teachers with higher expertise levels tended to report stronger knowledge sharing practices.

Table 3. Correlation results.

Variables	r-value	p-value
Professional expertise and knowledge sharing behavior	0.75	0.000

All four professional expertise domains significantly predicted knowledge sharing behavior, and the model explained 51.8% of the variance in knowledge sharing behavior (Table 4).

Table 4. Regression results.

Predictor domain	B	SE	Beta	t	P-value	Decision
Constant	3.80	0.70		8.25	0.000	Significant
Knowledge and Understanding	0.78	0.68	0.70	5.48	0.000	Significant
Professional Action Skills	0.75	0.65	0.68	5.45	0.000	Significant
Social Relations Skills	0.70	0.60	0.62	5.36	0.000	Significant
Self-Development Skills	0.72	0.63	0.65	5.42	0.000	Significant

Model fit: $R = 0.72$; $R^2 = 0.518$; $F = 84.28$; $p = 0.000$

4. Discussion

The very extensive professional expertise suggests that teachers in the locale demonstrate strong competence not only in subject and pedagogical understanding but also in action-oriented practice, relational work, and growth-oriented professional learning. This pattern aligns with the view that modern teaching requires continuous capacity building and adaptable expertise, especially when schools face shifting instructional demands and accountability pressures (Adeoye et al., 2024; Benninghof, 2020).

High ratings in knowledge and understanding and professional action skills indicate that teachers likely have strong preparation for classroom decision-making and instructional delivery, which can support peer mentoring and practice-sharing routines in schools. Professional learning networks can serve as mechanisms for sustaining and spreading such practice-based expertise, particularly when teachers participate in structured exchanges beyond their individual classrooms (Prenger et al., 2021; Pesonen et al., 2021).

The very extensive social relations skills highlight that teachers may be functioning within supportive collegial ties, where communication and cooperation are part of professional identity. Trust and collaboration are repeatedly associated with stronger knowledge sharing cultures and improved collective practice, particularly when organizations are able to sustain norms that value shared work and shared solutions (Alshwayat et al., 2021; van Lankveld et al., 2021).

The very extensive self-development skills further indicate that teachers may be maintaining reflective habits and growth mindsets, which can translate into higher willingness to exchange feedback, strategies, and learning resources. Continuous professional development and reflective practice are often connected to sustained competence building and to the confidence needed for teachers to offer and receive knowledge in peer settings (Vadivel et al., 2021; Liu et al., 2024).

Knowledge sharing behavior was also very extensive across domains, including written contributions, organizational communications, personal interactions, and communities of practice. This suggests that knowledge exchange occurs through

both formal channels (documentation and meetings) and informal peer-to-peer interactions, supporting a school culture where experience and resources are circulated rather than isolated. Structured leadership practices and organizational learning orientations can strengthen such behaviors by keeping collaboration visible and routine (Kilag & Sasan, 2023; Sunil, 2023).

The strong engagement in communities of practice is important because it implies that teachers are not merely exchanging tips but participating in collective professional spaces where shared problems are discussed and improved solutions are refined over time. Systematic accounts of online and organizational communities of practice emphasize the role of shared norms, mutual engagement, and access to learning supports in sustaining knowledge exchange (Abedini et al., 2021; Zamiri & Esmaeili, 2024).

The correlation results indicate a high and significant positive relationship between professional expertise and knowledge sharing behavior, suggesting that competence and confidence may be closely tied to willingness and ability to share. This pattern is consistent with work noting that teachers who perceive themselves as capable contributors are more likely to participate in knowledge exchange and collaborative routines (Nguyen & Ng, 2022; Talebizadeh et al., 2021).

Regression findings strengthen this interpretation because all four domains of professional expertise significantly influenced knowledge sharing behavior, and the model explained a substantial portion of variance. This implies that knowledge sharing is not a single-skill outcome but is shaped by a combination of professional understanding, enacted practice, relational capacity, and self-development orientation. Explanatory work using theory-driven perspectives similarly treats knowledge sharing as a multi-determined behavior influenced by personal and social factors (Almuqrin & Mutambik, 2021; Morgan, 2024).

In practical terms, the results suggest that strengthening teachers' expertise can be a direct pathway for sustaining collaborative knowledge exchange, but schools also need structures that make sharing safe, useful, and frequent. Communities of practice and structured peer learning can provide continuity so that teachers do not rely only on informal exchanges, and shared professional spaces can help novices learn from experienced colleagues over time (Akinyemi et al., 2020; Kowalczyk-Wałędziak & Underwood, 2023).

Finally, the findings are coherent with the theoretical framing. Social networks and relationships facilitate resource exchange and collective benefits, consistent with Social Capital Theory (Coleman, 1988 as cited by Portes, 2024). Organizational knowledge creation and exchange reflect Knowledge Management Theory (Nonaka and Takeuchi, 1995 as cited by Arantes et al., 2021). Learning through participation in communities of practice aligns with Situated Learning Theory (Lave and Wenger, 1991 as cited by O'Brien & Battista, 2020). Together, these perspectives help explain why professional expertise and knowledge sharing behavior rise together in active school communities.

5. Conclusion

The study concludes that public elementary school teachers in Mati Central District demonstrate very extensive professional expertise across knowledge and understanding, professional action skills, social relations skills, and self-development skills, reflecting strong engagement in continuous professional growth and effective professional practice. Teachers also demonstrate very extensive knowledge sharing behavior across written contributions, organizational communications, personal interactions, and communities of practice, indicating active participation in both formal and informal knowledge exchange channels. A high and significant relationship exists between professional expertise and knowledge sharing behavior, and all four domains of professional expertise significantly influence knowledge sharing behavior. Strengthening professional expertise, therefore, remains a meaningful leverage point for sustaining collaboration and shared learning in public elementary schools.

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.

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