

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Professional Learning Communities as Determinant of Instructional Practices of Public Secondary Teachers in Davao Del Norte Division

Etchel S. Vergara

The Rizal Memorial Colleges, Inc., Philippines DOI: https://doi.org/10.55248/gengpi.5.0724.1611

ABSTRACT

Teachers' instructional practices can be enhanced through participation in professional learning communities. However, the specific relationship between professional learning communities and instructional practices among teachers in the local context has not been thoroughly investigated. To address this gap, this study aimed to assess the extent of professional learning communities and instructional practices among public secondary teachers in Davao del Norte Division. Additionally, it sought to explore the association between professional learning communities and instructional practices. The study used probability sampling to select 200 secondary teachers from public schools as respondents. Employing a descriptive-correlational survey method, the data collected were analyzed using Mean, Product-Moment correlation, and Regression Analysis. The results indicated a significant relationship between professional learning communities and instructional practices, with both aspects being extensive. Based on these findings, it is recommended that higher officials in the Department of Education and school heads collaborate to enhance existing activities within professional learning communities. This collaborative effort can lead to the identification and strengthening of teachers' instructional practices.

Keywords: Professional learning communities, instructional practices, Davao del Norte Division, Philippines

Introduction

Effective instructional practices are recognized as crucial for achieving desired student outcomes. However, teachers face various challenges that impact their instructional effectiveness. Boakye and Ampiah (2017) conducted a study revealing that newly qualified teachers encounter difficulties in teaching due to factors such as inadequate teaching and learning resources, time management issues, content knowledge deficiencies, student comprehension difficulties, student discipline problems, lack of student interest in subjects like science, and incomplete syllabus coverage in integrated science.

In some third-world countries, schools often lack adequate infrastructure and facilities compared to more developed areas (Adu-Gyamfi, 2014). A significant challenge faced by teachers in these settings is the limited availability of teaching and learning resources, which directly affects their instructional practices (Okongo et al., 2015). For example, in Zimbabwe, it was found that teachers typically rely solely on textbooks and syllabuses for instructional materials, without employing a variety of teaching methods or preparing diverse media for teaching and learning purposes.

In the Philippine educational context, several issues related to instructional practices have been identified. Teachers struggle with effectively delivering class content and possess inadequate teaching strategies and skills (Magallanes et al., 2022). This is exacerbated by a lack of professional development opportunities, leaving teachers unprepared to deliver content according to the assigned schedule and employ diverse teaching methodologies (Dizon et al., 2019). Moreover, the absence of proper support and materials further reduces the time available for teachers to deliver content efficiently, highlighting a lack of preparation for teaching development.

In the Division of Davao del Norte, there is an observed issue of teachers facing challenges that contribute to poor instructional practices. Due to the numerous roles they must fulfill, teachers have not taken the initiative to develop diverse instructional activities. Additionally, only a small number of teachers have participated in various professional learning communities. However, these observations have not been thoroughly investigated or studied in Davao del Norte. Specifically, there has been no research conducted to explore the extent of teachers' instructional practices in relation to their involvement in professional learning communities.

To address these gaps, the researcher examined the extent of professional learning communities and instructional practices among teachers in public secondary schools in Davao del Norte Division. The study also investigated the correlation between these two variables. This research aimed to shed light on the relationship between professional learning communities and instructional practices among teachers. Furthermore, it aimed to provide insights for policymakers to develop policies, programs, interventions, projects, and activities that would encourage school leaders to actively involve teachers in a variety of professional learning communities to enhance and improve instructional practices.

Several theories and models have been associated with professional learning communities and instructional practices. The theoretical frameworks employed in this study included Vygotsky's (1934) social constructivism theory, Olivier and Huffman's (2016) Professional Learning Theory, and Wenger's (2018) theory of learning. The primary theoretical foundation of this study was Vygotsky's social constructivism theory, which posits that the selection of different teaching instructional practices is guided by the understanding that knowledge construction is a social and cognitive process. This theory suggests that knowledge and meanings are actively and collaboratively constructed within a social context through frequent discourse and continuous interactions. In a social constructivist learning environment, effective learning is influenced by various factors within the school structure, including the teaching methods employed. The theory emphasizes the importance of utilizing the school structure to enhance knowledge, learning, motivation, and instructional styles. In the context of this study, collaboration and interaction are facilitated by exposure to professional learning communities.

Another theory that underpinned this study was Olivier and Huffman's (2016) theory, which outlines five dimensions of meaningful collaborative learning to optimize the potential of professional learning communities. These dimensions include shared and supportive leadership, values, vision, collective learning application, shared personal practice, and supportive conditions. According to Olivier and Huffman (2016), these dimensions are crucial for interpreting results and findings and can provide insights for enhancing collaborative practices within professional learning communities.

Moreover, Wenger's theory of learning, which includes the concept of Communities of Practice (CoPs), also aligns with the focus of this study. Wenger (2018) emphasizes learning as social participation, where participation involves engaging in the negotiation and reification of a joint problem or project within social communities, as well as constructing identities in relation to these communities. For individuals, learning entails participating in the practices of the community; for the community, learning involves refining its practices and self-maintenance; and for an organization to support learning, it must sustain the interconnected Communities of Practice (CoPs) that enhance its effectiveness.

Participation in a social learning community requires three modes of belonging: engagement, imagination, and alignment (Wenger, 2000). Engagement involves doing things together and producing artifacts, shaping the members' experiences and identities within the community. For example, a new employee engages in daily meetings and workplace practices to integrate into the community. However, for a community to adopt new ways of working, members must engage in novel approaches. Engagement is considered the most straightforward mode of belonging. In the context of this study, teachers can enhance their instructional practices by collaboratively working with their colleagues.

Methodology

Research Design

This study adopted a quantitative research approach, specifically utilizing the descriptive correlational method. Quantitative research methods involve the collection of numerical data to elucidate and evaluate a problem or phenomenon, typically employing statistical analyses for interpretation (Apuke, 2017). Descriptive correlational studies, on the other hand, aim to describe variables and the inherent relationships among them (Davis, 2021). In this study, a quantitative approach was chosen as it relied on numerical data for analysis and interpretation. It was descriptive in nature, as its objective was to assess the extent of professional learning communities and instructional practices among teachers. Furthermore, the study was correlational, aiming to examine the relationship between professional learning communities and instructional practices among public secondary teachers in the Division of Davao del Norte.

Research Respondents

This study involved 200 public secondary teachers from the Division of Davao del Norte. According to Memon et al. (2020), a sample size of 200 is considered sufficient for testing Pearson Correlation analysis. Therefore, the inclusion of 200 respondents was deemed adequate to achieve the study's objectives. In terms of inclusion and exclusion criteria, all secondary teachers within the public schools of the Division of Davao del Norte were given an equal opportunity to participate. Specifically, secondary teachers with at least 5 years of teaching experience were selected for this study. Their tenure as public servants was deemed valuable for assessing their exposure to professional learning communities within the public school system and their own instructional practices. Teachers from private schools were not included in this study. Additionally, respondents were given the option to withdraw from participation if they felt uncomfortable or unwilling to complete the survey questionnaire. Their decision to withdraw was respected, underscoring the prioritization of respondents' welfare throughout the study's conduct.

Research Instruments

A survey questionnaire was utilized as means of gathering data. It was considered as the primary source of data. It was divided into two sections. The first section dealt about professional learning communities while the second set focused on instructional practices.

The professional learning community's questionnaire was adapted from Stamper (2015). The instrument consists of 52 items. It has the following indicators, namely: shared and supportive leadership (1-11), shared values and vision (1-9), collective learning and the application of learning (1-10), shared personal practice (1-7), and supportive conditions (1-15). The questionnaire was subjected to a pilot testing having Cronbach Alpha result of .77 suggesting that the items have *high* internal consistency.

The instructional practices questionnaire was adapted from the study of Hong, Greene and Higgins (2006). It was subjected to pilot testing which revealed a Cronbach Alpha result of .82 suggesting that the items have relatively *high* internal consistency. The tool has a total of 30 items. It has four variables, namely: cognitive (1-10), interpersonal (1-12), and intrapersonal (1-8). The instrument in this study was contextualized to achieve the purpose of this

study. The researcher incorporated all the comments and suggestions of the adviser, panel members and expert validators for the refinement of the tools and to achieve construct validity

Table

Table 1
Summary on the Extent of Professional Learning Communities

No	Indicators	Mean	Descriptive Equivalent
1	Shared and Supportive Leadership	3.56	Extensive
2	Shared Values and Vision	3.52	Extensive
3	Collective Learning and Application	3.46	Extensive
4	Shared Personal Practice	3.54	Extensive
5	Supportive Conditions-Relationships	4.16	Extensive
6	Supportive Conditions-Structures	3.28	Moderately Extensive
Overall		3.59	Extensive

Table 1 provides the summary on the extent of professional learning communities. It is exhibited that the overall mean of professional learning communities is 3.59, which is in an extensive level. This means that professional learning communities is oftentimes evident.

Data show that all seven (6) indicators reveal a varying result ranging from moderately to extensive level. As arranged chronologically, shared and supportive conditions-relationships has the highest mean score (4.16). This is followed by shared and supportive leadership (3.56), shared personal practice (3.54), shared values and vision (3.52), collective learning and application (3.46), and supportive conditions-structures (3.28).

The extensive presence of professional learning communities (PLCs) reinforces Miller's (2020) assertion that PLCs provide a platform for educators to collaboratively engage in recurring cycles of collective inquiry and action research, ultimately aiming to improve student outcomes. PLCs are a widely recognized and effective method for promoting teacher collaboration, which in turn enhances student achievement. It is essential for teachers to be equipped with the necessary skills to foster higher-order thinking in their students. Professional Learning Communities offer a valuable avenue for training teachers to adapt to these evolving educational demands (Darling-Hammond et al., 2017).

In the same vein, the formation of PLCs has led to improvements in instructional activities and increased teacher commitment to enhancing directed reading, writing, and self-selected reading practices. While the PLC model is being adopted by school faculties worldwide to enhance student achievement, many faculties lack a comprehensive understanding of what constitutes a PLC. Effective adult participation and ongoing learning are crucial for the PLC model to positively impact students. However, some school leaders struggle to lead teams towards a deep understanding of the fundamental concepts of PLCs, resulting in the formation of pseudo-PLCs within school faculties (Fullan, 2016).

Table 2
Summary on the Extent of Instructional Practices

No	Indicators	Mean	Descriptive Equivalent	
1	Cognitive	4.15	Extensive	
2	Interpersonal	4.16	Extensive	
3	Intrapersonal	4.16	Extensive	
Overall		4.16	Extensive	

Table 2 provides the summary on the extent of instructional practices. It is exhibited that the overall mean of instructional practices is 4.16, which is in an extensive level. This means that the instructional practices are oftentimes evident.

Data show that all three (3) indicators are in an extensive level. As arranged chronologically, interpersonal (4.16) and life and intrapersonal (4.16) both have the highest mean. Meanwhile, cognitive has mean of 4.15.

The positive outcomes of this study align with Marzano's (2007) findings, which emphasize that effective teachers employ various instructional strategies to enhance student learning. These strategies include maintaining a high rate of engagement, assigning tasks that ensure a high rate of success, reviewing previous work at the beginning of lessons, frequently questioning students to assess understanding, facilitating guided and independent practice, providing immediate feedback, incorporating cumulative reviews, and using student progress data to inform instructional decisions. Given the array of instructional strategies available, classroom teachers must discern which strategies are most suitable for individual students at specific times.

Similarly, Jang et al. (2010) underscore the importance of educators employing instructional strategies that incorporate curriculum with relevant and meaningful learning activities, offering optimal challenges for diverse learners, and establishing meaningful learning goals with moderate structure to enhance student engagement. Teachers who fail to provide adequate structure or support may impede students' development of prerequisite skills essential for academic success. Instruction tailored to individual student learning profiles, preferences, and interests is emphasized as crucial by Phan (2010).

Table 3
Significance of the Relationship Between the Extent of Professional Learning Communities and Instructional Practices

Professional Learning Communities	Dependent Variable	r-value	p- value	Decision on Ho
Indicators	Dependent variable		p- varue	Decision on no
Shared and Supportive Leadership		0.628	0.000	Ho is Rejected
Shared Values and Vision		0.585	0.000	Ho is Rejected
Collective Learning and Application		0.577	0.000	Ho is Rejected
Shared Personal Practice	Instructional Practices	0.618	0.000	Ho is Rejected
Supportive Conditions- Relationships		0.635	0.000	Ho is Rejected
Supportive Conditions- Structures		0.565	0.000	Ho is Rejected
Overall		0.601*	0.000	Ho is Rejected

^{*}Significant at 0.05 significance level.

Presented in Table 3 are the data on the significance of the relationship between professional learning communities and instructional practices. Reflected in the hypothesis, the relationship was tested at 0.05 level of significance. The overall r-value of .601 with a p-value of <0.05 signified the rejection of the null hypothesis. It means that there is a significant relationship between professional learning communities and the instructional practices. This shows that professional learning communities is correlated with instructional practices.

Doing a pairwise correlation among the measures of both variables, it can be gleaned that shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions-relationships, and supportive conditions-structures revealed computed r-values of 0.628, 0.585, 0.577, 0.618, 0.635, and 0.565 respectively with p-values which are less than 0.05 in the level of significance. This implies that as shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions-relationships, and supportive conditions-structures increases, the instructional practices increase.

The findings of this study aligned with Kennedy's (2016) research, which indicates that Professional Learning Communities (PLCs) are widely recognized for their role in improving teaching practices and transforming student learning. Despite descriptions of PLC characteristics, there remains a need for a deeper understanding of how teachers learn collectively and the factors that facilitate teacher learning in practice (Opfer and Pedder, 2011). Likewise, Mu, Liang, Lu, and Huang (2018) suggest that effective teaching is more likely to occur when teachers engage in collaborative PLCs that support teaching practices through engaging professional learning processes.

Postholm and Waege (2016) argued that teachers should have opportunities to collaborate, discuss their teaching experiences, observe colleagues, and provide feedback to enhance their practice. Furthermore, Wagner et al. (2019) found that effective professional learning promotes collaboration and collective participation among teachers, encourages active learning through teaching, observation, and reflection, and remains aligned with teachers' current concerns regarding standards and curriculum initiatives.

Serviss (2022) asserted that PLCs provide teachers with a platform to share best practices and brainstorm innovative ways to enhance learning and drive student achievement. Effective communication is essential for educators to exchange opinions and feel valued for their classroom efforts. These learning communities also promote teacher reflection on instructional practices and student outcomes. Regular meetings within PLCs enable teachers to share student progress, fostering a sense of shared responsibility for every child's education among educators and administrators across grade levels within a school building.

Conclusions

Based on the findings of this study, the following conclusions were offered:

The prevalence of professional learning communities among public secondary teachers suggests that they are frequently observed within the school environment. Specifically, shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive relational conditions are commonly evident. However, supportive structural conditions are only occasionally observed. Conversely, the extent of instructional practices is frequently apparent among teachers. All dimensions—cognitive, interpersonal, and intrapersonal—are frequently observed or practiced by teachers. The findings indicate a correlation between professional learning communities and instructional practices, thus rejecting the null hypothesis.

Recommendations

The following suggestions were offered based on the conclusions of the study:

The higher officials in the Department of Education may craft effective policies, programs, projects, interventions and activities which may intensify the professional learning communities and the instructional practices of teachers. They may provide undertakings that would further strengthen the professional learning communities of the teachers specifically on supportive conditions – structure and on instructional practices.

Meanwhile, school principals may find means in promoting professional learning communities' activities in their school that would help teachers to upgrade themselves. Specifically, they may further improve their supportive conditions in terms of structure so that teachers would be more motivated to strengthen their craft. Moreover, they may also craft new interventions strengthening the instructional practices of their teachers.

Furthermore, teachers may take an effort keep on upgrading themselves. They may attend various seminars, webinars, or any undertaking that would help them reinforce their instructional practices. They may not solely rely on the trainings provided by the school but also considering outside trainings relevant to teaching.

Lastly, future researchers may explore relevant information about professional learning communities and instructional practices of teachers. Also, other means of research approach may be utilized to further explore the involved variables in this study.

References

Adu-Gyamfi K. (2014). Challenges faced by science teachers in the teaching of integrated science in Ghanaian junior high schools. *Journal of Science and Mathematics Education*, 6, 59-80. Retrieved from http://www.academia.edu/11509955/Challenges_face_by_Science_In_Ghanaian_Junior_High_Schools

Apuke, O. D. (2017). Quantitative research methods: A synopsis approach. *Arabian Journal of Business and Management Review*, *6*, 40-47. https://doi.org/10.12816/0040336.

Boakye, C., & Ampiah, J. G. (2017). Challenges and solutions: The experiences of newly qualified Science teachers. *Sage Open*, 7(2). https://doi.org/10.1177/2158244017706710

Darling-Hammond, L., Hyler, M. E., Gardner, M. (2017). Effective teacher professional development. Palo Alto, CA: Learning Policy Institute

Dizon, R., Calbi, J., Cuyos, J., and Miranda, M., (2019). Perspectives on the implementation of the K to 12 program in the Philippines: A research review. *International Journal of Innovation and Research in Educational Sciences Volume 6, Issue 6, ISSN (Online)*: 2349–5219

Fullan, M. (2016). The new meaning of educational change (5th ed.). Teachers College Press.

Hong, E., Greene, M. T., & Higgins, K. (2006). Instructional practices of teachers in general education classrooms and gifted resource rooms: Development and validation of the instructional practice questionnaire. *The Gifted Child Quarterly*, 50(2), 91–103.

Jang, H., Reeve, J., & Deci, E. L. (2010). Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. *Journal of Educational Psychology*, 102(3), 588–600. https://doi.org/10.1037/a0019682

Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research*, 86(4), 945–980. https://doi.org/10.3102/0034654315626800

Magallanes, K., Chung, J. Y., & Lee, S. (2022, May). The Philippine teachers concerns on educational reform using concern based adoption model. *In Frontiers in Education (Vol. 7, p. 763991). Frontiers*. https://doi.org/10.3389/feduc.2022.763991

Marzano, R. J. (2007). The art and science of teaching. Alexandria, VA: ASCD

Memon, M. A., Ting, H., Cheah, J. H., Thurasamy, R., Chuah, F., & Cham, T. H. (2020). Sample size for survey research: review and recommendations. *Journal of Applied Structural Equation Modeling*, 4(2), 1-20.

Miller, A. (2020). Creating effective professional learning communities. https://www.edutopia.org/article/creating-effective-professional-learning-communities

Mu, Michael, Liang, Wei, Lu, Litao, & Huang, Dongfang (2018) Building pedagogical content knowledge within professional learning communities: An approach to counteracting regional education inequality. *Teaching and Teacher Education*, 73, pp. 24-34

Okongo, R. B., Ngao, G., Rop, N. & Nyongesa, W. (2015). Effect of availability of teaching and learning resources on the implementation of inclusive education in pre-school centers in Nyamira North Sub-County, Nyamira County, Kenya. Journal of Education and Practice www.iiste.orgISSN 2222-1735 (Paper) ISSN 2222-288X (Online)Vol.6, No.35, 2015. https://files.eric.ed.gov/fulltext/EJ1086389.pdf

Olivier, D., & Huffman, J.B. (2016). Professional learning community process in the united states: conceptualization of the process and district support for schools. Asia Pacific Journal of Education. 36, 2. 301-317.

Opfer, V.D. and Pedder, D. (2011) Conceptualizing teacher professional learning. *Review of Educational Research*, 81, 376-407. https://doi.org/10.3102/0034654311413609

Postholm, M. B., & Waege, K. (2016). Teachers' learning in school-based development. *Educational Research*, 58(1), 24–38. doi:10.1080/00131881.2015.1117350

Serviss, J. (2021). 4 benefits of an active professional learning community. https://www.iste.org/explore/professional-development/4-benefits-active-professional-learning-community

Stamper, J. C. (2015). A study of teacher and principal perceptions of professional learning communities (Doctoral dissertation). Available from Theses and Dissertations - Educational Leadership Studies. (Paper No. 11)

Wagner, T. D., Mahbub, K., Palomar, E., & Abdallah, A. E. (2019). Cyber threat intelligence sharing: Survey and research directions. Computers & Security, 87, 101589.

Wenger, E. (2018). Communities of practice: Learning as a social system. The Systems Thinker. https://thesystemsthinker.com/communities-of-practice-learning-as-a-social-system/

Wenger, E. (2000). Communities of practice and social learning systems. Organization, 7(2), 225-246. https://doi.org/10.1177/135050840072002