

Professional learning community and school-based management in Chinese universities

Wang, Zhen ✉

Graduate School, Lyceum of the Philippines University - Batangas, Philippines

Received: 23 April 2024
Available Online: 31 May 2024

Revised: 2 May 2024
DOI: 10.5861/ijrsm.2024.1036

Accepted: 23 May 2024

ISSN: 2243-7770
Online ISSN: 2243-7789

OPEN ACCESS



Abstract

This study uses a mixed methods approach, combining qualitative and quantitative analyses. In the qualitative analysis stage, participants will be interviewed about their perceptions and experiences of leadership communities and school-based management. In the quantitative analysis phase, we will collect data from a large number of participants' participation through questionnaires and conduct statistical analysis using SPSS 17.0 to determine the significant relationship between leadership community and school-based management. A random sample of 300 teachers from Chinese universities and colleges will be distributed 300 questionnaires to help this study explore the important relationship between leadership communities and school-based management. The purpose of this study to analyze the relationship between professional learning communities and school-based management in Chinese universities. Specifically, the study will Describe the respondent's sex, age, educational attainment and length of service; Identify professional learning communities in terms of community design factors, expert (mentor) factors, teacher learner self-factors, knowledge resource factors, teacher community factors, activity factors; Assess from planning and implementation, cooperation and evaluation to school-based management; Test for differences in response when grouped according to individuals; Test the important relationship between professional learning communities and school-based management; propose a plan for optimizing the effectiveness of Chinese universities. Most of the respondents were Female, aged between 30-39 years, Educational Attainment was bachelor's degree, Length of service was 4-6 years and 1-2 years. Most respondents identified the " Expert (mentor) Factor" and " Knowledge Resources Factors" as the most important factors in the Professional Learning Community. " are the most important Most respondents felt that Collaboration and Evaluation in School-based Management had the greatest impact. Significant differences were found in the teacher learner self-factor when grouped according to gender, education and years of service, and in the knowledge resource factor when grouped according to years of service. Professional learning communities and school-based management are closely related. propose a plan for optimizing the effectiveness of Chinese universities.

Keywords: professional learning communities, school-based management, Chinese universities

Professional learning community and school-based management in Chinese universities

1. Introduction

With the development of globalization and the knowledge economy, China's higher education is facing the challenges of improving the quality of education and promoting the comprehensive development of students. These challenges involve not only how to impart knowledge but, more importantly, how to cultivate students' innovative thinking, critical thinking abilities, and international competitiveness. Against this backdrop, professional learning communities have become increasingly significant as an effective platform for fostering the professional development of teachers and the learning of students. These communities support in-depth exchanges and cooperation among teachers, among students, and between teachers and students, facilitating the sharing of best practices, promoting innovative thinking, and enhancing the motivation to learn. Therefore, how to effectively manage and operate these learning communities to maximize their contribution to improving the quality of education has become a focus of attention for educational managers and researchers. For managers, exploring effective organizational structures and management strategies is crucial; for researchers, evaluating the impact of these communities and proposing optimization suggestions is a primary task. These efforts collectively promote innovation and development in education, which is of significant importance to enhancing the overall quality of higher education.

Professional Learning Communities represent an innovative practice in the field of education, emphasizing the creation of a supportive and collaborative culture for continuous professional development. They provide teachers with a platform to jointly explore new teaching strategies, address teaching challenges, and grow together. This cooperation is not limited to teachers within a school but often extends to experts, scholars, and other educational institutions outside, thus forming a broad learning network. Yang (2020) indicates that through regular meetings, workshops, and seminars, Professional Learning Communities members can motivate each other and make collective progress, thereby continuously driving the innovation and improvement of educational teaching. Furthermore, Liu (2018) believes that Professional Learning Communities encourage teachers to actively reflect on their practices and use data analysis to guide teaching decisions. Such processes help enhance individual professional skills of teachers, as well as optimize the learning environment, enabling students to succeed in a more supportive and enriched educational setting.

School-based management, by granting schools greater autonomy, not only stimulates the effective use of internal and external resources and educational innovation but also promotes close collaboration among educators. Ma (2019) demonstrates that this management approach encourages teachers, students, parents, and community members to participate collectively in the school's decision-making process. By sharing insights and experiences, they collaboratively address challenges encountered in teaching and learning. Such participation and cooperation provide strong support for improving educational quality and innovating teaching methods, thereby further promoting the healthy development and optimization of the education system. The implementation of the school-based management model also means that schools can more flexibly respond to changes in educational needs, achieve optimal allocation of educational resources, and ultimately realize the efficient achievement of educational goals.

Professional learning communities play a pivotal role in higher education as both a bridge and a catalyst, significantly enhancing the quality and effectiveness of education through interdisciplinary collaboration and knowledge sharing. They not only provide opportunities for professional growth and the expansion of international perspectives for teachers, thereby improving the quality of education and global competitiveness, but also promote comprehensive development, innovative thinking, and enhanced learning motivation among students through active participation and cooperation. Moreover, Ming (2018) has shown that the operational model of professional learning communities fosters close interaction between teachers and students, providing a strong impetus for

educational innovation and promoting overall progress within the education system. In summary, professional learning communities play a crucial role in meeting the educational needs of the knowledge economy era, not only optimizing educational practices but also strengthening the connections within the learning community, paving new pathways for the future development of education.

Objectives of the Study - The purpose of this study was to analyze the relationship between professional learning communities and school-based management in Chinese universities. Specifically, the study described the respondents' sex, age, educational attainment, and length of service; identified professional learning communities in terms of community design factors, expert (mentor) factors, teacher learner self-factors, knowledge resource factors, teacher community factors, activity factors; assessed from planning and implementation, cooperation and evaluation to school-based management; tested for differences in response when grouped according to individuals; tested the important relationship between professional learning communities and school-based management; and proposed a plan for optimizing the effectiveness of Chinese universities.

2. Methods

Research Design - This study utilized a descriptive research approach, incorporating both quantitative analysis methods. This involved the design and distribution of surveys to gather a broad range of opinions and feedback. This step was intended to validate the initial findings from the qualitative phase through extensive data collection. This, in turn, facilitated a deeper understanding and practical application of effectively integrating professional learning communities with school-based management within Chinese higher education institutions.

Participants of The Study - The study was conducted at three universities in Shenzhen, China, involving a total of 3,000 teachers. The sample size was calculated to be 341 using Raosoft. However, after receiving approval and suggestions for revision from the professor, it was ultimately decided to select 300 teachers to participate in the study. This decision was made to help the study explore the important relationship between leadership communities and school-based management effectively.

Data Gathering Instrument - The tool for this study will be divided into 3 sections · The first part is the Profile of the Respondents, which contains the gender, age, Educational Attainment, and Length of service of the participants. The second part is adapted from: Li (2011) Research on Knowledge Construction in Teachers' Virtual Learning Communities [D]. Qufu Normal University, 2011. The multidimensional questionnaire has 30 items, which are divided into: Community Design Factors, Expert (mentor) factor, Teachers Learners Self-factors, Knowledge Resources Factors, Teacher community factor, and Activity factors to determine the participants' Professional Learning Community. The third component is School-Based Management, adapted from: PAN Chenwu. Research on quality management of school-based curriculum in junior high school [D]. Guizhou Normal University, 2022. multidimensional questionnaire with 16 items. It contains two sections: planning and implementation, collaboration and evaluation. Factors exhibit high Cronbach Alpha values, signifying good internal consistency among them. Specifically, the factors "Community Design Factors," "Expert (mentor) Factor," "Teacher Learners Self-factors," "Teacher Community Factor," "Activity Factors," "Planning and Implementation," and "Collaboration and Evaluation" all achieved Cronbach Alpha values categorized as "excellent." Meanwhile, the "Knowledge Resources Factors" reached a level considered "good." This demonstrates that these factors possess high reliability and stability in measurement or evaluation.

Data Analysis - In the study of professional learning communities and school-based management in Chinese universities, quantitative data were first collected by designing a valid questionnaire. Statistical analyses, including correlation and regression analyses, were conducted on these data to explore the relationship between professional learning communities and school-based management.

Ethical Considerations - Moral and ethical considerations were crucial in the context of professional learning communities and school-based management in Chinese universities. Below are some relevant aspects that were considered in order to properly cite the ideas and research findings of others in essays and scholarly works,

following the norms of academic citation. Teamwork was common in professional learning communities and school-based management. Collaboration was encouraged by ensuring that each member had a fair share of the contribution and that each person's contribution was clearly indicated. Researchers needed to protect the personal information of those involved in research.

3. Results and discussion

Table 1

Summary Table on Professional Learning Community

Indicators	Weighted Mean	Verbal Interpretation	Rank
Community Design Factors	3.09	Agree	4
Expert (mentor) Factor	3.16	Agree	1
Teachers Learners Self-factors	3.10	Agree	3
Knowledge Resources Factors	3.15	Agree	2
Teacher community factor	3.07	Agree	5
Activity Factors	3.06	Agree	6
Composite Mean	3.11	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 1 presents a summary of respondents' assessments of Professional Learning Community. The composite mean of 3.11 indicates general agreement among respondents. Notably, the Expert (mentor) Factor scored the highest at 3.16, followed by Knowledge Resources Factors and Teacher-Learner Self-factors. These findings underscore the importance of leadership and guidance from experts or mentors, in addition to knowledge resources and learners' own efforts, as key components in enhancing the effectiveness of learning within communities. Kloes-Corwin (2020) suggests that to maximize the functionality and effectiveness of professional learning communities, platforms and organizers should focus on assembling a team of experts or mentors. Inviting more experts or mentors with rich experience and expertise to join the community can provide learners with high-quality guidance and support. Furthermore, there should be a commitment to updating and optimizing knowledge resources to ensure they meet learners' needs, alongside fostering the self-development of teacher-learners by offering personalized learning paths and development opportunities to stimulate their motivation and innovation.

In contrast, Community Design Factors (3.09), the Teacher Community Factor (3.07), and Activity Factors (3.06) received the lowest scores. According to Li (2019), a lower score in community design factors may indicate that aspects such as platform design, functionality, or user experience of the learning community need further optimization to align with learners' needs and expectations. The low score in the Teacher Community Factor may suggest issues with interaction, communication, or the cultural atmosphere within the community that require improvement. Similarly, a lower score in Activity Factors might reflect a need for enhancement in the organization, content design, or engagement of activities within the community.

Liao (2020) recommends that to improve the overall effectiveness of professional learning communities, platforms, and organizers should undertake thorough investigations and analyses of these areas. Identifying the root causes of issues and developing targeted improvement measures is essential. For instance, optimizing the design and functionality of the community's platform can enhance the user experience. Strengthening the construction and management of the teacher community is crucial for fostering a positive interactive atmosphere. Moreover, focusing on the organization and content design of activities can increase their appeal and participation rates. Through dedicated efforts in these areas, it is believed that professional learning communities can reach a new level of excellence, offering learners superior experiences and opportunities for development.

Table 2 presents a summary of the respondents' assessments on School-Based Management. The composite mean of 3.07 indicates general agreement among respondents. Notably, Collaboration and Evaluation received a score of 3.08, followed by Planning and Implementation. Respondents acknowledged that adequate communication and collaboration are essential for the smooth implementation of school policies. They also recognized that regular evaluation is crucial for identifying issues and adjusting management strategies timely,

thereby continuously enhancing the quality of education. Furthermore, Niu (2019) highlights that planning and implementation are critical aspects of school-based management that should not be overlooked. Respondents also emphasized this point, expecting schools to develop practical management plans based on clear objectives and to effectively execute these plans. The overall assessment of school-based management was positive. Respondents particularly stressed the importance of "collaboration and evaluation" as well as "planning and implementation" in improving the standards of school management and the quality of education. This offers valuable insights and references for the future direction of school management. The table highlights the association between Professional Learning Community and School-based Management. The computed r-values suggest an almost negligible direct or indirect correlation, except for a significant relationship between the activity factor and planning and implementation. This indicates that an improvement in the activity factor is associated with less effective planning and implementation. This discovery points to complex interactions between aspects of professional learning communities and specific elements of planning and implementation in school management practices. Tittle (2018) posits that although the overall correlation between these two domains is weak, certain factors, like the design and implementation of activities, might significantly influence school planning and implementation processes. This could be because the activity factor is more closely tied to the daily teaching practices and operational management of schools, while planning and implementation serve as the foundation and assurance for the effectiveness of these activities.

Table 2*Summary Table on School-based Management*

Indicators	Weighted Mean	Verbal Interpretation	Rank
Planning and Implementation	3.06	Agree	2
Collaboration and Evaluation	3.08	Agree	1
Composite Mean	3.07	Agree	

Legend: Significant at p -value < 0.05

Table 3*Relationship Between Professional Learning Community and School-based Management*

Community Design Factors	r-value	p-value	Interpretation
Planning and Implementation	0.013	0.822	Not Significant
Collaboration and Evaluation	-0.061	0.292	Not Significant
Expert (mentor) Factor			
Planning and Implementation	-0.025	0.661	Not Significant
Collaboration and Evaluation	0.074	0.200	Not Significant
Teachers Learners Self-factors			
Planning and Implementation	0.061	0.295	Not Significant
Collaboration and Evaluation	0.006	0.920	Not Significant
Knowledge Resources Factors			
Planning and Implementation	-0.028	0.635	Not Significant
Collaboration and Evaluation	-0.019	0.744	Not Significant
Teacher community factor			
Planning and Implementation	0.011	0.850	Not Significant
Collaboration and Evaluation	-0.012	0.841	Not Significant
Activity Factors			
Planning and Implementation	-.143*	0.013	Significant
Collaboration and Evaluation	0.094	0.103	Not Significant

Wang (2019) suggests that schools and educational administrators should closely examine this specific connection between professional learning communities and school planning and implementation during their development efforts. When designing and organizing professional learning activities, it's crucial to consider their potential impact on the broader scope of school planning and ensure that there is coordination and cooperation between the two areas. Moreover, further research is necessary to explore the underlying mechanisms and factors influencing this relationship, aiming to provide more precise and targeted recommendations for enhancing school management practices. In summary, although the correlation between professional learning communities and school-based management is not strongly pronounced overall, the significant link identified between activity

factors and planning and implementation highlights the importance of carefully and comprehensively considering the interactions and impacts of various factors. This approach is essential for effectively advancing school management processes and supporting the professional development of teachers.

Table 4
A Proposed Plan to Optimize the Effectiveness of Chinese Universities

Key Result Area	Objectives	Strategies/ Activities	Success Indicators	Person/s Responsible
1. Professional Learning Community 1.1 Community Design Factors	<p>To identify and assess the key design elements that foster a positive and engaging community environment.</p> <p>To create a framework that guides the development of community spaces that are inclusive, accessible, and sustainable.</p> <p>To enhance community members' sense of belonging and participation through thoughtful design interventions.</p>	<p>Conduct a needs analysis to understand the current state of the community and identify gaps in design elements.</p> <p>Engage community members in participatory design workshops to gather their input and ideas.</p> <p>Develop design guidelines that incorporate best practices in community design, sustainability, and accessibility.</p>	<p>Increased participation and engagement of community members in design workshops and other related activities.</p> <p>Positive feedback from community members on the improved design of community spaces.</p> <p>Enhanced sense of belonging and ownership among community members towards their community spaces.</p>	Teachers
1.2 Teacher community factor	<p>To foster a collaborative and supportive teacher community that enhances teaching and learning.</p> <p>To promote professional growth and development among teachers through shared knowledge and experiences.</p> <p>To create a positive school culture where teachers feel valued, respected, and motivated to excel.</p>	<p>Organize regular teacher meetings and workshops to discuss teaching practices, challenges, and successes.</p> <p>Encourage teachers to engage in peer observations and provide constructive feedback to one another.</p> <p>Create a shared online platform or repository where teachers can access and share educational resources and materials.</p>	<p>Increased participation and engagement of teachers in community activities and discussions.</p> <p>Improved teaching practices and student outcomes as a result of teachers' collaboration and shared knowledge.</p> <p>Positive feedback from teachers on the support and resources provided by the teacher community.</p>	Teachers
1.3 Activity Factors	<p>To identify and analyze the key factors that influence the effectiveness and engagement of activities within an organization or community.</p> <p>To develop strategies that enhance the quality and impact of activities, promoting greater participation and satisfaction.</p> <p>To establish measurable criteria for evaluating the success of activities and making data-driven improvements.</p>	<p>Conduct a thorough assessment of current activities to understand strengths, weaknesses, and areas for improvement.</p> <p>Engage stakeholders, including participants and organizers, in discussions to gather feedback and identify needs.</p> <p>Design diverse and inclusive activities that cater to different interests, abilities, and demographics.</p>	<p>Increased participation and engagement in activities, demonstrated through attendance, active participation, and positive feedback.</p> <p>Diversified participation across different demographics, indicating inclusivity and accessibility of activities.</p> <p>High levels of satisfaction among participants, organizers, and stakeholders.</p>	
2. School-based Management 2.1 Collaboration and Evaluation	<p>Promote effective teamwork and evaluation mechanisms to ensure that project or organizational objectives are achieved.</p>	<p>Introduce team-friendly collaboration tools, such as project management software and instant messaging tools, to support real-time communication and file sharing among team members.</p> <p>Clarify the principles and expectations of teamwork, including allocation of responsibilities, decision-making processes, and conflict resolution</p>	<p>Measure the improvement of team communication efficiency through the usage statistics of collaboration tools, meeting efficiency evaluation, and so on.</p> <p>Find out how satisfied team members are with the atmosphere and effectiveness</p>	Teachers

		mechanisms to ensure efficient and smooth teamwork. Establish a regular evaluation cycle, such as quarterly or semi-annual evaluations, to provide a comprehensive review of team and individual performance. Assessment criteria should be aligned with project or organizational goals.	of collaboration through regular team satisfaction surveys. Evaluate whether processes accurately reflect team and individual performance and provide valuable insights for improvement.	
2.2 Planning and Implementation	Ensure smooth planning and effective execution of project or organizational objectives.	Before the project or work begins, conduct sufficient research and analysis, and make a detailed and comprehensive plan, including timetable, resource requirements, risk assessment, etc. According to the plan requirements, rationally allocate human, material and financial resources, and ensure the effective use and optimization of resources in the execution process. Break down large tasks into smaller and more specific sub-tasks and set priorities to ensure that important tasks can be completed on a priority basis.	A measure of the proportion of a project or work plan that is completed according to a predetermined schedule. Assesses the utilization of resources during execution, including the effective utilization of human, material, and financial resources. Assesses whether completed tasks meet expected quality standards and satisfy the needs of the project or organization.	Teachers

4. Conclusions and recommendations

Most of the respondents were Female, aged between 30-39 years, Educational Attainment was bachelor's degree, Length of service was 4-6 years and 1-2 years. Most respondents identified the " Expert (mentor) Factor" and " Knowledge Resources Factors" as the most important factors in the Professional Learning Community. " are the most important. Most respondents felt that Collaboration and Evaluation in School-based Management had the greatest impact. Significant differences were found in the teacher learner self factor when grouped according to gender, education and years of service, and in the knowledge resource factor when grouped according to years of service. Professional learning communities and school-based management are closely related. Propose a plan for optimizing the effectiveness of Chinese universities.

Universities may greatly improve students' understanding of their profession by providing more experience in real workplace scenarios. This can be accomplished by integrating interactive educational technologies, such as simulation and virtual reality, to allow students to learn and practice in a more realistic environment. By simulating real work scenarios, students can gain a deeper understanding of their chosen field and develop the necessary skills needed for future employment. Teachers may utilize these interactive educational technologies to enhance course syllabi and activities to make them more relevant to students' future career prospects. For example, virtual reality (VR) or augmented reality (AR) technologies can create simulated scenarios that are relevant to students' future careers, providing them with an intuitive and in-depth learning experience. This approach not only enhances students' engagement, but also equips them with the practical knowledge and skills needed for their future careers. Students may be actively involved in career-related online seminars, workshops, and courses. These activities provide students with valuable opportunities to learn about various industries and gain insight into potential career paths. Teachers can facilitate these activities through interactive educational technologies (e.g., online collaboration tools) that allow for effective communication and collaboration among students. Implementing a career development program that incorporates the above recommendations will provide valuable insights for continuous improvement. Such a program would ensure that the university's efforts are aligned with the changing needs of the job market and enable students to develop the necessary skills and competencies required by employers. Future research on self-efficacy and the effectiveness of Chinese universities in developing student employability should aim to expand sample sizes to ensure that findings are diverse and broadly representative.

5. References

Kloes-Corwin, R. (2018). The Exploration of Student Shadowing and School-Based Instructional Rounds on

- Deeper Learning in the Middle and High School Classroom: A Transformative Approach Discussing Professional Learning with Teachers and Administrators [Doctoral dissertation, Pepperdine University].
- Liao, M. (2020). Analysis on the assessment standards of professional skills of community management and service in higher vocational colleges. *Journal of Changsha Civil Affairs Vocational and Technical College*, 27(3), 100-103. <https://doi.org/10.3969/j.issn.1671-5136.2020.03.028>
- Liu, Y. F. (2018). Current Situation of Community Health Management Services for Hypertension in young and middle-aged people and Research on Optimal Countermeasures based on KANO model [Master's thesis, Hangzhou Normal University].
- Niu, Y. L., & Dai, Z. D. (2019). Research and Implementation of the Management System of Communities in Colleges and Universities Based on the MVC Framework. *Journal of Xian University*, 21(4), 84-87+112. <https://doi.org/10.3969/j.issn.1008-5564.2018.04.018>
- Tittle, M. E. (2018). Using appreciative inquiry to discover school administrators' learning management best practices development [Doctoral dissertation, Walden University].
- Wang, X. (2019). Research on practice teaching of community management and service under the concept of "service-learning". *Wen Yuan*, (7), 50.