Professional Learning Communities As A Means To Strengthen Teacher Performance: A Systematic Review

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Abstract

Professional learning communities are recognized for their role in teacher performance. The purpose of the study was to analyze learning strategies in teachers from different educational institutions. The data was collected from the databases of Scopus and Scielo, Ebsco and Web Science, published between 2019 and 2021. The PRISMA method was used in this research and the inclusion and exclusion criteria were taken into account. A data table was used to collect the information. Results: After using the PRISMA flowchart, a sample of 40 original articles was obtained, which indicates that the different communities of professionals allow improvements in teacher performance and, consequently, improve student performance, in CPAs the teacher is the key to improving educational practice. This requires a change in the strategies used, a slow and costly process in work and effort, but in the review carried out, working together plays an important role in the CPAs to reinforce teacher performance.

Keywords: Professional Learning Communities, Teacher Performance

1. Introduction

Collaboration and learning are important components of research conducted by professional learning communities and teachers to strengthen learning cultures Admiraal (2021). According to Alles (2019), the role of the learning community as a powerful space for teachers to learn showed that learning communities begin at a stage where teachers are not yet fully established in discursive norms and develop to a level where teachers carefully proposed the way of teaching and offer a variety of teaching methods for others.

Beathe (2021) explores collaborative learning through learning communities to understand how teachers learn and use learning communities and how the use of these communities affects student learning. The study was conducted in a Norwegian secondary school with students aged 8 to 10 and 13 to 16, with a narrative approach over a period of 2 years. This study identifies the importance of collaboration in teacher training and practice. In particular, it examines how teams of teachers influence participation and practice in a CPA. Cabezas (2021) conducted a study in which he focused on analyzing the different dimensions that make up the CPA, the relationships and personal characteristics of their members and institutions, their classification and characteristics of the institution according to the stage of development for this purpose, a sequential mixed study was conducted in 49 institutions of the Metropolitan Region and Bio-Bío using 889 questionnaires for teachers and 100 for administrators. This included 15 in-depth interviews, during which it was concluded that CPAs could lead to teacher training and improvements in the student learning process. It is appropriate to identify directions for future research and to carry out an institutional follow-up of the evolution of the CPA over time and the changes between the different stages of the development of the CPA together with the econometric analysis that allows to deepen the analyzes already carried out. For her part, Candela (2021) develops her research from a qualitative perspective, emphasizes ethnographic observations and the collection of experience and evidence through individual and group interviews with trainers and center staff, using a sample of 11 teachers and experts. The participating teachers recognize the importance of collaboration and teamwork and recognize that it is an important tool in the renewal of the teaching profession. According to Flores-Fahar (2021) in his findings on the importance of training teachers and administrators to use collaborative learning in school environments, whether a community, a network or a team, as a way to organize participation, constant cooperation to learn, create, share and disseminate knowledge, with the main objective of developing learning in students. In China, Lucui (2022) During the research process new educational understandings and practices were developed, although there is already a plan to work action research with communities of learning professionals the results indicate low expectations in community-based teaching through external support and collective efforts cases of China.

In Ecuador, Mendoza et al. (2021) research was quantitative with a sample of 359 randomly selected primary school teachers. Using multiple regression and factor analysis, the results showed positive effects on learning strategies. In the study carried out by Luyten et it shows that learning strategies in learning environments have a great relevance for improvement, which were demonstrated in the application of the development study with 518 teachers and more than 95 primary schools. Rivera (2021) indicates that learning strategies in professional communities denote that 50% of teachers showed an appropriate struggle in school with community practices according to the practice and their relationships of the educational institution. On the other hand, Park et al. (2021) in their research, used data from math and science teachers who participated in the 2009 longitudinal study of the secondary level; this study addresses the problem by focusing on the spine as it is the directive part and the role of learning communities and the expectations of teachers at the group level. The reported findings were that the strategies show positive incidences. In support of one of their hypotheses, their results showed that CPAs are positively associated with math and science teachers' expectations, even after controlling for other variables. The importance of this article is to publicize the publications made in the last 4 years in various indexed journals to strengthen the performance of teaching in educational institutions before this new strategy that strengthens collaborative work, raises the professional quality of teaching and thereby improve education for students. To this end, we identified the articles that refer to this topic in the last 4 years, which contribute to improving this strategy.

2. Method

For the systematic review of the articles of the research variables, the prism statement related to the research question and the flowcharts were used. This analysis is based on 40 bibliographic references in a systematized way of learning strategies and teacher performance, found in Scopus, Ebsco, Scielo and Science Direct, in all of them it began with the search term: ("Professional learning communities" and "Teacher performance") or ("Professional communities" and "Pedagogical learning practice") ("Professional learning communities" and "teacher") or ("Learning community" and "Performance" teacher) or ("learning community" and "pedagogical practice") or ("learning community" and "teacher") or ("learning community" and "teacher performance") or ("learning community" and "pedagogical practice") or ("learning community" and "teacher").

Table 1. Database Search Products

Database	Articles in Spanish	Articles in English
EBSCO	1	3
SCOPUS	14	15
SCIELO	2	1
SCIENCEDIRECT	2	2

In this study, articles from 2019 to 2021 have been prioritized, in English and Spanish, in the field of social sciences, in basic education, in the regions of America, Europe and Asia. Regarding the inclusion criteria in the search process, the following were considered: 1) articles related to education and social sciences, 2) publications of the years 2019 and 2022, 3) Available in English and Spanish, 4) Type of publication (scientific articles) and open access and full text, 5) Developed in the theme of Professional Learning Communities and teaching performance, 6) Developed in Basic Education, 7) Quantitative and qualitative or mixed studies, 8) Scopus, Scielo, Ebsco and Science Direct database.

Similarly, the exclusion criteria were: 1) Original articles that do not correspond to education and social sciences, 2) Non-empirical studies, such as books, theses, editorials, letters to the editor, notes, essays, conferences and comments, 3) Articles published before 2019, 4) Studies in languages other than Spanish and English, 5) Incomplete articles with closed access or that are duplicated, 6) Studies on Professional Learning Communities in Higher Education, Teacher Training and Other Non-Education Professions 7) Research pertaining to other professions.

From the articles reviewed for this study, 154 articles were obtained: 44 in Scopus, 7 in Scielo, 84 in Ebsco and 19 in Science Direct. When performing the screening where the titles of all the selected articles were read and after eliminating the duplicates, only 111 were considered eligible. Similarly, 61 articles were eliminated because they were from higher education and 10 because they were systematic reviews. Finally, the 40 articles that met the inclusion and exclusion criteria were selected to carry out this systematic review.

Figure 1. Flowchart (PRISMA)

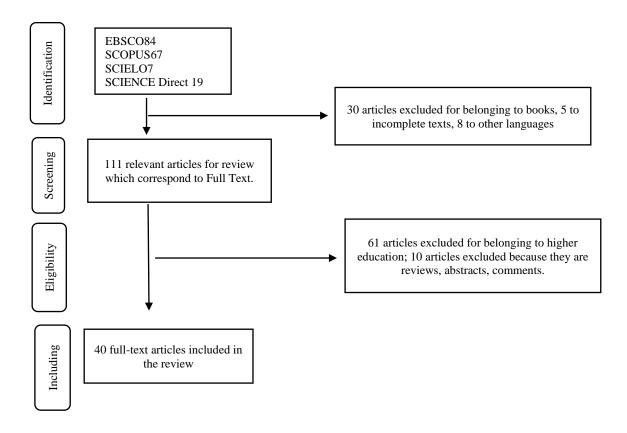


Table 2. Characteristics of articles on professional learning communities and teacher performance

Author	Approach	Design	Database
<u>Chen, I.</u> (2022)	Qualitative	Collaborative Action	Scopus
		Research	
		Case Study Design	
Wilfried Admiraal, Wouter (2021)	Qualitative	Case analysis	Scopus
Harvey, F., Nilsson, P. (2022)	Qualitative	Case analysis	Scopus
Ninković, S. , Florić, OK , Đorđić, D.	Quantitative	Non-experimental cross-	Scopus
(2022)		sectional type	
Visone, J.D., Mongillo, MB, Liu, Y.	Qualitative	Case Study	Scopus
(2022)			
Medina, GI , Vallinas, EG , Cruz, IP	Qualitative	Case Study	Scopus
(2022)			
Ng, B., Latife, A. (2022). Singapore	Qualitative	Case Study	Scopus
Elfarargy, H. , Irby, BJ , Singer, EA ,	Qualitative	Phenomenological	Scopus
(), Tong, F., Pugliese, E. (2022)			
Botha, C. , Nel, C. (2022)	Qualitative	Multiple cases	Scopus
	Chen, I. (2022) Wilfried Admiraal, Wouter (2021) Harvey, F., Nilsson, P. (2022) Ninković, S., Florić, OK, Đorđić, D. (2022) Visone, J.D., Mongillo, MB, Liu, Y. (2022) Medina, GI, Vallinas, EG, Cruz, IP (2022) Ng, B., Latife, A. (2022). Singapore Elfarargy, H., Irby, BJ, Singer, EA, (), Tong, F., Pugliese, E. (2022)	Chen, I. (2022) Wilfried Admiraal, Wouter (2021) Harvey, F., Nilsson, P. (2022) Ninković, S., Florić, OK, Đorđić, D. (2022) Visone, J.D., Mongillo, MB, Liu, Y. (2022) Medina, GI, Vallinas, EG, Cruz, IP (2022) Ng, B., Latife, A. (2022). Singapore Elfarargy, H., Irby, BJ, Singer, EA, (), Tong, F., Pugliese, E. (2022)	Chen, I. (2022) Qualitative Collaborative Action Research Case Study Design Wilfried Admiraal, Wouter (2021) Harvey, F., Nilsson, P. (2022) Ninković, S., Florić, OK, Đorđić, D. (2022) Visone, J.D., Mongillo, MB, Liu, Y. (2022) Medina, GI, Vallinas, EG, Cruz, IP (2022) Ng, B., Latife, A. (2022). Singapore Elfarargy, H., Irby, BJ, Singer, EA, (), Tong, F., Pugliese, E. (2022) Qualitative Case Study Case Study Case Study Case Study Case Study Phenomenological

10	Principal, S. , Slater, E. (2022)	Mixed	Information analysis	Scopus
11	Zhang, J., Huang, Q., Xu, J. (2022)	Qualitative	Multiple cases	Scopus
12	La Fleur, J., Dlamini, R.J. (2022).	Mixed	Information analysis	Scopus
13	Alghamdi, DJ. (2022)	Qualitative	Multiple cases	Scopus
14	Brennan, A., King, F. (2022)	Qualitative	Multiple cases	Scopus
15	Coenen, L., Schelfhout, W.,	Mixed	Multiple cases	Scopus
	Hondeghem, A. (2021)			
16	Velazco, DJM, Martinez, MFC,	Quantitative	Non-experimental cross-	Scopus
	Eyebrows, MN, Hinostroza, EMF,		sectional type	
	Pinos, KMC (2021)			
17	Zulu, FQB, Mukeredzi, TG (2021)	Qualitative	Interpretative	Scopus
18	Green, L., Collett, K. (2021).	Qualitative	Interpretative	Scopus
19	Candela Soto, P. , Jiménez Andújar,	Qualitative	Action research	Scopus
	EM , Blanco García, M. (2021)			
20	Flores-Fahara, M., Bailey-Moreno, J.	Qualitative	Multiple cases	Scopus
	, Mortera-Cavazos, LE. (2021)			
21	Dalby, D. (2021)	Qualitative	Exploratory study	Scopus
22	Moosa, V., Salleh, S., Hamid, L.	Quantitative	Confirmatory Factor	Scopus
	(2020)		Analysis (CFA)	
23	Omdal, H., Roland, P. (2020)	Qualitative	Case analysis	Scopus
24	Lundo, L. (2020)	Qualitative	Case analysis	Scopus
25	Kullberg, A. , Vikström, A. ,	Quantitative	Exploratory study	Scopus
	Runesson, U. (2020)			
26	Shdaifat, SAK, Al-Huson (2020)	Qualitative	Descriptive approach.	Scopus
27	Tayag, JR. (2020)	Qualitative	Phenomenological	Scopus
28	Prenger, et al. (2019)	Mixed	Analysis of information	Scopus
29	Schaap, H., Louws, M., Meirink, J.,	Qualitative	Semi-structured	Scopus
	(), Zwart, R. , Meijer, P. (2019)		interviews	
30	Qvortrup, L. (2019)	Qualitative	Analysis of information	Scopus
31	Vijayadevar, S. , Thornton, K. ,	Qualitative	Interpretative	Scopus
	Cherrington, S. (2019)			
32	Luyten, H. , Spleen, M. (2019)	Quantitative	Structural equation	Scopus
			models	
33	Yada, et al (2022)	Quantitative	Case analysis	
				Ebsco
34	Park, Joo-Ho; Byun, so-yong. (2021)	Qualitative	Case analysis	Ebsco
35	Widodo, Handoyo Puji;	Qualitative	Case analysis	Ebsco
	Allamnakhrah Alhacan (2020)			
	Allamnakhrah, Alhasan. (2020)			

36	Alles, Martina; Seidel,	Mixed	Multiple cases	Ebsco
	Tina; Gröschner, Alexander.			
	(2019)			
37	Cabezas et al. (2021)	Mixed	sequential	scilo
37	War, Paula ORCID ; Rodriguez, Mery	qualitative	case study,	scilo
	ORCID ; Zañartu, Carola. (2020)			
38	Chris Brown. (2020)	Qualitative	Semi-structured	Sciencia
			interviews	direct
39	Piret OppiEva Eisenschmidt. (2022)	Qualitative	Case studies	Sciencia
				direct
39	Kimberly EvertKristy Cooper Stein.			Sciencia
	(2022)			direct
40	beatheLiebech-Lien. (2021)	Qualitative	Narrative approach	Sciencia
				direct

3. Resultss

In 2012 the Ministry of Education published the document Framework for Good Teacher Performance, which is an important guide for the development and implementation of policies and actions for teacher training, evaluation and development (Ministry of Education of Peru, 2012). This guide outlines the skills teachers must acquire across the country and at all levels to improve student learning outcomes. The twenty-first century requires an organizational change to prepare students for the world of tomorrow, an internal and collective change that empowers those involved to achieve their goals of development and improvement. (Gil-del Pino & García-Segura, 2019).

According to MINEDU (2012), the role of the teacher consists of four phases: (a) Planning student learning, reviewing various theories, approaches and learning models and, in turn, understanding the context and educational needs of students to properly plan activities. b) Teaching students, which is an important part of learning outcomes, is the main objective of the learning process. (c) The teacher must participate in the management of the school, must be actively involved in the various educational projects that are carried out through educational research in which he is involved, and must also have proposals to carry out educational projects. Finally, (d) professional development and knowledge of the teacher: the teacher must be committed to his profession and respect his peers and students. You must demonstrate dedication

and responsibility in your work, ethically performing your functions as a teacher.

One way to create collaboration among teachers is through Professional Learning Communities (CPAs), an initiative in which a team of teachers maintains an ongoing research environment where each teacher's contribution contributes indirectly to student learning development (Guerra et al., 2020). To create a culture of effective collaboration in school networks, it is necessary to prepare an environment that enables deep learning and is based on the principles that guide professional learning communities" (Mellado Hernández et al., 2020).

Any educational institution that implements a CPA strategy will need to restructure its organization so that not only the principal is considered an educational leader, but also other educational leaders who are and have common goals (Morales-Inga & Morales-Tristán, 2020).

The most important thing that every educational institution must consider is the purpose that guides all the actions organized by the school, so the role of the educational leader plays an important role in the promotion of CPA (Rivera Huaranga, 2021).

The various studies reviewed in this article coincide in highlighting professional learning communities as an important aspect in today's educational landscape. In this specific case, three aspects of fundamental interest stand out; leadership, professional practice and collective learning. Below are the elements that are part of the comparison or discussion around these three aspects of vital interest within the framework of the general theme.

Regarding leadership, Medina et al. (2022) and Park et al. (2020), point out that leadership is the cornerstone for educational institutions to be seen as a CPA. It is clear that this leadership must be exercised in a fair and equitable manner among the members of the institution, a position similar to that of Rivera et al. (2021), who indicate that true leadership must start from a horizontal relationship based on values such as trust and collaboration in collective work, to achieve common objectives at the same time with all the entities that are part of the teaching dynamic. And learning. Each person involved in educational work in one way or another has knowledge that should not only be recognized, but also used and combined properly, this will undoubtedly result in institutional success (Brown et al., 2020; Elfarargy et al., 2022).

In the case of Botha (2021) and Coenen (2021), they argue that leadership is a role that must be exercised from a reflective perspective where the potential of each individual will strengthen CPAs, including the willingness to organize, communicate and innovate. In the context of professional learning communities, the results of purposeful leadership are evident, as participation is not forced but voluntary and is associated with a high level of commitment, planning and evaluation for each educational leadership task (Alles et al., 2021). 2021; Cabezas et al., 2021).

However, in professional practice Guerra (2020) Green et al. (2020) agree that this aspect is the result of a vision from the educational core for the general public, which allows teachers to network, provide periodic feedback, monitor student work and teaching practices, share experiences of the observed results, learn from students, collaborate in each teacher's classroom to establish improvement plans based on student performance (Gil-del-Pino et al., 2019; Izquierdo et al., 2022).

Lund (2020) and Omdal (2020) agreed that there are problems with the real dynamics of education that do not provide easy answers to the question of individualism or selfishness. However, there should be no coordinated response among institutional members, including pedagogical knowledge, empirical worldviews, and ongoing reflections on what they do.

Regarding collective learning, Schaap et al. (2019) and Harvey (2022), agree that this indicator in CPAs is mainly related to a form of self-reflection and the creation of continuous feedback of the activities that are developed within the daily life of the educational process. It can be emphasized that when the school is understood as a community, it is necessary that those who integrate it carry out actions that lead to the effective performance and common progress of education in its various expressions and forms (Soto et al., 2018).) .); (Yada et al., 2022).

As stated by Jarrent (2020) and Luyten (2019), collaborative learning in professional learning communities is underpinned by the concept of a network, in which each thread can and should implement a continuous and fully connected learning process. Teachers are constantly learning from their students and students from their teachers, and both are immersed in a dynamic that captures the internal and external worlds of learning institutions, the reconfiguration of educational trends, and how they have implications for educators on their performance (Mosa et al., 2020; Flores et al., 2021).

4. CONCLUSION

The purpose of this study is to systematically review published research on CPA strategies to improve teaching effectiveness by strengthening teacher performance, which I can conclude as follows: The research on the investigated topic provides very relevant and useful information about the professional learning community that should continue to deepen this topic for a change in educational institutions.

CPAs lead new ways of restructuring educational institutions from a social learning perspective, enhancing teaching effectiveness, where there is no place for personalized learning and where teachers take responsibility for improving student learning. This social reflection leads them to rethink their teaching practices in a framework of respect for work, which leads to the reformulation of work methods that affect learning and greater student performance.

Based on the review of the literature carried out in this study, trying to restructure the institutes as CPA is not an easy task, it will not happen overnight it requires a lot of determination not only from teachers, but from the entire community, because its effects are in favor of student learning.

The role of leaders of educational institutions, as administrators, coordinators, etc., helps strengthen various aspects of the CPA to support the participation of the entire educational community.

Regarding the educational impact provided by this study, the authors agree that one of the most important aspects of CPA is collaborative work and learning, which is an important component for teachers, where research into new ways of carrying out pedagogical practices and teacher research to investigate and evaluate progress over time are important.

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