## ADMINISTRATIVE STRATEGIES FOR ENHANCING PLC OF SCHOOL ADMINISTRATORS UNDER PRIMARY EDUCATIONAL SERVICE AREA

Haruathai Boonpradab<sup>\*</sup>, Yongyouth Yaboonthong, Choocheep Puthaprasert and Tharn Thongngok

Faculty of Education, Chiang Mai University, Chiang Mai 50200, Thailand

\*Corresponding author: haruithai.2510@gmail.com

Received: November 9, 2018; Revised: March 12, 2019; Accepted: April 18, 2019

### Abstract

The objective of this research was to study the administrative strategies for enhancing professional learning community (PLC) of school administrators under Primary Educational Service Area. The research was divided into four steps: 1) to study the components for enhancing PLC of school administrators, instruments used in an interview form and a questionnaire, a target group of 17 experts, analyzing the median calculation and interquartile ranges; 2 to study problems and factors supporting the success, instruments used were a questionnaire and an interview form, data were analyzed by mean, standard deviation, and descriptive analysis; 3) to create and verify by workshop with AIC techniques of 31 experts, and to verify the suitability, feasibility, and benefits of the questionnaire; and 4) to study the results of implementation by using PAOR, instruments used were the meeting agenda/issues the report, and the observation, data were analyzed by the descriptive analysis. The results were: 1) the components consisted of five components: knowledge, supporting factors, leadership, friendship, and collaborative network; 2) the problems and factors supporting the success indicated that the knowledge was at the highest level, followed by supporting factors, friendship, leadership, and collaborative network were at a high level; five problems were factors supporting the success of policy and practice; 3) the administrative strategies consisted of vision, mission, goals, strategy,

measures, indicators, achievements and projects; the results of verifying the suitability and feasibility were at the highest level, the benefits were at a high level; 4) the results of implementation revealed that the successful level of the operational results was overall at the highest level.

*Keywords:* Administrative strategies; professional learning community (PLC); school administrators

#### Introduction

Administrative strategies were important tools for administrators undertaking projects used in many different organizations. The basic idea behind administrative strategies was to combine planning, mission or a set of goals. Each of these processes represented an important component of the administrative strategies. Due to the effective professional learning communities (PLC), it could be a tremendous benefit to both teachers and students. For staff, the following results had been observed: reduction of isolation of teachers, increased commitment to the mission and goals of the school, and increased vigor when working to strengthen the mission, shared responsibility for the total development of students and collective responsibility for students' success, powerful learning which defined good teaching and classroom practice and created new knowledge and beliefs about teaching and learners. (Hord, 2009)

Later, DuFour (2004) gave the idea of improving schools by developing PLC, that is currently in vogue. People used this term to describe every imaginable combination of individuals with an interest in education - a grade-level teaching team, a school committee, a high school department, an entire school district, a state department of education, a national professional organization, and so on. In fact, the term had been used so ubiquitously that it was in danger of losing all meaning (DuFour, 2004).

Likewise, Balyer et al. (2015) studied the school principals' roles in establishing collaborative PLC at schools, it was found that establishing PLC developed capacity and improved students' learning at school. In order to develop capacity and maintain it, establishing "professional learning communities" at school was one of the administrative roles that school principals should fulfil. As far as capacity development was concerned, it was more important for school principals to establish collaborative PLC at schools than ever before. Moreover, Earp (2017) stated in building a PLC that ACER's concerning professional learning communities across five domains: professional culture, leadership, focusing on students, focusing on professional learning, and performance and development.

Regarding the term of administrative strategies for enhancing professional learning community (PLC), development of important issues and actively planning for implementing could be defined as the art of getting things done through the process of planning, organizing, leading and controlling the efforts of school administrators and using all the organizational/institutional goals and objectives providing guidelines for participation. According to the administrators should equip PLC adequately with various administrative strategies for enhancing PLC.

In 2018, The Teachers Council of Thailand (2018), called as Kurusapa, announced guidelines for promoting teachers and educational personnel development network in Professional Learning Community (PLC) that the successful development of teachers and educational personnel in many countries emphasized on the importance of professional development aimed at teachers, administrators, educators and relevant persons cooperating to develop professional skills continuously and consistently in the model of "Professional Learning Community (PLC)" by members of the professional community collaboratively defined the vision, goals, mission, and activities of professional development together as well as sharing a development mission, the cooperation of members to learn in terms of friendship, performance based on the actual work leaning on the working area rather than other models of development that can be obtained from outside the classroom. The results and the impacts of developing according to the professional learning community causing personal changes, namely positive behavioral changes for teachers, administrators, learners and relevant persons to be quality persons which affected to learners' quality development, educational quality, and the quality of the country in the end. In addition, it also created a work culture that encouraged persons in schools, organizations, and various agencies to collaborate to learn, to criticize, reflectively think collaboratively and exchange more professional learning.

As a school administrator, as an observer, the researcher found that some school administrators under Primary Educational Service Area, and also the researcher's colleagues, they really did not understand the processes of the PLC as they still lacked of collaboration among the school administrators to create a learning society, they were not open-minded to accept the PLC, and did not build a collaborative network to drive systematic administration. The school administrators under Primary Educational Service Area seldom realized administrative strategies to be one of the most significant assets in schools in order for the schools to be successful in implementing strategies. In fact, administrative activities could be carried out by school administrators who knew how to engage subordinates to get the job done in a consistent manner and stick with the goals of the organization to drive strategies and performance. Other important duties entailed developing safety protocols and emergency response procedures, realizing the significance of building the PLC among the school administrators before driving the educational direction by creating administrative strategies for enhancing PLC in order to lead the development of change affecting the school administration efficiently.

Additionally, the PLC would be an ongoing process used to develop teachers focusing on building and sustaining school improvement efforts as collaborative teams to improve students' learning which composed of school administrators, teachers and personnel who met regularly, formally or informally, as a team to study data, to analyze current levels of achievement and goals including sharing strategies. Thus, the results of studying the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area could be useful for the school administrators.

#### **Research Objectives**

1. To study the components for enhancing PLC of school administrators under Primary Educational Service Area.

2. To study problems and factors supporting the success of the administration for enhancing PLC of school administrators.

3. To create and verify the administrative strategies for enhancing PLC of school administrators.

4. To study the results of implementing the administrative strategies for enhancing PLC of school administrators.

#### **Materials and Methods**

The research process was divided into four phases as follows:

**Phase 1:** The studying of the components for enhancing PLC of school administrators under Primary Educational Service Area, the researchers synthesized documents, 23 concepts and theory related to PLC in order to provide a framework for issues in studying the components for enhancing PLC of school administrators. The synthesized results from documentary theory were confirmed by interviewing 17 experts. Instruments used for collecting data were an interview form and a questionnaire with Delphi technique answered by experts. Data were analyzed by synthesizing contents to consider consensus by comparing the answers of each expert with the group's answer. The median calculation and interquartile ranges were used to determine the consistency of the answers from the experts.

**Phase 2:** The studying of problems and factors supporting the success of the administration for enhancing PLC of school administrators under Primary Educational Service Area was divided into two steps as follows:

**Step 2.1:** The studying of the problems of the administration for enhancing PLC of school administrators under Primary Educational Service Area, the researcher brought the data obtained from phase 1 to build a questionnaire for 379 school administrators. The instrument used for collecting data was a questionnaire. The data were analyzed by using mean and standard deviation.

**Step 2.2:** The studying of the factors supporting the success of the administration for enhancing PLC of school administrators under Primary Educational Service Area, the data concerning problems was brought from step 2.1 by the researcher for analyzing the questions in an interview form involving the factors supporting the success in terms of policies and practices by interviewing 13 experts. The instrument used for collecting data was the interview form. The data were analyzed by descriptive analysis.

**Phase 3:** The creation and verification of the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area was divided into two steps as follows:

**Step 3.1:** The drafting the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area, the researcher used the data which analyzed and synthesized results obtained from phase 2 which were drafted by the administrative strategies by workshop with AIC techniques of 31 experts. The instrument used for collecting data was a draft of the administrative strategies and issues from the workshop with AIC techniques. The data were analyzed by descriptive analysis.

**Step 3.2:** The verifying of the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area examined the suitability, feasibility, and benefits of the strategies by using the questionnaire with 11 experts. The instrument used to collect data was a strategic verification form. The data were analyzed by using mean and standard deviation.

**Phase 4:** The studying of the results of implementing the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area, the researcher implemented the administrative strategies in Primary Educational Service Area selecting an experimental section by using participatory action research (PAOR), the processes were as follows:

**Step 4.1:** Planning (P) was to define the project details of administrative strategies and selected pilot project for implementing administrative strategies, consisted of a director of Primary Educational Service Area, a director of supervision, monitoring and evaluation for educational provision, school administrators, for a total of 25 informants. The instrument used to collect data was meeting agenda/issues. The data were analyzed by content analysis.

**Step 4.2:** Action (A) was to bring the pilot project for implementation by 139 school administrators. The instrument used to collect data was a report of the operational results according to the pilot project. The data were analyzed by descriptive analysis.

**Step 4.3:** Observation (O) was to evaluate by observation, monitored by a director of a group of supervisors, monitoring and evaluation for educational provision and a school administrator as a group chairman, for a total of 17 informants. The instrument used to collect data was an evaluation for achievement of the pilot project. The data were analyzed by using mean and standard deviation.

**Step 4.4:** Reflection (R) was to reflect concerning thoughts, results, and problems of policy makers and practitioners following the pilot project and consisted of a director of Primary Educational Service Area, a director of supervision, monitoring and evaluation for educational provision, school administrators, for a total of 25 informants. The instrument used to collect data was meeting agenda/issues. The data were analyzed by descriptive analysis.

#### **Results and Discussion**

The results of this research were as follows:

**Phase 1:** The components for enhancing PLC of school administrators under Primary Educational Service Area consisted of five components: knowledge, supporting factors, leadership, friendship, and collaborative network. This finding was similar to Earp (2017) stated in ACER's (Official partner of UNESCO) PLC framework covering the key characteristics and elements of effective professional communities across five domains: professional culture, leadership, focus on students, focus on professional learning, and performance and development. Concerning this, Suwanwong (2015) studied the management strategies to enhance PLC for teachers in private schools, the finding of the framework of management to enhance PLC for teachers in private schools consisted of 1) providing continuous professional learning, 2) distributing professional leadership, 3)

supporting openness and trust for cooperation, 4) seeking for professional learning support, and 5) managing for supporting professional learning. Similarly, The Teachers Council of Thailand (2018) had a policy to promote and support the professional development network for teachers and educational personnel by allocating subsidies for professional development activities to the network with the integration of professional teachers and educational personnel in the model of professional learning community by the network operational process consisting of 1) shared values and norms, 2) collective focus on student learning, 3) collaboration, 4) expert advice and study visit, and 5) reflection dialogue.

**Phase 2:** The results of the problems and factors supporting the success of the administration for enhancing PLC of school administrators under Primary Educational Service Area were divided into two steps as follows:

**Step 2.1:** The problems of the administration for enhancing PLC of school administrators under Primary Educational Service Area indicated as shown in table 1:

Table 1: Problems of the Administration for Enhancing PLC of School
Administrators under Primary Educational Service Area (n=379
school administrators)

No.	Items	$\overline{\mathbf{x}}$	S.D.	Meaning	Level
1.	Knowledge	4.61	0.63	Highest	1
2.	Supporting factors	4.20	1.04	High	2
3.	Leadership	3.91	1.35	High	4
4.	Friendship	4.13	0.94	High	3
5.	Collaborative network	3.78	1.39	High	5
	Total Average	4.21	0.87	High	

From Table 1, the findings of the level of problems of the administration for enhancing PLC of school administrators under Primary Educational Service Area by school administrators: five aspects were overall

at a high level ( $\bar{x} = 4.21$ , S.D. = 0.87) when considering by each aspect arranged from the highest average scores to the lowest average scores, it was found that knowledge was at the highest level ( $\bar{x} = 4.61$ , S.D. = 0.63), followed by supporting factors ( $\bar{x} = 4.20$ , S.D. = 1.04), friendships ( $\bar{x} = 4.13$ , S.D. = 0.94), leadership ( $\bar{x} = 3.91$ , S.D. = 1.35), and collaborative network were at a high level ( $\bar{x} = 3.78$ , S.D. = 1.39), respectively.

**Step 2.2:** The factors supporting the success of the administration for enhancing PLC of school administrators under Primary Educational Service Area were found that five aspects of problems were the factors supporting the success in terms of policy and practice.

The results were similar consistent with the finding of Janthakot and Tuamsuk (2015) who studied factors that affected the success of community learning centers (CLC) in Thailand, which was revealed that internal factors have had impact on the success of CLC at a high level, and external factors were the next. Regarding the details of each factor, it was found that the internal success factors ranked by the order of mean scores were; building, structure and administration, personnel, activities and services, information and knowledge resources, learning support resources, and budget. While the external success factors ranked by the order of mean scores were community leader, people in the community, and the external organizations. Likewise, Polanunt, et. al. (2015) studied the management for creating PLC (PLCs) of schools under the Bangkok Metropolitan Administration (BMA), the results showed the following: 1) the current state of management to create the PLCs of schools under the BMA was overall at a high level, five management strategies were developed including 1) to promote collaborative culture and shared practice; 2) to promote collective learning and application of learning; 3) to develop teachers' capacities and to increase the effectiveness of the structural support; 4) to raise the quality of shared vision, mission and goals; and 5) to increase the effectiveness of shared leadership and shared decisionmaking. Moreover, Suwanwong (2015) studied the management strategies to enhance PLC for teachers in private schools, the finding of the management strategies to enhance PLC for teachers in private schools were 1) creating professional learning network, 2) reforming human resources management for PLC, 3) creating culture of PLC, 4) managing for continuous professional

knowledge, and 5) distributing professional leadership. Concerning the PLC, the results were quite different from the findings of Kham-o-part et al. (2017) who studied the model of TPLC for the non-formal and informal educational center in Thailand's upper northern region, the findings of this study concerning the state of PLC in the centers was at a low level and the problem of PLC state in the centers was severe, especially with regard to "continuous learning and professional development", and the need for a state of teachers' PLC in the centers was at a very high level.

**Phase 3:** The creating and verifying of the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area were divided into two steps as follows:

**Step 3.1:** The drafting of the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area, it was found that the administrative strategies responding to vision, mission, and goals actually which consisted of performance measures, indicators of achievement, and projects. Five strategies were as follows:

**Strategy 1:** Developing the school administrators to acquire knowledge and skills for building a professional learning community (PLC)

**Strategy 2:** Enhancing the school administrators to have the characteristics of friendship.

**Strategy 3:** Coordinating all sectors to participate in building the professional learning community (PLC).

**Strategy 4:** Creating a quality information communication technology (ICT) system and support for building the professional learning community (PLC).

**Strategy 5:** Allocating budgetary support for building the sustainable professional learning community (PLC).

**Step 3.2:** The results of verifying the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area, the results were as shown in Table 2:

	Suitability (N=11)		Feasibility (N=11)			Benefits (N=11)			
Items									
	μ	σ	Meaning	μ	σ	Meaning	μ	σ	Meaning
1. Vision	4.73	0.47	Highest	4.55	0.52	Highest	4.36	0.50	Highest
2. Mission	4.61	0.47	Highest	4.70	0.47	Highest	4.48	0.51	High
3. Goal	4.42	0.52	High	4.51	0.58	Highest	4.27	0.62	High
4. The first strategy	4.91	0.30	Highest	4.91	0.30	Highest	4.64	0.50	Highest
5. The second strategy	5.00	0.00	Highest	5.00	0.00	Highest	4.91	0.30	Highest
6. The third strategy	4.09	0.70	High	4.18	0.75	High	3.73	0.65	High
7. The fourth strategy	4.82	0.40	Highest	4.73	0.47	Highest	4.73	0.47	Highest
8. The fifth strategy	4.27	0.47	High	4.27	0.79	High	4.09	0.54	High
Total Average	4.61	0.42	High	4.61	0.47	Highest	4.40	0.51	High

# **Table 2:** The Results of Verifying the Administrative Strategies for PLC (N = 11 experts)

From Table 2 were the results of verifying the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area, it was found that the average scores of feasibility was at the highest level ( $\mu = 4.61$ ,  $\sigma = 0.47$ ), followed by the suitability was at a high level ( $\mu = 4.61$ ,  $\sigma = 0.42$ ), and the benefits were at a high level ( $\mu = 4.40$ ,  $\sigma = 0.51$ ), respectively.

Regarding this, Intarak (2017) studied the components of strategic planning in schools, the findings of this study were concluded that there were 6 components of strategic planning; 1) setting philosophy, vision, and mission of the organization, 2) setting policy, goal, and objectives, 3) analyzing the environments, problems and needs of the organization, 4) setting alternatives and selection, 5) setting strategies and making decisions, and 6) implementing strategies. These components were confirmed by the experts that they showed accuracy, propriety, feasibility and utility. It was also similar to Peayoo et al. (2018) who studied the development of quality World-Class Standard School strategies in the lower north area, the study showed that the strategies of world class standard school's quality development in the lower north area consisted of visions, missions, strategies and strategy points, objectives, indicators and measures. The evaluation results of the strategies of World class standard school's quality development in the lower north area indicated that accordance, suitability, possibility, and usefulness are at very high levels. Additionally, when Kothsing et al. (2018) studied the strategic planning in Basic Education under the Chiangrai Primary Educational Service Area Office 2, the results showed that the establishment of strategic planning. should allow teachers to participate in the analysis of the problems and demands of the schools, the environment analysis education information should be learning local knowledge which will be analyzed and considered in the strategic planning, the direction of education, the community should be involved in determining the direction, management and policy from the agency to analyze and determine the direction of education, the vision, mission and goals should allow the school board to participate in the vision of the school, the educational strategies should be consistent with the vision, mission and goals. The strategy of the institutions should be consistent with current conditions. In accordance with The Teachers Council of Thailand (2018) stipulated concerning the model of professional learning community (PLC) by members of the professional community collaboratively defined the vision, goals, mission and activities of professional development together as well as sharing development mission, the cooperation of members to learn in terms of friendship, performance based on the actual work leaning on the working area rather than other models of development that can be obtained from outside the classroom.

**Phase 4:** The results of implementing the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area, the processes of participatory action research (PAOR) were as follows:

**Step 4.1:** The step of planning (P), it was found that 19 projects detailing administrative strategies were defined under 5 strategies by Primary Educational Service Area and determined the selection of administrative strategies for implementation by consensus.

**Step 4.2:** The step of action (A), it was found that Primary Educational Service Area selected 3 pilot projects for implementation as follows: 2.1) the project of information management of the school administrators with professional expertise in the PLC, 2.2) the project of establishment of a formal and informal network of the PLC, and 2.3) the project of the PLC success program with stakeholder (MOU).

**Step 4.3:** The step of observation (O), it was found that the evaluation results of 3 pilot projects after implementing in Primary Educational Service Area, the highest average scores was the project of PLC success program with stakeholder (MOU), followed by the project of establishment of a formal and informal network of the PLC and the project of information management of the school administrators with professional expertise in the PLC, respectively.

**Step 4.4:** The step of reflection (R), it was found that all three pilot projects can be realistically implemented, as well as policy makers and practitioners following the pilot projects concluded that all three implemented pilot projects were useful for enhancing PLC of school administrators under Primary Educational Service Area.

The findings of these steps were similar to Aramrun et al. (2013) who studied academic administration strategy of basic education schools under Kamphaeng Phet Service Area Office 1 and 2, the findings of this research were: 1) With regard to the academic administration practices in the basic education schools, regarding academic planning, administrative structure, administrative direction and controlling, the schools had some problems in academic administration practices at a moderate level, and they also needed to develop the academic administration practices at a high and the highest level. 2) With regard to the development of academic administration strategies using SWOT analysis and group seminars, there were 14 strategies, 26 measures and 32 indicators. 3) The evaluation of 17 connoisseurs revealed that the academic administration strategies of the basic education schools were relevant and feasible at a high level and the strategies were suitable and useful at the highest level. Similarly, the findings were similar to Chantarattana and Ngamprapasom (2013) who had studied the managing strategies for developing educational quality of small schools in highland areas in the upper northern region, the conclusion of managing strategies for developing educational quality of small schools in highland areas was as Component 1: Organizational leadership was strategic, Component 2: Strategic planning, Component 3: Focus on customers and stakeholders, Component 4: Knowledge measurement, analysis, and management, Component 5: Focusing on human resources, and Component 6: Process management. Later, Laisnitsarekul and Sumettikoon (2014) studied the school management strategies to develop a PLC in secondary schools in Benjaburapha Joint Campus, the results showed that the management efforts to achieve PLC comprised 3 main strategies, 12 sub-strategies and 29 procedures. In accordance with Akiri (2014) who studied the assessment of instructional and administrative strategies applied by principles to improve academic performance, the study was based on the assessment of instructional and administrative strategies applied by principles to improve academic performance of students in schools. It is therefore obvious these principles should apply numerous administrative strategies that suited the individual secondary school to enhance educational development in the nation and the principals were the major factor of administrative process for school setting and are expected to provide the enabling environment, equipment and facilities for effective teaching and learning and to encourage individual teachers to be innovative. They should always continuously communicate with the staff on the benefit of improvement in the school system. Additionally, Balver et al. (2015) studied the school principals' roles in establishing collaborative PLC. at schools. It is believed that establishing PLC develops capacity and improves students' learning at school. In order to develop capacity and maintain it, establishing "professional learning communities" at school is one of the administrative roles that school principals should fulfil. As far as capacity development is concerned, it is more important for school principals to establish collaborative PLC at schools than ever.

#### Conclusion

The first issue: Concerning the components for enhancing PLC of school administrators under Primary Educational Service Area consisted of five components: knowledge, supporting factors, leadership, friendship, and collaborative network.

The second issue: Concerning the problems and factors supporting the success of the administration for enhancing PLC of school administrators under Primary Educational Service Area, it was found that five aspects were overall at a high level when considering by each aspect arranged from the highest average scores to the lowest average scores, it was found that knowledge was at the highest level, followed by supporting factors, friendships, leadership, and collaborative networks were at a high level, respectively; and five aspects of problems were the factors supporting the success in terms of policy and practice.

The third issue: Concerning the creating and verifying of the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area, it was found that the drafting of administrative strategies responding to vision, mission, and goals actually which consisted of performance *measures*, indicators of achievement, and projects; and verifying the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area, it was found that the average scores of feasibility was at the highest level, followed by the suitability was at a high level, and the benefits was at a high level, respectively.

The fourth issue: Concerning the implementing of the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area, the processes of participatory action research (PAOR) in planning (P), it was found that 19 projects details of administrative strategies were defined under 5 strategies by Primary Educational Service Area and determined the selection of administrative strategies for implementation by consensus; in terms of action (A), it was found that Primary Educational Service Area selected three pilot projects for implementation as follows: 2.1) the project of information management of the school administrators with professional expertise in the PLC, 2.2) the project of establishment of a formal and informal network of the PLC, and 2.3) the project of PLC success program with stakeholders (MOU); the step of observation (O), it was found that the evaluation results of 3 pilot projects after implementation in Primary Educational Service Area, the highest average scores was regarding the project of the PLC success program with stakeholders (MOU), followed by the project of establishment of a formal and informal network of the PLC and the project of information management of the school administrators with professional expertise in the PLC, respectively; in reflection (R), it was found that all three pilot projects can be realistically implemented, as well as policy makers and practitioners following the pilot projects which concluded that all three implemented pilot projects were useful for enhancing PLC of school administrators under Primary Educational Service Area.

It might be because of the administrative strategies for enhancing PLC of school administrators under Primary Educational Service Area used the participatory action research (PAOR) so it could help administrative strategies for enhancing PLC of school administrators to be effective and productive. It also helped the school administrators to learn how to solve problems and to develop a plan or project for development. Act as "PLC" was the result of the use of participatory action research (PAOR) processes.

#### Acknowledgement

This research was supported by Assoc. Prof. Dr. Choocheep Puthaprasert. I would also like to be grateful to Assist. Prof. Dr. Yongyouth Yaboonthong, Dr. Tharn Thongngok, and Dr. Monnapat Manokarn for their comments and correcting any errors.

#### References

- Akiri, A. A. (2014) Assessment of Instructional and Administrative Strategies Applied by Principles to Improve Academic Performance. *International Journal of Educational Administration and Policy Studies* 6(7): 114-118. [Online URL: https://files.eric.ed.gov/fulltext/EJ10758 53.pdf] accessed on July 20, 2018.
- Aramrun, C., Wongnaya, S. and Sompongtam, C. (2013) Academic Administration Strategy of Basic Education Schools under Kamphaeng Phet Service Area Office 1 and 2. *Journal of Education Naresuan University* 15(4), 45-54. [Online URL: https://www.tcithaijo.org/index.php/edujournal\_nu/article/download/16100/14651] accessed on July 20, 2018.
- Balyer, A., Karatas, H. and Alci, B. (2015) School Principals' Roles in Establishing Collaborative PLC at Schools. *Procedia - Social and Behavioral Sciences* 197(2015): 1340-1347. [Online URL: https:// core.ac.uk/download/pdf/82491510.pdf] accessed on July 20, 2018.
- Chantarattana, R. and Ngamprapasom, N. (2013) Managing Strategies for Developing Educational Quality of Small Schools in Highland Area in the Upper Northern Region. *Journal of Education Naresuan University* 15(3): 23-39. [Online URL: https://www.tci-thaijo.org/ index.php/edujournal\_nu/article/view/16048/14605] accessed on July 20, 2018.
- DuFour, R. and Eaker, R. (1998) P L C Handbook: Creating and Sustaining a Professional Learning Community" Department of Teaching and Learning Services Lakeville Area Public Schools Revised. [Online URL: http://isd194.org/download/communications\_master/upper\_ nav./staff/teaching\_and\_learning/PLC\_Handbook. pdf] accessed on July 20, 2018.
- DuFour, R. (2004) What Is a "Professional Learning Community"? Educational Leadership, May 2004. [Online URL: http://www. ascd.org/publications/educational-leadership/may04/vol61/num0 8/What-Is-a-Professional-Learning-Community%C2%A2.aspx] accessed on July 20, 2018.

- Earp, J. (2017) Building a professional learning community. [Online URL: https://www.teachermagazine.com.au/articles/building-a-professionallearning-community] accessed on July 20, 2018.
- Hord, S. M. (2009) Professional Learning Communities. National staff Development Council 30(1). [Online URL: http://www.ecap-videos .ca/ecap/resources/Hord 2009.pdf] accessed on July 20, 2018.
- Intarak, P. (2017) The Components of Strategic Planning in School. Veridian E-Journal, Silpakorn University 10(3): 1503-1517 [Online URL: https:// www.tci-thaijo.org/index.php/Veridian-E-Journal/article/view/109469/ 86083] accessed on July 20, 2018.
- Janthakot, P. and Tuamsuk, K. (2015) Factors Supporting the Success of Community Learning Centers in Thailand. *Humanities, Social Sciences Social Sciences and Art* 8(1): 42-5. [Online URL: https:// www.tci-thaijo.org/index.php/tla\_research/article/view/43589] accessed on July 20, 2018.
- Kham-o-part, P., Puthaprasert, C., Yaboonthong, Y. and Muntabutara, S. (2017) The Model of Teachers' Professional Learning Communityfor the Non-Formal and Informal Educational Center in Thailand's Upper Northern Region. *Veridian E-Journal, Silpakorn University* 10(5): 348-364. [Online URL: https://www.tci-thaijo.org/index.php/Veridian-E-Journal/article/download/109699/86166] accessed on July 20, 2018.
- Kothsing, A., Supasopon, C. and Thonggate, K. (2018) The Strategic Planning in the Basic Education under the Chiangrai Primary Educational Service Area Office 2. *Veridian E-Journal, Silpakorn University* 11(1): 2605-2615. [Online URL: https://tci-thaijo.org/index.php/Veridian-E-Journal/ article/download/121823/93508] accessed on July 20, 2018.
- Laisnitsarekul, M. and Sumettikoon, P. (2014) School Management Strategies to develop a Professional Learning Community in Secondary Schools in Benjaburapha Joint Campus. *An Online Journal of Education*. *OJED*. 9(3): 392-406. [Online URL: https://tci-thaijo.org/index.php/ OJED/article/view/20575] accessed on July 20, 2018.

- Peayoo, S., Pongpinyoopas, S. and Jamjang, K. (2018) The Development of Quality World–Class Standard School Strategies in the Lower North Area. *Humanities and Social Sciences, Journal of Graduate School* 12(1): 260-274. [Online URL: https://www.tci-thaijo.org/index.php/ GraduatePSRU/article/download/130961/98253] accessed on July 20, 2018.
- Polanunt, K., Viseshsiri, P. and Sumettikoon, P. (2015) Management for Creating PLC (PLCs) of Schools under the Bangkok Metropolitan Administration (BMA). Assumption Journal 7(2): 241-249. [Online URL: http://www.assumptionjournal.au.edu/index.php/Scholar/article/ view/1520] accessed on July 20, 2018.
- Suwanwong, A. (2015) Management Strategies to Enhance Professional Learning Communities for Teachers in Private Schools. *The Chulalongkorn University Intellectual Repository (CUIR)* [Online URL: http://cuir. car.chula.ac.th/ handle/123456789/49958] accessed on July 20, 2018.
- The Teachers Council of Thailand.(2018) Guidelines for Promoting Teachers and Educational Personnel Development Network in Professional Learning Community (PLC), 2018 [Online URL: https://drive. google.com/file/d/0B7Cu9uHMPSZ4VHhHNjhTSXRySIE/view] accessed on December 20, 2018.