Innovation Driven the Professional Learning Community (PLC) Process for Small Educational Institutions and Remote Areas

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Abstract

This study is based on the idea of a professional learning community, which is a group of educators who get together to share teaching insights, gaining managerial expertise through the process of a professional learning community, which facilitates the transfer of information and the planning of operations that will result in actual operations, the PLC process driving model may be used by teachers to conduct research in the classroom on a regular basis and to share the findings with other members of the teaching staff in order to maintain continuity and sustainability. Therefore, this research article aims to; 1) to create innovation to drive the professional learning community process for small educational institutions and remote areas, 2) to apply innovations in driving the professional learning community process to network educational institutions, small educational institutions, and remote areas, and 3) to confirm innovation in driving the professional learning community process for small educational institutions and remote areas.

It is research and development, and the sample was drawn from purposive selection of small educational institutions in Phetchabun Province, Phichit Province, and Nan Province, totaling 7 locations, confirm the format by referencing qualified experts. The tools used in the research include; seminar recording form on innovation creation, workshop project manual, workshop project evaluation form, and opinion questionnaire. Statistics used include; percentage value; average; standard deviation; and analyze content.

The results of the research found that; 1) Innovation driven process of professional learning community for small educational institutions and remote areas that are built there are 6 aspects; management, teacher and personnel development, environment and learning management atmosphere, co-leadership, learning management and professional development and Applying learning outcomes to improve learner quality. Performance before development in high level, mean ( $\bar{X} = 4.34, \text{S.D.}=0.61$ ) after development at the highest level with an average ( $\bar{X}=4.50, \text{S.D.}=0.59$ ) an increase of +0.13, 2) Bring innovation to drive process of professional learning community for small educational institutions and remote areas the overall assessment results were at a high level, 3) Confirmed the creation of innovations to drive process of professional learning community for small educational institutes and remote areas it was found that there were several interrelated elements be appropriate. It is feasible, useful and theoretically accurate 100 percentages. The researcher offers the following recommendations on how to apply the research study's findings to promote better educational management; 1) until learners are able to develop themselves to their full potential, driving the professional learning community process for small educational institutions and remote areas should give educational institutions, teachers, and students opportunities to creatively design
learning together, this can be done by creating a professional learning community development plan that is clear and appropriate to the context of learners, and 2) teachers should use innovation to guide the process of professional learning communities for distant and small educational institutions, build routine research to be varied, fulfill the requirements of students, and empower students to be social innovators.

**Keywords**: Innovation, Driven process, Professional learning community

### Introduction

Since teachers are crucial in helping the country's youth become knowledgeable, capable, and equipped with necessary skills for living in the 21st century, which is the era of technology information and changes in many areas, including economics, society, and technology, the concept of developing teachers and educational personnel in Thailand has always been implemented. Providing pupils with academic knowledge, intellectual skills that can acquire knowledge, and the ability to extend knowledge on one's own is important because it reflects the priority placed on the development of school-aged children's quality by National Economic and Social Development Plan No. 12 (2017–2021). As for the National Education Plan 2017–2036, it has placed a strong emphasis on creating contemporary Thai with the habit of studying, the capacity to learn on their own, and a lifelong thirst for information, and focus on reforming the entire education system, developing teachers, lecturers, and educational personnel, in order to get good teachers, talented teachers, morality, quality, and higher academic status. (Dhedchawanagon, 2023)

The teaching profession and educational staff, particularly teachers, should place a high priority on professional learning communities (PLC). The Ministry of Education policy will take effect on February 28, 2017. Which about the main features that make PLC (Martin, 2011; Hord, Roussin & Sommers, 2010; Anenberg Institute for School Reform, 201; DuFour, 2007) into 5 things, namely; 1) Having common norms and values, a learning community, or learning community in schools, is a group of people who share certain standards and values, these shared norms and values are essential principles that serve as a foundation for growth. The PLC teachers must thus adhere to the same norms, beliefs, and perspectives towards learning management, 2) Since the targeted learning outcomes for students require for a variety of techniques and strategies, instructors and students must share responsibility for student learning. This is made possible by teachers having high expectations for their students. It is also a goal held by all teachers who are a part of the professional learning community and is based on the notion that all students can learn. Finally, it aims to improve learning management and student achievement, 3) Professional reflection studies, conversations about teaching and learning administration among members of the learning community, particularly between teachers, professionals, educators, and administrators, to reflect on the results of practice, including jointly proposing useful guidelines that improve student learning. Reflection and guidance will give a tool or method for assessing important issues that will enhance teaching and learning, the level of education in schools, or that will assist in the development of learning management, leading to pupils meeting higher academic standards. 4) Cooperation and the community of professionals who are learning places a high value on teacher collaboration across the board as well as collaboration within the professional learning community. In order to carry out activities to success under the same purpose, the cooperation will be centered on the sense of interdependence among community members throughout activities to achieve the
goals. For instance, there was a sharing of teaching strategies, educational resources, and different learning management systems. 5) Supporting staff or community members’ ability to observe instruction, offer feedback, and reflect on performance. This includes fostering connections within the organization and the hierarchy of the workforce. The development of a professional learning community will be fully supported by including the teaching of peers and of the learning community to concentrate on the learning process that takes place in the community and to boost student accomplishment.

Each educational institution has decided how its personnel development work will proceed in accordance with the policy, which emphasizes self-development through the process of a professional learning community, but from the follow-up evaluation of the development of the teacher personnel development program. Teaching and educational staff development courses with the theme “Learning Management for Teachers in the 4.0 Era: Integration Across Learning Subjects to Innovation” Fiscal Year 2018 (Limprasong, 2020, Curriculum Code: 612032003, according to research, the majority of teachers’ issues with VLC job stem from a lack of knowledge and awareness in their own self-development and a fundamental lack of knowledge interchange. Lack of giving, being a one-sided recipient, teachers who aren’t sure of their own expertise and aren’t willing to offer their thoughts, and a lack of knowledge summaries that would integrate what they have learned into a new body of information are all problems. The Office of Basic Education organized a training for the development of leaders in building a learning community by bringing representatives of administrators, education supervisors, and teachers from each school district to train, hoping to bring the results to teachers in the district study. The Office of Basic Education learned from interviews with trainees that the school lacks advisors, but discovered that despite their training and development, teachers are still unable to put their knowledge of the professional learning community process into practice. This is because development training places more emphasis on theory than on practical application, making instructors wary of their job. Instructors don't want to practice since they are exempt from the PLC policy change and lack the necessary skills to form effective groups, such as early childhood educators or tiny schools with only a couple of instructors who are unsure about their grouping partners, other jobs cannot be scheduled at the same time, and it is crucial that no one at school does them.

Because of the issues raised above, Phetchabun Rajabhat University has decided to adopt guidelines for managing the process of putting the learning community's professional theory into action in terms of management and practical classroom activities. The university is an educational institution with policies and missions to advance, support, and quicken the development of education management across all sectors. Implementing the policy will help the Faculty of Education focus on what it does best, supporting staff development in areas like managing the learning process, managing professional experiences, and measuring and evaluating education, to encourage instructors in educational institutions to create learning management systems in accordance with the professional learning community approach and educational research that can be used in actual practice in educational institutions, as well as many sciences of other fields.

Therefore, the project's scope is as follows when conducting this event so that educational institutions can introduce the community process of professional learning to educational institutions: 1) a plan to drive professional learning communities in educational organizations, 2) workshop projects, 3) using PLC processes in classroom research, 4) supervision, monitoring, and evaluation, and 5) performance report form, and in order to accomplish the goal, the researcher has organized a research project on innovation to propel the professional learning community process for smaller educational institutions and more rural
areas, to build the capacity of teachers to be able to manage learning to achieve the set goals and objectives.

**Research Objectives**

1. To create innovation to drive the professional learning community process for small educational institutions and remote areas.
2. To apply innovations in driving the professional learning community process to network educational institutions, small educational institutions, and remote areas.
3. To confirm innovation in driving the professional learning community process for small educational institutions and remote areas.

**Methodology**

The purpose of this study is to develop a community of professional learning that is driven by innovation in order to test, assess, and verify innovation while taking into account the context of each educational institution's size, composition, suitability, feasibility, and theoretical validity.

**Step 1:** The researcher conducts a problem analysis and collects data from theses, academic papers, books, journals, websites, theses, theories of knowledge integration, educational innovation, relevant literature, and other sources to create a research framework.
   1. Books, papers, textbooks, associated academic materials, such as innovation for advancing community processes of professional learning, ideas and theories of active learning, concepts/theories of learning management skills in the 21st century, regular work as research, and related literature.
   2. Among the sources that may be searched are academic articles, research papers, training materials, other publications, educational organizations, educational service area offices, and basic education institutions.
   3. Collecting data, which means that the researcher has thoroughly examined the document's contents and the study by recording the data by taking photographs, practicing, summarizing the lesson, taking the test, etc., and presenting those significant data to a group conclusion.
   4. Conduct an analysis and summary of the data, assemble a group of experts for the first time, and select five individuals who carry out tasks related to the professional learning community (e.g., school administrators, teachers, education supervisors, and curriculum specialists). These individuals will be responsible for creating training manuals, drafting innovations, documenting issues and roadblocks, and directing professional learning community processes.

**Step 2:** Organize a workshop project using the handbook to guide the professional learning community process and evaluate phase one effectiveness. The material that is crucial to be used in the second phase should then be analyzed and improved upon during the second group seminar. This step involves bringing innovation to drive the professional learning community (PLC).

**Step 3:** Key informants, the selection criterion is that the institution of higher learning must request to participate in the project that the researcher has suggested. It is a small basic education in the northern group of 3 provinces, namely Phetchabun Province, which consists of Tat Mok Wittaya School, Ban Dong School, Ban Bong School, Phichit Province, which has Khao Sai Thap Khlo School, and Nan Province, which has Ban Pao School, Ban Wang Tao School, and Hua Wiang Nuea School. In total, there are 75 people working in these 7 locations: 7 administrators and 68 teachers. This research is a research and development project and the sample was obtained through purposive selection.
Step 4: Create research tools in this research, classified into 4 types as follows;
1. To synthesize knowledge, two expert group seminar sessions were recorded, produce instructions and inventions.
2. Workshop project manual.
3. Workshop project assessment form.
4. Opinion questionnaire.

Step 5: How to make a tool and looking for quality tools.
Activity 1: involves planning a seminar for five experts who fit the requirements, creating an innovation driving process for a professional learning community, and presenting a draft operating manual and an innovation driving process, professional learning community that has been finished and is prepared to be reviewed, modified, and used at the meeting.

Activity 2: Assess the tools' quality and the content's veracity, calculate the consistency index, take into account the beginning value of 0.5 or higher, obtain the consistency value of 0.975, put it to the test starting in June 2021, and plan a training project operation phase 1. The second step then arranges recurrent training seminars after supervising, supervising, and monitoring implementation.

Step 6: The data were analyzed using statistical processing, percentage, arithmetic mean, standard deviation, and content analysis.

Results

Objective 1: to create innovation to drive the professional learning community process for small educational institutes and remote areas by trialing the tool two times.

Table 1 Process-driven innovation for professional learning communities for small and remote schools, consisting of 6 aspects as follows;

<table>
<thead>
<tr>
<th>No</th>
<th>List of Details</th>
<th>1st Time</th>
<th>2nd Time</th>
<th>Difference</th>
<th>Development Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Management: policy direction and school strategy</td>
<td>4.27 0.62</td>
<td>4.47 0.60</td>
<td>+0.2</td>
<td>more</td>
</tr>
<tr>
<td>2</td>
<td>Promotion and development of teachers and personnel</td>
<td>4.32 0.59</td>
<td>4.52 0.59</td>
<td>+0.2</td>
<td>more</td>
</tr>
<tr>
<td>3</td>
<td>Environment and atmosphere in learning management</td>
<td>4.36 0.58</td>
<td>4.52 0.59</td>
<td>+0.2</td>
<td>more</td>
</tr>
<tr>
<td>4</td>
<td>Co-leadership</td>
<td>4.31 0.69</td>
<td>4.44 0.68</td>
<td>+0.13</td>
<td>more</td>
</tr>
<tr>
<td>5</td>
<td>Management of learning and professional development</td>
<td>4.42 0.60</td>
<td>4.57 0.54</td>
<td>+0.15</td>
<td>more</td>
</tr>
<tr>
<td>6</td>
<td>In applying learning outcomes to develop learner quality</td>
<td>4.36 0.58</td>
<td>4.49 0.55</td>
<td>+0.13</td>
<td>more</td>
</tr>
<tr>
<td>Overview</td>
<td>4.34 0.61</td>
<td>4.50 0.59</td>
<td>+0.16</td>
<td>more</td>
<td></td>
</tr>
</tbody>
</table>
From Table 1: innovations for driving community processes of professional learning for small educational institutions and remote areas were built in 6 aspects as follows; from the first performance, it was found that the performance before development training was at a high level (\( \bar{X} = 4.34, \text{S.D.} = 0.61 \)) the highest aspect was aspect five, which was management and professional development at a high level (\( \bar{X} = 4.42, \text{S.D.} = 0.60 \)), and the least was the aspect one, which was management: policies, directions and strategies of schools were at a high level (\( \bar{X} = 4.27, \text{S.D.} = 0.62 \)). However, in the second it was found that the periodic performance of the performance monitoring supervision, which found that the average increase was greater than the first time in all aspects, the overall performance was found to be at the highest level (\( \bar{X} = 4.50, \text{S.D.} = 0.59 \)) increasing +0.16. The most common area is the five area, which is learning management and professional development is at the highest level (\( \bar{X} = 4.57, \text{S.D.} = 0.54 \)), which increases +0.15, and the least is the four aspect, that is co-leadership is at a high level (\( \bar{X} = 4.44, \text{S.D.} = 0.68 \)), increasing +0.13.

**Objective 2:** bring innovation to drive the process of professional learning community to network schools, small schools and remote areas performance, according to table 2.

**Table 2** Levels of satisfaction on cognition and applying knowledge to good use (n=75)

<table>
<thead>
<tr>
<th>No</th>
<th>List of Details</th>
<th>( \bar{X} )</th>
<th>S.D.</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Knowledge and understanding of PLC process drive model</td>
<td>Knowledge and comprehension in order to build professional ethics, the professional learning community is being improved.</td>
<td>4.43</td>
<td>0.57</td>
<td>a lot</td>
</tr>
<tr>
<td>1.1</td>
<td>Participation in activities that support the community process of professional learning and knowledge acquisition in order to establish professional ethics.</td>
<td>4.49</td>
<td>0.50</td>
<td>a lot</td>
</tr>
<tr>
<td>1.2</td>
<td>Having job skills can help you acquire professional ethics through the process of improving professional learning communities.</td>
<td>4.37</td>
<td>0.56</td>
<td>a lot</td>
</tr>
<tr>
<td>1.3</td>
<td>Possess the necessary procedural abilities to integrate teaching and classroom research.</td>
<td>4.45</td>
<td>0.50</td>
<td>a lot</td>
</tr>
<tr>
<td>1.4</td>
<td>Possess the capacity to create learning management that is responsive to changes.</td>
<td>4.47</td>
<td>0.58</td>
<td>a lot</td>
</tr>
<tr>
<td>1.5</td>
<td>The acquired information satisfies the requirements of learning community participants for professional ethics, and a clear, systematic approach is followed to create professional ethics.</td>
<td>4.39</td>
<td>0.63</td>
<td>a lot</td>
</tr>
<tr>
<td>2. Professional learning community process (PLC)</td>
<td>Lecturers have experience and ability to operate in educational institutions.</td>
<td>4.59</td>
<td>0.50</td>
<td>more</td>
</tr>
<tr>
<td>2.1</td>
<td>The training resources provide thorough information and examples that might be helpful in putting PLC in place in schools.</td>
<td>4.61</td>
<td>0.49</td>
<td>more</td>
</tr>
<tr>
<td>2.2</td>
<td>Improved understanding and proficiency with PLC following training.</td>
<td>4.73</td>
<td>0.45</td>
<td>more</td>
</tr>
<tr>
<td>2.3</td>
<td>For optimal advantage, the information acquired after the training will be included in the educational institutions.</td>
<td>4.45</td>
<td>0.50</td>
<td>a lot</td>
</tr>
<tr>
<td>2.4</td>
<td></td>
<td>4.53</td>
<td>0.58</td>
<td>more</td>
</tr>
</tbody>
</table>
3. Regarding organizing the PLC professional learning process
   - Between teachers and staff members of the school, a PLC team was formed. 4.23 0.71 a lot
   - PLC procedures are coordinated in educational settings. 4.21 0.70 a lot
   - The academy wants to operate PLC continuously each academic year after learning how to do so from their peers. 4.20 0.64 a lot
   - There is supervision and follow-up from the executives regularly after the training. 4.21 0.70 a lot
   - Administrators support and facilitate teachers who operate the PLC. 4.38 0.72 a lot

4. Teachers' readiness for teaching practice
   - The preparation time was appropriate. 4.33 0.74 a lot
   - Management issues and roadblocks, problem-solving throughout project execution. 4.21 0.76 a lot
   - Learning from the process of promoting professional ethics through the PLC process. 4.28 0.80 a lot
   - The application of innovation in promoting professional ethics of teaching personnel. 4.48 0.58 a lot
   - Have a positive impact. 4.49 0.58 a lot
   - There are negative consequences. 2.53 1.02 moderate

<table>
<thead>
<tr>
<th>No</th>
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<th>( \bar{X} )</th>
<th>S.D.</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Regarding organizing the PLC professional learning process</td>
<td>4.25</td>
<td>0.67</td>
<td>a lot</td>
</tr>
<tr>
<td>3.1</td>
<td>Between teachers and staff members of the school, a PLC team was formed.</td>
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<td>a lot</td>
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</tr>
<tr>
<td>4.5</td>
<td>Have a positive impact.</td>
<td>4.49</td>
<td>0.58</td>
<td>a lot</td>
</tr>
<tr>
<td>4.6</td>
<td>There are negative consequences.</td>
<td>2.53</td>
<td>1.02</td>
<td>moderate</td>
</tr>
<tr>
<td>Total</td>
<td>4.33</td>
<td>0.53</td>
<td>a lot</td>
<td></td>
</tr>
</tbody>
</table>

From Table 2: assessment of cognitive satisfaction and knowledge utilization, the researcher designed the assessment in 4 aspects; 1) information and comprehension of the methodology for guiding professional learning in communities, 2) process of professional learning in institutions of higher learning, and 3) motivating force behind the collaborative nature of professional learning in communities, 4) the readiness of teachers in teaching. Overall, it was found that it was at a high level (\( \bar{X} = 4.33, S.D. = 0.53 \)) when considering the descending aspects as follows; the professional learning community process was at the highest level (\( \bar{X} = 4.59, S.D. = 0.50 \)), and the least aspect is the readiness of teachers in teaching at a high level (\( \bar{X} = 4.06, S.D. = 0.57 \)).
Objective 3: Confirmation of process-driven innovations for professional learning communities for small and remote schools, performance on schedule.

Table 3  Assessment of process-driven innovations for professional learning communities for small and remote areas.

<table>
<thead>
<tr>
<th>No</th>
<th>List of Details</th>
<th>$\bar{X}$</th>
<th>S.D.</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Professional learning communities (PLCs) that are driven by innovation are in line with what educational institutions require.</td>
<td>4.80</td>
<td>0.56</td>
<td>more</td>
</tr>
<tr>
<td>2</td>
<td>Are congruent with the issue-barrier situations at the institution of higher learning.</td>
<td>4.60</td>
<td>0.63</td>
<td>more</td>
</tr>
<tr>
<td>3</td>
<td>Learning activities cover all subject groups.</td>
<td>4.53</td>
<td>0.64</td>
<td>more</td>
</tr>
<tr>
<td>4</td>
<td>It can cut down on the time and labor involved in managing students' and instructors' learning.</td>
<td>4.40</td>
<td>0.74</td>
<td>a lot</td>
</tr>
<tr>
<td>5</td>
<td>The exercises are acceptable and simple to grasp, as is the terminology utilized.</td>
<td>4.53</td>
<td>0.52</td>
<td>more</td>
</tr>
<tr>
<td>6</td>
<td>Innovation will be the driving force behind the professional learning community (PLC) process for small and distant educational institutions, which is ideal for the growth, instruction, and learning management of students at all levels of basic education.</td>
<td>4.33</td>
<td>0.49</td>
<td>a lot</td>
</tr>
<tr>
<td>7</td>
<td>The learning management system was created with the teacher's routine and the work schedule for the school in mind.</td>
<td>4.73</td>
<td>0.46</td>
<td>more</td>
</tr>
<tr>
<td>8</td>
<td>The implementation process is simple and practical.</td>
<td>4.40</td>
<td>0.51</td>
<td>a lot</td>
</tr>
<tr>
<td>9</td>
<td>It is a method for combining information and growing experiences that address crucial life skills.</td>
<td>4.33</td>
<td>0.49</td>
<td>a lot</td>
</tr>
<tr>
<td>10</td>
<td>To expand the outcomes to network schools that offer education at the same level, professional learning communities (PLC) can be used to drive the process in small and rural places.</td>
<td>4.53</td>
<td>0.52</td>
<td>more</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.52</td>
<td>0.55</td>
<td></td>
</tr>
</tbody>
</table>

From Table 3: while taking into account the item with the highest mean, it was discovered that the overall assessment of the quality of innovation in fostering community processes of professional learning for small educational institutions and distant locations is at the greatest level ($\bar{X} = 4.52$, S.D. = 0.55). The first item is that the professional learning community innovation for small and distant educational institutions produced is commensurate with the demands of educational institutions at the highest level ($\bar{X} = 4.80$, S.D. = 0.56), and the two items with the least value are equal, item six process-driven innovation, professional learning community for small educational institutions and remote areas that are suitable for educational development and learning management for learners of all levels, and item nine is a guideline for managing the integration of knowledge in developing experience management covering the competency-based curriculum at a high level ($\bar{X} = 4.33$, S.D.= 0.49).
Discussions

From research on Process-driven innovation for professional learning communities for small and remote educational institutions, results can be discussed as follows;

1. Process-driven innovations for professional learning communities for small and remote educational institutions created consist of six aspects;

1.1 Administrative aspects: policies, directions, and strategies, educational institutions have a strategic plan, an annual action plan in accordance with the guidelines for the development of a professional learning community development plan, define and prepare and change the vision, support research and use research findings to raise the caliber of learners, and encourage teamwork. This is consistent with the study by Dechakup & Yindeesuk (2018) which mentions the elements of PLC and states that the establishment of a professional learning community in schools requires collaboration among the staff members, including the director, administrators, head of the learning group, subject matter experts, study supervisors, and teachers. Stoll & Louis (2007) among others, claimed that management of an organization feels secure or unburdened based on the management of a professional learning community, professional development learning is an environment for teachers to feel connected rather than isolated, a collaborative learning space using a variety of strategies, and an intrinsically cohesive group that collaborates academically with one another.

1.2 Promotion of teachers' professional development and staff development of professional teachers during the supervision system to follow-up on teachers' work, closely advise problem-solving, study visits, exchange knowledge, use technology to communicate, bring information, and research is a management tool to create new innovations for excellent results in organizations. According to Montha (2019), improving teaching and learning is the only way to lead to the development of student outcomes, starting from teacher development, quality with knowledge and competence, skills in learning management, and being able to manage teaching and develop learners. These authors cited Luangsawat, Teeravanichtrakul & Rakngam: (2018) in support of their claim that improving teaching and learning leads to the development of student outcomes. According to Battersby (2015) it was suggested that schools apply the PLC process to provide instructors the opportunity to change learning management, increase awareness, improve teachers' teaching skills, and assist students' learning as effectively as possible.

1.3 The learning management environment and climate foster a psychological environment and foster a favorable perception of the school's mission and objectives. It was discovered that professional learning communities are a way to develop teachers by giving them a place to exchange ideas and learn from one another, which is in line with Phuangsomchit (2017) research on professional learning communities and recommendations for their implementation in educational institutions. As a result, instructors have a network with which to collaborate in order to advance students' learning.

1.4 Joint leadership, bolstering joint leadership both directly and indirectly with strong governance, to raise the power of members with leadership, support to increase the power of each other's work, generate inspiration, and inspire instructors to work freely. This kind of gathering is driven by the needs and interests of PLC members for learning and professional development in accordance with the learning standards of learners, according to Panich (2012), who also mentions having shared values and a shared vision. This type of gathering enables people to learn together and apply what has been learned in a creative way. According to Yoophakdee & Areerat (2017) study it was discovered that the four
administrative characteristics of leadership, organizational system, organizational structure, and management jointly predicted the professional learning community of school teachers.

1.5 In terms of learning management and professional development, instructors engage in hands-on, real-world learning management practices that directly impact students' learning and challenge their potential. Establish new practices, be skilled in utilizing electronic media for instruction and learning, measure and evaluate performance both online and offline using a range of methods, and use empirical evidence to support unambiguous conclusions. According to the findings, which were in line with Theparee (2014) research on the development of a professional learning community model for primary school teachers, a professional learning community model for elementary school teachers with a culture of learning requires teachers to become familiar with the mission, core values, and operating environment of the institution where they work, by merging school culture with culture, values, and changeable self-worth, there is empowerment created when learning possibilities are created in a learning environment.

1.6 Applying learning outcomes to improve learner quality, utilizing assessment outcomes as a tool to enhance operations, raise awareness, help stakeholders understand the operating conditions that exist, plan projects and various activities, and allowing students to reach their full potential and become academically outstanding citizens. Consistent with Chaibang (2017), the concept of building a professional learning community was applied in Lamplaimat Pattana School, by designing a problem-based learning management or problem-based learning (PBL), which is a form of learning to develop new skills that are needed in the future. When working on which teacher can do it, what is it or isn't, the group of teachers comes to a conclusion and exchanges, which everyone must understand collectively, also includes the role of administrators, which must be given importance to the development of teachers, this is what this innovative PBL reveals.

2. Implementing innovation to drive the community process of professional learning to small educational institutions and remote areas being an educational institution applying to participate in the project to develop the academic administration system of all seven educational institutions, namely; Phetchabun Province, which consists of Tat Mok Wittaya School, Ban Dong School, Ban Bong School, Phichit Province, which has Khao Sai Thap Khlo School, and Nan Province, which has Ban Pao School, Ban Wang Tao School, and Hua Wiang Nuea School, can be summarized as follows;

In terms of policy, 1) promoting education that is aligned with the school's focus objectives and overall strategy, 2) promote educational development effectively and efficiently, 3) cultivate consciousness and foster creative learning along with competency, and 4) develop a sense of discipline, help students understand their responsibilities, and improve their learning experiences by doing so.

Other applications, 1) promote awareness and bolster the spirit of voluntarism in public development for the good of the general populace, 2) cultivate consciousness and strengthen the courage to think, dare to do, dare to show the ability to do what is right and have positive thinking. In which Limprasong (2020) discussed creating a model to guide the professional learning community process in cooperation with the Teachers Council of Thailand Secretariat to organize a project to strengthen the professional learning community process to foster professional ethics through the use of system information technology (E-PLC). Influencing the growth of group instructors, providing thoughts on issues with teaching and learning management, strengths, and areas that other teachers should work on, and allowing for the identification and improvement of defects. Stolland Louis (2007) asserts that the PLC is an inherently cohesive organization that emerged from a mutual care ethic connected to
teachers' lives. Friendship, between students, teachers, and community leaders, is what gives PLC the appearance of a group of people who trust one another, are open-minded, and believe in one another's potential.

3. Evaluation results of innovation for driving professional learning community process for small educational institutions and remote areas, the innovation evaluation results were at the highest level ($\bar{X} = 4.52$, S.D. = 0.55). According to assessment findings citing specialists, the multicomponent innovations produced reflect 100 percent and are connected, suitable, practicable, beneficial, and theoretically sound.

The results of this research, however, are supported by the theory that many areas of educational quality development from the past still need to be accelerated and improved. As a result, the current government should concentrate on promoting teacher development in teaching and learning to become excellent teachers in the 21st century, the budget of educational institutions is constrained, but this operation needs funding to spur change. According to Wicharn Phanich (2012) theory, schools need to grow as institutions and enable teachers to support one another in professional development. Thus, driving the professional learning community for teachers (PLC) is used to drive learning and professional development of teachers together based on working in actual classrooms as a teacher learning community for students, this leads to the development of learning methods, and develops the organization. Additionally, the work that instructors perform together outside of the classroom to create learning management systems and be ready to teach is crucial to raising student accomplishment and advancing the teaching profession. Additionally, it is in line with the findings of Hord (2010) study, which established that using the PLC paradigm causes qualitative shifts in both professional and academic accomplishment. PLC is seen as tough, but it is something that may help increase student learning in schools over time and can help promote instructors' teaching abilities in addition to assisting kids in learning effectively, which is consistent with the findings of many other researchers.

**Conclusion and suggestions**

According to the aforementioned conclusions, the fundamental ideas and principles that were applied in the development of the teacher professional learning community model are appropriate and consistent with the guidelines for developing the teacher professional learning community model, in order to promote the capacity to oversee student-centered learning in accordance with high impact practices. The formula was useful and concrete as a result of the study's findings, which are consistent with Hord (2010) concept of creating a professional learning community model, which found that professional learning communities are a way for administrators, coworkers, and teachers to work together to solve problems and create learning management for students in order to achieve the specified educational goals. The agreement among participants in a process with stages will result in advantages that students, instructors, administrators, and organizations or schools will successfully get with the help of administrators, schools, parents, communities, and corporations that sponsor education. As all parties collaborate to learn and practice, students will directly benefit from the development of students and teachers under the full umbrella of educational information that has been gathered through investigation, analysis, and synthesis into visions, objectives, and goals of educational management. In a learning environment where everyone participates in learning together, there is mutual assistance among members rather than competition, supported by government policy,
support in terms of time, resources, media, and funds, including the physical learning environment, and the skills of personnel from school administrators.

The primary common elements identified by the researcher in her compilation of knowledge from studies on the efficiency of the community process of professional learning are;

1. Innovations can be produced through the efficacy of learning management, learning management via thought process, and practical practice.

2. Classroom management took into account both good and successful teaching methods as well as those that provide challenges to students' learning or are not conducive to learning as it should be. This was done through the appropriateness activity performance phases of the teaching process. Learning activities and assessment and evaluation, sequencing and continuity of activities, appropriateness and consistency of purpose, classroom management, and how to oversee classes or group activities are all important considerations. Learning activities contribute to the development of learners' skills, their timing and structure being suited to the course material, learners' proficiency level, etc. Instructional activities facilitate interaction/exchange of learning between learners and students as well as between teachers and learners.

3. Thinking about the responses, words, behaviors, expressions, evidence of various accomplishments that represent knowledge and understanding, thinking processes, learning processes, and various learning outcomes of learners is important when it comes to the learning plan, especially those that represent knowledge, ideas, or understandings that are false or incorrect. Enthusiastic involvement in identifying some of the students as exceptional and fascinating persons (both positively and negatively), providing instances of how students deepen their learning via conversations and activities, emphasizing the range of approaches students use to problem-solving, etc.

4. Self-development according to professional standards, considering the use of questions, instructions, explanations, or the use of teachers' media, the sequence of steps for presenting questions, instructions, or explanations the correctness, effectiveness of activity materials, worksheets, learning resources (quality), adequacy of media (quantity) etc., teacher reinforcement, etc.

5. Continuity of performance analysis of indicators, measurements, tools, and assessment criteria in the classroom, summarizing strengths, weaknesses, recommendations for improvement, prominence, opportunities, problems, and obstacles that affect student learning, which can be plainly seen to be indicative of best practice, innovation, etc.

6. Positive classroom management, a learning atmosphere that takes place in the classroom or other learning environment, affects the effectiveness of teaching and learning management of students, accepts opinions, questions, and provides assistance, and lessons encourage students to come up with ideas, questions, speculations, and/or proposals, among other things.

7. A systematic examination of learners is required in terms of inspection and evaluation, and the findings must be used to help learners improve their growth.

8. Teaching observers' sharing of knowledge and criticism in order to build and enhance learning management, by addressing topics that will influence the creation of a lesson plan and the actual classroom instruction in the future, write a letter summarizing the important points from the class observations.

In order to apply the results of the research study to be more useful in driving education management, the researcher has the following suggestions;
Research Recommendations

1. In order to drive the process of vocational learning community for small and remote educational institutions, teachers, and students should be permitted to design creative learning together. To do this, community development plans of professional learning should be clear, appropriate to the learners' context, and developed before the learners can develop themselves to their full potential.

2. To satisfy the demands of the learners, teachers should create a diversity of ordinary work into research, and students may become social innovators, these communities should be process-driven innovation for small schools and rural places.

Suggestions for Further Research

1. According to the rapidly evolving period, a causal link study should be conducted on the creation of innovation-driven procedures for professional learning communities.

2. To promote community processes of professional learning with various ideas and theories to use in order to accomplish a range of continuous and sustainable learning, innovation-driven classroom research should be supported.

3. With participants in professional learning community activities, education should be provided on collaborative leadership, decentralization, and empowerment.

New knowledge and the effects on society and communities

In order to address the issues of learners' learning management in line with changes in the 21st century, where teachers must seek knowledge alongside students, process-driven innovation of professional learning communities for small and remote educational institutions is built with elements derived from brainstorming and recommendations of experts in applying innovation to guide schools. In order to encourage students to seek problem-solving and learn more broadly, instructors must also design learning and equip themselves to act as coaches and facilitators, such as problem-based learning (PBL), brain-based, project-based learning, 5E, STEM, phenomenon-based, and research-based learning, etc. The “professional learning community”, created by instructors coming together to share the experience of each teacher's role, is another crucial component of the effort to manage learning alongside teachers and students. The ability to bring the PLC process-driven model to the classroom research work, which is a routine task, and to extend the results to other educational personnel so that they are continuous and sustainable, is promoted by learning management skills with a professional learning community process, teachers have knowledge and understanding of these concepts.

As a result of this study, a model for a professional learning community for teachers was developed to support their capacity to plan student-centered learning in accordance with the standards for high impact practices, because of the use of participatory action research, the school has improved the quality of its teaching, leading to increased student accomplishment and more collaboration and camaraderie among instructors. The teacher empowerment program was developed as a result of this research using a participatory action research methodology. In order to put information regarding organizational change and teacher empowerment into reality, a collaborative learning approach between the researcher and teachers in the sample schools was adopted during the study process.
References


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