# The Importance of Sharing, Caring and Collaboration in Thai Teacher Competency Development through Online Professional Learning Communities

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## Abstract

Due to the global COVID 19 pandemic, education in Thailand is undergoing a radical transformation in which state funds are moving from traditional schools to information communication technology (ICT) based education systems that support the development and teaching of online courses. As such, stress and workloads have increased significantly, even leading to student protests over the required conditions for online learning. Therefore, a systematic literature review was conducted to establish which components were most effective in an *online professional learning community* (OPLC) that supports the development of teacher competencies under the conditions now referred to as the '*New Normal* .'From the analysis, six common themes were identified. These included 1) *shared values and vision*, 2) *collaborative teamwork*, 3) *practice and cooperative learning*, 4) a *caring community*, 5) *shared leadership*, and 6) *supportive technology*. After that, from the input of 30 teacher volunteers in five groups, a plan-see-do (PSD) mechanism was outlined, as well as the importance of the *role model/model teacher*, *buddy teacher*, and *mentors* was also established. Finally, we suggest OPLC implementation for teacher competency development has four stages, including a preparatory stage, an analysis stage, an OPLC implementation stage, and an OPLC testing and evaluation stage.

**Keywords:** Competency-based education, ICT, OPLC, shared values and vision, teacher wellbeing, Thailand

## Introduction

DuFour (2004, 2007) discussed the main characteristics and confusion in the use of the term *professional learning communities* (PLCs), in which the author stated that out of the darkness and confusion, PLCs are not a program or course, but instead is something which empowers change within schools at all levels. Thus, educators and staff must focus on the content to teach rather than the learning. Teachers are also central to facilitating a child's cognitive, emotional, and behavioral development, which requires an investigation and a better understanding of the psychological factors associated with effective teaching and teacher wellbeing (Arslan, 2021).

Teachers must also work collaboratively, holding themselves accountable for the results achieved. In addition, there must also be a focus on cooperation and collective energy or 'synergy' (Ontario Principals' Council, 2009), with an effort at continuous improvement to achieve success and goals through collaboration. Similarly, Hord (2008) says that a school's purpose is student learning and that this is achieved through the level of teaching quality.

Thus, the quality of teaching can be improved through *continuous professional learning* (CPL), which today is achieved best by using PLCs and teacher collaboration within them. Additionally, in Thailand, Tanyarattanasrisakul (2017) added that PLCs became effective if teachers were involved in a *caring community*, *shared their visions and values* with others, exhibited *leadership characteristics*, implemented *collaborative learning and sharing*, and finally, implemented leadership characteristics and, most importantly, the development of *student 21st-century skills*.

The critical nature of PLCs in 21st-century skills education is also stated from research from Kenan Foundation Asia (2019), in which the group reported that teaching in Thailand is undergoing a paradigm shift due to PLCs. Reasons for this include the engagement of educators into small groups of team-based units in which the teaching and learning process is examined while discussing and implementing solutions on how to engage best and motivate students.

Furthermore, the study detailed how PLCs created higher teacher job satisfaction, improved morale, and made for longer professional careers. Therefore, personnel development is also an important matter within the context of a PLC. This importance has also been outlined in Thailand's *National Strategy 2018-2037* (2017) strategy and policies plan, in which the importance of community-based lifelong development systems is stated, from which high quality and flexible competency-based education (CBE) needs to take place.

Mechanisms to achieve these goals include *open online learning system* (OOLS) development, digital skills learning system development, and PLCs (Wannapiroon & Pimdee, 2022). This is consistent with UNCTAD (2018), which stated that education system reforms should include more flexible and open approaches to education.

Furthermore, almost daily studies appear in which the impact of the global COVID 19 pandemic is affecting education at all levels, creating a paradigm shift in how education will take place for many years to come.

In Thailand, the Ministry of Education (MOE) is evolving methods to improve an educational system using *online digital learning management* (ODLM) tools that fit within the context of the pandemic and each school system's technological realities. Moreover, according to UNESCO (2020), Thailand's Distance Learning Television (DLT) and online learning have become vital pedagogical methods to ensure physical distancing recommendations.

Finally, Thailand's MOE is shifting its school budget to develop online curricula, online teaching, digital devices, and ICT. Therefore, under this '*New Normal*,' enhancing the effectiveness of online learning will become critical in educational development for the future (UNESCO, 2020; Wannapiroon & Pimdee, 2022).

Under this '*New Normal*,' all educational stakeholders will transform their learning by

changing teaching and learning methods. One style being explored in the quest to achieve 21st-century learning goals is the integration of digital technologies and teaching management tools into an online form of '*digital learning ecosystem*'(DLE) (Gütl & Chang, 2008; Ruenphongphun et al., 2021; Sarnok et al., 2019).

## Literature Review

### Competency-Based Education (CBE)

In McClelland's (1973, 1975) often cited research concerning competency, it was stated that competency has three primary components: *knowledge, skills*, and *attributes*. Moreover, competency can be categorized as either a *core* or *functional competency*.

Therefore, a person's core competencies include analytical abilities, problem-solving skills, and creative thinking. However, functional competency can vary depending on the organization one works in.

Also, essential characteristics include leadership skills and analytical thinking skills. Moreover, for Thai teachers, the necessary traits for functional competency have been reported as curriculum and learning management, student development, classroom management, analysis, synthesis and classroom research, teacher leadership, relationship and collaborative building for learning management (Danpho, 2018; Kanawapee et al., 2021).

Moreover, teacher competency has been stated to be essential to a country's development (Tampang & Wonggo, 2018), with educators serving as the facilitators, motivators, and initiators in assisting graduates to achieve life-long learning. These ideas are consistent with Scott (2015), who highlighted the importance of competency in problem-solving skills for a 21st-century labor force. Furthermore, personalized learning is being integrated with '*competency-based education*' (CBE) in non-traditional higher education to serve the needs of employers who are seeking out student graduates (Monroe, 2016; Camacho & Legare, 2016).

Employers now seek graduates who have *mastery* of education competencies and critical thinking skills, and industry-specific competencies and skills (Khan, 2016; Williams et al., 2015). Moreover, as outlined by Figure 1's '*Iceberg Model of Competencies*' (HayGroup, 2021)

, we can see the multiple layers of driving forces related to an individual's 'competency,' including *motives, traits, self-image, social role*, and *values*. Therefore, the development of teacher competency that distinguishes a person from others includes behaviors arising from the use of competencies, including their knowledge, skills, and attributes (values, motivations, and attitudes) that contribute to the success of their teaching profession.

**Figure 1**

*Iceberg Model of Competencies*



Source: HayGroup (2021)

## Online Professional Learning Communities (OPLCs)

Digital educational technologies are evolving quickly. However, in this ongoing paradigm shift, teachers can now gather relevant and meaningful data almost real-time (Twyman, 2018). Additionally, teachers now can adapt their lessons to their learners' needs, and from the use of ICT, instructors can break away from traditional passive instructional models (*chalk and talk*) and make their lessons more interactive (Noonoo, 2012). It also allows teachers to develop students' thought processes (Fulton & Britton, 2011).

Moreover, numerous studies indicate that active student response increases student engagement and learning outcomes. Happily, online activities have also been shown to decrease student disruptive behavior. Personalized learning also uses differentiated instruction geared to each learner's needs and shaped by the preferences and interests of the learners (Taylor & Gebre, 2016).

Furthermore, personalized learning has been stated to contain four core ideas necessary for learning success. These include *content flexibility, targeted teaching, student reflection and ownership*, and the instructor's *ability to use data to make decisions* (Johns, 2018).

Therefore, developing an OPLC to develop teacher competency is an excellent tool in the digital era that should be developed through systematic and *continuous professional learning* (CPL). Moreover, all OPLC members should suggest new ideas and approaches and experiment with student learning management solutions. Finally, from the literature review related to an OPLC shown in Table 1, several common and reappearing characteristics were identified.

**Table 1**

*Personalized Learning Characteristics*

| Personal learning characteristics | Johns (2018) | Grant and Basye (2014) | DeMink-Carthew et al. (2017) | Cullhaj (2017) | LEAP Innovations (2021) | Gross et al. (2018) |
|---|---|---|---|---|---|---|
| Set goals, learning needs, and interests. | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Flexible learning content consistent with learning objectives. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Student reflection and collaboration promotion. | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Teachers should assess student learning achievement while also allowing for student decision-making. | ✓ | ✓ | | ✓ | ✓ | ✓ |

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## Objectives

To analyze and synthesize literature relevant to the concepts and practices of an OPLC used for teacher competency development.

To evaluate, report, and make recommendations from the study's teacher use of an OPLC and their input.

## Methods

The Human Ethics Committee from our research university was notified and consulted before including the teacher group that participated in the study's OPLC. Along with the committee's approval, we obtained an informed consent form from each participant, who stated that each participant's anonymity was ensured.

## Resources

The resources used for the study were studies concerning discussions on how teachers in PLCs can use online, digital, and ICT resources to increase their CBE methods and techniques.

## Data collection

The OPLC was tested on a volunteer group of 30 teachers, administrators, mentors, teacher leaders (role models), and other academics. Their input was invaluable in determining the outcomes discussed later in this paper.

## Data analysis

Data analysis used content analysis to distinguish, analyze, and paraphrase the relevant issues from recent studies and articles. After that, we synthesized, compiled, and presented the information to the volunteer group.

## Results

### Components of an OPLC

A study of the critical components of an OPLC from academic articles and research is presented in Table 2. We determined that three components were frequently consistent with the PLC literature from the analysis. These were 1) shared values and visions, 2) shared practice and learning, and 3) collaborative teams. After this, the second tier of related components emerged: evaluation and support conditions, caring community, and shared leadership.

However, as we started to calculate the components from the Thai and foreign studies, we noted a very noticeable difference between earlier author research and newer research concerning the stated importance of '*supportive technology*' instead of '*evaluation and support conditions*' (Table 2). Therefore, in developing a forward-looking model, we substituted 'supportive technology' for 'evaluation and support conditions' (Figure 2). Also, it was determined that the concept of community support structure should be adjusted to supportive technology as it better portrayed newer online concepts within an OPLC.

**Table 2**

*Literature Review Syntheses of OPLC Components*

**OPLC components**

| | Problem analysis/thinking | Shared values and vision | Shared leadership | Collaborative teams | Co-designing activities | Professional development/workspace | Shared practice and learning | Exposure to operational guidance | Caring community / cultural learning | Self-reflection | Supportive technology | Evaluation and support conditions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Boyd (1992) | | ✓ | | | | | ✓ | | ✓ | | | ✓ |
| Little and McLaughlin (1993) | | ✓ | | ✓ | | | ✓ | | | | | ✓ |
| Sergiovanni (1994) | | ✓ | ✓ | | | | ✓ | | | | | ✓ |
| Louis and Kruse (1995) | | ✓ | | ✓ | | | ✓ | | ✓ | | | |
| Hord ( ,1997 2008) | | ✓ | ✓ | ✓ | | | ✓ | | | | | ✓ |
| Hargreaves (2003) | | ✓ | | | | | ✓ | | | | | ✓ |
| Hipp & Huffman (2003) | | ✓ | ✓ | | | | ✓ | | | ✓ | ✓ | |
| Schmoker (2004) | | ✓ | | ✓ | | | ✓ | | | | | ✓ |
| Thompson et al. (2004) | | ✓ | | ✓ | | | | | ✓ | | | ✓ |
| DuFour (2004, 2007) | | ✓ | | ✓ | | | | | | | ✓ | |
| Panich (2015). | | | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | |
| Theparee and | ✓ | | | | | ✓ | ✓ | | ✓ | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Patphol (2014) |  |  |  |  |  |  |  |  |  |  |  |  |
| Chookemnerd and Sungtong (2014) |  | ✓ | ✓ | ✓ |  | ✓ |  |  | ✓ |  | ✓ |  |
| Tsiotakis and Jimoyiannis (2015) |  | ✓ |  | ✓ |  | ✓ |  |  |  |  | ✓ |  |
| Chookhampaeng (2017) |  | ✓ |  | ✓ |  |  | ✓ | ✓ |  | ✓ |  |  |
| Tanyaratta nasrisakul (2017) |  | ✓ | ✓ | ✓ |  | ✓ |  |  | ✓ |  |  |  |
| Jarernrak (2018) |  | ✓ |  | ✓ |  |  | ✓ | ✓ |  | ✓ |  |  |
| Karo and Petsangsri (2021) | ✓ |  |  | ✓ | ✓ |  | ✓ |  |  | ✓ |  | ✓ |
| **Totals** | **2** | **15** | **6** | **13** | **1** | **4** | **13** | **2** | **7** | **4** | **5** | **8** |

**Figure 2**

*The Proposed OPLC Components Model*



*Note.* The authors developed the model.

## Discussion

### Shared Values and Visions

*Shared values and vision* within PLCs are when teachers jointly support behavioral norms that guide a school's teaching decision and an unwavering focus on student learning. Moreover, each 'team' has a sense of 'ownership' which drives each individual towards a common goal and causes value recognition when the objectives are achieved. Also, vision drives the development of effective policies, procedures, and strategies targeted toward a future goal (Huffman & Hipp, 2001). This is also consistent with a five-year, national United States study in which student success and school improvement were dependent on the sharing of leadership and vision, collective learning, supportive conditions, and shared personal practice within each PLC (Huffman, 2001).

Tsiotakis and Jimoyiannis (2016) also added in Greece that online PLCs are popular and dynamic, fostering a new professional development philosophy characterized as collaborative, constructivist, associative, reflective, situated, and connectivist. Finally, Dogan et al. (2017) examined PLCs in the Turkish context and found that organizational capacity can strongly predict interpersonal capacities.

### Collaborative Teams

Collaborative teams are teachers that have positive interactions and work together constructively. Each team's purpose is to provide assistance and support with each team member's development and student teaching. Community members, parents, administrators, executives, and other stakeholders should also participate in the teacher PLCs by sharing knowledge, skills, and experience necessary for professional development (Farren, 2016). Effective PLCs can also contribute to a teacher's professional '7C's skill development.

These '7Cs' are: 1) curriculum creation skills, 2) learner-centered learning management skills, 3) classroom learning innovation skills, 4) assessment skills learning, 5) classroom action research skills, 6) classroom management skills, and 7) character development skills (Chookemnerd & Sungtong, 2014; Danaisak & Sirirat, 2020; DuFour, 2004, 2007; Hargreaves, 2003; Louis & Kruse, 1995; Panich, 2015; Tsiotakis & Jimoyiannis, 2016).

### Shared Practice and Cooperative Learning

*Shared practice and cooperative learning* are practical in teaching and working with community members to share and exchange knowledge online. It can help enhance a teachers' work competency by collaboratively setting goals and objectives within a team environment. Research also suggests that cooperative learning is connected with affective outcomes and enhanced cognitive abilities (Jacobs & Seow, 2014).

Furthermore, there are five main principles within a shared practice and cooperative learning environment. These include; 1) Positive correlation. 2) Encouraging interactions among group members while giving students the opportunity for collaboration. 3) Individual group member responsibility. 4) Use interpersonal and small group work skills to improve social skills. 5) Group work and learning processes create cooperation in thought, work, and responsibility until set goals are achieved (Boyd, 1992; Danaisak & Sirirat, 2020; Little & McLaughlin, 1993).

### Caring Community

A *caring community* is partly based on listening to opinions. It is also based on working together in a friendly atmosphere, in which there is a feeling of support and generosity. It is a family relationship rather than a professional one because mutual trust allows openness.

Therefore, a caring community must have four essential characteristics. These include: 1) The preservation or nurturing of a coexistence nature, 2) the shift from formal and hierarchical lines of work to the atmosphere of family coexistence, 3)

transition from a protective, isolated culture to a culture of trust and unbiased listening, and finally, 4) a shift from conflict to a culture that respects individual differences (Chookemnerd & Sungtong, 2014; Panich, 2012; Thompson et al., 2004)

### Shared Leadership

According to Wilhelm (2016), *shared leadership* is the foundation of PLCs. Shared leadership should also be focused on curriculum, instruction, and assessment (CIA) through 'teacher leaders' development. Moreover, teachers tasked to serve as leaders should put the students' needs ahead of their own or colleagues' convenience and comfort. Finally, effective school communities have shared leadership which extends through the school to faculty, staff, and administrators (Huffman & Hipp, 2001).

### Supportive Technology

*Supportive Technology* in ICT's use in supporting an OPLC for typical collaborative applications in 2021 is listed in Table 3. Also, within the digital *Learning Management System* (LMS) space, common names are *Moodle, Schoology, Canvas*, and *Google Classroom*.

We determined which applications were most effective for our Thai teacher groups from our research and practical experience using and testing the applications outlined in Table 2. The *Line* messaging app and *Zoom Cloud Meetings* were the most productive and easiest to use.

Also, due to near-universal use by Thai educators, time is not wasted in installing and training users on *Line*'s use, and it is free of charge. Also, *Zoom Cloud Meetings*' most significant advantage is that teams can meet together even if they are not flagged as 'friends,' allowing information sharing online. The application also allows the recording of meetings for use and review later.

In addition, we felt that *YouTube* was an easy platform in which OPLC team members could upload video clips of teachers' teaching. Most importantly, *YouTube* is a medium for exchanging learning where anyone can come to study anytime and anyplace and develop a '*mastery*' within their selected discipline (Khan, 2016). This merger of technology with knowledge is now referred to as '*mastery-based learning* .'Also, OPLCs can save time and money and are highly convenient.

**Table 3**

*OPLC Applications in 2021*

| Applications | Advantages | Disadvantages |
|---|---|---|
| Zoom Cloud Meetings | - Suitable for professional online learning communities. | - If purchasing additional programs, there is a cost. |
| | - Highest maximum participant capacity (100 free-1,000 maximum). | - Heavy on system resources. |
| | - Able to make video calls. | - Free plan sessions are limited to 40 minutes. |
| | - Can share content. | |
| | - Can record video. | |
| | - Schedule a meeting. | |

| Platform | Advantages | Disadvantages |
|---|---|---|
| Google Hangouts (Replaced Google Talk) | - Suitable for meetings.<br>- Able to make voice and video calls.<br>- Can record video.<br>- Cross-platform synchronization. | - There is advertising.<br>- There are a few menus to choose from.<br>- All Hangouts users must have a Google + account. |
| Microsoft Teams | - Able to send homework and check grades.<br>- Video calls and screen sharing are capable.<br>- Can save data and view historical data. | - The screen display only allows for a small number of users.<br>- Poor picture quality.<br>- The user interface is challenging to use. |
| Facebook Live | - Live can be used for teaching and assigning tasks.<br>- Learners can watch past Live broadcasts.<br>- There is a function to create learning units.<br>- Useful tool for marketing specialists and entrepreneurs. | - Live streaming can be potentially embarrassing as it is in real-time with no editing.<br>- Not interesting.<br>- Negative commentary can be viewed simultaneously by other Facebook Live viewers. |
| Webinar | - Suitable for seminars or online meetings via the web, including media training presentations.<br>- Can record video and retrieve historical data. | - There is a charge<br>- Listeners cannot skip uninteresting parts.<br>- An extensive amount of time is required to complete the finished clip. |
| Line | - Line Chat helps increase communication as it is fast and convenient.<br>- More than 1 GB of files can be shared in groups per day.<br>- There is an announcement function.<br>- Note and Keep allows information storage, including albums, photos, videos, links, and files.<br>- Line desktop allows easy upload of PC files. | - No server backup.<br>- Files have an expiration date.<br>- Cannot separate notifications.<br>- The desktop app is slow and freezes often. |

Meetings can occur as a community group or individual conversation (Figure 3). Members can create, share and collect video clips and other digital teaching materials while mutually