



วารสารอิเล็กทรอนิกส์
ทางการศึกษา

กรณีศึกษาชุมชนแห่งการเรียนรู้ของผู้สอนภาษาอังกฤษในประเทศไทย

A CASE STUDY OF AN ENGLISH TEACHER LEARNING COMMUNITY IN THAILAND

นางหสต์กมล ดวงมณี *

Hassakamol Duangmani

บทคัดย่อ

ในชุมชนแห่งการเรียนรู้ของผู้สอน ครูให้ความร่วมมือและสนับสนุนกันและกันเพื่อนำไปสู่การพัฒนา ในงานวิจัยนี้ การเรียนรู้และการจัดการเรียนการสอนของครูภาษาอังกฤษในโรงเรียนรัฐบาลจำนวน 5 คน ในจังหวัดศรีสะเกษ ถูกสังเกต เป็นเวลา 3 เดือนในระหว่างที่พวกเขาใช้เวลาร่วมมือกันในชุมชนแห่งการเรียนรู้ของผู้สอนที่ร่วมกันจัดตั้งขึ้นด้วยความสมัครใจ ข้อมูลจากการสังเกต การบันทึกหลังการสอน และแผนการสอน ได้ถูกนำมาวิเคราะห์โดยใช้วิธีการใส่รหัส ผลการวิจัยแสดงให้เห็นถึงประโยชน์ของชุมชนแห่งการเรียนรู้ของผู้สอนที่ส่งผลต่อการเรียนรู้และการจัดการเรียนการสอนของครู ครูผู้สอน ภาษาอังกฤษในงานวิจัยนี้ดูเหมือนจะได้เรียนรู้ที่จะพัฒนาการจัดการเรียนการสอนของตนเองจากกระบวนการต่าง ๆ ในชุมชน แห่งการเรียนรู้ของผู้สอน ได้แก่ การเตรียมแผนการสอนด้วยการเรียนรู้จากแหล่งเรียนรู้ออนไลน์ การแลกเปลี่ยนเรียนรู้ เกี่ยวกับแผนการสอน และ การลงมือปฏิบัติในชั้นเรียน นอกจากนี้ ผลการวิจัยยังระบุว่า ชุมชนแห่งการเรียนรู้ของผู้สอนส่งผล ให้ครูมีการพัฒนาการจัดการเรียนการสอนในหลายด้าน ผลการวิจัยนี้เสนอให้เห็นข้อดีที่เกิดจากชุมชนแห่งการเรียนรู้ของ ผู้สอนที่สร้างขึ้นด้วยความสนใจของสมาชิกมากกว่าการทำตามข้อบังคับ จากข้อค้นพบเรื่องข้อจำกัดของเวลาสำหรับการ ประชุมแบบเผชิญหน้า งานวิจัยในอนาคตอาจศึกษาเกี่ยวกับการใช้การเรียนรู้ร่วมกันผ่านช่องทางออนไลน์ในการแก้ปัญหา เรื่องเวลาสำหรับชุมชนแห่งการเรียนรู้ของผู้สอน

* Master's Degree Student, Department of Curriculum and Instruction
Faculty of Education, Chulalongkorn University, Bangkok, Thailand
E-mail Address: lekbnb@gmail.com

Abstract

In Teacher Learning Community (TLC), teachers collaborate and support each other's development. In this study, the learning and instructional practices of five public school English teachers were examined over the period of three months using observations, journals, and lesson plans while they were collaborating in one self-established TLC. Coding was used to analyze the data from all sources. The benefits of TLC on teacher learning and instructional practices were found. The English teachers in this study seemed to benefit when learning from online resources, during lesson plan sharing, and from classroom implementation. The findings also indicated that TLC improved the teachers' instructional practices. The findings suggest the promotion of establishing TLC based on the interests of the members, rather than as a requirement. Due to the time constraints for face to face meetings, future research may explore how online collaboration may help overcome this challenge in TLC.

คำสำคัญ: ชุมชนแห่งการเรียนรู้ของครู / การจัดการเรียนการสอน / การเรียนรู้ของครู

KEYWORDS: Teacher Learning Community / Instructional practice / Teacher Learning

Introduction

Instructional quality affects students' learning and achievement (Ketterlin-Geller, Baumer, & Lichon, 2015). One of the current approaches to improve instructional quality is the so-called 'Teacher Learning Community (TLC) (Wenglinsky, 2000) which is the term derived from Professional Learning Community (PLC). So, the studies about TLC are based on the same principles as PLC studies (Krutka, Carpenter, & Trust, 2016; Sjoer & Meirink, 2016). The different types of TLC can range from small groups of teachers from the same grade level or department, to large groups of teachers across school districts or in online settings. (Barab, MaKinster, & Scheckler, 2003; Grossman, Wineburg, & Woolworth, 2001; Horn & Little, 2010; Milbrey W McLaughlin & Talbert, 2001; Rosenholtz, 1989). These communities may have different goals such as learning new contents or ideas, analyzing course content, or analyzing student work from national or local area data (McLaughlin, M. W., & Talbert, J. E., 2006). Research on TLC has been conducted extensively in recent years; however, studies that focus on English teachers learning community specifically is still limited (Graham, 2007).

Despite the limitations mentioned above, there are still demonstrable benefits from TLC. For example, TLC can bridge the gap between teachers' knowledge and practice. It creates a platform for teachers to solve issues and address concerns that emerge from the participants' own classroom experiences (Daugbjerg, 2016). The process of transferring theory into practice can be difficult. Teachers often possess the right theoretical knowledge but might not be able to support it with appropriate teaching techniques and material. TLC can provide the support and advice to teachers experiencing these difficulties by making suggestions regarding teaching

strategies and approaches. In TLC, teachers are engaged in purposeful collective inquiry which, in turn, can lead to an increase in students' performance (Borko, 2004; Scheerens, 2010; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Verbiest, 2011). Members of TLC benefit from advice from other members based on similar classroom experiences. Consequently, teachers in TLC may pass on the benefits of the solutions and strategies discussed in TLC to the students in their classroom. Practical advice based on real classroom experience is likely to be effective because it has already been proven by teachers to be successful. TLC provides an unthreatening forum in which teachers can share both positive and negative experiences in order to find effective solutions to these issues (Daugbjerg, 2016). However, few studies have investigated in depth how English teachers learn in the collaborative culture of TLC and how TLC may affect the English instructional practices, which are the focuses of the present study. Since the Ministry of Education in Thailand currently emphasizes the importance of collaboration in TLC, studies such as this one are needed.

The emphasis on the collaborative learning process in TLC complements education policy in Thailand. At the present time the Education Administration in Thailand is trying to support English teacher's instructional ability, in order to facilitate and assist student's learning. However, Thai teachers continually find themselves facing countless problems concerning their teaching. For example, the majority of their students lack both the interest and motivation required to learn English. No professional support is available to most teachers as regards to gaining knowledge to improve their learning as well as recommendations on how to follow any new policies. These government policies tend not to match with neither the teachers nor the schools' particular needs in a social context.

TLC helps to align education strategies and practical classroom requirements. Previous studies relating to TLC clearly showed the benefits to support a setting up of TLC in a Thai context. It provides the opportunity for teachers to learn through collaboration in order to match their teaching to their students' needs. This study was an opportunity to investigate how teachers learned in TLC and provided insight into what effect it has on their instructional practices. This in turn might be significantly beneficial for future studies about TLC in Thailand.

Objectives

1. To investigate how English teachers learn in a Teacher Learning Community.
2. To investigate how a Teacher Learning Community can affect the instructional practice of English teachers.

Methodology

The present study was a case study which aimed to investigate two variables including teacher learning and Instructional practice in a TLC.

The data was collected using three research instruments including field notes observations, journal reflections and lesson plans.

Participants

In this study, purposive sampling method was employed to select the participants. The criteria for the selection included being a Thai teacher who taught English as a foreign language in public schools in Thailand either at primary educational level or secondary educational level, having willingness to work and learn in a TLC to enhance students learning, and an agreement to follow the process of this study. The researcher also participated in the study as one of the members of the TLC. In total, the number of participants were 5 teachers.

Research Instruments

This study implemented three instruments including observation field notes, journals, and lesson plans. The data from the three sources was used for data triangulation. The details of each instrument were as follows.

Observation field notes

Participant observation was chosen to be used in this present study. It was a qualitative data collection method in which the researcher was not only the researcher but also a participant in the team. During TLC meetings, the researcher actively engaged in the activities as a member of the team and observed what happened in the meeting. Field notes were taken during and immediately after each face-to-face meeting in order to record the details of how the participants participated in the meeting and the content of the discussions. The discussion was also audio recorded to assist the researcher to recheck and complete the expanded field notes.

Journal

During the TLC process, the participants wrote journals and post them in a private group on online social media after each lesson. The journals were the participants self-report reflections. In this study, each member wrote eight journals immediately after using their lesson plans that were discussed in TLC, to teach in classroom. The teachers were asked to reflect on the results of their own lesson plan implementation in order to provide information for the team discussion. The data from the journals was also used to analyze to answer the research questions.

Lesson Plans

The participants were asked to post all their lesson plans that they used during the time of the study on the online social media in private group platform. So altogether, there were eight lesson plans produced and posted by each teacher. Four of the eight lesson plans were those that were discussed in the TLC meeting with the remaining four being produced by each participant themselves.

Research Procedure

Phase 1: Building the Teacher Learning Community

To set up the TLC, the researcher created a list of prospective participants which consisted of teachers of English at different levels in Sisaket. The participants were asked to attend an orientation meeting if they were willing to participate in the study.

Orientation Meeting

In the orientation meeting, the teachers were informed of the ethical dilemmas that they may encounter as participants in this study. They also learned about the concepts and the six principles of TLC. The first meeting aimed to create a clear focus of TLC to ensure commitment among all the participants. The discussion based on the six principles was organized as follows.

1. The shared mission, vision, values, and goals

To ensure clear focus and commitment to collaborate in TLC, the participants must have shared mission, vision, values and goals.

In the first face-to-face meeting the members were assigned to provide their own context information for lesson plan discussion. They used the same mission as a purpose for their team in order to write the first lesson plan to reach the team vision. Then, the members took turns to present their lesson plan, asked for comment and discussion by using team values to collect inquiry to be the information for their lesson plan development. For posting online social media in private group platform, journals and developed lesson plans were posted based on the comments and feedbacks of other members. The mission, vision, values, and goals proceeded in the cycle process of TLC development. The participants improved and provided their lesson plan based on the agreements as an on-going cycle every time they had a face-to-face meeting and online social media communication.

2. Collaborative culture with a focus on learning.

With the shared missions, vision, values and goals, the participants were asked to work on improving their instructional practice interdependently. After this discussion, the culture of collaboration was formed and used systematically in the process of English teachers working interdependently. The participants used their own experiences to provide comments and feedback to one another in journal reflections through online social media communication. All the members then communicated in this channel to find solutions for the member's obstacles and supported one another to improve and impact on good instructional practice in order to achieve the TLC goals.

3. Collective inquiry into best practice and current reality.

Collective inquiry was the process of building shared knowledge of TLC. In this study, the participants were asked to share the results of their teachings to accomplish collective inquiry.

The participants agreed to candidly clarify their current practices, best practices regarding teaching and learning, and provide an honest assessment of their students' current level of learning. This also supported participants working interdependently to reform collaborative culture.

4. Action orientation: Learning by doing

In this study, the way that the participants worked together interdependently under the TLC principles, was a powerful spectacle to serve as catalysts for action. All the participants agreed to listen to and turn team suggestions into instructional practice improvement. Collective inquiry will bring about best practices. From these action orientations the gap between knowing and doing was closed. The discussion, learning or planning was quickly turned into action to make the vision into reality.

5. A commitment to continuous improvement

Based on DuFour & DuFour (2012), a commitment to continuous improvement engaged each participant to search for better instructional practices to achieve the goals of TLC and accomplish the purpose of teaching English. All participants agreed to commit to and engage in a process of continuous improvement collectively: a) Gather evidence of current levels of student understanding. b) Develop strategies and ideas to build on strengths and to address weaknesses in students learning. c) Implement those strategies and ideas. d) Analyze the impact of the changes to discover what was effective and what was not. e) Apply new knowledge in the next cycle of continuous improvement.

TLC system framed responsibility for all participants to work in an ongoing cycle of planning, doing, checking and acting design. The goal was not simply learning a new strategy, but creating conditions to sustain learning and constantly improve results.

6. Results Orientation

In TLC the interest was always assessed on the basis of results rather than intentions. In order to move on, results became the mechanism for TLC improvement. For instance; a) The effectiveness of the teaching was assessed on the basis of student results (DuFour, 2008). b) Results of common formative assessments were shared amongst team members. c) Ongoing common formative assessments were used and scored in consistent ways to facilitate improvement. Results played a big role in TLC including sharing mission, vision, values, and goals, collective inquiry, action orientation, and continuous improvement.

Phase 2: Teacher Learning in TLC

During this phase, the participants conducted their instruction and participated in TLC face-to-face meetings and online social media communication. The face-to-face meetings provided the opportunity for all the participants to discuss their instructional practices and the results of students' learning.

Face-to-face meetings

Five face-to-face meetings were organized to provide the participants the opportunities to discuss and learn from one another in order to achieve their TLC goals based on the six principles. The time schedule for each meeting was decided by TLC participants during the orientation meeting. The format to be used during each face-to-face meeting was as follows.

Step 1 Lesson plans presentation

At the first face-to-face meeting, each participant presented their lesson plans created on the basis of the commitment from the orientation meeting. The next face-to-face meeting continued with a discussion into the results of previous teaching reflection for collective inquiry into best practices. This was followed by each member presenting their lesson plan.

Step 2 Comment and discussion.

After each lesson plan presentation, a discussion was then held by all participants to provide feedback and comment on one another's lesson plan.

Step 3 Conclusion.

Through discussion, different ideas and variations of teaching methods were required by participants to be expressed as regards to each lesson plan in order to provide each member the knowledge to create continuous improvement and obtain a better lesson plan for their students.

Online communication

A private group on an online social media communication platform was created to be used amongst the participants. On this platform the participants were asked to post their lesson plans and journals.

Data Analysis

The data obtained from the field note observations and artifacts was analyzed as follows. First, the observation field notes were read and rewritten into expanded fieldnotes with the help of the audio recordings. The expanded field notes were coded based on the research questions then categorized into themes. For the artifacts from online communication, the lesson plans and journals were coded and categorized into themes directly. The results from all three resources were triangulated to ensure the validity of the data.

Findings

The results of the study were presented based on research questions as follows,

Research Question 1: *How do English teachers learn in Teacher Learning Community in Thailand?*

Learning from online resources

The findings from this study indicated that the teachers in TLC learned how to improve their instructional practices from the Internet. In order to prepare their practices, the members

learned many different components such as teaching strategies, handouts, worksheets, teaching techniques, as well as games and songs.

Learning from lesson plan sharing

The lesson plan sharing in face-to-face meetings showed to be another helpful process for teacher learning. In this process, TLC members took turn presented their lesson plan. After one member presenting his or her lesson plan, the other members would ask for more clarification to be able to understand that lesson plan and discuss in order to find the best way to improve the lesson plan. Finally, the teacher who presented the lesson plan reflected what he or she learned the from group suggestions. However, the lesson plan owner had to decide on their own how to revise their lesson plan since each school context may vary.

Learning from implementing the ideas in the classroom

The teacher gained new knowledge about instructional activities after implementing their lesson plans in real class.

Research Question 2 How does Teacher Learning Community affect Instructional Practice?

The data showed that the three-month TLC had influenced on the instructional practices of the members in three aspects as follows.

Improvement of Classroom management and strategies

In this study, the members learned from the three keys learning in TLC as reported in the previous research question themes. From learning all the members in TLC put their effort on designing the effective instructional practices in order to create students' motivation in learning English such as group work, peer feedback, checking understanding. Classroom management was implemented to ensure that their classroom learning run smoothly without interrupting.

Improvement of teaching strategies

The members learned from collaborative learning in TLC through their actual teaching and by assessing strategies. The members applied their instructional practices based on their school and student context to promote student learning. Data analysis in this study provided evidence that participation in the TLC had affected the members' instructional practices.

Improvement of lesson planning skills

One of the apparent changes observed among TLC members was their ability to plan English lessons. From the first few weeks, the data revealed that the participants lacked the ability to write lesson plans. TLC discussion in the face-to-face meetings and journal posts allowed the members to gather examples of collective best practices and started to improve their lesson planning skills.

Discussion

TLC that was established by members could affect teachers' learning and instructional practice.

Based on the findings in this study, the data showed that all the teachers had learned to improve their lesson planning, teaching strategies and classroom management techniques through the collaboration in TLC. The data from all three sources, especially journal reflection reports, also showed the changes in their instructional practices. Darling-Hammond and McLaughlin (1995) noted that, in PLC, teachers learned by collaborating with one another to implement new ideas, examine student work, and reflect on what they see. They explained that these processes enabled teachers to improve their instructional practice and therefore, improved students' learning achievement (cf. Bolam et al., 2005; Little, 2002; Louis & Marks, 1998; Richard DuFour & Marzano, 2011; Supovitz & Christman, 2005). Supovitz and Christman (2005) explained that in the community teachers shared their expertise with one another and thus resulted in improving their own instructional practices. The teachers in this present study also reported the benefits of the lesson plan sharing session in helping them learn how to improve their lesson design and instructional materials.

The TLC in the present study were established using the bottom up process, in which the members agreed on their own free will to work together. The teachers in this TLC taught the same subject, English, and volunteered to join the community and committed to follow the norms and to achieve the missions and vision that they established by themselves (cf. Dufour, 2004, 2008). The data from all sources revealed a strong commitment and energetic participation in organizing face-to-face meetings and to share journals and lesson plans online throughout the three-month TLC amidst their own busy schedule. The positive results in this study showed how member commitment can help this self-established TLC to overcome the time issue mentioned in literature as a critical factor in running TLC (e.g. Cochran-Smith & Lytle, 1999; Dalal, 2013; Darling-Hammond, 2005; Hiebert, Stigler, & Manaster, 1999; Lortie, 1975; Paine & Ma, 1993; Wang & Paine, 2003).

Sharing is the key process

The second key finding in the present study suggests the importance of the sharing process in facilitating the members' learning in the TLC, as noted in previous studies (e.g. Mahfud, 2017; DuFour et al., 2005). In this TLC, sharing was a key activity in all processes, from the first meeting to face-to-face meetings and online social media interactions. The data from all sources consistently showed how all the members benefited and learned how to improve their instructional practices from those sharing sessions. To improve the performance of educators, Mahfud (2017) indicated sharing as a key aspect to support teacher collaboration. DuFour et al. (2005) explained that sharing can promote a collaborative culture of teacher learning and

transformative teaching. They elaborated that when teachers shared their expertise with one another in TLC, each member could learn from the best practices and apply the ideas in their own style that fits their contexts and students. Mertler (2018) explained that when teachers had a chance to 'share' and 'learn' from one another, they could gain confidence in trying out new ideas in their classrooms.

Culture of collaboration and trust: Key factors for the success of TLC

The successes of the TLC in the present study suggested that the culture of collaboration and trust built among the members were the key factors.

Culture of collaboration

In TLC, the members changed from learning for teaching their own students to learning for improving their instructional practices in order to support the community's shared goals, which was described as a shift from independent working to interdependent working by Dufour & Dufour (2012). The findings in this study revealed that the process of learning in TLC that included sharing their knowledge and practices derived changing culture of learning among the members from isolate learning to collaborative learning. The culture of collaboration was the result of the evolution of the TLC. Another essential key factor was the differential among the members. In this TLC, the members had different teaching experiences, were from different schools, and taught English at different levels. These differences were advantage for them, the protocol of being members in TLC was that everyone had equal roles in sharing common advantages of their community. As showed in the face-to-face meeting, all the members had an opportunity to present their lesson plan and gain benefits in order to improve their instructional practices from every members in various ways based on their knowledge and experiences. . In TLC everyone had to provide feedback to one another. They didn't completely concur with the feedback but there was a shared acceptance that they were all there to learn. TLC structure is one where the culture that all the teachers can and do take it in turns to play different roles. By using this structure it could support teachers' leadership. To be successful in a TLC, teachers need to build positive relationships in which the members feel safe to collaborate and improve student learning. There were times at the beginning of this community that the less experienced felt uncomfortable to share their ideas with the group. However, after the first time the data showed that all the members felt more comfortable to share in order to improve each other's practices. Giving candid information was another important factor in order to shift the culture from focusing teaching to students' learning (Dufour, 2016). The results from giving real situation in TLC was very important data for the members for future instructional practice improvement. As in this study, the results from implementing practices in the classroom were posted on journal reflection via the online channel. This information was the evidences to confirm the success of their practices

and to raise any issues that may cause failure in their teaching. A further essential element of the TLC was the passion and enthusiasm of the teachers as shown when speaking about the success of ideas after implementation. It would appear that a TLC is more effective when the teachers have volunteered to be involved as this brings increased motivation and commitment to the community. This is consistently with Bolam (2005) who completed a comprehensive study on PLCs and found that his data suggested a positive impact on teaching practice and morale because of teachers' participation in learning community and occurred advantages cultures.

Trust

Trust in participation is vital to a successful TLC (Lave and Wenger, 1991a). This is a key in supporting members to learn with the rest of the TLC because teachers feel safe in making mistakes and therefore are more likely to experiment, as this quote from Cordingley confirms: "This evidence suggests strongly that sharing the risk of looking silly, as teachers abandon familiar routine to try something new, helps them to trust each other quickly (Cordingley, 2013, p.5)". As the members in this TLC demonstrated, the other members were not critical of or negative about each other's mistakes. On the contrary, they helped each other to find solutions for problems. Whilst Cordingley is referring to teachers trying out new ideas generated from research in essence this is the same supposition; if teachers trust each other they are more likely to try things out and consequently learn from that. Similarly, in a previous study, Louis and Marks (1998) argued that in order to promote trust and collaboration, schools must focus their attention on the development of teachers' relationships. They also found that while individual teacher performance was important, collegial support and extensive external support was necessary to help teachers become productive professionals in communities. This trust is crucial to the development of professional learning communities and therefore must be a priority for the members' leadership. In this study, all the members indicated that feeling trust in the group members made them feel confident to share in group discussions. Moreover, the members trust to use the knowledge that they learned from TLC to improve their instructional practice and implement in their classroom. In addition, the members in TLC allowed themselves to make mistakes. The teaching results were the crucial information for all the members to learn from successes and take responsibility for problem solving.

Limitations of the study

The present study has provided insights into how an English teacher learning community can be established in a voluntary manner; nevertheless, the implication of the findings should be used with a few limitations. First, since the number of the members in the present TLC was rather small and shared similar socio-economic and geographical backgrounds. This may have affected their working style and culture. Second, the changes in the teachers' instructional practices were

determined based on the written documents, including the journals and lesson plans that the teachers shared in the TLC only.

Pedagogical Implications

There are many pedagogical implications to gather from this study. The Structure of building TLC was the example of successful in applying the six principles in building community of learning. According to this study, the members agreed and volunteered to learn collaboratively. In addition, discussion to set group's norm based on the commitment of mission, vision, values, and goals is one of the key processes in TLC. Moreover, the key factors to be success in TLC demonstrated as the culture of collaboration. In this study provided the key points for the future TLC study to discuss and define the values to reach their goals in order to maintain the success of sharing to learn from each other.

Recommendation for future Research

The possibility for areas of further study beyond this one are numerous. To start with, similar research questions should be implemented with the same building TLC system included in this study but in different provinces. This could help to clarify if the issues raised in this research are province specific or have wider implications. Additionally, another recommendation would be studying TLC with teachers in groups that teach different levels would be important , Lastly, face-to-face TLC meetings and online communication should be compared and contrasted with the strengths and limitations of each type examined in the context of teachers in Thailand.

References

- Barab, S. A., MaKinster, J. G., & Scheckler, R. (2003). Designing system dualities: Characterizing a web-supported professional development community. *The Information Society*, 19(3), 237-256.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational researcher*, 33(8), 3-15.
- Daugbjerg, P. S. (2016). The relationship between science teachers' career expectations and different professional development experiences. *Journal of the European Teacher Education Network*, 11, 100-111.
- DuFour, R., Eaker, R., & DuFour, R. (2005). Closing the knowing-doing gap. On common ground: The power of professional learning communities, 225-254.
- DuFour, R., & Eaker, R. (2005). *Professional Learning Communities at Work TM: Best Practices for Enhancing Students Achievement*: Solution Tree Press.
- Eaker, R., DuFour, R., & DuFour, R. (2004). First steps: Cultural transformation of the school Professional learning community. Bloomington, IN: Solution Tree.

- Fleener, J., Lu, L., Dun, J., & Mingquan, Y. (2018). Sustaining a Teacher Professional Learning Community in China Through Technology *Digital Transformation and Innovation in Chinese Education* (pp. 80-99): IGI Global.
- Fullan, M. (2001). *The new meaning of educational change*: Routledge.
- Grossman, P., Wineburg, S., & Woolworth, S. (2001). Toward a theory of teacher community. *Teachers College Record*, 103, 942e1012.
- Horn, I. S., & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American educational research journal*, 47(1), 181-217.
- Ketterlin-Geller, L. R., Baumer, P., & Lichon, K. (2015). Administrators as advocates for teacher collaboration. *Intervention in School and Clinic*, 51(1), 51-57.
- Krutka, D. G., Carpenter, J. P., & Trust, T. (2016). Elements of engagement: A model of teacher interactions via professional learning networks. *Journal of Digital Learning in Teacher Education*, 32(4), 150-158.
- Lave, J., Wenger, E., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation* (Vol. 521423740): Cambridge university press Cambridge.
- Little, J. W. (2002). Locating learning in teachers' communities of practice: opening up problems of analysis in records of everyday work. *Teaching and Teacher Education*, 18, 917e946
- McLaughlin, M. W., & Talbert, J. E. (2001). *Professional communities and the work of high school teaching*: University of Chicago Press.
- McLaughlin, M. W., & Talbert, J. E. (2006). *Building school-based teacher learning communities: Professional strategies to improve student achievement* (Vol. 45): Teachers College Press.
- Rosenholtz, S. J. (1989). Workplace conditions that affect teacher quality and commitment: Implications for teacher induction programs. *The Elementary School Journal*, 89(4), 421-439.
- Rosenholtz, S. J. (1989). Workplace conditions that affect teacher quality and commitment: Implications for teacher induction programs. *The Elementary School Journal*, 89(4), 421-439.
- Saldana, J. (2015). *Qualitative Data Analysis: The coding manual for qualitative researchers*.
- Scheerens, J. (2010). Teachers' professional development: Europe in international comparison. *Luxembourg: Office for Official Publications of the European Union*.
- Sergiovanni, T. J. (2001). *The principalship: A reflective practice perspective*.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of educational change*, 7(4), 221-258.

- Verbiest, E. (2011). *Developing professional learning communities*. Paper presented at the AERA conference, New Orleans, USA.
- Wenglinsky, H. (2000). *How teaching matters*: Bringing the classroom back into discussions of teacher quality.