

## **Professional Learning Communities: A Review of Literature**

**Fekede Tuli<sup>1\*</sup> and Adula Bekele<sup>2</sup>**

<sup>1</sup>Department of Teacher education, Ambo University

<sup>2</sup>Department of curriculum and instruction, Jimma University

\*Corresponding author Email: [fekede2010@gmail.com](mailto:fekede2010@gmail.com)

### **Abstract**

*Teachers are professionals in charge of planning and implementing the learning process, assessing the results of learning, coaching and training, and conduct research and community services. As professionals, they must continue to learn and relearn to equip themselves with required tools to function effectively in today's world. To this end, professional learning communities are receiving considerable attention from policy makers, scholars and practitioners. Researchers have documented that the right kind of continuous and job embedded teachers professional learning opportunities will improve the quality of teaching thereby ensures learning for all students-the fundamental mission of educational institutions. Cognizant of this fact, the Ethiopian ministry of education placed professional learning community at the forefront and tried to institutionalize it in order to improve the quality of teaching and learning. However, after a decade of practice/implementation in our educational settings, functional professional learning community [locally known as educational army development] was not yet established. Rather, the concept was poorly understood and surfaced by chaos and dilemmas. Hence, in this paper, authors attempted to give an overview of the professional learning community based on the current literatures and international experiences. In so doing, authors emphasized the concept of a professional learning community, characteristics of a professional learning community, forces that have compelled organizations to build a professional learning community and supportive conditions for professional learning community.*

**Keywords:** professional learning community; teacher learning; professional learning; collaborative learning, organizational learning

### **Introduction**

“The illiterate of the 21<sup>st</sup> century are not those that cannot read or write, but those that cannot learn, unlearn, and relearn”. - Alvin Toffler (1970)

Learning has become a key topic for professionals, students, and organizations. The reason is that organizations with big brains and ability to learn quickly will become global leaders in the new world of the 21<sup>st</sup> century (Marquardt, 2002; Senge, 1990). The rapid development of information and communications technology, the growing production of knowledge in the economy, increasing internationalization and globalization as well as changes in occupational structures and in the contents and organisation of work have challenged not only

educational institutions but also work organisations to develop new ways of ensuring that the level of competence of the workforce meets these challenges (Tynjala, 2008). Hence, countries are forced to rethink and transform their education system in order to prepare their students for an ever-changing world. Educational institutions not only need to design learning environments in a changing world, but also for a changing world. They need to define new goals of education, design new curriculum, apply innovative approaches to teaching and learning, construct new forms of assessment and harness the power of learning at all levels—individual, group, and organizational. However, Transforming the education system is a complex task and cannot be underestimated. As Zmuda, Kuklis, and Kline (2004) succinctly put, it requires several significant shifts—from unconnected thinking to systems thinking, from an environment of

isolation to one of collegiality, from perceived reality to information-driven reality, and from individual autonomy to collective autonomy and collective accountability. Hence, the teaching profession must be refashioned into the new realities of today, where transformative shifts include: professional community rather than individualism; learning-centered instruction rather than teacher-centered instruction; and inquiry and leadership rather than technical and managed work.

Research studies (Zmuda, Kuklis, and Kline, 2004; Heikkinen, Jokinen and Tynjälä, 2012; Tynjälä, 2013; Kleinhenz and Fleming, 2007; DuFour and Eaker, 1998; Hord, 1997; Senge, 1990) increasingly recognized professional learning communities as a means for profound and positive educational change. For example, Dufour and Eaker (1998) argue that the most promising strategy for sustained, substantive educational improvement is developing the ability of staffs to function as professional learning communities. In the same vein, Bolam et al. (2005) stated that an effective professional learning community has the capacity to promote and sustain the learning of all professionals in the school/university community with the collective purpose of enhancing learning. In this piece of work an attempt was made to provide a brief description of professional learning community by reviewing available literatures. It gives justification for the needs and importance of initiating and developing professional learning communities in the context of an ever changing world. Furthermore, the authors believe that this paper helps in clarifying the misconceptions and dilemmas of current government call to establish and strengthen learning communities (i.e. education army development) as a strategy to improve the education sector.

## Review Methodology

This study was grounded on review of available literature in different contexts. The Google scholar served as the search engine for locating this literature review using the key words: teacher learning, professional development, professional learning community, organizational learning, work place learning

and educational change, resulting in voluminous of diverse reliable sources. These sources included books, conference papers and scholarly journal articles. Additional sources for the literature review came from off line published books.

## Professional Learning Community

The fundamental mission of any educational institution is to ensure learning for all. This requires a concerted effort of many stakeholders such as teachers, students, leaders. When we strive to ensure learning for all we have to be sure that teachers are not neglected and left aside. Part of the reason is that teachers need to have an opportunity to seek and share learning, engaged in an ongoing action and reflection, work collaboratively to improve educational practices and impact their student learning. As Fullan (1993) succinctly puts, you cannot have students as continuous learners and effective collaborators, without teachers that have the same characteristics. Correspondingly, Peery (2004) state the best way to improve education for student is to improve the ongoing education of the adults who facilitate student learning. Hence, the importance of teachers' continued professional development cannot be underestimated, especially during this era of increasing demands on teachers' expertise and higher expectations for their accomplishments (Hargreaves & Fullan, 2000).

Professional learning communities provide opportunities for professional staff to look deeply into the teaching and learning process and to learn how to become more effective in their work with students (Morrissey, 2000). Within the traditional one shot, outsider-led, one size fit-all and deficit-based approach to professional learning, it is hard to ensure long-term, job embedded and ongoing professional learning of teachers (see Waters & Marzano, 2006; Sandholtz & Scribner, 2006). It is, therefore, argued that professional learning communities (PLCs) provide a learning context for bridging the gap between the ideal attributes of professional learning and the limitations of traditional professional development initiatives. Some strategies for enhancing learning within professional learning communities include working to develop engaging lessons and

assessments, analyzing student work, observing teaching, providing feedback on teaching and assessment, action research, joint publication, peer coaching, mentoring, and study groups. Within learning communities, teachers can engage in the job embedded professional learning opportunities to raise their understanding around best practices and to refine their teaching skills.

The expression professional learning community made its appearance in literature in the early 1990's and originates from organizational theories, mainly those referring to learning organization (Senge, 1990). Senge describes learning organization as a condition in which people continually expand their capacity to create desired results, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free. The term professional learning community can be defined in many ways and has been widely used as an approach for facilitating teaching and learning in classrooms. For example, Dufour et al. (2006) define professional learning communities as educators committed to working collaboratively in ongoing processes of collective inquiry and action research in order to achieve better results for the students they serve.

Professional learning communities operate under the assumption that the key to improved learning for students is continuous, job-embedded learning for educators (ibid). We need to be cautioned that professional learning community is not an event that teachers do once a week or once a term rather it is an ongoing process where teachers work collaboratively in cycles of inquiry and joint construction of knowledge in order to improve their educational practices and student learning. It is neither a reform package nor a training program rather an approach to change how we think about teaching, learning and assessment. It is a process that will change education culture, which includes: change in fundamental purpose from teaching to learning, change in use of assessments from assessment of learning to assessment for learning, change in the work of teachers from isolation to collaboration and shift in response when students don't learn

from remediation to intervention (DuFour et al., 2010).

Professional learning communities are proven successful in improving student achievement and enhancing professional growth within teachers (Dufour et al., 2008; Lieberman & Miller, 2004; Senge, 1990). It is through participation in professional learning communities that teachers become well informed, professionally renewed, and inspired to inspire their students (Hord, 1997; Lieberman & Miller, 2004). However, as Timperley et al. (2007) remarked, we need to be cautioned that simply giving teachers' time to talk is not enough to promote their own learning or that of students rather teachers should be supported to process new understandings and their implications for teaching and learning. Improvement through professional learning communities is only possible if teachers collaborate and focus on the 'real work' of improving learning and teaching (Harris & Jones, 2010). In the same vein, Dufour and Eaker (1998) assert that, well implemented professional learning community represents a transformation from factory-model education to education that embrace ideas and assumptions that are radically different than those that have guided education in the past.

Professional learning community is composed of collaborative teams whose members work interdependently to achieve a common goal linked to the purpose of learning for all (Fullan, 2007). Collaboration is a key for professional learning community. Without collaborative teams and relationships, as Fullan says, it is not possible to learn and continue to learn. DuFour et al. (2006) remarked that a collection of teachers does not truly become a team until they must rely on one another and need one another to accomplish a goal that none could achieve individually. For true collaborations to exist, according to McLaughlin (1994), teachers/leaders: 1. Need to have some shared values, goals and/or a common vision of teaching, 2. Their relationship is characterized by trust, care and mutual respect, 3. They are comfortable and courageous about sharing self-doubts without feeling like a failure, as well as celebrating successes without feeling arrogant, and 4. In a true collegial relationship, peers must be willing to give and receive both

constructive feedback and reinforcement. Furthermore, Fullan (2007) asserted that any solution for improvement must do two things: it must mobilize the ingenuity and creative resources of a critical mass of the whole system, and it must foster a we-we or collective commitment.

### Characteristics of Professional Learning Communities

Many educational researchers and practitioners have studied professional learning communities and identified the distinguishing characteristics of a professional learning community (Bolam et al., 2005; DuFour and Eaker, 1998; Hord, 1997, Williams et al., 2007). Many of the characteristics identified by various researchers as a key to effective professional learning

community overlap and emphasize collaboration, shared leadership and collective responsibility for student learning, and commitment to continuous learning and inquiry. An understanding of these characteristics provides educators with a shared lens through which to examine their own professional learning communities. The works of Senge (1990), Hord (1997, 2004), DuFour & Eaker (1998), Bolam et al. (2005), and Williams et al., (2007) can be considered as a foundation in the characterization of professional learning community. Below is presented the defining characteristic of professional learning community identified by each author.

Table 1: Characteristics of professional learning community

Senge (1990)	Hord (1997;2004)	DuFour & Eaker (1998)	Bolam et al. (2005)	Williams et al., (2007)
<ul style="list-style-type: none"> <li>• Shared vision</li> <li>• Mental models</li> <li>• System thinking</li> <li>• Personal mastery</li> <li>• Team learning</li> </ul>	<ul style="list-style-type: none"> <li>• Shared values and vision</li> <li>• Supportive and shared leadership</li> <li>• collective learning,</li> <li>• Shared practice</li> <li>• Supportive conditions (physical structures)</li> <li>• Supportive conditions (relationships)</li> </ul>	<ul style="list-style-type: none"> <li>• Shared mission, vision, and value. focus on learning</li> <li>• Collaborative culture with focus on learning for all</li> <li>• Results orientation</li> <li>• Collective inquiry into best practice and current reality</li> <li>• Action orientation and experimentation</li> <li>• Commitment to continuous improvement</li> </ul>	<ul style="list-style-type: none"> <li>• Shared values and vision</li> <li>• Collective responsibility for pupils' learning</li> <li>• Collaboration focused on learning</li> <li>• Professional learning: individual and collective</li> <li>• Reflective professional enquiry</li> <li>• Openness, networks and partnerships</li> <li>• Inclusive membership</li> <li>• Mutual trust, respect and support</li> <li>• Optimising resources and structures</li> <li>• Promoting individual and collective professional learning</li> <li>• Evaluating and sustaining a PLC</li> <li>• Leading and managing the EPLC</li> </ul>	<ul style="list-style-type: none"> <li>• Common mission, vision, values, and goals</li> <li>• leadership that is focused on student learning</li> <li>• Participative leadership focused on student learning</li> <li>• High trust embedded in institutions culture</li> <li>• Interdependent culture</li> <li>• Academic success for students with systems of prevention and intervention</li> <li>• Professional development that is teacher driven</li> <li>• Data-based decision making</li> <li>• Teaming that is collaborative</li> <li>• Use of continuous assessment to improve learning</li> </ul>

Despite the differences in the characterization of professional learning communities, as described in the table above, authors shared six core futures. A brief description of some of the most commonly cited characteristics were as follow:

- **Shared mission, vision and values-** The focus of professional learning communities should be on guiding principles that promote student learning (Bolam et al., 2005; Hord, 1997). Teachers and leaders must share a vision focused on student learning and a commitment to improvement (Louis, Kruse and Bryk, 1995; Timperley, 2005; Reichstetter, 2006).
- **Collaborative culture-** Reflection and collaboration are critical components of development for educators. Professional learning community is based on the premise that through collaboration, teachers achieve more than they could alone (DuFour & Eaker, 1998). They work collaboratively to ensure that learning is productive (Fullan, 1993; Timperley, 2005; Bolam et al., 2005). Professional learning community requires an intentional collaborative learning process to ensure that student learning is evident (Hord, Roussin, & Sommers, 2010). Teachers within a professional learning community work together and utilize the strengths of all educators to meet student needs.
- **Supportive and shared leadership-** Professional growth is reciprocal between all members within the organization. Leadership in schools should be shared by all members and is enhanced through support (Hord, Roussin, & Sommers, 2010; Hord, 1997). Sharing power and authority with teachers through decision making and shared leadership increases leadership capacity and builds a belief in the university's/school's collective ability to affect student teaching (Olivier & Hipp, 2006). Teacher leadership is distributed in a professional learning community, and all educators are engaged in leadership roles and opportunities.
- **Commitment to Continuous Improvement:** Hord (2009) stated that professional learning communities are

communities of continuous improvement. Professional learning community members continuously analyze their work to check whether the work aligns to the organizational vision. They continually search for ways to advance and grow. Teachers within the top performing countries such as Finland, Australia, Japan, and China spend more time being developed and honing their professional skills than they do working with their students (Darling-Hammomnd, 2010).

- **Collective inquiry into Best Practice:** The educators seek new methods, test ideas, reflect on their beliefs, and coordinate efforts to reach goals (DuFour & Eaker, 1998; Temperley, 2005). All individuals continue to grow and learn through inquiry to bring about new learning to increase the students' learning (Hord, Roussin, & Sommers, 2010). As Louis et al. (1995) succinctly puts, collective learning is evident through collective knowledge creation, whereby the professional interacts, engages in serious dialogue and deliberates about information and data, interpreting it.
- **Focus on result -** Learning organizations are judged by results (Senge, 2006). The professionals in the learning community measure their growth using observable and measurable results. Professional learning communities promote results-oriented thinking that is focused on continuous improvement and student learning (Reichstetter, 2006). Educators are rapidly becoming cognizant of the immediate need to show growth and development in their own practice to enhance their students' understanding of the content that they teach.

### **Forces that have compelled organizations to build a professional learning community**

The drive to reculture educational institutions as a learning community has recently acquired more urgency than ever before. This is fuelled by the dramatic change in economic, social and technological environment. Below are some of the significant forces of change and arguments

that have fuelled the urgency of creating a learning community.

*Changing nature of knowledge:* In today's globalized world knowledge is exploded, obsolete and widely accessible (Weer & Kendall, 2003). Knowledge is created continuously in every corner of the globe and doubles every 2 to 3 years (Marquardt, 2002). Consequently, the transmission view of knowledge and the transfer of prepackaged knowledge from the teacher to the learner seem dysfunctional. Rather, it requires active and joint construction, deconstruction and co-construction of knowledge. Hence, learning is becoming a lifelong challenge as well as a lifelong process.

*The knowledge based economy:* Technology and globalization have led to an economy based on knowledge. The new sources of wealth are knowledge and its applications and not natural resources and physical labor. Knowledge will pay the primary role in the world's future, a position claimed in the past by physical labor, minerals, and energy (Marquardt, 2002; Weer & Kendall, 2003). Therefore, continuous learning and knowledge provide the key raw materials for wealth creation and have become the fountainhead of organizational and personal power (Marquardt, 2002). Lifelong learning is the most important and promising way to empower citizens to meet these demands (Weer & Kendall, 2003).

*Changing Roles and Expectations of Workers:* As we move from the industrial era to the knowledge era, job requirements are changing. According to Gürüz (2008) rapid technological progress is creating new types of jobs, which require different and, usually, more advanced skills. Employees are moving from needing repetitive skills to knowing how to deal with surprises and exceptions, from depending on memory and facts to being spontaneous and creative, from risk avoidance to risk taking, from focusing on policies and procedures to building collaboration with people (Marquardt, 2002). Hence, Lifelong learning is increasingly becoming a key component of education and training systems.

*Rapidly Escalating Change and Chao:* The industrial era workplaces have been built on Newtonian physics. Newtonian physics, according to Marquardt (2002), is a science of quantifiable determinism, linear thinking, and controllable futures—in sum, a world that does not change too quickly or in unexpected ways. This mechanistic and reductionist way of thinking and acting was ineffective in today's changing and challenging world. Organizations need to realize that they cannot predict anything with certainty and the fact that chaos is part and parcel of reality (Marquardt, 2002; Gürüz, 2008). Today's problems are unprecedented and far more complex than those of the past. The solutions of the past are inadequate to address today's problems. Hence, organizations would have to continuously transform themselves into learning organizations in which everyone, groups and individuals, could increase their adaptive and productive capabilities.

*Changing theories of learning:* learning is fundamentally a social process (Heikkinen, Tynjälä, and Jokinen, 2012; Vygotsky 1978). Meaningful learning occurs when individuals are engaged in interaction and dialogue. Teachers need to work in collegial communities that encourage sharing expertise and problem solving; building collective knowledge and exploring relevant outside knowledge; providing critiques of existing practices; and inventing, enacting, and analyzing needed innovations.

### **Supportive conditions for professional learning community**

Research has found that supportive conditions needs to be in a place so that professional learning communities can flourish and sustained. Hord (2004) described the supportive conditions of professional learning communities (PLCs) as the physical conditions and human capacities that encourage and sustain a collegial atmosphere and collective learning. Louis et al. (1995) categorize the supportive conditions that support the development of professional community as structural conditions and social/human resources. According to Louis et al. (1995) the

structural conditions included: time to meet and talk, Physical proximity, Interdependent teaching roles, Communication structures, Teacher empowerment and Autonomy. Social and human resources included: Openness to improvement, Trust and Respect, Access to expertise, Supportive leadership, Socialization. In the same vein, Huffman and Hipp (2003) described the size of the institution, proximity of staff to one another, communication systems, and the time and space for staff to meet and examine their current practices as Structures conditions supporting and sustaining PLCs. Collegiality and collaboration require time which must be frequent and long enough to discuss ways to collaborate to improve student learning (Hoerr, 1996).

## **Two Exemplary international experiences**

### ***Lesson Study***

Lesson Study is an approach originally developed in Japan and used for over a century in examining the practices of teaching in order to improve teaching and learning (Takahashi & Yashida, 2004). It is now firmly embedded in Japanese education system and has been adopted by several other countries. Lesson Study remains an integral part of Japanese pre-service and in-service professional development and is said by some to have contributed significantly to the steady improvement of Japanese students' performance. The Lesson Study approach is a method of professional development that encourages teachers to reflect on their teaching practice through a cyclical process of collaborative lesson planning, lesson observation, and examination of student learning (Lenski, & Caskey, 2009). It is typically a form of teacher inquiry in which teachers in small groups undertake collectively a cycle of 'plan-do-review' activities to improve pedagogy thereby enhance their students' learning and progress. Fernandez, Cannon, and Chokshi (2003) state Lesson Study as a comprehensive and well-articulated process for examining practice. Lesson Study approach is based on Situated Learning Theory, which held the belief that learning is situated in

the specific activity and is embedded within a particular context and culture (Lave & Wenger, 1991; Lenski, & Caskey, 2009). Lave and Wenger (1991) posited that learning is a social process in which individuals co-construct knowledge rather than transmit knowledge from one individual to the next. In the case of Lesson Study, the learning occurs as teachers exchange ideas and collaborate on lessons for their actual classrooms. As teachers engage in the process of Lesson Study, they are collectively examining practice. The Lesson Study approach helps teachers to form communities of practice around planning and teaching. In these communities, teachers construct, organize, share, and refine their knowledge of the lesson (Lenski & Caskey, 2009).

A lesson study cycle usually involves small groups of 4–6 teachers instruct students from the same grade-level and/ or content-area. First, teachers decide on an overall goal for their teaching which will guide their practices in lesson study. Teachers then directly access the curriculum, decide on a topic to teach, and build a lesson plan around particular learning objectives (Lewis, Perry, & Hurd, 2009). Following this collaboratively planning content and materials for the lesson, one teacher conducts the lesson while other members of the lesson study community attend and observe that lesson. This observation of the lesson is an important phase of the cycle which differs to other forms of teacher observation since all teachers have engaged with the planning and observation of the lesson. Teachers then collectively reflect on the lesson and may decide to alter and re-teach it or continue to another cycle of lesson study (Fernandez, Cannon & Chokshi, 2003).

### ***Peer group mentoring***

Peer-group mentoring (PGM) is a new model of supporting teachers' professional development in Finland. The Finnish Network for Teacher Induction 'Osaava Verme' disseminates the PGM model throughout the country and develops it further in collaboration with local education authorities. This network comprises all the teacher education departments

of universities and all vocational teacher education institutions in Finland and is coordinated from the Finnish Institute for Educational Research (FIER) at the University of Jyväskylä (Heikkinen et al., 2012; Geeraerts et al., 2015 Skaniakos, Penttinen & Lairio, 2014). An essential element of the PGM model is that the mentors are trained for their facilitator's role. The training is organised regionally by the Network, and the programme consists of 5 two-day seminars (10 ECTS credit points). The foundation for this mentoring approach rests on the assumptions dialogue and equality as well as integration of formal, informal and non-formal learning (Heikkinen et al., 2012). The PGM system is being introduced as a professional development tool. The main activities taking part in peer-group mentoring include: 1) Sharing experiences and discussing important pedagogical questions, 2) Reciprocity and equality, 3) Formal, informal and non-formal learning, and 4) Dialogue and collaboration.

## Conclusion

“Good teachers are good learners - indeed, lifelong learners. If you are not learning, you are not teaching very well. Not only will you lack up to date skills and knowledge, you will have little to enthuse or excite you and, consequently, your learners”- Scales (2012)

The quality of an educational system cannot outperform the quality of its teachers (Harris & Jones, 2010). Consequently, a concerted effort will be required to improve professional practice through participation in professional learning communities. Evidence would suggest that professional learning communities offer a very powerful way of engaging teachers in reflecting upon and refining their practice. It helped teachers learn together as they rethink their practice, challenge existing assumptions about instruction, and reexamine their students' learning needs and interest.

Professional learning communities are based on the premise that learning results from the varied perspectives and experiences that members

share with one another as they work toward common goals- working collectively and purposefully to create and sustain a culture of learning for all students and adults. Building learning community is not and should not be the ultimate goal; rather, a means to an end. The very idea of a professional learning community is that the ‘whole is greater than the sum of its parts’.

We live in unprecedented times – a time where we are bombarded with information from all multiple directions. Many factors fuel today's urgency about teachers' learning opportunities in our context. First, the global environment is in a constant state of change and knowledge based. Second, the deep-rooted educational problems (inequity, declining quality) demand urgent change and improvement. These changes and challenges emphasize teachers' capability to provide the kinds of classroom experiences needed to improve learning and achievement for all students. Teachers must be committed to lifelong professional learning and collective responsibility for improved student learning and to instigate lifelong learning skills among their students.

Acknowledging the importance of collaborative approach in improving the education system, the Ethiopian government has emphasized professional learning of teachers at all levels of education. The authors strongly believe that this will provide fertile ground to establish and strengthen PLCs. However, we cautioned that PLCs cannot be authoritatively mandated, built or maintained in a technical, mechanistic sense, rather, they need to be encouraged, nourished and sustained in the manner of an organic system. As Harris and Jones (2010) remarked system-level improvement can only be achieved by changing the way people connect, communicate and collaborate.

The fundamental mission of our institution is to ensure learning for all and therefore we need to examine all our practices in light of their impact on learning. We must stop working in isolation and hoarding our ideas, materials, and strategies and begin to work together to meet the needs and interest of all learners. When we work toward becoming a learning community,



all stakeholders are valued, collaboration is the norm, learning occurs naturally, and reflection is fostered through collegial conversations (see Zepeda, 2008). Hence, we need to reculture ourselves as a professional learning community to enhance our individual and collective capacity that go beyond classroom and committed to work together to derive change and improvement in our practices. Developing and sustaining professional learning community can be an effective means of Institutional development and a useful tool to develop the capability of the staffs. However, strengthening professional learning community requires support and commitment of both the university leadership and the staff members.

## References

- Bolan, R., McMahon, A., Stoll, L., Thomas, S., & Wallace, M. (2005). *Creating and sustaining professional learning communities*. London: General Teaching Council for England, Department for Education and Skills.
- Darling-Hammond, L. (2010). Teacher Education and the American Future. *Journal of Teacher Education*, 61(1-2), 35-47.
- DuFour R and Eaker R (1998) *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement*. Bloomington: Indiana University Press.
- DuFour, R., Eaker, R., & DuFour, R. (2006). *On common ground: The power of professional learning communities*. Bloomington, IN: Solution Tree.
- DuFour, R., Dufour, R., & Eaker, R. (2008). *Revisiting professional learning communities at work: new insights for improving schools*. Bloomington, Ind.: National Education Service.
- DuFour, R., Dufour, R., Eaker, R., & Karhanek, G. (2010). *Raising the bar and closing the gap whatever it takes*. Bloomington, IN: Solution Tree.
- Fernandez, C., Cannon, J., & Chokshi, S. (2003). A U.S.-Japan lesson study collaboration reveals critical lenses for examining practice. *Teaching and Teacher Education*, 19, 171– 185.
- Fullan, M. (1993). *Change forces*. London: Falmer Press.
- Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York: Teachers College Press.
- Geeraerts, K., Tynjälä, P., Heikkinen, H. L. T., Markkanen, I., Pennanen, M., & Gijbels, D. (2015). Peer-group mentoring as a tool for teacher development. *European Journal of Teacher Education*, 38(3), 358-377. doi: 10.1080/02619768.2014.983068
- Gürüz, K. (2008). *Higher education and international student mobility in the global knowledgeeconomy*. United States of America: State University of New York Press.
- Hargreaves, A. & Fullan, M. (2000): *Mentoring in the new millennium. Theory into Practice*. 39(1). pp. 55–56.
- Harris, A., & Jones, M. (2010). Professional learning communities and system improvement. *Improving Schools*, 13(2), 172-181. doi: 0.1177/1365480210376487
- Heikkinen, H., H. Jokinen, and P. Tynjälä. (2012). Teacher education and development as lifelong and lifewide learning. In P. Tynjälä, H. L. T. Heikkinen & H. Jokinen (Eds.), *Peer-Group Mentoring for Teacher Development*. London: Routledge.
- Hoerr, (1996). Collegiality: A new way to define instructional leadership. *Phi Delta Kappan*, 77(5), 380-381.
- Hord, S. M. (2009). *Professional learning communities: Educators Work Together Toward A Shared Purpose —Improved Student Learning*. *Journal of Staff Development* 30(1), 40-43.
- Hord, S. M. (2004). Professional learning communities: An overview. In S. M. Hord (Ed.), *Learning together, leading together: Changing schools through professional learning communities* (pp. 5-14). Austin, TX: Southwest Educational Development Laboratory.
- Hord, S. M. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory.

- Hord, S. M., & Hirsh, S. (2008). *Sustaining professional learning communities*. Thousand Oaks, CA: Corwin Press.
- Hord, S. M., Roussin, J., & Sommers, W. A. (2010). *Guiding Professional Learning Communities: Inspiration, Challenge, Surprise, and Meaning* 1st Edition. Thousand Oaks, CA: Corwin Press
- Huberman, M. (1995). Networks that alter teaching: Conceptualizations, exchanges and experiments. *Teachers and Teaching*, 1(2), 193-211.
- Huffman, J. B., & Hipp, K. K. (2003). *Reculturing schools as professional learning communities*. Lanham, MD: Scarecrow Education.
- Kleinhenz, E., & Fleming, J. (2007). *Towards a Moving School: developing a professional learning and performance culture*. Victoria Australian: Australian Council for Educational Research Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.
- Lenski, S. J., & Caskey, M. M. (2009). Using the Lesson Study Approach to Plan for Student Learning. *Middle School Journal*, 40(3), 50-57.
- Lewis, C., Perry, R., & Hurd, J. (2009). Improving mathematics instruction through lesson study: a theoretical model and North American case. *Journal of Mathematics Teacher Education*, 12(4), 285-304.
- Lieberman, A. & Miller, L. (2004). *Teacher Leadership*. San Francisco, CA: Wiley & Sons.
- Louis, K. S., Kruse, S. D., & Bryk, A. (1995). An Emerging Framework for Analyzing School Based Professional Community. In K. S. Louis & S. D. Kruse & Associates (Eds.), *Professionalism and Community*. Thousand Oaks: Corwin Press.
- Marquardt, M. J. (2002). *Building the Learning Organization: mastering the 5 elements for corporate learning* (2nd ed.). CA Davies-Black Publishing.
- McLaughlin, M. (1994) Strategic Sites for Teachers' Professional Development, in P. Grimmett & J. Neufeld (Eds) *Teacher Development and the Struggle for Authenticity: professional growth and restructuring in the context of change*. New York: Teachers College Press.
- Morrissey, M. S. (2000). *Professional learning communities: An ongoing exploration*. Austin, TX: Southwest Educational Development Laboratory.
- Olivier, D. F., & Hipp, K. K. (2006). Leadership capacity and collective efficacy: Interacting to sustain student learning in a professional learning community. *Journal of School Leadership*, 16(5), 505-519.
- Peery, A. B. (2004). *Deep Change: Professional Development from the Inside Out*. Lanham, Maryland: The Rowman & Littlefield Publishing Group, Inc.
- Reichstetter, R. (2006). Defining a professional learning community. *E & R Research Alert*, (06.05).
- Sandholtz, J. H., Scribner, S. P. (2006). The paradox of administrative control in fostering teacher professional development. *Teaching and Teacher Education*, 22 (8), 1104-1117.
- Scales, P. (2012). *Teaching In The Lifelong Learning Sector*. UK: McGraw-Hill Education.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Currency Doubleday
- Senge, P (1990), *The fifth discipline: The art and practice of the learning organisation*. New York: Currency Doubleday.
- Skaniakos, T., Penttinen, L., & Lairio, M. (2014). Peer Group Mentoring Programmes in Finnish Higher Education—Mentors' Perspectives. *Mentoring & Tutoring: Partnership in Learning*, 22(1), 74-86.
- Takahashi, A. and Yashida, M. (2004) Ideas for establishing lesson-study communities. *Teaching Children Mathematics*, 436-443.
- Thessin, R., & Starr, J. P. (2011). Supporting the growth of effective professional learning communities. *Phi Delta Kappan*, 92(6), 48-54.
- Timperley, H. S. (2005). Instructional leadership challenges: The case of using student achievement information for

- instructional improvement. *Leadership and Policy in Schools*, 4(1), 3-22.
- Timperley, H., Wilson, A., Barrar, H. and Fung, I. (2007). *Teacher Professional Learning and Development: Best Evidence Synthesis Iteration*. Ministry of Education, New Zealand.
- Toffler, A. (1970). *Future Shock United States*: Random House.
- Tynjälä, P. (2013). *Toward a 3-P Model of Workplace Learning: a Literature Review* *Vocations and Learning* 6, 11-36.
- Tynjala, P. (2008). *Perspectives into learning at the workplace*. *Educational Research Review*, 3, 130-154.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher sociological processes*. Cambridge, MA: Harvard University Press.
- Waters, J. T., & Marzano, R. J. (2006). *School district leadership that works: The effect of superintendent leadership on student achievement*. Denver, CO: McREL.
- Weer, T. J. V., & Kendall, M. (Eds.). (2003). *Lifelong Learning in the Digital Age: Sustainable for all in a changing world*. New York: Kluwer Academic Publishers.
- Williams, E., Matthews, J., Stewart, C., & Hilton, S. (2007). *The learning community culture indicator: The development and validation of an instrument to measure multidimensional application of learning communities in schools* Paper presented at the University Council for Education Administration Washington DC.
- Zepeda, S. J. (2008). *Professional development: What works*. Larchmont, NY: Eye on Education.
- Zmuda, A., Kuklis, R., & Kline., E. (2004). *Transforming schools: creating a culture of continuous improvement*. Virginia USA: Association for Supervision and Curriculum Development.