

PROFESSIONAL LEARNING COMMUNITY IN EDUCATION: LITERATURE REVIEW

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Abstract: Professional learning communities enable teachers to collaborate and upgrade their skills to enhance student learning. Nevertheless, professional learning communities vary widely in practice, especially between the developed and developing countries. This review paper discusses the background and development of professional learning communities. It begins with the various definitions of professional learning communities. It then goes into developments and practices in Britain and the United States of America. It then focuses on three models of PLCs: the Senge model, the DuFour model and the Hord model. The similarities and differences in aspects of the three major models are discussed. This paper also covers some differences in practice of PLCs in developed and developing countries, with particular reference to the Asian experience. Finally the role of technology in developing professional learning communities is discussed, and some suggestions for future consideration are given.

Keywords: Professional Learning Community, Literature Review, Professional Learning Development, Three models, Common Core Curriculum Standards

1.0 Introduction

With the development of professional learning communities (PLCs) of teachers, scholars have studied the formation, function, system, positive effect related with this area. Bryk, Camburn, and Louis(1999) raise their view "The classroom is the fixed place in which teachers deal with regular work that is paid close attention to, but their work also have other contents" (Bulkley & Hicks, 2005). The interactions of teacher peers are very necessary and very important to perfect the process and outcomes of teaching and learning. In this situation, the PLCs become the important tool to meet teachers' new knowledge and other requirements continually to help teachers adapt and improve their visual field which is helpful for both the teachers and the whole organization. Professional learning communities have the positive function of joint professional learning and fulfilling teachers' immediate needs (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006).

1.1 Definition of Professional Learning Communities

Following the development of professional learning communities, many researchers and scholars give their definitions on the topic of professional learning communities in different periods.

In 1983, after the publication of "A Nation at Risk", teacher professionalization and teacher development have become significant issues to discuss in the school development field(Scribner, Cockrell, Cockrell, & Valentine, 1999). Barth described learning communities as "a place where students and adults alike are engaged as active learners in matters of special importance to them and where everyone is thereby encouraging everyone else's learning" (Roberts & Pruitt, 2008). Newmann (1996) gave his conception of professional learning community which including five main elements. The professional learning community is a team, in which teachers have universal views on collaborating, sharing, reflecting, and the needs of their teaching and learning practice (Hord, Roussin, & Sommers, 2009). Hord (1997) indicated the conception of professional learning communities in schools that refers to teachers and staff following the five dimensions steadily: supportive and shared leadership; shared values and vision; collective learning and application of learning; supportive conditions, and shared personal practice.

Myers and Simpson(1998) represented learning communities as a cultural system for learners to learn as an entirety that is helpful for learning and other good aspects to interact with other participants (Roberts & Pruitt, 2008). Collay et al. (Collay, Dunlap, Enloe, & Gagnon, 1998) posited that all the learners, the ensemble development of learning communities and the procedures are significant.

In 1999, Speck explained that the school learning community is a continuous procedure of collaborative interactions among teachers, students, leaders, staff, parents by the way of conversation to develop learning and life in school. The community helps individuals in learning and makes them contribute to the learning community (Roberts & Pruitt, 2008). Cochran-Smith and Lytle in 1999 suggested that professional learning communities make teachers get more formal knowledge combining with practice knowledge. Professional learning communities provide the conversation and writing to establish close relationship between the contextualized knowledge and application. According to Fernandez (2002), PLCs are defined by two aspects:

teachers have frequent interactions between their teaching and learning. They can plan and discuss the contents, forms, teaching methods and all the activities of peers' observation; teachers should do research to explore new knowledge and publish (Cochran-Smith & Lytle, 1999).

Seashore Louis and colleagues (2003) developed their view of professional learning community to help teachers to expand their sights and goals from sharing individuals' actions to build a common culture which develop continued collaboration in more substantiated, knowledgeable ways. In PLCs, teachers pay more attention to students' outcomes by testing and examining their own ideas. Moreover, going into depth on topic of teachers' performance connections with others outside classrooms is very important; as important as ensuring their performance and actions in their classrooms by the evaluation and measurement of students' results and teacher professional learning (McLaughlin & Talbert, 2006).

In 2007, Stoll and Seashore Louis published their conception of Professional Learning Community of schools which had four key points: professional learning; the paradigmatic group or team; collective knowledge; create the atmosphere with moral caring on leaders, teachers, and students. In the opinion of Speck, the school learning community needs leaders, teachers, students, parents and other community members together to establish and develop. They should apply appropriate dialogues and conversations on topics related to school community improvement (Roberts & Pruitt, 2008). Many other researchers described the PLC as a positive environment where teachers work and interact with others to achieve the common goal of student accomplishments under the powerful system led by an effective school leader (Hord et al., 2009). But are professional learning communities sustainable in the long run? Stoll et al. (2006) concluded that changes in senior leadership of schools appear to be a factor, so increasing attention is being paid to the potential of leadership succession planning to help promote PLC sustainability.

This paper will discuss the emergence of Professional Learning Communities in the US and the UK and then consider in detail three teacher professional learning models: Senge's Model, DuFour's Model and Hord's model.

1.2 Studies of the Emergence of Professional Learning Community of UK and US

Traditionally teachers used to work in isolation much like independent contractors within a school. During the late 1980s the focus of reform within schools started to shift from this traditional approach to a modern approach focusing more on accountability, collaboration and teacher efficacy. Rosenholtz (1989) brought attention to this topic through her empirical research on workplace condition of the teachers. She identified that effective school workplace is an important prerequisite to encourage teacher collaboration – where teacher can share and analyze with each other their institutional practices and share ideas to improve the quality of instruction.

Rosenholtz also found that student achievement and success is positively correlated with the teachers' sharing ideas and improving institutional practices. She conducted the study on 78 schools to examine the teachers' workplace and found two types of schools based on the workplace conditions – learning enriched schools and learning impoverished schools. In learning impoverished schools, teachers used to work in isolation and their belief in their capability to bring meaningful change is greatly diminished. In learning enriched schools, the teachers work in collaboration through creating shared goals and focus on improving teaching and learning. The study found that this sort of collaboration among the teachers led to increased level of teacher efficacy and commitment which resulted in increased student achievement. Rosenholtz (1989, p. 430) also noted that in most traditional school settings "..... *teachers function as individuals in isolation who rarely share ideas; who don't seek or offer professional assistance; who insulate themselves from self-disclosure of inadequacies; and who convince themselves that their problems are particular only to them -- teachers avoid help seeking if they view it as potentially embarrassing or stigmatizing and if it again threatens their sense of professional adequacy.*"(p. 430).

In contrast, Senge (1990) in the book "The Fifth Discipline" focused on systems thinking in a learning organization: ".....*where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together....*" (p. 3). The book focused on the idea of engaging teachers in teams to create and develop a shared vision that will direct them to guide their work, and improve their teaching. The book became a driving force in the school districts and educational settings due to its focus on the development of professional learning community.

School administrators and teachers are the interconnected subsets of a larger system where each element of the system is supposed to work collectively to resolve problems and continually improve and utilize the expertise of other team members. This sort of system took shape in many forms across the USA. Later the practice became known by the term "learning communities". Astuto et al. (1993) named this process of the teachers coming together to share knowledge and bring improvements to their practice as Professional

Community of Learners. Hord (1997) later coined the practice as professional learning communities and positioned it as a focal point of education discussions.

The professional learning community (PLC) approach to teaching shifted the focus from an isolated teacher-centered approach to instruction to a student-centered approach where teachers work interdependently and collaboratively and focus on a shared mission of collective capacity building, identify learning gaps and develop effective institutional practices to fulfill the needs of all students. The school administrators began to understand the effectiveness of PLCs and started to invest resources and time into it by restructuring institutional systems so that teachers can gather and discuss on enhancing curriculum knowledge, share ideas and develop local standards and assessments (Darling-Hammond, 1996).

At the Center of Organization and Restructuring of Schools at the University of Wisconsin-Madison researchers identified the most effective way to restructure schools to improve student achievement. The data were collected over the period 1990 to 1995, and from over 1500 elementary, middle and high schools throughout the United States, as well as field research in 44 schools in 16 states. They found no unique simple way of improvement that could be implemented nationwide consistently (Newmann&Wehlage, 1995). However, they showed that the most successful schools were those which introduced professional learning communities and concentrated on higher level collaboration among teachers and enhanced student achievement. They also identified that building these PLCs require certain specific workplace conditions and a well-defined mission.

In 1995, Lee et al., working for the Center on Organization and Restructuring of Schools released a report on successful school restructuring efforts which spread over 11,000 students from 820 schools across the United States. They found that the schools characterized as PLCs showed increased student achievement, and both their teachers and students are more committed to the school goals and mission and the administrators work in unison with the teachers and students to improve classroom instruction.

DuFour et al. (2006) defined the term professional learning communities as – "Educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve" (p. 217). They also explained that effective professional learning communities are structured under the assumption that: A structure of ongoing, job-embedded learning for educators needs to be ensured to achieve sustained improved learning for students; This approach focuses on results-oriented goal setting for each member of the organization in order to achieve high levels of learning for all students; Members of the PLC are expected to work inter-dependently to achieve agreed upon common goals that are focused primarily on student learning.

From this perspective teacher collaboration is not the only key to success of PLCs; rather the key is that the collaboration is focused on classroom practices which will lead to improved student learning. The success of PLC largely depends on collective enquiry, reducing isolation among teachers, reflection on current institutional practices, sharing responsibility for the learning of all students and creating a capacity for learning. Student success becomes the only institutional priority and the focus moves away from excuses and blame, to an approach focused on learner individual needs (DuFour et al., 2006).

Reeves (2010) analyzed the effects of professional development on student achievement gains. He found that student achievement gains were significant when schools come together in PLCs to engage in deep discussions about planning, implementing instructional strategies, and monitoring student results. His analysis of schools implementing PLCs from the United States and Canada unearthed that the deeper the implementation, the more dramatic the student achievement. Yet too often schools fail to develop a process to adequately support teacher professional growth. Given the importance of a collaborative culture with a focus on learning for all (DuFour et al., 2006) it would seem that teachers can no longer work in a completely autonomous classroom, using concepts and principles of the 20th century factory model but instead must have a systematic way to collaborate with peers to share proven effective practices (DuFour &Eaker, 1998). Teachers are not only expected to develop a list of strategies, they also need to monitor the growth and development of each individual student and adjust their teaching to the individual needs of each. DuFour et al. (2004) argued that a school truly committed to the concept of learning for each student will develop consistent, systematic procedures for responding when students do not learn. Schools and classrooms should be results-focused and develop a plan for continuous improvement through aligned assessment and data analysis. This use of data emphasizes a collaborative approach to continual improvement and research into best practices.

2.0 Senge's Model

Peter Senge is a very famous scholar who contributed in the two areas of business world and the education community. In the field of education, he proposed his significant visions of the learning organization. He wrote the book *The Fifth Discipline*, and another one is "Schools that Learn: A Fifth Discipline Field book for Educators, Parents, and Everyone Who Cares about Education" for explaining and improving the important conceptions.

Senge et al. (1990) published *The Fifth Discipline Field* book that offers a simple dynamic set of structures and useful material five disciplines for leaders to set up the effective school learning organizations. The five disciplines are personal mastery, systems thinking, mental models, shared vision, and team learning. Each discipline includes the principles that can guide us to learn, master, practice, and test in our lives to get success of work (Cochran-Smith & Lytle, 1999).

In his view, the five disciplines make the members in the organization add new elements in their minds. The change of minds arouses the members to improve their knowledge and abilities through the learning process (Hughes & Kritsonis, 2006). In these five disciplines, the first one is personal mastery. On the basis of Senge's view (1990), personal mastery "...is a procedure. It is a discipline for long time to learn and practice. "When people have high level of personal mastery, they will have the ability of understanding their ignorance, incompetence" (p.142). "Only individuals learn that can stimulate the whole organizational learning .If the organizational members do not learn, organizational learning will not happen (Senge, 1990, p. 139). Personal mastery is the discipline which needs the long sustained time to realize and go deep into personal vision which stress on individuals' vigours, patience, the realistic conceptions, the abilities and skills. Moreover, it means that personal mastery is the process of spiritual growth (ibid.141).

The discipline of personal mastery builds the forms of self-development and individual learning (Caldwell, 2012).It is the theory on individual development which help distinguish the significant things for individuals and focus on the interrelation and mutual responsibilities of individuals and their organizations. When workers consider that their organization has positive influence on their individual development, they will try their best to make contribution to the organization by working hard (Wells &Feun, 2007). Personal mastery application brings the way in which we go access our life as the creative work process with the perceptions of innovation and continuation. This is the practice process including we should discriminate the important tentative ideas and how to achieve the goals from the realistic circumstances following the steps in practices of growing progressing with the development of related actions (Lloyd Raines,2009).

In Sage's five disciplines, systems thinking is the conceptual cornerstone.Systems thinking refers to the way we see interrelationship links, and connections existing in things. It is unique because it combines other disciplines, and coalesces them into the entirety of theory and practice (ibid.: 12).According to Senge, systems thinking conjoins the other four supporting disciplines for seeing the wholes. Systems thinking focus on revealing interrelationships and change patterns (Senge 1990a, p. 23).

Not only seeing parts and pieces, systems thinking indicates the process of observe the whole, but also studying the relationship of each main element of the system such as how make decision, the perceptions, the outcoming quality, hierarchical relationships and so on (Lloyd Raines,2009).The contents of systems thinking include two parts: one part emphasis on the whole entirety, the other part is focusing on the individuals.

The third discipline is mental models. According to Senge(1997), mental models are our views, mindsets, and assumptions even pictures and images which impact our comprehensions of the world effectively and how to do our behaviors. Mental models can use the learningful dialogues to maintain people's needs and requirements which relates to their effective thinking and their thinking impact on other people. In organizations, mental models have significance to guide members to decide new orientations and improve their work skills which bring the new changes. "Mental models should be strengthened and systems thinking can arrest changes sometimes". According to Senge (1997), the discipline of mental models need openness and honesty. Mental models emphasize understanding and learning others' feelings, thoughts and what they want to express. Openness is useful for people to know saying the appropriate words in different situations, and absorb more power information to build up their mental models.

Moreover, the practice of mental models can break people's inherent wrong perceptions including the areas of business and education. Sometimes people do not ask questions when they do not know the answers. To everything, people usually have their own certain views or predefinitions about how things work .In other words, mental models produce the effect on setting the way how people perceive reality (Senge, 1997).

The discipline of shared vision is important for people to expand and integrate their visions that can make organizations achieve. According to Senge (2000) the discipline of shared vision has the ability of aligning disparate aspirations among people (p.72). For organizations, shared visions bring the experimentation and innovation to improve the organizational quality. In organizations, every member has his or her own personal aims or goals which they want to achieve. However, all members belong to their organizations, and shared visions are useful to combine individuals' purposes to bring experimentation and creativity to the organizations to work for the same goals (Cochran-Smith & Lytle, 1999).

"Team learning" as discipline focuses on "the process of arranging and improving teams' abilities to attain the goals of members' and the whole organizations' (Senge, 1990, p. 236).According to Senge, the learning organization needs teams working together and argued that team learning can give members a set of resources, information, feedback, fundamental values, general thinking, and help members to solve their problems in

creative ways. With global changes, job pressures, fierce competition, new technological skills, we need new conceptions and behaviors as bases to set up and develop learning organizations (Hughes & Kritsonis, 2006).

2.1 DuFour's Model

According to DuFour's views, as an organization, the foundation of professional learning communities is the development of teachers' cooperative work which focuses on improving the abilities of dealing with complicated work of teachers although helping students narrows the gaps of learning to achieve their learning goals. DuFour argues that the PLC should pay more attention to learning not teaching, cooperative working only to get individuals' achievements (DuFour, 2004).

To DuFour, the learning community should contain the basic characteristics: shared vision, mission, values, and aims; learning is the primer of the cooperative teams; the cooperative team needs practical and realistic traits; the action orientation should be clear for members to achieve in application; duties for sustained development of learning teams; and the learning teams should have the outcome orientation.

"Shared mission" means that each school has its own tasks or missions related to educating students, developing the quality of school to attain their stated goals and so on. The premier issue of cooperative teams is learning. Schools should offer support to students that can meet their needs in regular sequence to reach the high level, not educational chaos (DuFour, 2004). The collaborative teams in schools emphasize on ensuring students learn. Every teacher should understand how to guide students to learn in the best way. The staff also need to be aware of how to create harmony to adjust learning phases and the support for students in learning. Hence collaborative teams need the best practice and current reality (ShIPLEY, 2006) with the foundation of basic resource, universal standards, evolution systems of outcomes, students' performances and so on. In DuFour's view, although every member has their individual district work, they all work in coordination with each other to achieve the common goal in collaborative teams.

In order to get the same goals to gain outcomes, members in the collaborative team should have the orientation conducting their actions and behaviors (ShIPLEY, 2006). As teachers, they must keep open minds to accept new ideas and conceptions which can help them achieve their aims. In collaborative teams, the evaluation measurements need to be applied for their outcomes. DuFour used six reasons for learning communities to need evaluation measurements: Efficiency, Fairness, Effective monitoring, Informs individual teacher practice, Team capacity, and Collective response (ShIPLEY, 2006).

Richard DuFour raises the "Big Ideas" of stating the topic of "Professional Learning Community". DuFour (2004) proposed that "The key point of building is learning not teaching, working cooperatively for designed aims" (p.6). In schools, the prime task is to help students and to ensure they learn. This is the core conception of the first big idea. From the conception of "teaching" to "learning", this is the great change in learning organizations. All members in learning communities should understand about student learning: communicating teachers' wants to students, the ways of knowing whether students learn or not, and the methods of solving students' difficulties in the learning process (DuFour, 2004).

According to DuFour, the second "Big Idea" is culture collaboration. In the PLCs, the members including teachers and staff need work cooperatively to build and develop the cultural systems in their organizations. When teachers are belonging to one entirety, they also want to need to work individually sometimes. In addition, some staff members have the limitations of understanding "collaboration" only exist the camaraderie in organization. Someone only focus on one aspect of school's operation such as discipline, technology, social climate, not the whole perception of professional learning community.

Professional learning community must have the strong organizational procure of improving the collaboration of culture system for teachers' working together to help students get more progress through the high levels of learning. In addition, in the process of collaborating school improvement, teachers should pay more attention to supervise each student's main outcomes. As teachers, they should make different beneficent standards or goals for different students to achieve. They also have the rules or benchmarks to evaluate qualities of students' work. By these useful methods, teachers can know the time to manage the measurements of students' work.

The measurements of students' work are important for teachers in professional learning communities to analyze their students' advantages and disadvantages in the learning process and adopt suitable tactics to improve student learning. This is the best way for the ensemble to expand new minds and new ideas in building the professional learning community.

DuFour proposes that the third "Big Idea" is results focus. Effectiveness of the professional learning community or not depend on the results. In schools, the common work for teachers is teaching knowledge to students to make students get developments by working together. Usually, according to students' current learning situations, teacher groups should analyze the learning levels to formulate the specific plans to attain

their designed goal for make the progress periodically. Teachers in cooperative work groups must change their goals to raise students' percentage or decrease student failure.

Teachers in the professional learning communities need more useful information about their students' performances compared to other students. In PLCs, every teacher can get the materials, minds, and tactics with other colleagues (DuFour, 2004). The teachers should be required master the more useful data to analyze the students' successful performances overall not only by the average rates. Teachers and staff stress the important goals of students' learning, and share their information, thoughts, and tactics for working together to improve students' progress instead of working isolated. The PLC needs hard work to build and maintain progress. The members in PLCs should pay more attention to learning, and do everything which has relationships with learning to collaborative work for the sustainable progress.

2.2 Hord's Model

Hord (1997, 2004) describes the professional learning community by five characteristics or dimensions: supportive and shared leadership; collective creativity; shared values and vision; shared personal practices; and supportive conditions for sustaining the learning community (Feger & Arruda, 2008).

According to Hord, the first characteristic is shared beliefs, vision, and values. Hord (1997) argues that in the process of improving PLCs the key point is a shared mind, universal goals, and the same central value system for sustained learning. In the PLC, the main belief must be learned by students. The main values can be advanced to encourage teachers to share their visions to develop their students' learning (Cormier & Olivier, 2009). In professional learning communities, teachers have the responsibilities to build their value mechanism by working together to attain individual goals.

Hord (2004) states that school visions can connect school's tasks as vivid figure with the school's main direction and principles including decision-making, activities of guidance and management, and professional improvement. Hord (1997) argues that teaching methods must change that contain thoughts and professional practice for improving shared visions.

In professional learning communities, Isaacson and Bamberg (1992) suggest that vision is the old topic which means tasks, aims, goals, objectives, and the papers in the leader's office. For staff, the shared vision means it is the general conduction to make decisions in the procedure of teaching and learning. More important, staff should create positive surroundings and atmosphere to improve students' learning. DuFour and Eaker (2008) stated that an effective professional learning community should know the school's interest as the orientation that is related students' leaning and the aims of the whole organization.

According to Hord(1997), the second dimension is supportive and shared leadership. Hord (1997) raises her view that school principals and teachers share their specific duties and responsibilities have the positive effects on leadership in PLCs .She also says that leadership is the important content in professional learning community as it has the positive influence for leaders and teachers to share their authorities, ideas and determines for attaining the school's vision (Cormier & Olivier, 2009). The positive leadership ability should be built in professional learning community has six main advantages pertinent to stressing on leadership for interactions; relations of teachers' supports and involvements; taking the school's visions as the regular actions; arousing goal professional culture developments; the methods of dealing with difficulties and clashes; and the entirety of organizations. According to Kleine-Kracht (1993) the leaders, the teachers and the staff must learn how to find questions, how to do surveys, and how to find the suitable ways to overcome the difficulties to develop the good quality of school (Hord, 1997).

As Hoerr (1996, p.381) says, the leaders and teachers should develop shared and collegial leadership which help them to know they are a whole for working to achieve their universal goal. Leithwood and his team's researches (1997) reveal that the leaders should give teachers high respect to work together with them as professionals, peers, and colleagues.

Louis and Kruse (1995) indicate that leaders or principals need supportive leadership because it is the basic element of human resources for professional communities with school-based which make the leaders understand they have the responsibilities to construct their effective schools(p. 234).According to Prestine, in order to build more effective professional learning communities of schools, three main factors are needed that include the capabilities of sharing authority, the capabilities of offering convenience to their teachers and staff, and the capabilities of attending actives without privilege (Hord,1997).

In Hord's views, leaders should decentralize their authority that stimulates the successfulness of shared leadership, but it is decided by the leaders' perceptions and minds. The point is explained by Hord and Sommers (2008) "Professional learning Communities must have the important and necessary factors including authority, power, and decision making to be shared and inspired"(p.10). However, Hord admits leaders change their minds or conceptions of sharing leadership exists many difficulties, and some teachers also think it is more difficult. Huffman puts forward the view that the faculty should play the function of advocating and applying the teachers' suggestions when they are considered significant. In conclusion, the leaders of schools need to develop their

democratic conceptions and behaviors to share power, make decisions, and adopt the valuable suggestions from their teachers and staffs which are contributed for the effective leadership (Cormier & Olivier, 2009).

In Hord's five dimensions, the third one is "collective learning and the application of that learning". It refers to how leaders and teachers need the way of inquiring to build up the community (Hord, 1997). She thinks the forming of professional community is a process of ongoing and collective learning in school faculty (Hord & Sommers, 2008). In addition, she adds the implementations; the collective learning is very significant to the professional learning communities because it includes getting new knowledge and the process of practicing knowledge in classroom which has the close relation with the school's perception of students' learning goals (Hord, 1997).

In the PLC, applying of systemic model which guide the ongoing and cyclic process to form the abilities to explore new knowledge and get the professional reflection for schools. Six elements are comprised: study, select, plan, implement, analyze and adjust (Cormier & Olivier, 2009), Hord also provided the evidence to prove the professional Learning Cycle by her views of collective learning.

Actually, collective learning is an ongoing process including leading student learning and dealing with the school's specific problems (R. P. Dufour, 1999). The collective learning process can help teachers develop their subject matter knowledge and teaching skills and practice these in classroom in order to improve students' learning results and the professional qualities of schools as the regular activities and interactions (Cormier & Olivier, 2009).

The fourth dimension of Hord's (1997) is supportive conditions contains specific organizational structural and relational supports (Pitman, 2008). According to Hord (1997), supportive conditions means interpersonal relationships and physical resources (Cormier & Olivier, 2009). In fact, the supportive conditions contain the two main parts: human capacities and structural resources. In addition, in order to maintain and develop the PLC, structural supports have the different dimensions of meeting times, sizes of schools, the necessary resources, money for supporting schools and teachers' activities.

In Hord's thoughts, the physical conditions and human abilities have the positive influences to school's running. Human capacities should play the effective role in the professional learning social procedure as a contributing member. The human capacities include the contents of collective learning, shared leadership, and shared professional practices.

In the supports of structures, Hord (1997) thinks communication structures are very important with the foundation of school size and constructions. Communication structures need the depth of feedback and reflection. The range of communication structures is wide including staff meetings, email, information boards, and mailboxes. These tools are helpful for effective schools. Usually, Email is very important for teachers and leaders to share available resources, inquiring questions, and shared practices (Pitman, 2008). Huffman (2003) argues that the faculty or subareas are fit for developing and applying shared leadership containing small groups, grade gradations, and partition teams how to set up and develop the abilities of settling the problems in students' learning.

The last dimension of Hord's (1997) model is shared personal practice. Hord (1997) says that the individuals' behaviors have the direct influences for setting up group capacities which are important for professional learning community (Cormier & Olivier, 2009). Shared practice is the hinge element of classroom pedagogy used that can develop schools' qualities. Louis and Kruse (1995) state their views that in professional learning community, teacher's actions are formed through the process of peers' helping and cooperative influences (Hord, 1997). Midgley and Wood (1993, p.25) proposed that teachers need the suitable and encouraging environment to provide the support for their specific and complex tasks, risks and challenges to improve the PLC.

Shared practice is the process of teachers' reciprocal actions comprehension including teacher peer's observation, peer's coaching, peer supporting, encouragements, peer's trust, and shared feedback and results from students' work and explore the best ways to help them. Leaders must emphasize the formal classroom observations which help teachers build their individual perceptions for developing professional abilities that foster the collective capabilities. According to Hord (1997), schools should create the norm of school culture which means the helps among teacher peer's work-doing, judgments and effective reflections of their tasks. Huffman and Hipp (2003) think that the foundation of building the culture of shared practices which need the procure of experience repeating many times and this is the necessary stages (Cormier & Olivier, 2009).

2.3. Antecedents of Professional Learning community

We will now discuss briefly the antecedents of the Professional Learning community, among them leadership and culture.

2.3.1. Leadership

The goal of building a professional learning community is student learning. In the process of building and sustaining professional learning, much of the literature from many researchers and scholars consider that leadership is very important to set up and support the professional learning community. Good leadership has the positive effects on students learning performances and make for great progress in student learning (Bryk et al., 1999). According to Beck and Murphy (1994), the leadership styles which have the characteristics of "principal as follower" or "the leader-centered" are helpful.

According to Louis and Kruse (1995), the school leadership plays the key part to improve and strength the professional learning community defining the six main features: Leaders put themselves in the center of teachers and staff not the top of the team; teacher's classroom supports help PLCs because one teacher's problem can bring out all teachers' group discussion and solutions and develop teaching cooperation, and duties for mutual help; good leaders are aware of creating the culture of inquiring and absorbing the new knowledge, new ideas and the reflections of teaching practices; Leader build the form of actions and make the culture more easily recognized; Leaders have the abilities to deal with conflict including querying and discussing in schools; leaders should build school as more wide PLCs which shows solicitude for all teachers in the ensemble.

Good leadership is the significant catalyzer for developing PLCs to attain the goals by shared knowledge and developing the qualities of every aspect of the PLC (Shipley, 2006). According to Harris (2008), distributed leadership has the ability of enhancing the professional learning communities of schools (Harris & Jones, 2010). In addition, Harris (2009) states that the main trait of distributed leadership is that teachers have cooperative working with shared equipment. Valentine, Clark, Hackmann, and Petzko (2004) suggested that good leadership must ensure leaders and teachers share common values, goals of their programs and practices to lead all students to success in their coherent curriculum with the student-centered guidance; school leaders need to provide more opportunities for attending more teaching activities with their teachers; leaders play various roles in making decisions, coordinating and guiding the whole classroom teaching; leaders should create and maintain the school systems which service the teachers' and students' learning and set up healthy relationships of teachers to teacher, students to teachers, and students to students (Valentine, 2006). According to Dantow (2005), schools maintain the systems due to the good persistence leadership. Valentine considered that if the school does not have good leadership, the good school does not exist (Valentine, 2006). In other words, the positive school leadership can develop the professional learning community.

2.3.2. Culture

School culture encompasses institutions including norms, values and beliefs, rituals and ceremonies, symbols and stories which build up the school's "persona" (Peterson, 2002). The school culture impacts on the members' thoughts, perceptions, feelings, behaviors, and the ways to solve problems that can lead to school success because the good culture needs all the leaders, teachers, and staff to shape, identify, and follow to carry out improvements. In good culture, the characteristics can be strengthened to reinforce school members to learn together, get commitment and motivation. According to Deal and Peterson (1998), good school culture has direct positive effects on the improvement of schools with the members' conceptions and attitudes (Boyd, 1992, p.1). Fullan (1992) stated that many researchers considered that school culture is always ignored because it is easy to change. Schein (1985) said that we always depict the contents of school culture as the organizational members' common assumptions and beliefs, but school culture is determined by the school's perception, goals, and surroundings.

As Schein (1985) articulated, school leaders must have the abilities responsibilities, and skills to create, manage, and maintain school culture and make all the school members work in common. They should learn the history of their school, and make the comparison to the prior schools' development plans to learn the merits and study the experiences to get real ways to help the whole school members to improve. School leaders must adopt some effective ways to shape the good school culture.

Good culture should emphasize learning, and it refers to make the balance between interests and stakeholders, pay more attention to people not only the school system, help school members to build up confidence to change the surroundings, provide more time for members to learn and communicate, arouse their enthusiasm for teamwork, and create effective ways to solve problems. It can facilitate the learning at all levels. In the PLC, learning is the most significant issue. Learning is not only referring to the students' learning, but also the leaders, teachers, and staff in the whole organization, in short, community learning. Good culture has positive influence on PLCs when teachers agree with professional development is very important, valued, and the set of rules for leading school members do all the things to accord. When school culture has the effective professional learning, the professional development is being perfected and improved. Teachers with the good culture conceptions must be focused on: collaboration, a focus on student learning, teacher authority, and continuous

teacher learning that belong to the professional learning community. Newman and Wehlage (1995) argued that teachers with the good culture seek the clear shared aim to work cooperatively and undertake the universal responsibilities for students' learning. Teachers' culture includes the tasks and missions. Teachers' strong universal value can construct the safe and stable surroundings for teachers and can form the powerful leadership (Peterson, 1990). Fullan (1993) stated that the good school culture can inspire power for teacher learning through the process of teaching students' learning and the cooperation of working with other teachers and managers (Valentine, 2006). Gruenert (2005) concluded that good school culture has positive influence on students' achievements. In conclusion, the positive school culture promotes the professional learning community.

2.4 Motivation

2.4.1 Motivation Theory

According to Beltman (2005), motivation means people have guarantee, attendance, and sustainment of their activities. People must have motivation to help them to insist on their continuous professional learning in their daily life. To the perceptions of learning and motivation, individuals have the conviction that the self and learning activities must match. People also have the clear awareness of their conceptions, behaviors and practices which should be harmonious in the working environment. There are two main motivation theories applied to guide the continuous study. One is the expectancy value theory which emphasized on the self and the learning actions to people; the other theory is goal theory which focuses on motivation beliefs of the social context. Many dominant theoretical approaches to motivation pay more attention to students' learning and school performance which including Expectancy- value, Achievement Goals, Interest, and cost relating to the Emotional filed. However, we focus on the relationship between teacher motivation and professional learning community.

2.4.2 Expectancy-Value Theory

Richardson and Watt (2006) and Watt and Richardson (2007) gave the framework of expectancy-value theory to prove the relations of teachers 'motivation, their grantee, commitment and the continual teaching in professional development. Motivation has many influences on teacher efficacy including their self-perceptions abilities interfering with their achievements. To students, teachers' efficacy and skeptical consciousness have impacts on students' in enthusiasm, work guarantee, and conductive actions (e.g. Tachannen Moran & Woolfolk Hoy, 2001).

Teacher efficacy use teachers' conductive actions to influence student achievement (Ashton & Webb, 1986; Tschannen-Moran et al., 1998; Turner et al., in press; Woolfolk Hoy & Davis, 2006). Teacher's confidences are also very important to apply in instructional strategies. Four elements make up the values (Wigfield & Eccles, 2000) which are interest value, utility value, attainment value and cost.

Interest value means that people can attain happiness from performing the mission; utility value refers to how the mission build up the relationship with their goals; attainment value emphasizes on significance of completing work well with teacher identity, and cost means work also has negative respects concluding anticipated emotions and the great efforts leading to success in missions. Watt and Richardson (2006, 2007, 2008) investigated teachers' work as related to intrinsic value, personal utility value and social utility value. They also paid attention to professional learning community and gave the frameworks for evaluating value to efficacy and how teachers integrate the PLCs to get motivation and benefits.

2.4.3 Achievement Goal Theory

In conclusion, we can understand that students' achievements and their self-regulation and accomplishment must be coordinated. Teachers' activities, their structures of success have great impacts on students' achievements. Teachers use the structures to manage their students and classes, get the feedback to students' good or bad results, and put the key point to systematic performance and the comparative capacities of developments and undertaking hazard in study. In these years, more and more researchers began to attach importance to teachers' emotions and students' emotions in academic learning. Pekrun's control-value theory is applied to sort out emotions by the two dimensional system. Teacher emotions contain anger and frustration that have the close relation with their identities, conceptions, and aims in the classroom. They also have the influences on teachers' professional learning community.

2.4.4 How motivation affects professional learning community

Motivation affects students' learning and behavior in a number of ways. First of all, motivation can influence students' behavior towards specific goals. It helps students to identify the specific goals and strive for it, and thus affecting the students' choices.

Theoretical literature on teachers' motivation in context of developing countries is sparse, but certain psychological theories offer relevant applications for the developing country context. According to Maslow's Need Hierarchy Theory (1943), individual's lower order needs (i.e., basic needs e.g. food, clothing, shelter etc., safety and security, belonging and self-esteem needs) are to be fulfilled prior to motivate to fulfill the higher-order need of self-actualization. In the context of teaching, self-actualization need can be depicted as personal achievement of a teacher, which is also a key component in teacher motivation. As basic needs of the people are always neglected in the developing countries, Maslow's need hierarchy theory is pertinent to an investigation of teacher motivation in developing countries.

According to Maslow fulfillment of basic needs is necessary to lay the foundation for teachers to motivate them to improve their professional behavior and achievement, whereas other theories indicate fulfillment of basic needs as a mere extrinsic incentive. Benabou and Tirole (2000) noted that these extrinsic incentives are weak reinforcers of motivation in the short run and negative reinforcers in the long run. According to Herzberg (1966), achievement, recognition, the work itself, responsibility and advancement are more effective long-run motivators than interpersonal relations, working conditions, and pay. Most of the incentives to teachers' motivation are related to job satisfaction rather than teachers' classroom practices (Chapman et al. 1993). Thus, it appears that while teachers need housing, food, safety, belonging, and so forth to be professionally motivated, providing these needs is not considered to be a sustainable driver of teacher motivation. Instead intrinsic motivation such as achievement, recognition, career development are considered to be important drivers in teachers' motivation.

The relationship between extrinsic and intrinsic motivation and their relative effectiveness is an important issue in teacher motivation in the context of developing countries, where literature is very scarce on teachers' motivation through extrinsic incentives. Identifying specific goals, teachers' participation and self-efficacy may be considered as source of intrinsic motivation for the teachers. Goals that are specific, challenging, formed through teachers' participation and reinforced by feedback are the most effective in motivating employees (Locke, 1966). In developing countries, goals are mostly not so clearly defined and often determined through a participatory process incorporating teacher feedback.

Self-efficacy or belief in one's ability to realize goals is also an important determinant of motivation according to Social Cognitive theory (Bandura, 1966). According to Bandura (1966), self-efficacy is the combination of four components: physiological and emotional well-being, verbal encouragement from others, learning from one's own experience, and learning from others' experiences. These four components are strongly related to Maslow's Need Hierarchy model and the relationship between intrinsic and extrinsic sources of motivation as discussed earlier.

Several other studies found that teachers' motivation in developing countries mostly depend on incorporating new teaching methods into their strategies to help students learn. In Egypt, it was found that teachers are struggling to implement new learning techniques due to unsupportive school administration, lack of resources, and a mechanical curriculum (Johnson et al., 2000). Johnson et al. (2000) also draw from Beeby's (1966) hierarchy of teacher development and suggest that teachers will be demotivated and uninterested in applying new techniques in the classroom unless their environment is supportive of more advanced teaching styles. Moreover, teachers' different levels of professional development may require different levels of support. It is evident that teachers' self-efficacy and personal achievement can only be attained by ensuring appropriate training and resolving the constraints of the school environment.

Empirical studies on teacher motivation in developing countries shows that level of motivation is considerably low among formal public school teachers. This situation varies from country to country. For example, a study on the teachers of Burkina Faso, Cameroon, Cote d'Ivoire, Madagascar, and Senegal shows that more than 50 percent of the fifth grade teachers seems to prefer any other profession than teaching; over 40 percent of them liked their profession and do not want to change (Michaelowa, 2002). On the other hand, Ethiopia exhibits nearly all of the causes and symptoms of low teacher motivation.

Teachers play a very important role in the learning process of students who idealize teachers and try to copy them. So teachers' motivation is very important as it directly affects the students. Teacher motivation is affected by many factors. Amongst them are: Personal/social factors; Classroom environment ; Socio economic status; student's behavior; Examination stress; Rewards/incentives; Self-confidence/personality of the teacher and so forth

A study conducted on the factors affecting the motivational level of teachers at secondary school level in Rawalpindi shows that (Alam & Farid, 2011) most teachers were not satisfied with their salaries and it was

concluded that low salaries of the teachers affected their teaching; Most teachers were not fully satisfied with their economic states. They wanted to upgrade the standard of life but they could not manage to do so; A good number of teachers felt that they had more capabilities than others; most of teachers were opined that students should be held responsible for their low results and not teachers; A number of teachers suggested that teachers should be given incentives and rewarded on showing good results.

In short, development of PLCs in developing countries is still a work in progress. For more robust PLCs in such countries teacher working conditions and motivation have to improve first.

3.0 Suggestions for Future Research

In recent two years, many studies continued to explore the essences and positive effects of Professional Learning Community (PLCs). Some researchers paid attention to the educational framework application to lead meetings, the implantation of Common Core Curriculum Standards (CCCS) which gave the common understanding of what students are expected to learn. The standards help in arranging the contents of textbooks or educational materials to help teachers notice disparity between their students' performance and the new standards. It requires the new changes of instruction. In fact, the obstacle for meeting students' CCCS is that teachers lack enough opportunities to work collaboratively and consistently to narrow the gap between the existing long established curriculum and the new standards.

According to Fisher, Frey, and Uline (2013), educators should face the challenges of making the changes of instruction and culture in applying to make the CCCS progress (p. x). The Professional Learning Communities provide the ideal structure to meet the demands of professional development with implementation of the standards requiring daily practices in schools (DuFour & Marzano, 2011). As the model of Professional Learning community, CCCS can make teachers work in collaborate and coordinate environment fitting for the educational changes to build consummate plans in order to make great progress

When CCCS application became the essential requirements in teaching, some researches indicated that students achieved learning success from more effective instruction (DuFour & Marzano, 2011). PLCs offer the container to make learning development through understanding the adequate subject knowledge to make the lessons significant and challenging. The latest reform of PLCs involve new programs application such as reading programs or chemistry programs for colleagues to partake which is regarded as the positive school plan to make PLCs attain progress. The teachers from the PLCs discuss and inquire into some new programs to build the new plan for implementation, and then the feedback is discussed in PLCs again. Teachers can maintain high quality instruction which is the most important advantage of the program.

Technology developments have led to the rise of massive open online courses or MOOCs offering teacher education programs. Some online offerings, for example those on coursera.org, edx.org, Open2Study.com have active virtual discussion boards where teachers can pose problems for discussion. Other MOOCs such as Stanford Online offer academic writing courses where teachers have made substantial contributions to the online interaction and some have continued discussion in other virtual spaces. These are equivalent to transient PLCs and deserve further research to determine their effectiveness.

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Professional Learning Communities: Key Themes from the Literature. Report authors: Stephanie Feger and Elise Arruda With assistance from: Robin Pringle, Danielle Briggs Spring 2008. This review was conducted by The Education Alliance at Brown University under a subcontract from Hezel Associates, LLC, general evaluation contractor for PBS TeacherLine, under a U.S. Department of Education Ready to Teach grant. The content of this review does not necessarily reflect the views of the Department of Education, or any other agency of the U.S. government. Copyright © 2008 Brown University. All rights U.S. Department of Education September 2013. Can online learning communities achieve the goals of traditional professional learning communities? Professional learning communities (PLCs) "teams of educators who get together regular-ly to exchange ideas" have sprung up to meet school districts' growing interest in pro-moting professional development that engages teachers and administrators. PLCs meet to develop lesson plans, monitor student progress, assess instructional effectiveness, and identify professional learning needs. B1 Selected literature reviews of traditional professional learning communities. B-2. Tables. 1 Selected characteristics of online professional learning community articles reviewed. Professional learning communities: a literature review. Irene Garcia Garcia, Marijn de la Morena Taboada. Universidad Camilo Jos Cella (SPAIN). We also provide some guidelines on how to implement Professional Learning Communities in schools, including a case study. Finally, we argue how Professional Learning Communities have a number of advantages for teachers, being the promotion of distributed leadership one of the most important ones. The paper concludes with some suggestions for future research on the field.