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# Professional Learning Communities: The American Experience And Its Implications For Ghana And Other International School Systems

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PROFESSIONAL LEARNING COMMUNITIES: THE AMERICAN EXPERIENCE AND ITS
IMPLICATIONS FOR GHANA AND OTHER INTERNATIONAL SCHOOL SYSTEMS

by

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PERMISSION

Title         Professional Learning Communities: The American Experience and its

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George Prince Atta

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ABSTRACT

The purpose of this study was to develop better understanding of professional learning communities (PLCs) and how they have evolved over the years as a comprehensive school reform to improve teachers' knowledge, skills, and instructional practice as well as students' achievement during accountability periods. It also explored whether learning communities had democratic principles as their foundations. The study revealed how learning communities had evolved historically, conceptually, and theoretically. It also revealed that with commitment on the part of principals and teachers, and principals distributing leadership, PLCs were very effective in enhancing the knowledge and instructional strategies of teachers, and improving students' learning. There was a change in the culture of schools that implemented PLCs as the habits and minds of teachers transformed in their day-to-day classrooms activities. Further, the study revealed that through common vision, collective participation in discussion, collective decision making, listening to the views of teachers in their groups, considering minority perspectives, and the opportunities provided for the voices of teachers to be heard exemplified democratic principles in PLCs. I reviewed teacher education/collaboration in several countries: Ethiopia, Namibia, Ghana, Japan, China, and Singapore. Finally, I suggest ways in which PLCs could be harnessed to change teacher professional development if implemented in the Ghanaian educational system to improve teachers' instructional practice and students' learning outcomes.

# CHAPTER I

## INTRODUCTION

The teacher is obviously important in any educational system. After pre-service education, there is the need to continue learning because teaching is a learning profession (Darling-Hammond & Sykes, 1999). A growing body of American and international research indicates that continuing professional development for teachers is one of the major indicators in raising the achievement of students (Leu and Prince-Rom, n.d). Leu and Prince-Rom mention that teacher professional development has the capacity to ensure quality education—particularly, if the whole school community is brought on board to support and shape the program. Having access to professional development programs help to update their knowledge and skills in the current methods of teaching and learning. A professional learning community (PLC), a concept associated with professional development, is now being seen by many researchers and education reformers as a comprehensive school reform.

In professional learning communities teachers meet together on a regular basis to plan, study the curriculum, and assess their instruction. As teachers learn collaboratively, they develop a strong sense of community which is a major responsibility to improve student learning (Savage, 2008). In defining professional learning community in their study, Seashore, Anderson, and Riedel (2003) stated:

> By using the term professional learning community we signify our interest not only in discrete acts of teacher sharing, but in the establishment of a school-wide culture that makes collaboration expected, inclusive, genuine, ongoing, and focused on critically

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examining practice to improve student outcomes. The hypothesis is that what teachers do together outside of the classroom can be as important as what they do inside in affecting school restructuring, teachers' professional development, and student learning (p.3).

Developing schools as learning communities is recognized as an effective way to improve teacher quality. As Lee, Zhang, and Yin (2011) point out, "Teachers' qualities, such as teachers' self-efficacy and collective efficacy as well as their commitment to students have been shown to affect students' achievements" (p.821).

The purpose of the study was to develop a better understanding of professional learning communities and how they have evolved over the years as a comprehensive school reform, reviews the claims to improve teachers' knowledge and pedagogy, as well as students' achievement during accountability periods.

In the study I discuss the concept of learning communities, their evolution—both conceptually and theoretically—how they are created and sustained, how they help to improve teachers' instructional practice and students achievement, possible challenges, and explores whether they (PLCs) exhibit democratic principles in schools. We also review the current state of teacher education and in-service training (professional development) in the sub-Saharan African countries of Ghana, Namibia, Ethiopia, as well as the Asian countries of Singapore, Japan and China. The final chapter is a discussion of the relationship of successful learning communities to the foundation of democratic principles (with reference to Dewey's concepts on that issue). I conclude with a reflection on this reform's possibilities for the developing country of Ghana.

**The Teacher as Learner**

Of all the factors that influence student learning, such as previous achievement levels of students, class size, heterogeneity of students and socioeconomic make-up of the class, it is

"[t]he effect of the teacher far overshadows classroom variables" (Rivers & Saunders, 2001, p.17). Students who have been taught by ineffective teachers tend to have lower academic achievement and gains as compared to those assigned to several effective teachers in a row (Darling-Hammond, 2000). And this phenomenon is not limited to the United States: studies of primary schools in four developing countries concluded that quality of teachers was recognized as one of the top factors that showed the difference between schools that performed better than those that did not perform well (Fredrickson, 2004; Carron and Châu, 1996). Good teaching is dependent on lifelong learning at every level in teachers' careers by taking part in collaborative organizations that focus on ongoing inquiry into practice (USAID/EQUIP1, 2006).

Anamuah-Mensah (2002), in emphasizing the importance of the teacher notes that no meaningful education can take place without the teacher who has the responsibility to create environment conducive for effective learning to occur. In describing the important role of teachers in any educational system, Hargreaves and Lo (2000) note that of all professions, teaching seems to be the only one which has the responsibility to develop human resources and capacities to advance the course of societies in the age of information technology. They further reiterate:

> Even—and especially—in developing countries, it is teachers, more than anybody, who are expected to build learning communities, create the knowledge society and develop the capacities for innovation, flexibility and commitment to change that are essential to economic prosperity in the twenty-first century (p.1).
>
> Hargreaves and Lo refer here to the indispensable role of teachers in any school-reform in developing talents for the advancement of every country, and so their learning should be accorded with the needed attention.

Thus, considering teachers essential role in education, their learning need to be accorded with the necessary attention. McLaughlin and Talbert (2006) cite two issues that drive the need for teacher learning in American society. First, society expects schools to train students to have "complex intellectual skills that are needed by the knowledge society" (p.1). Second, the society cannot continue to accept differential students' outcomes that have become a norm in American schools for decades where privileged students achieve more academically than the less privileged who have less resources to support their learning. In view of these unequal opportunities, McLaughlin and Talbert note that the focus has shifted to teachers' knowledge, skills, and practice. There is a clarion call from the federal government, states, and districts to ensure that all students strive to achieve high standards as well as have the opportunity to experience high quality instruction (McLaughlin & Talbert, 2006). The question then is, What can help teachers learn to accomplish those goals?

Leu and Prince-Rom (n.d) also suggest that new reforms in teaching should ensure that teachers embrace a professional standard that includes, "continual learning, reflection, and concern with the multiple effects of one's action on others as fundamental aspects of their professional role" (p.11). A growing body of research on the quality of education has stressed that there are strong relationships among teacher professional development, teacher quality, and student learning (Leu & Prince-Rom, n.d; Killion, 2002). Hord (2009) explained, "We can all agree that the purpose of schools is student learning, and that the most significant factor is whether students learn well is teaching quality…teacher quality is improved through continuous professional learning" (p.40).

Again, Philips (2000) and Holm (2012) point out that continuous learning, as well as high quality professional development for teachers are crucial consideration. For example, Hopkins

(2008) finds that to improve the mathematics skills of students and the general achievement of students, teacher professional development has been rated to have more influence than even new textbooks and technology. Feiman-Nemser (2001) also summarized the importance of teacher learning and professional development across their careers this way:

> After decades of reform, a consensus is building that the quality of our nation's schools depends on the quality of our teachers […]. If we want schools to produce more powerful learning on the part of students, we have to offer more powerful learning opportunities to teachers. […] Unless teachers have access to serious and sustained learning opportunities at every level in their career, they are unlikely to teach in ways that meet demanding new standards for student learning or participate in the solution of educational problems (p. 1014)

Professional development gives teachers the opportunity to provide quality instruction to enhance students' achievement. But, does engaging in professional development automatically always lead to professional learning?

Despite the crucial role of professional development in developing quality teachers, often teachers perceive professional development as a waste of their time that disconnects them from their teaching, their students, and classroom practices (Smith & Kritsonis, 2006). Research shows that traditional models of professional development such as workshops, conferences, courses, and seminars for teachers have not been effective (Gasper, 2010). The traditional workshops are organized for one-day sessions of short duration and therefore have little effects on the instructional practice of teachers and students learning outcomes in schools (Ball & Cohen, 1999; Gasper, 2010).

To test this conclusion, researchers looked at the preparation and qualification of public school teachers concerning the effects of professional development on their practice. The report revealed that almost all teachers took part in some form of professional development. Half to four-fifths of the training programs had a duration of one-day or less (Gasper, 2010). Less than eight percent of the teachers who participated in these training reported that they benefited from the training. What make this training ineffective is that, in most cases, teachers have limited time and opportunity to practice, reflect, and engage in professional dialogue. Gasper notes that opportunities for follow-up as well as accountability with regard to execution in the classrooms are few and limited.

Also, in commenting on the ineffectiveness of the traditional professional development (e.g., workshops), Schmoker (2006) labelled professional development as "bad beyond hope" (p.109), in the sense that it fails to connect with the day-to-day activities of teachers. Wei, Darling-Hammond, and Adamson (2010) further described the current state of professional development in schools in U.S. as "poorly conceived and deeply flawed" (p.2).With the poor impact of the traditional professional development on teachers' practice and students' learning outcomes, what then has been or could be done to improve teacher professional development?

As a way to improve the traditional professional development to provide the desired results, Elmore (2004) suggested that, "improvement above all entails learning to do the right things in the setting where you work" (p.73). Similarly, Easton (2008) noted that the best ways to learn are engaging in active learning opportunities which are situated in the work of teachers, and begins when teachers get the opportunity to assess the needs of their students, as well as identifying areas [teachers] feel that they need to learn in order to help them.

**Research Questions**

This theoretical study will be guided by the following research questions:

(1) What is a professional learning community in a broad conceptual term?

(2) How are professional learning communities formed and sustained historically?

(3) What are the characteristics/models/frameworks of professional learning communities?

 (4) What methods do PLCs use to improve teacher learning—their knowledge, skills, instructional practice, and students' learning?

(5)  How is teacher professional development/collaboration organized in some countries around the world?

(6) Do PLCs exhibit democratic principles in schools that are learning communities? How and why?

**Significance of the Study**

The present study can help schools of education, colleges and universities to team up with teacher associations, subject associations, and other bodies responsible for teacher learning to put in place comprehensive teacher learning programs, with goal the of having a significant impact on teaching quality and student achievement. Also, there is little research on PLCs as embodying democratic principles, and this will contribute to the existing literature on the philosophical foundations of education. Ultimately, the understanding of this information might assist in recommending a model for introduction in my country, Ghana which does not have a comprehensive policy and practice for teacher professional development after pre-service education.

**Methodology**

This section describes the method that was used to answer the research questions for this dissertation. The purpose of the study was to develop a better understanding of the history of professional learning communities and how they (PLCs) have evolved over the years as a comprehensive school reform to help improve teachers' knowledge, pedagogy and students' achievement. I will also discuss the relationship of this school reform to accepted democratic principles.

Considering the essential role of archived information or materials in doing research (Asare & Nti, 2014; Hart, 1998), I conducted a literature search on PLCs in U. S. and other countries around the globe. In doing the literature search, the Internet sources and databases used were: Academic Search Premier, ERIC, ProQuest, and PsycINFO. Also, journal sources used were SAGE and Science Direct. Again, Google Scholar as a general search engine was used, and the literature search terms/descriptors used were "teacher learning," teacher professional development, "professional learning communities," "learning communities," "teacher collaboration," "collaboration," "community of practice," "history of professional learning communities," "professional learning communities and democracy," and "democracy." A more specific citation search was conducted after the general searches (European Agency for Development in Special Needs Education, 2010). "Professional learning communities," "teacher collaboration," "professional learning," and professional developments" yielded more resources that were important for the topic.

After the search, I started with initial reading by skimming through the titles, prefaces, contents, abstracts, introductions, findings, and conclusions and selected initial resources—articles, books, and reports that were relevant to the research questions (Hart, 1998). Hart

mentions that the purpose of reading to review is entirely different from that of reading for pleasure. And for the purpose of reviewing and identifying information relevant in the literature, as suggested by Hart (1998), I began with a second detailed readings of the chapters of the books, articles, and the reports that provided the rational for the study to extract "concepts, events, motives, definitions, problems, questions, perspectives, theory, interpretations, ways of thinking, hypotheses, standpoint, and arguments" (p.53).

Hart adds that the goal of reading to review is to produce a product: "an analytical evaluation of the research on your topic. This means that you are expected to unravel the reasoning that informs the research and arguments that you find in the literature" (p.53). Undertaking the second reading helped me to move "from the general to the particular extracting different levels of detail and information" (p.54). This enabled me to select the specific resources below to answer the research questions.

To answer the research questions, I divided them into four parts. The first part— consisting of research questions 1-3 dealing with an historical overview of PLCs and how they have evolved over the years were answered by reading the following books, peer-reviewed articles, and reports:

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.

Senge, P., Cambron-McCaben, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2000). *Schools that learn*. New York. Doubleday.

Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools*. New York: Longman.

Jean Lave and Etienne Wenger (1991). *Situated Learning: Legitimate Peripheral*

*Participation*. New York: Cambridge University Press.

Dewey, J. (1929). *The Sources of a science of education*. New York: Horace Liveright.

Hord, S. M. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, Texas, Southwest Educational Development Laboratory.

Hargreaves, A. (2000). Four ages of professionalism and professional Learning. *Teachers and Teaching: History and Practice, 6* (2), 151-182.

Curry, (2010). *The implementation of professional learning communities' components and perceptions of self-efficacy by teachers and school administrators*. Unpublished doctoral dissertation, Texas A & M University, Commerce, U.S.A.

Thompson, S. C., Gregg, L., & Niska, J. M. (2004). Professional learning communities, leadership and student learning. *Research in Middle Level Education Online*, *28* (1). Retrieved from http://www.nmsa.org/Publications/RMLEOnline/tabid/101/

Kilbane, J. F., Jr. (2007). *Sustaining schools as learning communities: Achieving a vision of the possible*. Unpublished Dissertation submitted to the Indiana University Graduate School, Indiana, USA.

National Center for Literacy Education (2012). Building capacity to transform literacy learning. Retrieved from www.ncte.org/.../NCLEshortlitre.

The second part—research question 4 asks how PLCs as comprehensive school reforms intended to improve teacher learning and students' achievement. The following books and peer-reviewed articles were read:

Louis, K.S., Kruse, S. and Bryk, A. S. (1995). Professionalism and community: what is it

and why is it important in urban schools? in K. S. Louis, S. Kruse and Associates (1995). *Professionalism and community: Perspectives on reforming urban schools*. Long Oaks, CA: Corwin.

Bolam, R., McMahon, A., Stoll, L., Thomas, S., & Wallace, M. (2005). *Creating and sustaining professional learning communities*. Research Report Number 637. London, England: General Teaching Council for England, Department for Education and Skills.

Kilbane, J. F., Jr. (2009). Factors in sustaining professional learning community. *NASSP Bulletin, 93*(3), 184-205.

McLaughlin, M. W., and Talbert, J. E. (2006). *Building school-based learning communities: Professional strategies to improve student achievement*. New York, NY: Teachers College Press.

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24, 80-91.

Hipp, K. K., Huffman, J. B., Pankake, A. M., & Olivier, D. F. (2008). Sustaining professional learning communities: Case studies. Educational Change, 9, 173-195.

Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. Teachers College Record, 109 (4), 877–896.

Hollins, E.R., McIntyre, L.R., DeBose, C. Hollins, K.S., & Towner, A. (2004). Promoting a self-sustaining learning community: Investigating an internal model for teacher development. *International Journal of Qualitative Studies in Education, 17*(2), 247-264.

Phillips, J. (2003). Powerful learning: Creating learning communities in urban school reform. *Journal of Curriculum and Supervision, 18*(3), 240-258.

The third part (answered research question 5) asked the types of professional development/teacher collaboration found in some countries around the world. The following articles were used:

Acheampong, K. (2003). *Teacher training in Ghana- Does it count? Multi-site teacher education research project (MUSTER)*. Retrieved from ageconsearch.umn.edu/bitstream/12867/1/es030496.pdf

Anamuah-Mensah, J., & Wolfenden, F. (n.d). *TESSA OER: A sustainable approach to teacher education in sub-saharan Africa*. Retrieved from gc.aau.org/papers/jophus_anamuah_mensah_full20.pd

Asare-Danso, S. (2014). Effects of educational policies on teacher education in Ghana: A historical study of the Presbyterian College of Education. *International Journal of Humanities and Social Science, 4* (6), 57-65.

Asare, K. B. &  Nti, S. K. (2014). Teacher education in Ghana: A contemporary synopsis and matters arising. *SAGE Open,* 1–8.    DOI: 10.1177/2158244014529781.

Asgedom, A., Desta, D., Dufera, D., and Leka, W. (2006). *Ethiopia pilot study of teacher quality in education, teaching, and learning: Perceptions and Practice*. Retrieved from www.equip123.net/docs/E1-EthiopiaPilotStudy.pdf

Ghana Education Service (2012). *Pre-tertiary teacher professional development and management  in Ghana: Policy framework*. Retrieved from planipolis.iiep.unesco.org/.../Ghana/Ghana_Pre-tertiary%20teac.

Ghanaweb (2014). *Gov't constructs 73 SHS day schools*. Retrieved from http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=337170.

Hairon, S. & Dimmock, C. (2012). Singapore schools and professional learning communities: Teacher professional development and school leadership in an Asian hierarchical system. *Educational Review, 64* (4), 405–424.

Kadingdi, S. (2006). *Policy initiatives for change and innovation in basic education programs in Ghana.* Retrieved from

http://www.educatejournal.org/index.php?journal=educate

http://www.rethinkingschools.org/special_reports/bushplan/hoax.shtml

Kavenuke, P. (2013).  What is it that keeps good teachers in the teaching profession: A reflection on teacher retention. *SAVAP International, 4* (1), 165-175.

Lee, D., Hong, H., Tay, W., & Lee, W. O. (2013). Professional learning communities in Singapore schools. *Journal of Co-operative Studies, 46* (2), 53-56.

Leu, E. (2004). *The patterns and purposes of school-based and cluster teacher professional development programs*. Working Paper #1 under EQUIP1's study of school-based teacher inservice programs and clustering of schools. Retrieved from pdf.usaid.gov/pdf_docs/PNADD973.pdf

Moon, B., & O'Malley, B. (2008). *Every child needs a teacher: The primary teacher supply and training crisis in Sub-Saharan Africa*. Retrieved from www.unesco.org.uk/.../EveryChildNeedsaTeacher-June08.pd

Mulkeen, A., Chapman, K. W., DeJaeghere, G. J., Leu, E., & Bryner, K. (2005). *Recruiting, retaining and retraining secondary school teachers and principals in Sub-Saharan Africa* (World Bank Working Paper No. 99). Washington, D.C.: The International Bank for Reconstruction and Development/World bank. Retrieved from Siteresources.worldbank.org/…/Resources/No.4Teachers.pdf.

Nkengbeza, D. (2014). *Building a professional learning community in a conflict and post-conflict environment: A case study of a high school in Liberia*. Unpublished doctoral dissertation, University of Jyväskylä, Jyväskylä,Finland.

Sampong, K. A.  (2009). An evaluative study of a distance teacher education program in a university in Ghana. *International Review of Research In Open and Distance Learning, 10* (4).

Schwille, J., Dembele, M., & Schubert, J. (2007). *Global perspective on teacher learning: Improving the policy and practice*. Paris: UNESCO, International Institute for Educational Planning. Retrieved from http://www.unesco.org/images/001502/150261e.pdf.

Verspoor, A., & Bregman, J. (2008). *At the crossroads: Choice for secondary education in sub-*

*Saharan Africa.* Document prepared by ADEA for its Biennale (Maputo, Mozambique, May 5-9, 2008). Retrieved from

www.adeanet.org/.../adea/Biennale%202008/Documentation/.../Final%20P...

Voluntary Service Organization (VSO) Ghana (2013).*The quality and inclusivity of basic education across Ghana's three northern regions: A look at change, learning effectiveness and efficiency*. Retrieved from

Wei, R. C., Darling-Hammond, L., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Dallas, TX: National Staff Development Council.

Wolfenden, F. (2008). *Building new modes of teacher education: Research analyses for the teacher in education in sub Saharan Africa program*. In BERA Annual Conference 2008, 3-6 Sep 2008, Heriot-Watt University, Edinburgh, UK. Retrieve from oro.open.ac.uk/27189/2/Bera_08_fw.p

The fourth part (answered research question 6) asked whether PLCs demonstrated democratic principles in schools that were learning communities. A type of "philosophical lens" was adopted to answer this question. The following books and articles were used:

Biesta, G. J. (2006). Beyond learning: Democratic education for a human future. Boulder, CO: Paradign Publishers.

Dewey, J. (1916/1944). *Democracy and education: An introduction to the philosophy of education.* New York, NY: The Free Press.

Jenlink, P. M., & Jenlink, K. E. (2008). Creating democratic learning communities: Transformative work as spatial practice. *Theory into Practice*, 47, 311–317.

Mncube, V., & Mafora, P. (2013). School governing bodies in strengthening democracy and social justice: Parents as partners? *Anthropologist, 15* (1), 13-23.

Oliver, D. W. (1976). *Education and community: A radical critique of innovative schooling*. Barkeley: McCutchen Publishing Corporation.

To answer the research questions, I read the book chapters, the articles, and the reports individually and did mapping, classification, and analyses of the ideas (Hart, 1998; Mkhwanazi, 2014). According to Hart (1998),

> The main purpose of mapping a topic is to acquire sufficient knowledge of the subject to develop the necessary understanding of methodology and research techniques, to comprehend the history and diffusion of interest in the topic, and to undertake an analytical evaluation of the main arguments, concepts and theories relevant to the topic in order to synthesize from the analysis an approach or thesis that is unique, that is, your map. Mapping therefore enables analysis and synthesis to be undertaken; in mapping work on a topic, you undertake the task of construction, putting together the different strands and elements of work that make up the body of knowledge on a topic (p. 142).

Also, mapping ideas is a way in which the content of the literature is organized "into sections and subsections" to help you establish connections between ideas found in various books and articles that have been published for a certain period of time (Hart, 1998, p.143). Again, mapping ideas in an organized arrangement enables you to be conversant with the major "concepts, theories and methods" researchers in that particular subject area used. According to Hart, this familiarity with the literature assists you to "acquire what is called declarative knowledge about the topic; that is, what the topic is about" (p.145).

With the declarative knowledge, books, articles, and reports (information) were further synthesized and summarized to answer the research questions by focusing on the purpose of the study, "the findings, the discussion and conclusions" (Mkhwanazi, 2014, pp.427-428).

**Researcher's Experience**

Teachers are very important in providing quality education to all children: "they are central to shaping the minds and attitudes of the coming generations to deal with new global challenges and opportunities" (ILO/UNESCO, 2014, para.3). And for schools to provide quality instruction for all students with the 21st century skills to deal with its opportunities and challenges, teachers need continuous education because teaching is a lifelong profession. Pre-service education is recognized to be insufficient to help teachers teach throughout their careers Leu and Prince-Rom (n.d). Thus, teachers need in-service training and continuing professional development to keep them up to date in their subject areas.

As a Ghanaian educator, I appreciate the efforts of the government, teacher unions such as the Ghana National Association of Teachers (GNAT) and Ghana National Association of Graduate Teachers (NAGRAT), parents, and foreign donors (NGOs) for supporting in-service training/professional development for teachers to ensure quality education for all Ghanaian children irrespective of their social, ethnic, and economic background. While recognizing their invaluable efforts, studies in Ghana indicate that teacher professional development is not well embedded into teachers practice; professional development is not organized regularly for teachers, and the little organized, many teachers do not get access to them (VSO Ghana, 2013; Acheampong, 2003; Kadingdi, 2006; Ministry of Education, 1995). This may be confirmed with my own experience—as a teacher for nine years at the basic and high school levels, I did not participate in a single professional development. This calls for urgent attention to teacher professional development in Ghana.

I believe as a country, we can do more to overhaul teacher professional development to make it accessible and regular to all teachers irrespective of where they practice to develop

quality teachers in enhancing effective student learning. As an educator, I have developed much

interest in studying teacher professional development—specifically professional learning

communities (PLCs). PLCs—an aspect of professional development where teachers agree to

meet regularly to work together in planning the curriculum, reflect on their practice, and assess

students' learning (Servage, 2008; Hord, 1997; McLaughlin & Talbert, 2006; Curry, 2010).

Studies demonstrate that PLCs are effective in improving teachers' knowledge, skills, and

pedagogy, and students' achievement (Talbert, 2010; Vescio, Hord, 1997; McLaughlin &

Talbert, 2006). As such, schools in United States and other countries in the world are making

efforts to create PLCs to help teachers in their professional development needs (Talbert, 2010).

 With interest in teacher professional development, I have decided to study the American

model of PLCs to develop better understanding of their contributions in improving teachers'

practice and students' learning in public school system. This understanding might help

recommend this to the government for consideration in Ghanaian educational system. While this

might make professional development accessible and regular to all teachers if considered, it

might also help in reducing travelling costs and long distance travels to attend workshops and

seminars; helps government, schools, and donor agencies save money for other development

projects.

**Organization of Chapters**

 This study is organized in five chapters. Chapter I consists of the need for teacher

learning, research questions guiding the study, the significance of the study, the method

employed in answering the research questions, researcher's experience as an educator, the

organization of the chapters, and conclusion. Chapter II reviews educational reforms movements

in the United States from the 1950s-2000, the history of PLCs based on teacher professionalism

and professional learning from the 1900s to 2000 with four broad historical phases—the pre-professional age, the age of autonomous professional, the age of collegial professional, and post-modern age; the work of Rosenholtz (1989) and its impact on PLCs; and the influence of learning organization on PLCs with the discussion of the five disciplines undergirding learning organizations—system thinking, personal mastery, mental models, shared vision, and team learning.

Chapter III with sections addresses the various definitions of PLCs, an overview of PLCs, the theory of communities of practice, characteristics associated with PLCs, factors required to create and sustain PLCs, benefits of PLCs, evidence of PLCs impacts on teachers practice and students' learning, and the challenges of implementing PLCs. Chapter IV examines professional development in selected countries—specifically, Asian countries of Singapore, and Japan and China; sub-Saharan African countries of Ethiopia, Namibia, and Ghana. It discusses the anticipated challenges of implementing PLCs in Ghana. Chapter IV attempts to ascertain whether there is a relationship between PLCs and democracy. The examination of this relationship is relevant because creating PLCs demands democratic principles to be present and serve as the foundation for PLCs to take place. It reviews Dewey's philosophy of democracy, defines democracy, PLCs as social spaces, the potentials of PLCs in transforming professional development of teachers in Ghana, and personal reflection of the researcher on the study.

**Conclusion**

Chapter I examined the essential role of teacher learning in any educational system. Teachers after pre-service education need to continue to learn because teaching is a lifelong career. Access to professional development plays significant role in influencing teachers' practice and student's learning. Teacher learning is important, especially in the 21$^{st}$ century

because society requires schools to train students to have sophisticated knowledge to make meaningful impact in this technological age; and society cannot afford to see different achievement of students. It also reviewed the importance of the study to society, and the methodology used to answer the research questions. The next chapter would examine the educational reform movements in the United States from 1950 to 2000 and their influence on teacher professional development—specifically PLCs.

# CHAPTER II

## EDUCATIONAL REFORM MOVEMENTS

This chapter reviews the various educational reforms that had taken place in the United States from 1950-2000, and their influence on schools and teacher professional development. The chapter consists of three sections. The first section reviews various reform movements such as the 1950s, 1960s, and 1970s that centered on curricular creativity to reduce poverty, the report of *A Nation at Risk, 1983, Goal 2000*, and the *No Child Left Behind (2002)* Act. The second section examines the history/evolution of PLCs with the four ages of professional learning. The third section reviews the influence of learning organizations on PLCs.

### U. S. Educational Reforms: 1950-2000

We see continual innovations in education decade after decade. As such, issues regarding teacher quality, teacher learning, and teacher improvement have attracted the attention of policy makers, researchers, program designers, implementers, and evaluators (Leu & Prince-Rom, n.d). Educational reforms have had greater influence on American schools for a number of years (Holm, 2012). Educational historian Diane Ravitch (2010) cited William Chandler Bagley, the New York superintendent of schools who expressed his frustration as early as 1907 with the "fads and reforms that sweep through the educational system periodically" (p.10).

In the late 1950s, 1960s, and 1970s reforms centered on national security and global competition culminating in the Sputnik, equality and decreasing poverty, and curricular creativity to resolve issues concerning poverty respectively (Holm, 2012). Reforms based on accountability efforts surfaced in America in the 1980s because of the failure of the previous

reforms (Holm). The report of *A Nation at Risk*, 1983 was in response to the 1960s and 1970s

reforms (Holm, 2012). The result of A Nation at Risk was narrated in this way by Hipp and

Huffman (2011), "This bureaucratic top-down approach succeeded in alienating teachers and

administrators, thus widening the gap between decision making of policy makers and the real

work in schools and classrooms" (p.2). These reforms failed to have much impact on students

due to little resources being allocated them, in addition to movement of more curriculum, student

time on-task, and testing and assessment (Holm). Holm notes that the reforms that followed A

Nation at Risk report called for greater accountability.

From the failure of *A Nation at Risk* reform, another, *Goal 2000*, emerged. The *Goal*

*2000* attempted to free teachers from central authority as well as enhance literacy, readiness,

school safety, math skills, and citizenship (Holm, 2012). According to Pankake and Moller

(2003), *Goal 2000* had these specific goals: (a) getting students ready to learn; (b) increasing

graduation rates; (c) expanding student competency in crucial subject areas; (d) increasing

emphasis in math and science; (e) increasing adult literacy; (f) decreasing drugs and violence on

campuses; (g) providing opportunities for professional development; and (h) boosting parental

involvement (p.3). These seem to center on curriculum reforms.

As both *A Nation at Risk* and the *Goal 2000* measures failed to influence students'

learning outcomes, the accountability measures were driven further. This led to the birth of the

*No Child Left Behind* (NCLB) Act in 2002 (Holm, 2012; Porter-Magee, 2004). The idea that

students could derive substantial gains from improved schools gave rise to even more

accountability-based measures (Dee and Jacob, 2011; Holm, 2012; Selwyn, 2007).

NCLB seemed to respond to this call. NCLB mandated schools to carefully examine the

achievement of students with data, and for students to get to a certain level of proficiency in

reading and math irrespective of students' demographic status (Kilbane, 2009; Porter-Magee, 2004; Holm, 2012; Dee and Jacob, 2011). Annual high stakes tests were to be conducted by states to determine the learning outcomes of students (Dee and Jacob, 2011; Holm, 2012). The high stakes tests are assessments that states give in both reading and math and the results are used to infer the quality of instruction (Holm, 2012; Dee & Jacob, 2011).

The NCLB set some provisions for teachers. The first provision was, "all teachers [should] be highly qualified in their subject areas that they teach, by 2006" (Porter-Magee, 2004, p. 27). This implies that all teachers should hold "a college degree, state certification, and demonstrate mastery of the subject they teach" (p.27). The second provision was that states had been given the leverage to define the requirement for their certification (Porter-Magee, 2004).

The failure of schools to meet "Adequate Yearly Progress" (AYP) has serious implications. Schools that failed to meet the AYP "toward the goal of having all students meet standard by 2014 will experience increasing consequences" (Selwyn, 2007, p.125). The consequences would be that states would take over the schools, and reconstitute them as charter schools to be operated by private companies for profit (Selwyn). Karp, a former teacher in New Jersey, in 2003 gave a speech about NCLB and noted that no social institution in the country was under increasing restrictions of annual yearly progress than were schools:

> How would it be, if doctors or hospitals faced an increasing sequence of sanctions unless they made annual yearly progress of reducing the number of people who were sick? Or if police departments had to reduce crime at a consistent annual rate until it disappeared entirely, or face sanctions and possible takeover by the private sector? Education has been singled out, and required to bring all students to arbitrarily set standards by the year 2014, a goal that cannot possible be attained (p.125)

Adding to Karp's statement on the increasing pressure on schools and teachers to increase students' learning outcomes, Oliver (1976) when referring to Kohlberg and Mayer's (1972) description of three different aspects of psychological camps with regard to educational reform, compares educational reform to medicine. "Like medicine, education is very much wedded to the procedure of running tests on individuals, diagnosing their sicknesses, shortcomings, and weaknesses, prescribing treatments, and waiting somewhat impatiently for the cure" (p.147).

After the implementation of a reform, stakeholders watch for the cure to take place. That is, they are waiting on teachers to see whether their instructions are effecting changes or not in the attitudes and behaviors' of students. What are the likely scenarios when the cure does not occur as expected? It is generally clear that teachers are always the first to receive the blame before turning to other stakeholders. With strong accountability reforms proceeding the historical perspectives, and the fear of being punished for not meeting specific measures, educators decided to collaborate by creating a vision and opportunities aimed at helping students' learning (Holm, 2012). Hence, leading to the creation of PLCs in schools.

**History of Professional Learning Communities**

The emergence of accountability measures in education for teachers to improve students learning outcomes has taken a considerable number of years to develop in the American educational system (Curry, 2010). An era towards the movement leading to the development of PLCs has taken more than 60 years (Curry). Hargreaves (2000) stresses that teaching is undergoing greater transformation across many parts of the globe. Contexts and uncertainty are on the increase, thereby requiring many teachers to work together to be abreast with the changes in a more positive way.

Hargreaves (2000) notes that pressures as well as demands on the part of teachers to help "students learn new skills such as teamwork, higher order thinking and effective use of new information technologies call for new styles of teaching to produce these skills" (p.151). This compels many teachers to adjust their teaching to modern standards which they themselves have not even received in their training. Thus, teachers are being encouraged to work collaboratively with their colleagues as well as tap on the knowledge of experts to improve their practice. Hargreaves states that not only teachers are under pressure to improve their practice, but also schools are striving to get to parents and communities so that teachers and schools can share their knowledge with people outside their schools.

Hargreaves (2000) describes how professionalism and professionalization are shaping the work of teachers. Professionalism referring to "improving quality and standards of practice" and professionalization meaning "improving status and standing" (p.152). These words are sometimes used to complement each other, but they contradict each other.

Hargreaves (2000) after reviewing the literature on the nature in which teacher professionalism and professional learning had undergone over the years identified "four broad historical phases" (p.153). He stresses that these phases are not general, but seemed to be common in English speaking countries, and even some differences exist. The four phases identified were: (1) The pre-professional age, (2) The age of the autonomous professional, (3) The age of the collegial professional, and (4) The fourth age-post-professional or postmodern (p.153).

**Pre-professional age (1900s-1960s).** This age occurred between the early 1900s and 1960s (Curry, 2010). This era witnessed mass education where teachers worked alone in their classrooms covering large content and many students were not ready to learn. Resources like

textbooks were lacking, and often teachers had little incentive to work. Teaching and learning followed rigid classroom control, and teachers could survive and succeed in this period only through their capabilities of balancing the two (Hargreaves, 2000). Public education took the form of factory model of mass education where teachers worked individually in their classrooms with minimal or no interaction with other colleagues (Curry, 2010; Hargreaves, 2000). "Students were processed in large batches and segregated into age-graded cohorts or classes" (p.152). All students received the same instruction from teachers, and new teachers failed to ask for assistance from experienced teachers for the notion that they would be regarded as not effective (Curry, 2010; Hargreaves, 2000).

During this period, the common teaching methods used were rote learning and lecturing, together with "note-taking, question-and-answer, and seatwork" (p.154). The advantage of using the recitation method was that it helped teachers who were working with large groups of students, little resources to work with, and students who were not motivated enough to learn. It also helped to achieve four classroom demands: "maintaining student attention, securing coverage of content, bringing about some degree of motivation, and achieving some degree of mastery" (p.154).

In this age, to Hargreaves, teachers never paid much attention to individual student's needs, but rather treated the class as "collective student" (p.154) in their lesson preparation and teaching. Teacher's main concern never centered on the "learning experiences of individual students," (p.155), but the general flow of instruction or the lesson—that is, how effective the lesson was progressing with the intended purpose while maintaining order in the classroom.

Hargreaves points out that for about hundred years or so, transmission teaching was accepted as the norm and there was no question concerning the wisdom behind it. Teaching was

seen as not requiring any technical expertise and once an individual learns the needed skills, there wasn't the need for any assistance after that. With pre-professional notion existing, teachers felt there were nothing else to learn in teaching.  In this age, teaching was considered to be highly involving job, but did not demand technical expertise and the tenets and parameters governing it was recognized "as unquestioned commonsense" (Hargreaves, 2000, p.156).  One could learn to be a teacher by engaging in practical apprenticeship and could see improvement through "trial-and-error" (p.156). A good teacher was recognized as the one who was committed to his/her job, very loyal and personally won rewards in his/her service. Hargreaves (2000) citing Murray (1992) notes that teachers in this age were considered amateurs: "they only needed to carry out the directives of their more knowledgeable superiors" (p.495).

**Age of the autonomous professional (1980s).** This age started in the 1960s and beyond (Hargreaves, 2000). The status as well as the standing of teachers saw some improvements in many countries in comparison with the pre-professional age. Teacher education was concentrated in the universities and teaching nearly moved to become an all-graduate profession. Hargreaves mentions that teachers, especially, those in England and Wales had greater control over issues concerning curriculum planning and development as well as decision making, particularly— those  courses or age groups that did not require external examinations.

As a result of the strong competition in the international space race era in the 1950s and 1960s, governments and charitable organizations showed greater commitment to invest so much money to develop scientific as well as technological skills, mathematics, sciences, and other subjects received greater attention in educational institutions (Hargreaves, 2000; Curry, 2010). Thus, curriculum innovation sprang up to see various projects and packages being designed and developed. These projects motivated both schools and teachers to work on the ideas behind the

projects and also take on the experiments that accompanied them which embraced new student-centered learning approaches as well. Hargreaves indicates that the shortcomings of this age were that projects were not implemented effectively in the classroom because they were not well grounded in the practices of teachers.

Hargreaves (2000) notes that the words 'professional' and 'autonomy' in this age were indivisible among educators. As time went on, many teachers enjoyed "trust, material reward, occupational security and professional dignity and discretion in exchange for broadly fulfilling the mandates the state expected of them" (p.159).

To Hargreaves, a single pedagogy never existed in this age as teachers tended to use instructional methods which they deemed fit for their students. Many teachers, though, adopted the didactic teaching approach, many questions were raised on their teaching. Classroom pedagogy from1960s and beyond became an ideological battle operated "between child-centered and subject-centered education, open classrooms and closed classrooms, traditional methods and progressive methods" (p.159). Theories such as child-centeredness and developmentalism were vigorously adopted by Education faculties, and thus were being extended into the educational practice.

The assumption that pedagogical expertise could be passed on from the expert as a tradition to the novice was no longer tenable (Hargreaves, 2000). Thus, pedagogy became an ideological choice by many teachers. Also, conflict of ideology sprung between "traditionalism and progressivism" (Hargreaves, 2000, p.159). This affected pre-service education of teachers. Not only these ideological problems affected pre-service education, but also this era saw a growth of continuous professional development and in-service education. In-service education was uninspiring, especially considering the shape adopted. Experts presented workshops and

courses outside the workplace of teachers, and teachers received them as individuals. Teachers found it difficult to incorporate what they studied into teaching after returning to their places of work that failed to understand or support their efforts (Hargreaves, 2000). Hargreaves indicates that teaching in this age bred individualism, as teachers taught their classes in isolation, independent from their peers. Teaching in 1970s and 1980s was characterized by the culture of "individualism, isolation, and privatism" (Hargreaves, 2000, p.160).

Hargreaves (2000) indicates that teachers interacted only when they were sharing instructional materials, issues of discipline, and dealing with problems confronting individual student. Teachers as group seldom focused on issues concerning the goals of the curriculum, "teaching behaviors, or classroom learning" (p.160). Hargreaves enumerates the consequences associated with the culture of individualism, isolation, and in-service courses received outside their immediate workplace and peers such as:

Lack of confidence and certainty about effectiveness because of limited feedback on performance.

Impaired improvement as a teacher, because of lack of opportunities to learn from colleagues.

Limited senses of efficacy, and of self-belief in the power to change children's lives and futures, because of lack of feedback and support.

Tendency to focus on short term improvement that makes a difference in one's own classroom, with one's own students, rather than on more fundamental forms of long-term or school-wide change.

Proneness to self-defeating guilt and frustration, especially among exceptionally committed teachers.

Lack of consistency and coherence between teachers in expectations and programs that are created for students.

Lack of professional dialogue that might cause teachers to reflect on and re-shape their practice in ways that could serve students better.

The irony that isolation does not create a kaleidoscope of individuality and iconoclastic eccentricity in teachers' classes, but dull routine and homogeneity.

An atmosphere of uncaring and indifference in relation to students' needs in large secondary schools because teachers do not share students in common" (pp.160-161).

Further, Hargreaves (2000) outlines factors which causes teacher individualism as:

"The physical, egg-crate structure of schooling that divided teachers from one another and which efforts at collaboration always had to overcome.

The habit and routine of teachers having already worked within existing grammar of schooling for decades; the impossibility for many teachers of imagining anything else.

Economizing of effort in the face of unwanted multiple innovations and accelerated educational reform.

Anxiety and self-doubt about competence, whose flaws would be exposed by observation and inspection—a point that has been widely asserted but not empirically proven" (p.161).

**Age of the collegial professional (late 1980s).** This period began in the middle of late 1980s when it was realized that teachers working individually was very difficult to sustain based on the increased nature, complexities, and direction in which schooling was heading towards (Hargreaves (2000). The world was undergoing fast transformation and teachers' working place as well as their own work were also changing. And what this change brought about was that

many teachers faced the challenge of having to teach in ways which they themselves had not even been taught before. The individualism which teachers were practicing was ad hoc and never coordinated with their peers and thus depended on their own knowledge and skills which could not match with the rapid changes in demands which they had to meet.

Varying teaching methods in this age were rapidly increasing and therefore it was difficult to just distinguish "between traditional and child-centered methods" (Hargreaves, 2000, p. 162). There was also an imposition of particular ways in which teachers were to teach being mandated by administrators. In this age, expert knowledge was being discounted, and professional development which was course-based was in the hands of experts and delivered from outside the school came under severe scrutiny. Many teachers began to look "to each other for professional learning, for a sense of direction, and for mutual support" (Hargreaves, 2000, p. 162). Teachers' role, thus, increased to include consultation with members, planning collaboratively, and other activities that involved working together with colleagues.

Based on the rapid educational reforms taking place around the world, teachers working together was viewed as very important in helping them to pool resources together, share, and collectively develop responses that could help them face the unpredictable demands on the ways they teach (Hargreaves, 2000). Also, teaching demanded new skills, character, mentality, efforts, time and commitments, as teachers tried to reassert themselves with "their roles and identities as professionals in a collegial workplace" (Hargreaves, 2000, p.162).

Hargreaves (2000) stresses that in spite of this development, not all teachers tried work with their colleagues; several of them either were unaware of or unconcerned with  the feasibility of collaborating with their colleagues, and some held tight to their individualism in their classrooms when others attempted to exert force on them to accept collaboration.  Hargreaves

identified a number of factors that had driven teacher collaboration in recent years, and among them were:

Expansion and rapid change in the substance of what teachers are expected to teach.

Expansion of knowledge and understanding about teaching styles and methods.

Addition of increasing social work responsibilities to the task of teaching.

Integration of special education students into ordinary classes.

Growing multicultural diversity.

The alienating nature of secondary school structures for many students in early adolescence.

Changing structures, procedures and discourses of school management and leadership.

An increasing evidence of the vital contribution that cultures of collaboration make to widespread improvements in teaching and learning, as well as successful implementation of change (pp.163-164).

This age recognized professional development as very effective when it was not organized and delivered by experts outside the school, but rather one which was integrated in the life of teachers in the school, one which principals in schools approved, showed strong support and taking active part in them, and when it centered on teachers working collaboratively (Hargreaves, 2000). This period, according to Hargreaves had seen strong transformation with respect to the "patterns of professional learning, in-service education, and pre-service teacher education to more school-based forms" (p.165). Professional learning communities provided the best avenue for teachers to learn best.

**Post-professional or postmodern professional.** The witnessing of greater

transformation and development in education as well as in society in the millennium called for

changes in teacher professionalism and that of professional development in the new period of

postmodern age (Hargreaves, 2000).  This post-modern age encouraged teachers to open up with

their colleagues and the community in which the school is located (Curry, 2010). Teachers were

called upon to change their schools into learning communities where a conducive environment is

created for them to work collaboratively to develop ideas to enhance their practice, practically

put the ideas into practice, and carefully examine the outcomes of their practices (Curry, 2010).

What has necessitated the transformation of schools, according to Curry was the surge in

enrollment of minority students as well as the rise in the number of children living in poverty,

thus challenging schools to assume social responsibilities role to provide effective education for

all children.

The post-modern era advocated for the use of more school-based professional

development in such a way that teaching strategies could be modified to provide students' needs

in each school (Curry, 2010). Many teachers in this age yearned for independence in the

profession, creating a collision with the team inquiry approach which a number of schools were

implementing.

According to Curry (2010) the post-modern era provided teachers the opportunity to

employ collaboration as well as collective inquiry to resolve problems that impeded the

achievement of students. This age achieved two major successes: First, teachers were

empowered and encouraged by school administrators to take on leadership roles within their

schools. Second, the visions and goals for each school was produced by collaborative inquiry

amongst teachers, which assisted individual school to "become a self-renewing organization within the post-modern era" (Curry, 2010, p.29; Hargreaves, 2000).

**The Influence of "Learning Organizations" on the Development of PLCs**

The literature on the whole school reform describes the call for the development of learning organizations or PLCs in the reform efforts initiated in the 1990s (Kilbane, 2007). The development of this approach to teacher learning followed the argument made by Sarason (1990) that "...it is virtually impossible to create and sustain over time conditions for productive learning for students when they do not exist for teachers" (p.145, cited in Kilbane, 2007). Dewey's (1916/1966) notion of community and education also builds on the foundation of these communities (Kilbane, 2007). On the part of Dewey, the continuing life of the community needed renewed adaptation to new knowledge or needs. Dewey points out that it is necessary for the community to learn by adapting and developing a common vision for its growth, and as such it is important for each member of the community to develop its talents and abilities for the advancement of the group (Kilbane, 2007). Dewey did not only propose progressive child-centered education, but also the concept of learning communities or organizations. Kilbane citing Meier (1992) on the description of the level of collegiality had this to say:

> At the very least, one must imagine schools in which teachers are in frequent
> conversation with each other about their work, have easy and necessary access to each
> other's classrooms, take it for granted that they should comment on each other's work
> and have the time to develop common standards for student work" (p.602).

The notion of PLCs emerged from the business sector with the conviction that organizations are capable of learning (Thompson, Gregg, & Niska, 2004; Curry, 2010; Senge, 1990). Senge (1990, 2006), and Senge, Cambron-McCabe, Lucas, Smith, Dutton, and Kleiner

(2000) played a significant role on the ideas that culminated on the creation of PLCs (Curry, 2010). Senge (1990) defines "learning organizations" or collegiality in his seminal book on organizations that learn as,

> ...organizations 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.1).

Senge et al. (1994) included another definition of "Learning in organizations" in their field book as the process where there is on-going testing of experience and transforming that experience into knowledge which will be made available to the whole organization, which is important to the main purpose of the organization (Kilbane, 2007).

The renewed introduction of the term "learning organizations" by Senge (1990) in his book *The Fifth Discipline*, caught the attention of educators with the view that schools should rather be concerned with adult learning as well as student learning (Thompson et al., 2004). The education community accepted that students learning could be enhanced when teachers were also actively involved in rigorous learning activities (Thompson et al., 2004).

Senge and his colleagues (2000) emphasize that a number of teachers as well as administrators confirm that the learning disciplines provide real assistance in resolving the confusions and pressures confronting contemporary education. Senge (1990) in an effort to articulate clearly and promote the importance of learning organizations or collaborative learning asserts:

> The tools and ideas presented in this book are for destroying the illusion that the world is created of separate, unrelated forces. When we give up this illusion we can build

"learning organizations," organizations 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 lean together ( p.3).

**Five disciplines for a learning organization.** Senge (1990), a renowned theorist of learning organizations, propounded five disciplines in The Fifth Discipline  on systems theories to assist organizations to develop as well as strengthen as learning organizations (Kilbane, 2010; Thomas et al., 2004). The five disciplines were—Systems Thinking, Personal Mastery, Mental Models, Shared Vision, and Team Learning, (Senge, 1990; Senge et al., 2000; Kilbane, 2007; Thomas et al., 2004; Curry, 2010). These disciplines provide a better practice for schools to change through individual and collective learning (Senge, 1990; Senge et al., 2000; Kilbane, 2007). Senge's conviction is that the first discipline—systems thinking—is the backbone of the learning organization because it combines all the disciplines (Thompson et al., 2004).

*Systems thinking.* Thompson and colleagues (2004) define systems thinking "as a body of knowledge and tools that help us see underlying patterns and how they can be changed" (p.2). These patterns are seen as the impediments to change, and rather not on the part people or events (Senge, 1990; Senge et al., 2000, Thompson et al., 2004). In systems thinking, attention is shifted from the individual to the relationships of the group (Kilbane, 2007). The system should be understood as whole with a set of "rules, assumptions, the interactions, its complexity—the culture of the situation" (p.19). For a situation to be changed, it requires the review of the whole situation, instead of making some changes to just an aspect of the system. For instance, in a school system, or any other human institution, there is the need to examine the structure of the organization, its culture, and the kinds of interrelationships within the organization, to be able to

develop better understanding of it and then come out with good strategies to make effective changes (Kilbane, 2007). Making changes and adjustments within a system is likely to fail and [is] possibly unsustainable "as they work against the system, and the system pushes back to return to equilibrium, negating the effectives of the change" without the system thinking discipline (Kilbane, 2007, p.20).

Through trial and error in the school system for instance, educators have realized that as changes are made to one part of the system, it affects the other parts of the system (Thompson et al., 2004). Sometimes teachers in schools don't understand what is actually happening in their very little corner, let alone dealing with issues and problems affecting the whole school. Thompson and colleagues therefore stress that it is critical for system thinking to be part and parcel of the school's culture to provide effective support for systemic reform rather than trying to mend parts of the school organization.

***Personal mastery.*** Senge (1990) had the notion that organizations can learn only if individuals within the organization learns. The learning of the individual does not proof that the whole organization is learning. Personal mastery indicates the process in which a person understands his/her work in terms of theory and practice (Kilbane, 2007). Also, personal mastery shows the commitment people attach to their own learning throughout their career (Thompson et al., 2004; Kilbane, 2007). Senge (1990) argues, "An organization's commitment to and capacity for learning can be no greater than that of its members" (p.7). It is no longer sufficient for students to be the only learners in school. A successful teacher should have good understanding of the instructional process, and together, a successful school is achieved where all students are provided with the opportunity to learn well (Kilbane, 2007).

***Mental models.*** Mental models indicate strong commitment in trying new strategies and programs (Thompson et al., 2004; Senge, 1990; Senge et al., 2000). Mental models are firmly fixed or established assumptions and generalizations that affect how we perceive the world and our reaction to it (Thompson et al., 2004; Kilbane, 2007; Curry, 2010). Mental models tend to prevent people from adapting new changes. It is therefore important for mental models to be reviewed as well as examined to see if they are preventing possibilities—achievement of goals, common visions, and areas that are possible for collaboration (Kilbane, 2007). Examination of the mental models of people—especially administrators and teachers in the school can lead to the generation of new perspectives and the possibility of devising interactions to enhance students learning outcomes (Kilbane, 2007). Senge et al. (2000) explain further:

> This discipline of reflection and inquiry skills is focused around developing awareness of attitudes and perceptions–your own and those of others around you. Working with mental models can also more clearly and honestly define current reality. Since most mental models in education are often "undiscussable" and hidden from view, one of the critical acts for a learning school is to develop the capability to talk safely and productively about dangerous and discomfiting subjects (p.7)

Personal dialogue as well as the examination of others' mental models have the potential to change the culture of the school (Thompson et al., 2004).

***Shared vision.*** Senge (1990) and Senge et al. (2000) state that building a shared vision is what administrators, teachers, and staff in a school aspire to create in the future and the guiding principles and practices they believe can lead them to get there. There is suggestion that the leader should not in any way force his/her vision on members, no matter how juicy it may turn out to be. Rather, the leader should ensure that every member in the organization shares the

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common vision by collecting information from every member to be able to develop a vision that would help all members to demonstrate strong commitment to the organization (Curry, 2010). The vision should truly be shared together (Thompson et al., 2004). Kilbane (2007) stresses that schools that have been successful—student learning has been pivotal of this shared vision.

   *Team learning.* Team learning is based on the notion that group intelligence is greater than that of the individual, and therefore the learning of all members in the organization collaboratively, their outcomes would be greater considering their expected visions and goals (Curry, 2010). Team learning is built on the idea of interaction, dialogue, and skillful discussion by team members in the organization to maximize their learning to achieve their common goals (Senge et al., 2000; Curry; Thompson et al., 2004). Senge et al. (2000) emphasis that team can take place in the "classrooms, between parents and teachers, in pilot groups, among members of the community that pursue successful school change" (p.8). Senge (1990) maintains that when teams learn, they not only produce good results, but also individual members grow in a faster pace as otherwise anticipated.

   The working together of the five disciplines as espoused by Senge develop a different culture in the organization or school (Kilbane, 2007). While the five disciplines support each other, they also help in developing a community that exhibits the elements discussed so far. The exhibition of these practices are an indication that an organization is functioning as a learning community (Kilbane, 2007).

   Besides learning organizations influence on the development of PLCs, Rosenholtz (1989) also researched in the history and benefits of learning communities by employing both quantitative and qualitative methods in studying teacher collaboration in schools, she related teachers' workplace factors to teaching quality (Hord, 1997). Rosenholtz (1989) indicates that

some schools had teachers who had a common vision and thus worked collaboratively, that common purpose was students' learning; teachers who received support on their own continuing learning as well as classroom practice showed more commitment and effective than their counterparts who did not receive the same support (Hord, 1997).

To Rosenholtz (1989) through teacher support networks, collaborating with peers, and increase in professional roles, teachers' efficacy in providing the needs of students increased. Again, Rosenholtz indicated that teachers who were having high sense of efficacy had the likelihood of adopting new classroom practices and this kind of efficacy motivated them to remain in the profession (Hord, 1997). Rosenholtz is regarded as the premiere researcher to have conducted statistical analysis in establishing "a relationship between teacher collaboration and student achievement" (Thopmson et al., 2004, p.4). Her quantitative analysis revealed "that collaboration is a strong predictor of student achievement gains in reading and math" (p.4).

According to Thompson et al. (2004) as schools began to embrace the culture of collaboration at the workplaces, the term learning organization evolved to be known as PLCs in schools.

**Conclusion**

Chapter II described various educational reform movements that had taken place in the United States from the 1950 to 2000. United States had gone through successive educational reforms in the public school system. These reforms aimed at ensuring effective learning of students. With the failure of the reforms to live up to expectations, federal and state governments exerted pressure and demanded schools to improve students learning, leading to the accountability reforms like the NCLB. And for teachers to adjust their teaching to enhance students learning, teachers were encouraged to work together with their peers to tap each other's

knowledge and that of experts to enhance their practice. This led to the evolution of PLCs as a

comprehensive school reform in schools. The ideas in the business sector with regard to learning

organization further assisted in shaping PLCs in schools as a form of professional development

for teachers. The next chapter examines PLCs in detail.

## CHAPTER III

## PROFESSIONAL LEARNING COMMUNITIES

This chapter describes in detail PLCs and the various components as a comprehensive school reform in the United States. The chapter has eight sections. The first section describes the general ideas of PLCs. The second section reviews a number of conceptual definitions of PLCs provided by different authors. The third chapter elaborates on the theoretical framework of PLC—specifically the theory of communities of practice espoused by Lave and Wenger. The fourth section highlights on the characteristics associated with PLCs. The fifth section illuminates on the factors that are necessary for creating and sustaining PLCs in schools. The sixth section examines the benefits of PLCs. The seventh section describes the evidence of PLCs impacts on teachers' practice and students' achievement. The eight section discusses the challenges of implementing PLCs in schools in the United States.

**Professional Learning Communities: An Overview**

Easton (2008) suggests that it is more apparent now that teachers have to learn, and that is the reason why professional "learning" has taken the place of professional "development." Educators should acquire the necessary knowledge and be wise in the work they do. They should get enough knowledge to be able to change, and the ability to change can guarantee different results. Educators should be learners as well as self-developing professionals.

Based on the accountability systems being stressed at the federal and state levels, and for teachers to be learners, educators have tried to change school structures to put greater emphasis on teacher collaboration and reflection of teaching practices (Curry, 2010; McLaughlin & Talbert, 2006). In the current educational system, professional learning communities (PLCs)

have emerged as the popular concept for all schools where teachers have resolved to collaborate and focus their attention on the learning of students (Curry, 2010).

A professional learning community has been described as a public school setting where attention is placed on learning and collaboration and every member shares the responsibility to achieve the desired results (DuFour, 2004; Curry, 2010). Schools in the United States and other countries around the globe are making serious efforts to establish PLCs as hub of the work of teachers. Talbert (2010) notes that PLCs are increasing at a fast pace as an educational policy and practice and educational systems are investing so much resources—energy, time, and money to develop themselves as PLCs.

For DuFour (2004), the mission of learning communities was not only to ensure that students' learn, but also to ensure that students are taught well. Likewise, Little (1993) elaborates on the importance and implication of the mission of learning communities:

> . . . the most promising forms of professional development engage teachers in the pursuit of genuine questions, problems, and curiosities, over time, in ways that leave a mark on perspectives, policy, and practice. They communicate a view of teachers not only as classroom experts, but also as productive and responsible members of a broader professional community (emphasis added) and as persons embarked on a career that may span 30 years or more (p.133).

PLCs are meant to help teachers to be curious, ask and get their questions and problems answered or resolved by and for each other. It also suggests that teachers become experts in their classroom practice, as well as responsible adults in the community in which they practice. In PLCs, teachers learn by working closely with their colleagues, engage in continuous dialog as well as observe critically their practice, student performance to be able to develop better and

effective instructional practices (Wei et al., 2009). PLCs present a paradigm shift from teacher-centered instruction to student-centered learning, which has positive effect on students' learning outcomes (DuFour, 2004; Curry, 2010).

Contributing to the discussion on the need for teachers to work together to enhance students' learning, McLaughlin and Talbert (2006) point out that teachers learn best from activities which: (1) focus on instruction and students' learning specific to settings in which they teach; (2) are sustained and continuous, rather than episodic; (3) provide opportunities for teachers to collaborate with colleagues inside and outside the school; (4) reflect teachers' influence about what and how they learn; (5) help teachers develop theoretical understanding of the skills and knowledge they need to learn (p.9). Engaging in these activities help teachers to put into practice what they have learned as a result of working with their students, find out the extent to which the application worked out, be able to assess the results of the application, and make the necessary changes (Holm, 2012; Schmoker, 2006).

To illustrate on this point, in a meta-analysis of 35 years of educational research, Marzano (2003) concluded that collegiality and professionalism were among five school-level factors that characterized schools as highly effective in improving students' learning outcomes. But, it is not easy shifting from a culture of isolation that often characterizes the teaching profession to a culture of a school community; it takes some time for it to happen. It also requires a great deal of commitment and dedication on the part of every member of the school community (Curry, 2010). Curry notes that it is important for teachers to willingly collaborate with other colleagues to create a shared vision and goals in the school community in which they work. For, both school leaders and teachers had encountered difficulties concerning commitment and time,

and inadequate knowledge on how to implement the components of PLCs correctly (Curry, 2010).

As such, PLCs have emerged as one of the most comprehensive school reforms in education in recent times. Many schools are striving to become professional learning communities with the goal of improving student learning when teachers resolve to work together about teaching and learning by taking action to improve student learning and their achievement (Thompson et al., 2004).

Many reasons have been expressed with regard to the creation of PLCs: "To increase coherence, to reduce isolation, to develop teacher knowledge, and to intervene early when students are in danger of failing" (Mundry & Stiles, 2009, p.6). Mundry and Stiles in comparing education to other organizations operating in this age of technology, advance an argument that education should make every effort to invest in its own human resources to achieve its goals. It would be difficult to train and equip students with the requisite knowledge and skills in the 21st century if teachers and administrators in schools are not provided with the opportunity to learn or have a clear view of the 21st century and put in place a lifelong professional learning for them (Mundry & Stiles, 2009). Considering their structure and organization, PLCs demonstrate the capability of assisting schools to change course with regard to how they think and practice which propel any school and student to be successful in the future (Mundry & Stiles, 2009).

Highlighting on the isolation nature of teaching and the evolution of PLCs, Somers and Plyley (2009) note that the emergence of PLCs was recognized as the best strategy for school reform to deal with the culture of "isolation, fragmentation, and privatization" that had characterized the teaching profession (p.18). Wei et al. (2009) confirm that the creation of PLCs in American schools responded to the existing structure of isolation which had led to an increase

in working individually, preservation of existing conditions, values, and traditional practices, and "present-minded norms" (p.9). Gasper (2010) also adds by emphasizing that new reforms were called in order to eradicate teacher isolation as well as resolve the frequent incoherence among improvement strategies. Gasper notes that there are calls for the ineffective practices to be replaced with collaborative team work where teachers will accept responsibility concerning the outcomes of students' learning. In terms of organizational arrangement, PLC is recognized as a strong form of staff development which has the potential to transform and improve schools (Gasper, 2010). Wei et al. (2009) note that historically, little effort has been made by the teaching profession to promote collective work of teachers in United States.

The concept of PLCs is firmly established in two critical assumptions (Curry, 2010; Vescio, Ross, & Adams, 2008). First, the assumption is that knowledge that teachers accumulate is established in their day-to-day lived experiences, and well understood by engaging in critical reflection with their colleagues who experience similar thing. The second assumption is grounded in the idea that when teachers actively engage in professional learning communities, their professional knowledge tends to increase as well as improve student learning (Curry, 2010; Vescio et al., 2008).

**Defining PLCs**

PLC as a model of teacher professional development is associated with many models and theories with some central beliefs such as:"(1) that staff professional development is critical to improve student learning; (2) that this professional development is most effective when it is collaborative and collegial; and (3) that this collaborative work should involve inquiry and problem solving in authentic contexts of daily teaching practices" (Servage, 2008, p.63). This renders the concept to defy a single definition as various authors and researchers have defined it

differently (McLaughlin and Talbert, 2006; Holm, 2012; Bolam, McMahon, Stoll, Thomas, and Wallace, 2005; Hord, 1997). Wells and Feun (2007) even describe this situation as very worrying and confusing, while DuFour (2004) expresses the view that the state in which the concept is being used everywhere might cause it to lose its real meaning. Barth (1990) believes that it is possible for schools to be "improved from within" and as such employed this concept to define community of learners or PLCs 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" (p.9). Barth went further to examine both the role that teachers and principals play as learners and how cooperation and collegiality serve as critical ingredients in a community. Berth notes that as teachers and principals develop collegiality in their schools, they should practice four behaviors: (i) Have conversations concerning their practice; (ii) Observe the teaching of one another; (iii) Engage in activity concerning curriculum planning as well as development; and (iv) Share what each other knows with regard to teaching and learning. When teachers and principals exhibit these high quality relationships and practice such behaviors, then schools can grow to be a community of learners. Berth holds the view that irrespective of the size of the school, the location of the school—whether the school is situated in the rural area or urban area, whether the school is privately owned or publicly owned, and whether the school is in rich community or poor community, any school has the potential to assume the position of community of learners.

Also, the Annenberg Institute (2004) views PLCs to "comprise groups of educators, administrators, community members, and other stakeholders who collectively examine and improve their own professional practice. Typically, individual groups are small and meet regularly over a significant period of time" (p.2).

Again, Bolam et al., (2005) after reviewing the literature on learning communities put forward this definition: "An effective PLC has the capacity to promote and sustain the learning of all professionals in the school community with the collective purpose of enhancing pupil learning" (p.2).

Besides, McLaughlin and Talbert (2006) in describing in their book, <u>Building a School-Based Teacher Learning Communities: Professional Strategies to Improve Student Achievement</u>, define PLCs as "[a place where] teachers work collaboratively to reflect on practice, examine evidence about the relationship between practice and student outcomes, and make changes that improve teaching and learning for the particular students in their classes" (pp.3-4).

Two sets of definitions can be distinguished from the concept of PLCs outlined. While one set of definitions, specifically, Bolam and colleagues, McLaughlin and Talbert, and Berth see PLCs as the collaboration of teachers to improve student learning. The other—the Annenberg Institute, considers PLCs as a collaboration of teachers, students, and members of the community (i.e., parents, guardians, and other stakeholders) in education to enhance students learning. This latter definition captures Astuto and colleagues' (1993) three proposition of communities that are related: "(1) the professional communities of educators, (2) learning communities of teachers and students, and (3) the stakeholder community" (cited in Hord, 1997, p.6). In as much as both sets of definitions are critical to the learning of students, the second definition is very important, in my view. Although teachers will improve their knowledge, skills, and professional practice by collaborating to enhance the learning of students, this alone will not be adequate to enhance students learning without the support or working together with the members of the local area— parents, and other stakeholders.

Research even indicates that PLCs that had been successful created a congenial environment where parents and other members outside the community were encouraged to collaborate with teachers (Curry, 2010). Curry further describes how a policy statement issued by the Council of Chief State School Officers urging leaders in schools to stop the isolation that had been the norm in the school system and rather try to collaborate with parents and other members of the community because they play critical roles in impacting students' learning. Studies also state that for schools to see improvement, there was the need for teachers, administrators, and parents to engage in collaboration (Curry, 2010).

Considering the definitions outlined thus far, although PLCs may be explained in different ways as well as in different contexts, they seem to have a common feature where teachers or a group of people work together to share and reflect on their practice, critically examine the relationship between their practice and student learning outcomes, and make the necessary adjustments to enhance teaching and learning of students (McLaughlin & Talbert, 2006; Bolam et al., 2005).

**Theory of community of practice.** The theory of communities of practice model was espoused by Jean Lave and Etienne Wenger in their groundbreaking publication, *Situated Learning: Legitimate Peripheral Participation* (1991). Etienne Wenger (1998), formerly a teacher and currently an independent consultant specializes in the development of communities of practice (Smith, 2003). In defining communities of practice, Wenger (2006) states that they are "groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly" (p.2). To Wenger, learning does not only hinge on one constructing knowledge, but also a process in which one constructs his/her identity based on the changing forms of taking part in the communities of practice (Miyazaki, 2014). Wenger (1998)

believes that learning and education are based on the assumption that learning is done by individuals. Also, learning "has a beginning and an end; that it is best separated from the rest of our activities, and that is the rest of teaching" (p.3). Further, Wenger argues that communities of practice can be found everywhere and people belong to one or more of them—either at the workplace, at home, at school, in our pleasures, and in our democratic pursuits (Wenger, 1998; Smith, 2003, 2009). Smith (2003, 2009) citing Wenger (2007) wrote:

> Communities of practice are formed by people who engage in a process of collective learning in a shared domain of human endeavor: a tribe learning to survive, a band of artists seeking new forms of expression, a group of engineers working on similar problems, a clique of pupils defining their identity in the school, a network of surgeons exploring novel techniques, a gathering of first-time managers helping each other cope. (p.2).

Wenger is actually using typical examples in explaining the process in which groups or organizations strive to learn or work together on a common purpose through interactions while helping one another.

Wenger (2007) identified three important elements or characteristics that set apart a community of practice from other communities or groups.

(a)      The domain:  A community of practice surpasses or goes beyond a club which comprises of friends and or just having links with friends through networks. Instead, it has an identity which is clearly clarified by shared and common goal (Smith, 2003/2009). Members exhibit strong commitment to the organization with shared proficiency making them different from other people.

(b)     The community: In an effort to pursue their interest in the organization, members work together on activities and discussions, try to help one another, and share information (Smith, 2003/2009). Members develop a bond of relationships that help them to learn from one another.

(c)     The practice: Community of practice members are professionals. They build a shared resources: "experiences, stories, tools, ways of addressing recurring problems—in short a shared practice. This takes time and sustained interaction" (Smith, 2003/2009, pp.3-4).

Wenger's theory emphasizes that learning is an active social participation where the concept of community of practice serves as the focus of the theory (Steyn, 2013). The implication of the theory is that learning forms an important aspect of a person's participation in organizations as well as communities of practice. Communities of practice serve as a condition for learning to take place which includes knowledge creation and transfer as a key factor for meaning learning. There is the development of communities of practice in organizations when members of staff serve as a social groups who participate in a strengthened as well as shared collective learning (Steyn, 2013). Thus, members in a community of practice should develop trust for one another and create the opportunities to share and resolve problems together. Steyn (2013) states that the communities of practice framework espoused by Wenger is exemplified by collaborative activities where teachers are provided with the opportunity to employ new instructional strategies as well as reflect on their outcomes. This rests on the assumption that knowledge construction by people does not occur in a vacuum, "but that constructing knowledge, skills, attitudes, and beliefs is culturally and socially situated" (Steyn, 2013, p.280).

**Characteristics of PLCs.** Different characteristics have been outlined for PLCs. For instance, Hord (1997) used attributes in her description, Louis, Marks, and Kruse (1996), and DuFour, DuFour, and Eaker (2008) used characteristics, and Hord (2004) used dimensions in her study.

Louis, Marks, and Kruse (1996) after undertaking a study in urban areas concluded that the creation of communities of teachers was very important. The researchers identified five characteristics that were associated with the communities, "(1) shared values; (2) reflective dialogue; (3) deprivatization of practice; (4) focus on student learning; and (5) collaboration" (p. 28). The researchers note that schools that are PLCs (or aspire to be PLCs), should demonstrate a minimal aspect of each of these characteristics. In their conclusion, the researchers suggested that though the culture of the school with respect to demographics plays critical role, in their hypothesis—the major role of PLC is to make teachers responsible for the learning of students.

Also, Hord (1997) after reviewing the literature on PLCs identifies seven attributes: (1) Supportive and Shared Leadership, (2) Collective Creativity, (3) Shared Values and Vision, (4) Supportive Conditions, (5) Physical Conditions, (6) People Capacities, (7) Shared Personal Practice.

Again, Bolam and colleagues (2005) after synthesizing the literature on PLCs accepted five characteristics. They include: (a) shared values and vision, (b) collective responsibility for pupils' learning, (c) reflective professional inquiry, (d) collaboration focused on learning and group as well as individual, (e) professional learning. In addition, they include three that they consider to be important. They are: (f) inclusive membership, (g) mutual trust, respect and support, and (h) openness, networks and partnerships (p. iii). Some of the characteristics are briefly described below.

***Supportive and shared leadership.*** Educational research on school change and educational leadership demonstrate that school principals play significant roles in influencing school improvement (Morrissey, 2000; Hord, 1997). The kind of leadership that a principal displays in a school as an individual is important in providing the initiative, guidance, and support for an effective implementation of a PLC with new policies and practices. Hord (1997) stresses that the era when principals assumed all powerful and authoritative role and were seen as "all-wise and all-competent" by teachers and other staff under them in the hierarchy of power has given way to a phenomenon of sharing and collective leadership in PLCs. So also is the period where teachers were responsible to teach, students were responsible to learn, and the responsibility of administrators to manage have absolutely changed. Kleine-Kracht (1993) summarizes it nicely in this statement, "[There is] no longer a hierarchy of who knows more than someone else, but rather the need for everyone to contribute" (p.393).

In the PLC model, principals and teachers tend to be learners and try to question, investigate, and find solutions to improve their schools (Hord, 1997; Morrissey, 2000). Hord and Morrissey note that principals and teachers aspire to grow as professionals, learn to see themselves as a team and work collaboratively to achieve the goal of building a better school. Principals have the responsibility of putting in place the needed organizational as well as supportive structure for collaborative work to take place in schools. Studies outline three roles that principals in schools should strive for if they want to restructure their schools: "The ability to share authority; the ability to facilitate the work of staff, and; the ability to participate without dominating" (Hord, 1997, p.16). Hord notes that it is critical for principals to accord teachers the needed respect and work with them as professionals, peers, and colleagues.

Also, shared leadership denotes a leadership which is democratic in nature and willing to share power, and take decisions with teachers, and which in turn nurtures leadership among the teachers (Hord, 1997). What makes this even more significant is that the morale of teachers is boosted when they feel that their ideas and opinions are respected (Cormier & Olivier 2009). Thus, Cormier and Olivier note that principals in schools are being impressed upon to use democratic principles to work with teachers by sharing power, authority, and by engaging them in making decisions of the schools which tend to develop and nurture leadership potentials of teachers.

The literature on PLCs maintains that building and sustaining PLCs require strong and supportive leadership with respect to the head teacher or the principal (NCLE, 2012; Bolam et al., 2005; Louis & Kruse, 1995; Thompson et al., 2004; Kilbane, 2009). The possibility of principals seeing some of their roles changing as a result of redistribution as well as shared leadership, the support that comes from them is a critical resource for schools to embark on the journey of becoming PLCs (NCLE, 2012; Thompson et. al., 2004). Thompson and colleagues (2004) maintain that one single person who is very important in starting and strengthening improvement in the academic performance of students at middle school is the principal.

The supportive roles that principals provide as leaders includes extending leadership roles to teachers; encouraging those who are not willing to assume leadership roles; clearly delineating freedom and authority for leaders; ensuring free flow of information to keep staff members updated (NCLE, 2012); creating a favorable culture for learning; making sure that learning takes place at all levels; and promoting the approach of enquiry (Bolam et al., 2005). Bolam and colleagues citing McLaughlin and Talbert (2001) explain this point succinctly:

For better or worse, principals set conditions for teacher community by the ways in which they manage school resources, relate to teachers and students, support or inhibit social interaction and leadership in the faculty, respond to the broader policy context, and bring resources into the school (p.98).

The authors are emphasizing the essential roles of principals in either promoting or stifling collaborative learning in their schools. For instance, Hipp and colleagues (2008) studied two schools—Lake Elementary School (PreK-8) located in a rural district in Louisiana, and Galena Park Middle School (grades 6-8), located in a suburban setting near a metropolitan area in Texas, that had established PLCs. The purpose of the study was to ascertain the impacts of collaboration on the learning of teachers. The study revealed that the schools had leaderships that were inclusive. One teacher commented, "Teachers are leaders; whereas the administration is the backbone of the school." One principal remarked, "I'm blessed with the overall competence of my faculty. Our teachers also model good instruction. I have many teachers who are leaders, but it's about leading by example" (p.183). Teachers praised the leadership of the schools. This indicates that principals in these schools shared leadership with teachers to sustain their learning communities.

Conversely, Kilbane (2009) studied four schools—Emerson, Dewey, Pierce and Thoreau, out of ten (10) schools that took part in the Indiana Essential Schools Network (IESN) project, a comprehensive school reform in the state of Indiana. The study used data that had been gathered for 4 years after funding for the project stopped, and "investigated the long-term impact of the comprehensive school reform (CSR) to develop learning communities and support collaborative inquiry for teacher professional development and organizational change" (p.185).

Kilbane (2009) stated that three schools—Pierce, Dewey, and Thoreau experienced some changes in their pricipals, while Emerson was able to retain the principal during and after the reform. With respect to Pierce and Thoreau, the study noted that teachers complained that group decision making as well as shared vision were no longer working as a result of new administration. In an interview with the group of teachers in Pierce, they had this to say: "I don't think we have a shared vision now. I think it's 'Here's what I want to do and this is the way we are going to do it'" (p.193).

The comments and actions of the new administration at Thoreau deterred teachers from meeting as a group. The chair meetings of the department in the two high schools turned out to be a one—direction communication format. To make the statement clear, Kilbane (2009) stated, "Particularly at Pierce teachers described the change in leadership and direction at the building level to devaluation of collaborative element of their work, reduction in opportunities for local inquiry, and curtailment of their empowerment" (p.195). Teachers' working together was no longer the norm, but rather perpetration of division among staff which was a mark of traditional school culture being stumped up in the schools. This study portrays how leadership/principals either help to sustain or devolve a learning community. Hipp and colleagues (2008), however, note that leaders in schools that have made learning their cornerstone accept change and support staff and students in all the change process.

***Shared values and vision.*** A school that aspires to be a PLC must have shared vision and a common purpose (Bolam et al, 2005; Curry, 2010). McLaughlin and Talbert (2006), and Bolam and colleagues (2005) emphasize that the main focus of all teachers is the learning of all students, and depending on individual teacher to deliver does not work. Their target is the success of all students in the school. Vision is recognized as the best approach for educators to

build a strong bond of trust with their colleagues, and this provides them with the opportunity to see how they want the school to be (Curry, 2010). Curry states that teachers sometimes encounter conflicts when developing shared vision and goals because of different visions. But conflicts can be resolved when effective PLCs exist. Having a shared value base creates the opportunity for a "framework of shared, collective, and ethical decision making" (Bolam et al., 2005, p.8).

*Collective responsibility.* In PLCs, teachers take collective responsibility with regard to the learning of all students (Bolam et al., 2005). The assumption is that with collective responsibility teachers will have sustained commitment as well as exert pressure and accountability on those teachers who fail to do their work, and also reduces isolation (Bolam et al., 2005). When teachers assume collective responsibility, questions tend to change from the competence of individual teacher to that of the group's capability to address students' learning (McLaughlin & Talbert, 2006). For instance, McLaughlin and Talbert state some of the questions teachers or schools tend to ask: "What is this faculty going to do about disappointing students' outcomes? About significant achievement differences among groups of students?" (p. 8). The authors maintain that when this takes place, then critical reflection and continuous learning become part and parcel of teachers, and they experience the same practice due to the fact that every teacher has better knowledge and understandings of what goes on in each other's classroom. This state of affairs helps all teachers to grow and mature in PLCs when they develop better understanding of collective responsibility (McLaughlin & Talbert, 2006).

***Reflective professional inquiry.*** Reflective professional inquiry involves engaging in dialogue and conversations concerning issues affecting education and how to apply new knowledge in a consistent way to find solutions to them (Bolam et al., 2005). It also has to do with a condition where teachers strip off the privacy of their practice and frequently evaluate their practice by agreeing to observe each other in their classrooms and engage in case analysis; work together to plan and develop the curriculum; and try to search for new knowledge. Again, through reflective inquiry, implicit knowledge can be shared by teachers through interaction in PLCs. Bolam and colleagues (2005) further state that reflective professional inquiry affords teachers with the opportunity to apply new information and ideas learned to find answers to the needs of all students.

***Collaboration.*** Collaboration is considered critical to implement shared vision as well as shared leadership in schools (Curry, 2010; Bolam et al., 2005). This involves teachers taking part in joint activities; failure is not attributed to one person, but the whole group (Bolam et al., 2005). Teachers assist and support each other, especially when it comes to joint review of students' work and get prompt feedback. Interdependence is the heart of collaboration, and attaining good teaching practices would be a mirage when collaboration is absent (Bolam et al., 2005). Bolam and colleagues stress that it is impossible to rule out micro politics during collaboration, but it is surmountable in some learning communities which are very effective. Hargreaves (2003) highlights it clearly in this statement, "Professional learning communities demand that teachers develop grown-up norms in a grown-up profession – where difference, debate and disagreement are viewed as the foundation stones of improvement" (p.163). When teachers have common areas to collaborate, the likelihood of sharing ideas and assuming leadership within schools are high (Curry, 2010). Some authors suggest that the various

characteristics are connected, and thus work together; and they should not be separated (Bolam et al., 2005). While these characteristics work together, other factors are required to establish and sustain PLCs for them to be successful.

**Factors to Create and Sustain PLCs**

It is not an easy task to create as well as sustain PLCs (NCLE, 2012). The ability to organize teachers into groups has the potential to enhance the culture of the school, it does not justify that it would improve instructional practices and students learning outcomes (NCLE, 2012). The ability to establish and develop PLCs hinges on many contextual factors both within and outside the schools (Bolam et al., 2005).

For instance, Bolam and colleagues (2005) articulate four broad factors such as "focusing on learning processes; making the best of human and social resources; managing structural resources; and interacting with and drawing on external agents" (p.11). Also, Prestine (1993) identifies three key factors as critical in creating PLCs in schools including—the ability of principals to share authority, make it easier for staff to work together, and the ability to take part without exercising more control over teachers. NCLE (2012) outlines two broad factors in creating and sustaining PLCs: supportive leadership and structural supports. Louis and Kruse (1995) found five structural conditions as well as five social/human resources as the necessary factors for creating PLCs. The structural conditions include: "(1) time for teachers to meet and talk, (2) physical proximity, (3) interdependent teaching roles, (4) creation of communication structures and networks, and (5) teacher empowerment and school autonomy" (p.198). Among the social/human resources identified were: "(1) openness to improvement, (2) trust and respect, (3) shared expertise, (4) supportive leadership, and (5) socialization mechanisms" (p.202). This study discusses the common factors.

**Structural conditions/factors.** Certain structural conditions must be present when creating PLCs, and some are described below.

***Time to meet and talk.*** The nature of a learning community to discuss professional practice calls for teachers to talk, therefore schools should be well organized in such a way that time is provided for teachers and staff members to meet on a regular basis (Bolam et al., 2005; Kruse et al., 1995). Kruse and colleagues argue that time is very essential for carrying out any agenda that involves change as well as maintaining innovation. Therefore, schools should structure their timetables to cater to teachers who participate in training outside the school as well as learning that takes place inside the school; and designate where that learning will take place—either in the classrooms, staff rooms, or any other place (Bolam et al., 2005).

There is the need for more and regular time to be set aside for teacher professional development and school improvement (Kruse et al., 1995). For teachers should be provided with enough time to discuss issues relating to pedagogical practice in the department or grade level meeting and when considering the whole school (Kruse et al., 1995). Time for meetings should not be scheduled at the end of the school days when teachers are tired and it does not work; rather it should be scheduled during school day on the calendar (Kruse et al., 1995). Kruse and colleagues outline two ways in which professional time should be understood and used in teacher learning communities: First, opportunities should be provided for teachers to meet regularly to discuss issues that are of prime concern to the working groups at the departmental, grade, and team levels; second, smaller working groups of teachers in the faculty should be provided with the opportunity to interconnect among themselves.

***Communication structures.*** To create, develop, and sustain any PLC, there is the need to create a school-wide communication structure that promotes cross-connection of ideas inside and across the organizations (Kruse et al., 1995). Scheduling regular meetings where the focus is on teaching and student learning, discussing issues involving curriculum and instruction, and teachers' personal as well as professional growth. And this can further be enhanced by creating teacher networks inside the school for discussing matters concerning pedagogical practice, and school organization (Kruse et al., 1995). Kruse and colleagues note that communication should not only focus on face-to-face to be regarded as effective, but could include email to assist teachers on different schedules.

***External support.*** Creating and sustaining PLCs requires external support, networking, and partnerships since schools are microcosms within the larger society (Bolam et al., 2005). The need to connect with outside experts is critical, and seeking this resource has been referred to as "a sign of a school's vitality" (Bolam et al., 2005, p.20). This external support should be of substantial amount and quality if the change agenda is to be supported. District support is the main external support that PLCs enjoy, although reports usually suggest rifts with respect to the evaluation policies of districts which might breed competition. To Bolam and colleagues, external agents tend to support schools in their efforts to build "reflective intelligence," through activities such as data use and assisting school in their transition to the PLC journey.

Schools should build effective relationships with different partners such as "parents, governing bodies, local community members, social services agencies, psychological services, businesses and industry" (Bolam et al., 2005, p.21). Again, schools building partnerships with higher education institutions relating to the initial ground work for establishing a community and

continuing teacher development is important in an effort to create and sustain PLCs (Bolam et al., 2005).

 ***Teacher empowerment and school autonomy.*** PLCs are unique with respect to empowering teachers as well as school autonomy (Kruse et a., 1995). Teachers should be given the freedom to decide on their own what they perceive to be the best pedagogical practice. However, Kruse and colleagues argue that this autonomy given to teachers as individuals is not a guarantee that it will enhance total professionalism of the school or school change. It rather has a negative effect on the efforts of whole school improvement. The authors assert, "We believe that this is because excessive individual autonomy is antithetical to professional community" (p.37). Instead, teachers are more empowered in learning community as a group with respect to the collective influence of their actions and practice with regard to the learning of their students, as they make decisions together to reduce the freedom that individual's will enjoy to be able to enhance the group effectiveness. Thus, this promotes the creation, development, and sustenance of PLCs in schools.

 However, Kruse and Louis (1995) concluding their analyses on the supportive structural conditions relating to the creation of PLCs state: (a) Lack of structural supports hinders the growth and development of a PLC; (b) the existence of supportive structures alone is not enough to sustain or grow a PLC and (c) the establishment of learning community does not guarantee automatic empowerment of teachers or school autonomy; but other factors are also crucial such as time and physical proximity.

**Social/human factors.** Some social/human factors must be present to create PLCs in schools.

*Developing trust and positive working relationships*. One factor necessary for establishing and sustaining PLCs is the development of trust, respect, and good working relationship among staff members as a social resource (Bolam et al., 20005; Kruse, Louis, & Bryk, 1995). In a human enterprise like learning communities, it is critical for it be harnessed effectively for the benefits of the group (Bolam et al., 2005). For teachers to work in a productive manner in schools, there is the need to build good, positive, and strong relationships among members inside the schools, key external members including parents and members at the district office (Bolam et al., 2005; Kruse, Louis, & Bryk, 1995). Not only building positive relationships among teachers, but also developing respect and trust between and among members for the community to be strong.

Kruse and colleagues (1995) define respect as "honoring the expertise of others, whereas trust refers more to the quality of interpersonal relations" (pp.37-38). Trust is revered as the necessary ingredient for collaborative work because it helps to build strong support and commitment which are essential for collective decision making and the creation of effective collegiality. Failure to build trust among teachers means that the possibility of change could be stifled and may not have a long term influence (Kruse et al., 1995). This is important because learning is a challenging task, especially when learning with peers (Bolam et al., 2005). It is not easy for teachers to open up for learning as well as taking part in activities being observed by colleagues in the classroom and receiving feedback, especially, discussing issues relating to pedagogy, and innovation in the curriculum, among others, unless teachers have absolute

confidence they are safe engaging in them (Bolam et al., 2005). Bolam and colleagues citing Bryk et al (1999) explain the issue of trust further:

> By far the strongest facilitator of professional community is social trust among faculty members. When teachers trust and respect each other, a powerful social resource is available for supporting collaboration, reflective dialogue, and de-privatization characteristics of professional community. On balance, we note that the dynamic relationship between professional community and social trust is likely to be mutually reinforcing (pp.18-19).

These respect issues should be demonstrated by the principals to build a culture of trust in relationships (Kruse et al., 1999). Do relationships and trust building only ensure functional PLCs?

**Benefits of PLCs**

A growing body of research notes that school-based PLCs as a form of school change or improvement has great effects on teacher development and high standards for students' achievement (Gasper, 2010; Hord, 1997; Anneberg Institute, 2004). Recent studies indicate that the forms of professional development that enhance teachers' instructional capabilities to improve students' learning outcomes exhibit four characteristics. They are: "(1) ongoing, (2) embedded within context-specific needs of a particular setting, (3) aligned with reform initiatives, and (4) grounded in a collaborative, inquiry-based approach to learning" (Anneberg Institute, 2004, p.1). PLCs seem to work in the following ways for both teachers and students.

First, research indicates that the establishment of strong and effective PLCs in schools by teachers and administrators is critical in improving schools (Annenberg Institute, 2004). Annenberg Institute argues that these communities are incorporated into the school system, and

thus make use of the goals of school-wide reforms to help teachers to be committed and interact positively. These PLCs offer the necessary opportunities for all teachers and administrators to put their heads together on the various ways to enhance their own practice, which subsequently leads to better learning. This approach to collaborative work makes PLCs quite unique (Annenberg Institute, 2004). Annenberg Institute notes that members have common vision, mission, norms, and values that give fundamental support to their work and inform their goals.

Second, PLCs ensure a positive transformation of culture in schools (Annenberg Institute, 2004). Teachers and administrators are provided with the opportunity to meet and work together, and they also make their work available to others and reflect on their practice. This is a departure from the isolated nature that characterizes the traditional professional development or classroom (Annenberg Institute, 2004; Hord, 1997). This cultural transformation of PLCs ensures reduction in the dropout rate of students, a substantial improvement in major subjects and a subsequent social equity (Annenberg Institute, 2004; Hord, 1997).

To confirm this, Lee, Smith, and Croninger (1995) reported on studies conducted on schools that had embarked on school restructuring in America. They studied 11, 000 students who were admitted in 820 high schools. The report noted that the schools were set up like a community. The teachers recognized their responsibility to develop all students, and saw their collective responsibility to ensure that all students were successful in their academic pursuits. The report further stated that in those schools, "teachers and other staff members experienced more satisfaction and higher morale, while students drop out less often and cut fewer classes and posted lower rates of absenteeism" (p.5). In such schools, teachers develop strong bonds of trust and respect for each other, show adequate ability in academic work, and propel staff to make collective decisions (Annenberg Institute, 2004).

**Evidence of PLCs Improving Teachers Practice and Students Achievement**

A growing body of literature on teacher collaboration outlines positive results for teachers, such as enhanced impact, increased efficacy, and the enhancement of the knowledge base of teachers (Goddard, Goddard, & Tschannen-Moran, 2007). McLaughlin and Talbert (2006) also state that school-based teacher learning communities perform functions that are interrelated and contribute immensely to increase the knowledge of teachers, their skills, conduct, aims, and qualities as professionals, and the capability to take charge of their own learning. The authors maintain that three functions are clearly delineated: "They (teachers) build and manage knowledge; they create shared language and standards for practice and student outcomes; and they sustain aspects of their school's culture vital to the continued, consistent norms and instructional practice" (p.5).

**Improvement on teachers' practice.** The implementation of PLCs in schools affect teachers' practice positively in various ways.

***Build and manage knowledge to improve practice.*** In learning communities, McLaughlin and Talbert (2006) identify two types of knowledge that help teachers in their practice: "(1) knowledge of practice, or information about student performance, and (2) knowledge for practice, or information about best practice" (p.5). The efforts made by teachers to conduct inquiries into the work of students and find out the links that exist between their practice and the learning outcomes of students, amount to creating "knowledge of practice." The

best opportunities are provided for teachers who are in learning communities to reflect and solve problems, and this enables them to construct knowledge with regard to the information they have about students' learning (McLaughlin & Talbert, 2006).

The examination of the work of students by teachers in a collaborative approach enables them to ascertain whether they are succeeding or failing in terms of practice (McLaughlin & Talbert, 2006). The authors contend that the work of PLCs hinge mostly on studying the poor performance of students' learning based on established standards and their actual accomplishment. Teachers use data on achievements (i.e., those that are not well explained by different ethnic and economic backgrounds) in order to "organize knowledge around concrete problems of practice" (p.5). This fact about poor performance of classroom instruction calls for change. And effective PLCs help teachers to report poor learning outcomes of students, instead of hiding them. This, then, forms the central focus of teachers by critically examining their practice through reflection (McLaughlin & Talbert, 2006).

Conversely, knowledge FOR practice deals with theoretical knowledge that teachers employ to improve their practice (McLaughlin & Talbert, 2006). Teachers acquire this knowledge through different outside resources that are found in the community such as workshops, university partnerships, networks, and expert-knowledge so that they (teachers) learn current content knowledge and pedagogy, and standards set by professional associations concerning the performance of students. PLCs afford teachers the opportunity to transform environmental knowledge (i.e., knowledge for practice) that deals specifically with their students, subject areas, and classroom settings.  PLCs provide the site as well as source for teachers to learn actively by engaging in inquiry and deliberation (McLaughlin & Talbert, 2006).

Again, PLCs help teachers to manage knowledge through sharing learning resources together (McLaughlin & Talbert, 2006). Knowledge considered private becomes public knowledge for consumption by members in learning communities. Teachers learn from each other's strengths to promote individual as well as collective know-how. PLCs develop the collective capacity of teachers "to provide high-quality, rigorous instruction to all students and so enhance capability to respond quickly and effectively to evidence of failure or surprise" (McLaughlin & Talbert, 2006, p.6).

PLCs serve as a forum for the production of new knowledge with respect to curriculum and pedagogy. This occurs when teachers investigate further the results of various teaching and learning strategies. For instance, Vescio, Ross, and Adams (2008) conducted a meta-analysis of 11 studies—10 American studies and 1 English study concluded that all the studies were clearly in support of the notion that taking part in PLCs has significant influence on teaching practice of teachers. Also, Wells and Feun (2013) citing Mertins and Flowers (2003) in their study on the efforts of teachers' collaboration reported, ''An important goal of teaming that certainly contributes to improved teaching and learning outcomes is that teachers work together to coordinate and integrate the instruction in the classroom,'' (p.37).

In addition, Pounder (1998) studied teacher collaboration by examining teachers who took part in a formal middle school team who coordinated on issues relating to curriculum planning and development, intervention programs, management, and communications with parents, and compared them with teachers who were not in teams. The study reported that teachers who were working in teams acquired a different set of skills, had adequate knowledge about the performance of students, established contact with parents and guardians, and had good knowledge of the work of other teachers (Goddard et al., 2007). Pounder contended that when

teachers work collaboratively on formal teams, he saw a strong link between the work of teachers and the learning outcomes of students.

Furthermore, Hollins, McIntyre, DeBose, Hollins, and Towner (2004) conducted a study on a self-sustaining learning community in an urban school district located in California as an internal approach for teacher development to help improve literacy acquisition and development for African-American students who attended an urban elementary school typified by poor academic performance and a high level of poverty. The purpose of the study was to explore a model of developing a self-sustaining learning community that could help teachers facilitate high literacy learning outcomes for African American students in kindergarten through fourth grade. After the two year period during which teachers engaged in discussions among themselves in the study-group meetings, teachers developed positive attitudes toward the children, connected themselves with that of the children on their culture, to a state of eagerness, keenness of "sharing their own strategies and engaging in public reflection, and collaboration in developing new instructional approaches" (p.247). The teachers used a five-step approach in solving problems to help them reflect on their practices and work collaboratively with their peers to identify problems and implemented new ways of tackling them. The problem solving approaches employed were: (1) delineating challenges, (2) identifying approaches for meeting challenges, (3) implementing selected approaches, (4) evaluating implementation, and (5) formulating theory to guide future practices.

The study further stated that at the tenth meeting teachers started designing a new "approach to language arts instruction that involved letter writing, a poetry project and class books, and employed the writing process" (pp.258-259). Teachers shared different instructional strategies, materials, and activities.

***Increased efficacy.*** The sense that teachers have with respect to being affiliated with their colleagues and the school, and the support they get from one another, and the responsibility shown by individual to develop effective instruction increased when working with colleagues (Kruse, Louis, & Bryk, 1995). In learning communities, teachers get the opportunities to enhance their classroom practice by having access to quality feedback from peers. When teachers open up to accept the critical reviews of their work with strong supportive relationship with peers, then the reactions expressed by teachers based on the comments by colleagues on and the support received from school indicates a positive relationship and sense of efficacy for teachers; and a strong sense of efficacy indicates strong commitment to teaching as well as student learning (Kruse, Louis, & Bryk, 1995). PLCs strengthen a sense of efficacy both collectively and individually. With an increase sense of efficacy for teachers in collaboration, students' achievement improve (Goddard et al., 2007).

***Satisfaction emerging from personal dignity.*** Many teachers, if not all, sometimes feel discouraged in their work when they realize that every effort that they are putting in does not receive recognition, or is valued and respected by their colleagues, supervisors, and the public (Kruse, Louis, & Bryk, 1995). It is therefore critical for them to be empowered in their work to eliminate or reduce this challenge. Empowerment here as argued by Louis, Kruse, and Bryk (1995) is to give teachers more autonomy with respect to policy and practice in schools, as is enjoyed by doctors and lawyers in their workplaces. The authors posit that if teachers are given such autonomy, they also could accomplish a professional status, exhibit their knowledge base, and develop programs that could unearth young talents to achieve their aims. What is more, when this kind of empowerment is given to teachers, it fosters effective teaching and learning

because teachers have total control over issues relating to curriculum as well as school organization.

However, Louis, Kruse, and Bryk (1995) and Kruse, Louis, and Bryk (1995) argue that teacher empowerment is not sufficient to develop the performance of teachers as professionals as well as reduce the discouragement. But when this empowerment is integrated with other strategies in an attempt to enhance their work, then it will add to their responsibility for the learning of students and their sense of efficacy (Kruse et al., 1995). "Their value as social agents" is enhanced (p.26). There is suggestion that when teachers are given the freedom to make decisions in their work, they feel more responsible for student learning. "Teachers obtain the greatest satisfaction from empowerment that focuses on teachers and classrooms; involvement in policy setting that is not directly related to their work is viewed as a distraction" (p.26). With empowerment and other strategies which are emphasized by PLCs, teachers' dignity and satisfaction are improved.

Goddard and colleagues (2007) conducted a study on teacher collaboration as a form of school improvement and its effect on student achievement in some public elementary schools in an urban school district located in the U. S. Midwest. The study sampled 47 elementary schools where 452 teachers completed a survey which assessed their collaboration, while data for 2536 fourth grade students were collected. They found "that fourth-grade students have higher achievement in mathematics and reading when they attend schools characterized by higher levels of teacher collaboration for school improvement" (p.878).

Garmston and Wellman (1999) found that in high performing schools that had collaboration and collegiality as a principle the likelihood of student succeeding is high, even [among] those who have not been successful in traditional schools (Kilbane, 2007).

Strahan (2003) conducted three-year case studies of three elementary schools in which all the teachers took part in collaborative efforts in an attempt to improve the achievement of students in reading. A shared mission was developed by the teachers which focused on four values—integrity, respect, discipline, and excellence (Vescio et al., 2008). The study reported that teachers developed strong rules on instruction and were responsive to working collaboratively with a curriculum coordinator in areas such as "changing practices for guided reading, writing, and self-selected reading" (Vescio et al., 2008, p.84). The study reported that the achievement of low-income and minority students increased in these schools where the culture of professional collaboration was a norm (Kilbane, 2007).

Little (1982) did case studies of four schools considered successful based on the achievement of students on standardized tests and two schools deemed as failures based on the same criteria. Little concluded that the schools considered successful were marked by periodic evaluation and feedback by teachers, teachers discussing among themselves concerning their teaching, teachers collaborating in designing their classes, and teachers teaching one another with respect to teaching. These collaborative practices were not present in the schools that were not successful (Thomas et al., 2004).

**Evidence of PLCs impacts on students' achievement.** Philips (2003) studied one urban middle school that had embarked on school reform in the U.S. southwest. The initiative focused on high-quality professional development with the notion that when teachers continue to learn, it would have a positive impact on students' academic achievement. Through their learning communities, teachers created a new curriculum program that focused on students who were low and under-achievers, or by merging students into groups based on socioeconomic, ethnic and academic.

The study concluded that student achievement with respect to the socioeconomic and academic groups all witnessed an increase over the five-year period of the implementation of the program. Also, students' academic achievement improved in reading and mathematics in state standardized tests during the last three years of the implementation. Students had an "Accepted" score of 50 percent for passing tests in subject areas in reading, writing, science, and social studies on Texas Assessment for Academic Skills (TAAS) in 1999-2000 academic year. Following this year, students received a "Recognized" rating of 80 percent for all students for passing each of TAAS subject area. In the 2001-2002 academic year, students received the highest rating—"Exemplary" indicating "that 90 percent of the students passed each of TAAS subject area" (p.256).

Again, NCLE (2012) citing Beyond the Book (n.d) did a study in Arizona where more than half of the students who registered for algebra course were earning grades Ds or Fs. Seventeen percent of the students satisfied the standards of algebra set by the state. With this state of development, a PLC was created in 2003. Subsequently, students' scores in math standards increased in 2005—from 17 percent to 53 percent. Also, the number of students enrolling in algebra rose from 1800 to 3, 800.

In addition, referring to Hollins and colleagues (2004) study, the researchers reported improvement in the achievement of African American students at the second and third grades who were struggling or poorest readers after assessment. The data points to significant gains by African American students in a poor and high striking poverty school after the implementation of a self-sustaining PLC:

In 1998, 45% of second graders scored above the 25th percentile as compared with 64% in 1999, and 73% in 2000. This is a 28% overall gain. District-wide, 48% of second

graders scored above the 25th percentile in 1998, 61% in 1999 and 56% in 2000, an

overall gain of 12% (p.259).

Their scores even were better when compared generally with the district scores. In sum,

the changes to the teachers' habits of mind enhanced the learning outcomes of the students.

Nevertheless, such achievements are not easy to come by.

**Problems of Implementing Professional Learning Communities**

Despite the positive relationships between PLCs and students' achievement, the literature

suggests a number of problems confronting teacher collaborative culture in schools (Lujan &

Day, 2010). To the authors, "lack of time, the isolated nature of the profession, and the presence

of divergent points of views" (p.10). Annenberg Institute (2004) also puts forth the following

barriers to PLCs: "Focusing on processes that divert attention from instructional content and

approaches, reluctance to make work public that limits rigorous feedback, deep-seated issues of

trust and equity that are often not addressed, leadership capacity that remains underdeveloped,

effects of changes in practice and improved student learning that are often poorly documented,

and structural changes alone do not ensure change in practice" (pp.5-6).

**Inadequate time.** Time has been realized as a critical resource for successful teacher

collaboration. However, inadequate time for teachers to meet and work together has been

outlined as a major setback for teacher collaboration (Lujan & Day, 2010). Often, teachers

complain that attending meetings and engaging in other activities as their positions demand do

not give them enough time to collaborate, thereby impeding effective collaboration.

**Isolation nature of the profession.** Traditionally, the education setting is structured in

such a way that teachers work alone, and even if they try to collaborate at all, they go back to

their classrooms to work individually (Lujan & Day, 2010). Teaching seems to favor autonomy

and thus works in contradiction with the creation of PLCs (Talbert, 2010). To teachers, teaching is viewed as a private practice, and as such allows many teachers to resist working together with their peers, especially opening their classrooms for peer observation, comments and feedback. To Talbert (2010), many teachers do not want to discuss issues relating to instruction and the learning of students. To confirm this, Pomson (2005) did a study in some districts in Canada and concluded that many teachers favored the isolated nature of teaching to avoid sharing their teaching skills with their colleagues. They believed that when they shared their teaching skills with their peers, their chances of winning awards that were promised by the districts could be lowered (Curry, 2010).

**Issues of trust and equity.** PLC teachers engage in different types of activities such as sharing examples of the work of students, commenting and getting feedback, and trying to offer suggestions on the possible ways of improving their practice (Annenberg Institute, 2004). In a friendly manner, teachers make their work public for others to comment. To Annenberg Institute, however, some teachers are skeptical in presenting their work for others to examine critically, receive feedback in order to make changes in the delivery of their lessons and that of their instructional practice.

PLCs provide the opportunities for teachers to interact on regular basis to reduce isolation and create the feelings of togetherness among teachers (Annenberg Institute, 2004). But in its work with different PLCs in different districts, Annenberg Institute notes that issues concerning trust and equity were quite rare. Also, some PLC groups tried to work individually and never conversed with one another with regard to "how and what they were learning and doing could be used to inform each other's practice and to improve learning conditions and achievement levels for students within schools and across districts" (p.6). Adding to this, Magolda (2006) did a

study on collaboration in schools in Washington, D.C. The researcher reports that many teachers found collaboration to be difficult because it was extremely hard in reposing their trust in other colleagues to finish tasks. The difficulty of trusting one another resulted in many teachers resorting to working in isolation (Curry, 2010). The study reports further that teachers who had taught for more than ten years preferred to work in isolation and shunned anything related to collaboration and PLCs.

**Lack of shared leadership.** Shared leadership has been documented as a problem associated with PLCs. Failure to share school leadership with teachers could jeopardize the success of a PLC (Curry, 2010). To Curry, many teachers prefer to work collaboratively in schools where leadership is shared. Leithwood and Jantzi (1999) conducted a survey study on elementary and high schools both in Canada and United States. The study reports that, where principals shared leadership with teachers, schools recorded higher students' achievement with regard to standardized tests as well as positive school climates (Curry, 2010). On the contrary, the achievement of students was lower and it was very difficult developing a positive school culture in schools that failed to distribute leadership.

**Influence of external forces.** The influence of outside forces poses a serious problem to the implementation of PLCs. The shared focus on the learning outcomes of students by teachers is the main vision of PLCs (Talbert, 2010). Teachers make every efforts to use the achievement data of students from different types of assessments—formative, test results, the work of students, and classroom observations, and persistently evaluate them and make the necessary adjustments to their instructional strategies by crafting effective interventions to meet the learning needs of all students (Talbert, 2010).

However, this vision of PLCs tends to compete with the concept of good teaching practice since federal and state governments (through accountability measures) put pressure on teachers to implement prescribed curriculum. Thus, districts are mandated "to adopt the best curricular programs," and districts that are performing poorly exert enormous pressure on teachers to execute them with obedience in the classrooms (Talbert, 2010, p.558). To Talbert, this kind of system takes away the concept of teaching as critically examining the learning outcomes of students and intervening to resolve gaps in performance. This makes it quite difficult for teachers to maintain the focus on PLCs because the accountability measures stretch "in both directions", thereby putting schools districts in a tight position to try and finds solution to competing models as well as satisfying the pressures to improve (Talbert, 2010; Curry, 2010). School leaders who attempt to devote much attention to nurture PLCs by building "their capacity to make sound collective judgments to address student learning needs are challenged to take a stand against the curriculum implementation model of change" (Talbert, 2010, p.558). Teachers face pressure from external forces to make sure that students perform well on standardized tests (Curry, 2010).

Hargreaves and Goodson (2006) interviewed 200 teachers who had implemented PLCs in United States and reported that pressure exerted by the state governments made it extremely hard to concentrate on sustaining PLCs. Although the PLCs had bright beginnings, they quickly reverted to "teacher-centered instruction" to be able to cover all the materials required by the state standardized tests (Curry, 2010).

**Conclusion**

Professional learning community had been defined differently by different authors. But some key words such as collaboration, planning and development of curriculum, reflection on

practice and students learning to make adjustments, enhancing teachers practice and students'

achievement are common in the concept to convey its meaning. To establish and sustain a

successful PLCs, certain characteristics must be present—supportive and shared leadership,

shared vision, collective responsibility, reflective inquiry, and collaboration, among others. Well

implemented PLCs demonstrate strong relationship between teachers' practice and students'

learning outcomes. In spite of this, it was not easy creating and sustaining PLCs in schools. They

are beset with many challenges such as lack of trust on peers, unwilling to make work public for

scrutiny and feedback, lack of shared leadership, and impact of external forces, among others.

**CHAPTER IV**

**PROFESSIONAL DEVELOPMENT IN SELECTED COUNTRIES**

This chapter examines professional development/collaboration in selected countries around the globe. The purpose is to ascertain the types of PD/collaboration that exist in other countries and lessons that can be learned to influence PD model that might be recommended for Ghana. Also, to compare with the U.S. model. The chapter first describes the principles that International Labor Organization (ILO) and United Nations Educational, Scientific and Cultural Organization (UNESCO) had established to guide teacher education and professional development in the world. The chapter briefly reviews professional development in some European countries. Countries selected for detailed description in the study were the Asian countries of Japan and China, and Singapore. These countries were selected because of the availability of articles. It was not easy accessing articles that described in detail professional development in a single country. Besides, I felt their professional development was unique and seemed to link with their culture. Therefore, juxtaposing them with the American model of PLC might be interesting for readers to observe the differences and what valuable lessons might be learned.

Again, teacher education/professional development in sub-Saharan Africa was examined generally. This was followed by selecting specific countries—Namibia and Ethiopia. I chose these countries to study because articles were available. Also, to examine their professional development to see if there were similarities and differences; furthermore, to understand the

progress being made with the support from international donors on their professional development programs.

With respect to the selection of Ghana, I am a Ghanaian and I decided to examine in detail the strengths and weaknesses of teacher education and professional development to see if I would be able to recommend a professional development model for the educational system based on my experience/learning in the United States. For the country does not have a formal and comprehensive professional development that commits all teachers to it.

**International Principles on Teacher Education**

Fifty years ago International Labor Organization (ILO) and United Nations Educational, Scientific and Cultural Organization (UNESCO) (1960/1966) put in place principles to guide teachers' and teaching globally. The international principles include:

Policy governing entry into preparation for teaching should rest on the need to provide society with an adequate supply of teachers who possess the necessary moral, intellectual and physical qualities and who have the required professional knowledge and skills. To meet this need, educational authorities should provide adequate inducements to prepare for teaching and sufficient places in appropriate institutions.

Completion of an approved course in an appropriate teacher-preparation institution should be required of all persons entering the profession.

Admission to teacher preparation should be based on the completion of appropriate secondary education, and the evidence of the possession of personal qualities likely to help the persons concerned to become worthy members of the profession.

While the general standards for admission to teacher preparation should be maintained, persons who may lack some of the formal academic requirements for admission, but who

possess valuable experience, particularly in technical and vocational fields, may be

admitted.

Adequate grants or financial assistance should be available to students preparing for

teaching to enable them to follow the courses provided and to live decently; as far as

possible, the competence authorities should seek to establish a system of free teacher-

preparation institutions.

Authorities and teachers should recognize the importance of in-service training (INSET)

designed to secure a systematic improvement of quality and content of education and of

teaching techniques.

Teachers should be provided time necessary for taking part in in-service training (INSET)

program" (pp.21-24; Cited in GES, 2012; Moon & O'Malley, 2008).

Around the globe, pressure is mounting from various governments for schools to improve

the achievement of students based on rigid accountability policies (Moolenaar, Sleegers, & Daly,

2012). As such, Moolenaar and colleagues emphasize that in many countries, reforms in

education have attempted to concentrate on enhancing the quality of instruction as well as

student learning outcomes by focusing more on collaborative practices in schools. This is based

on a growing body of research stressing that effective teacher PLCs prove student learning, and

policies in education and practice seemed to accept teachers working together "as a

contemporary Zeitgeist" (Gable & Manning, 1997, p.219, cited in Moolenaar et al., 2012).

Moolenaar and colleagues (2012) reiterate that the importance of teacher collaboration to build

the capacity of teachers and student learning has received widespread suggestions by many

researchers on educational reform around the globe.

Wei and colleagues (2009) posit that countries considered as performing excellently on international measures and thus ranking high with regard to the Program for International Student Assessment (PISA) and Third International Math and Science Study (TIMSS) have effective professional development built on long periods of time for teachers' learning.

Wei and colleagues (2009) emphasize that these top ranked countries such as Finland, Canada, Japan, South Korea, Netherlands, and New Zealand, who have high scores in the international assessment in Math and Science (TIMSS) are considered "high achieving" countries because they have some common characteristics underlying their professional development practices: Extensive opportunities for both formal and informal in-service development; Time for professional learning and collaboration built into teachers' work hours; Professional development activities that are embedded in teachers' contexts and that are ongoing over a period of time; School governance structures that support the involvement of teachers in decisions regarding curriculum and instructional practice, and; Teacher induction programs for new teachers with release time for new teachers and mentor teachers, and formal training for mentors (p.18).

**State of Collaboration in Selected Countries**

Wei and colleagues (2009) stress that one major structural support that helps teachers in their engagement in professional learning is the time provided for them in their daily and weekly work to take part in professional development activities. The authors mention that in many countries in Europe and Asia, teachers use less than half of their time for instruction, while they spend about 15 to 20 hours every week to prepare activities relating to teaching such as lesson preparation, grading papers, meeting both students and parents, and working together with their peers. Most of their planning take place in collaborative environment based on "subject matter

departments, grade level teams, or large teacher rooms where teachers' desks are located to facilitate collective work" (Wei et al., 2009, p.20).

Also, in countries such as South Korea, Japan, and Singapore, teachers spend about 35% of their time teaching students (Wei et al., 2009). Teachers have a large office space where they spend their time when they are not teaching, and the office assists them to share teaching and learning resources as well as ideas between and among themselves. To Wei and colleagues, this approach is considered very helpful for novice teachers.

These practices are not limited to schools in South Korea, Japan, and Singapore, but are also found in some countries in Europe including Norway, Switzerland, Denmark, Finland, Italy, Hungary, and the Flemish community of Belgium where time is provided by schools for teachers to meet collaboratively for instructional purposes (Wei et al., 2009). Wei and colleagues note that teachers in schools in Finland have one regular meeting every week to plan as well as develop curriculum together and similar schools in a municipality are persuaded to work collaboratively to share teaching and learning materials.

Again, professional development which is integrated in teachers' workplace, particularly, time for professional learning and action research when contextualized, is considered crucial and effective in supporting and enhancing the teaching practice of teachers (Wei et al., 2009). The authors note that active research relating to topics in education is common practice in schools in the countries in Western Europe where time for professional development is embedded into the work and time of teachers. For instance, in countries such as Denmark, Finland, Italy, and Norway, teachers get the opportunity to engage in "collaborative research or development" on education related topics in their pre-service training as well as in their practice (Wei et al., 2009, p.22).

In addition, Wei and colleagues (2009) state that in countries like England, Hungary, and Canada (e.g., Ontario) teachers are provided with opportunities to participate in research and development that are focused on the school. In this approach, teachers get the time and support to study as well as evaluate "their own teaching strategies and school programs" and share their results with their peers "through conferences and publications" (Wei et al., 2009, p.22).

Furthermore, Schwille, Dembele, and Schubert (2007) and Wei et al. (2009) describe in detail the uniqueness of professional development/collaboration in Japan and China which embodies every aspect of effective professional development. In Japan, their practice of PD is known as *kenkyuu jugyou/jugyokennkyu* or the "research lessons/research study" (Schwille et al., 2007; Wei et al., 2009).The lesson study/lesson research forms a major aspect of *konaikenshu*, which is an "in-service professional development that brings together the entire teaching staff of a school to work in a sustained and focused manner on a school wide goal that all teachers have agreed is of critical importance to them" (Fernandez and Yoshida, 2004, p.10, quoted by Schwille et al., 2007). The research lessons/study is an important part of their learning culture (Wei et al., 2009). Wei and colleagues emphasize that the Japanese model is spreading very fast to other countries around the world.

China also has an effective professional development which embraces research in teaching and teacher education. This type of professional development specifically stresses teacher research groups known as *jiaoyanzu*, which are very common practice in school organization in China (Schwille et al., 2007). Schwille and colleagues (2007) outline the following as some of the essential features characterizing Japan's lesson study and China's teacher research groups as an approach to professional development:

*Using the teacher's own classrooms as laboratories for professional development*: The core principle behind the lesson study is that teachers learn a lot by working as well as learning in their own classrooms (Schwille et al., 2007).

*The public nature of teaching*: It is a common practice for both teachers in Japan and China to teach in public while their colleagues and others outside observe them in their classrooms (Schwille et al., 2007; Wei et al., 2009). Wei and colleagues (2009) note that the lesson is recorded through various ways—"videotapes, audiotapes, narratives, and a checklist of observations that focus on areas of interest to the instructing teacher," for instance, how many students contributed to the lesson with their own knowledge, ideas, and understanding (p.21). Schwille and colleagues (2007) and Wei et al. (2009) stress that after the lesson, teachers and outside educators get the opportunity to discuss thoroughly the strengths and weaknesses of the lesson, post questions, and offer suggestions to enhance the lesson. Sometimes the lesson is revised and is given to another teacher to teach some few days after the lesson and goes through the same process of observation and discussion (Wei et al., 2007).

*The importance of teachers working together*: A growing body of research has documented the habitual nature of teachers in Japan and China working together (Schwille et al., 2007). For instance, in Japan, the lesson study involves teachers working in teams, while in the research lesson in China, teachers are allocated to some working groups which are school-based that help in their professional development discourse (Schwille et al., 2007).

*Action research as a means of professional development*: The lesson study in Japan does not only involve "curriculum development and lesson planning," but "it is also research" (Schwille et al., 2007, p.113). The authors note that teachers work together to plan a study that

involves "experimental intervention, make hypotheses or conjunctures about how it will work, collect data to see if it has in fact worked as hypothesized" (p.113).

*Emphasis on the understanding of student thinking*: Lesson study places emphasis on student thinking—such as predicting the mistakes that students are likely to make (Schwille et al., 2007). The authors note that generally, this is recognized as a critical feature in elementary school teaching in Japan and is stressed on lesson plans. One critical focus of the lesson study is the opportunity for teachers in teams to engage in discussions based on "what they have learned or are likely to learn about student thinking" (p.113).

*Cumulative impact through writing and dissemination of reports*: Schwille and colleagues (2007) highlight that the writing of project report is recognized as quite an outstanding aspect of the lesson study (Western educators find very challenging to get teachers who are practicing to write excellent project report). The writing of reports by all the study team members is assumed to have a cumulative effect. This is due to the fact that before a new lesson study projects begin, the teams read other reports that had been done previously by other teams which are quite similar or are closely related. These report are sometimes published and sold in bookstores (Schwille et al., 2007).

*Balance between teacher initiative and outsider advice and guidance*:  Although the lesson study process embraces a bottom-up approach where teachers take the initiative with supportive leadership, experts from outside get the opportunity to give advice (Schwille et al., 2007). Outsiders such as scholars from the universities, school administrators, and other leaders in education are called upon to take part at certain points in the discussions of the lesson study to be able to offer their outside perspectives (Schwille et al., 2007).

**Singapore.** Singapore, which has invested so much on teacher learning in 1998 introduced the Teacher Network which was created by the country's Ministry of Education with the new vision, "Thinking Schools, Learning Nation" (Wei et al., 2009, p.23). The focus of this vision is "to produce life-long learners by making schools a learning environment for everyone from teachers to policy makers and having knowledge spiral up and down the system" (p.23). Wei and colleagues explain that the mission of the Teacher's Network's is to stimulate and support teachers own developmental initiative via "sharing, collaboration, and reflection" (p.23). According to Wei and colleagues (2009) six major interrelated features characterize Teacher's Network: "(1) learning circles, (2) teacher-led workshops, (3) conferences, (4) well-being program, (5) a website, and (6) publications" (p.23).

Concerning the learning circle, it consists of a membership of about 4-10 teachers and a facilitator who work together to identify common problems selected by the teachers through discussions and action research to find solutions to them (Wei et al., 2009). The group meets for two hours for every session on eight times within a period of 4-12 months. According to Wei and colleagues, the facilitator plays the role of encouraging "teachers to act as co-learners and critical friends so that they feel safe **t**o take the risks of sharing their assumptions and personal theories, experimenting with new ideas and practices, and sharing their successes and problems" (p.23). By engaging in discussion in their learning circles concerning problems and an attempt to find solutions to them develop friendship among teachers and are promoted to become reflective practitioners. Teachers learning circles do not only allow them to disseminate the knowledge received, but also allow them to generate knowledge (Wei et al., 2009). The workshops which are led by the teachers offer them the opportunity to showcase their ideas and work together with

their peers in a friendly environment where all teachers and the presenter are recognized as mutual learners and important friends (Wei et al., 2009).

  ***Implementation of PLC in Singapore.*** The concept and application of PLCs in schools in Singapore and other Asian countries are quite new (Hairon & Dimmock, 2012; Lee, Hong, Tay & Lee, 2013). The government of Singapore showed interest in the creation of PLCs in schools in 2009 when a new Minister and the Director-General of Education, Dr. Ng Eng Hen was appointed and recognized PLCs as the best approach to improve teacher quality and professionalism (Hairon & Dimmock, 2012; Lee et al., 2013). Also, appraising the excellent performance of Singapore students in international measures including the Trends in International Mathematics and Science Study (TIMSS) and Program for International Student Assessment (PISA), compelled the government to demonstrate a strong commitment by devoting money to teacher professional development by creating PLCs (Hairon & Dimmock, 2012).

  After the announcement and instruction from the Minister, bodies which were associated with the state like the Academy of Singapore Teachers (AST) started a PLC pilot projects in 51 schools in the country in that year, and one year later revised the effectiveness of the program implementation (Lee et al., 2013). This compelled the government to unite the PLCs in East Zones schools with the larger collaborative network being supervised by AST. And currently, all schools in Singapore under the control and authority of the Ministry of Education have adopted the PLC concept initiated by the government (Lee et al., 2013).

  Lee and colleagues (2013) indicate that AST outlined the vision for the PLCs adoption and practice. The leaders of the schools were to hold the vision in high esteem and "were given the autonomy to adapt the program implementation to accommodate the diverse learning needs of their teachers" (p. 54). The PLC vision adopted by AST was the conceptual framework of

Duffour's "Three Big Ideas:" "(a) ensuring that students learn, (b) building a culture of collaboration, and (c) focusing on student outcomes (Ministry of Education, 2010, pp.7-10, cited in Lee et al., 2013). Lee et al. note that the central principle guiding the creation of PLCs in Singapore was based on supportive conditions espoused by Fullan: (a) deep pedagogy (b) systemness and (c) school leadership (p.54).

In an effort to ascertain the effectiveness of the young PLCs in Singapore, the first assessment was conducted on the 51 pilot schools and a gap was discovered "between theory and practice" (Lee et al., 2013, p.54). Lee and colleagues stress that three problems were identified concerning the implementation of the PLCs approach: " (a) high teacher workloads, (b) ambiguity of PLC processes and their efficacy, and (c) bureaucracy and red-tape that hindered autonomous teacher professional development" (p.54). Also, contextual challenges identified included the leadership styles exhibited by schools and the perception of "overly centrist implementation of PLCs," have been documented as hindrances to effective PLCs (p.54).

**Professional development in Sub-Saharan Africa.** Sub-Saharan Africa countries are making efforts to provide quality education for their children. As such, teacher education (pre-service training) and professional development are receiving massive supports from donor agencies to make them better to serve the needed goals.

***Access and participation in primary education in SSA.*** African countries spend a huge percentage of their GDP on education, which is quite similar to countries in East Asia (Verspoor & Bregman, 2008). For instance, in 2004 alone, a percent of 4.6 of GDP was spent on education by African countries compared to "between 4.3 % and 4.6% in Korea, Singapore, Thailand, and Vietnam" (p.3). An average of about 4.6% of African countries GDP are used on education (Verspoor & Bregman, 2008). Anamuah-Mensah and Wolfenden (n.d) state that the severe

teacher shortage in sub-Saharan Africa has emanated from the rise in school enrollment since 1990s due to the countries' commitment to implement the United Nations Millennium Development Goals (MDGs) (all pupils to complete Universal Primary Education by 2015; and the UNESCOs Education for All (EFA) goals), and other commitments in the sub-region. Anamuah-Mensah and  Wolfenden stress that accessing pre-primary education in the sub-region rose 5 million in 1999 to 9 million in 2006, although "gross enrollment ratio remained low at 14%" with large differences among the countries (p.3). During the same period, "average net enrolment ratio at the primary level" in sub-Saharan Africa increased from 54% to 70% bringing to a total of 116 million pupils who started schooling in 2006 (Anamuah-Mensah & Wolfenden, n.d, p.3). Pupils entering primary schools in the sub-region also rose from 16 million in 1999 to 23 million in 2006 presenting "the net intake ratios almost doubling from a median of 27% to 52%" (p.3).

In spite of the tremendous improvement in access to and participation in primary education in the region, the quality of teaching and learning is still a challenge—where many schools have pupils who repeat classes or have high dropout rates. Many pupils are unable to complete primary education (Anamuah-Mensah & Wolfenden, n.d; UNESCO 2008). The rate of repetition in the region is judged to be the highest compared with all regions globally, although there was a reduction from 17.4 % in 1999 to 13.1% in 2006. Anamuah-Mensah and Wolfenden emphasize that the primary school completion rate of 67% in 2005 is still at a very low level.

For universal primary education to be achieved in Sub-Saharan Africa, countries will require about 1,361,000 newly qualified teachers between the year 2000 and 2015, or have to realize a 3% average increase annually, when compared with 2% achieved between 1985 and

2000 (Schwille et al., 2007). The authors also reiterate the sub-region will need 2,449, 000 teachers actively teaching to receive professional development opportunities.

In sub-Saharan Africa, most especially, the effect of teaching and learning far outweighs that of the developed countries (Schwile et al., 2007). This, thus, posts a daunting task for the region considering its implication on teacher education, irrespective of how the various countries will handle it. Then, What efforts are being made to prepare quality teachers to improve teaching and learning by sub-Sahara African countries?

*Teacher education in sub-Saharan Africa.* The ability to sustain the supply of highly qualified teachers is very important in developing the human resource base of SSA; and the teacher holds the sole responsibility to prepare professionals and other skilled personnel such as doctors, engineers, and teachers, among others for the next generation (Anamuah-Mensah & Wolfenden, n.d). And Thakrar, Zinn, and Wolfenden (2009) citing Teferra and Skauge (n.d) put this in a better perspective:

> Teacher education now lies at the heart of all development schemes. It has already been recognized as one of the major areas of focus for poverty reduction, economic progress and social and cultural development. Development initiatives...affirm the critical importance of education and the role played by teachers (p.3).

The Commission for Africa's Report (2005) recommended that huge investment should be made in teacher training, and suggested that efforts being made to realize the EFA goals would not work if significant investment is not made in recruiting, training, retaining, and professional development of teachers (Moon & O'Malley, 2008).

The critical need for highly qualified teachers and the shortage of teachers' in training have worsened the situation leading to the recruitment of many untrained teachers in primary

education in over half of the countries in sub-Saharan Africa (Anamuah-Mensah & Wolfenden, n.d). The authors contend that what is exacerbating the situation is the adverse effect of the HIV/AIDS disease on the supply of teachers as well as the migration of trained teachers to take up positions in other countries and other jobs either inside their own countries. These and other factors continue to play a significant role in affecting the poor performance as well as low completion rates of pupils in primary education in the sub region (Anamuah-Mensah & Wolfenden, n.d).

Over half of primary school teachers in SSA are not trained. It is approximated that more than half of the 2. 6 million teachers currently at post in the region are not qualified (Anamuah-Mensah & Wolfenden, n.d; UNESCO, 2008; Wolfenden, 2008). And more than 4 million additional teachers are estimated to be needed in the region to meet its teacher demand (UNESCO, 2008; Anamuah-Mensah & Wolfenden, n.d).

Considering the rate at which school enrollment has surged has also compelled a dramatic rise in "pupil-teacher ratios in the sub region from 41:1 to 45:1 from 1999" (Anamuah-Mensah & Wolfenden, n.d, p. 4; UNESCO, 2008). It is estimated that the pupil-teacher ratio in the region could rise to about 58:1 should the estimated 35 million primary-age children who are not in school enroll (Anamuah-Mensah & Wolfenden, n.d; UNESCO, 2009). This situation is worse in some countries than others in the sub region. For instance, in Mozambique, the ratio is 67:1, Rwanda—66:1, Congo—83:1, in Mali, Ethiopia and Mozambique—it is more than 55:1, and in Botswana, Ghana and Namibia have a range of 25–34:1 (Moon & O'Malley, 2008; Anamuah-Mensah & Wolfenden; UNESCO, 2008; UNESCO, 2009). Anamuah-Mensah and Wolfenden note that the pupil-teacher ratios in some countries at the primary level increased to

81: 1. Moon and O'Malley (2008) point out that these are estimates and the real class sizes could be much larger.

 Moon and O'Malley (2008) citing The Global Campaign for Education (2005) to some extent, see the untrained teacher situation in sub-Saharan Africa to be financial:

> The education system in West Africa is increasingly the domain of 'para-teachers,' i.e., persons with pre-service training of only a few months or even weeks. This is a direct attack on the quality education which all aspire and are entitled to. With the teacher crisis, quality has often been a hostage of quantity. The trend is to recruit as many teachers as possible, even if they do not have the necessary qualifications, in order to respond to expanding enrolment (p.27).

Because of the shortage of teachers to provide effective teaching and learning, Ghana, for instance, can only boast of a quarter of its teacher needs nationally, while Lesotho can boast of only a fifth (Moon & O'Malley, 2008; Anamuah-Mensah & Wolfenden, n.d; UNESCO, 2005). The government of Ghana (2009) in presenting its annual budget statement stated that as many as "32,000 national service and volunteer teachers were recruited" to support the teaching force in the country (p. 4, cited in Anamuah-Mensah & Wolfenden, n.d).

***State of in-service training in sub-Saharan Africa.*** Generally, teacher development, specifically the in-service training for working teachers, does not receive critical support in developing countries because of financial constraints and thus concentrate so much on pre-service education (Leu, 2004). In fact, most teachers in primary education in developing countries have not received formal training or preparation at all; the few who are deemed to qualify just receive a short training of one or two year pre-service education program at a college to move on as teachers (Leu, 2004). Leu emphasizes that after graduating from their pre-service

training, access to "professional support is frequently scanty or nonexistent" (p.3). The author, citing research evidence to support the claim notes that in a funded USAID BESO Project survey study which was conducted in the Tigrai Regional State of Ethiopia in 1996, the study indicated that on average teachers took part in one or two days in-service training "every ten years" (p.2).

Leu (2004) states that the situation changed for the next eight years, though—things were not the best in those years. The one or two days in-service training within a period of ten years implied that many teachers did not attend any in-service training at all and those who had the opportunity could be the male teachers in senior positions. This could also mean that male and female teachers at the junior ranks never received any in-service training such as workshops and courses (Leu, 2004).

Leu (2004) postulates that even if teachers received in-service training at all in developing countries, it followed the "occasional large-scale centralized 'cascade or 'multiplier' of 2" approach of workshops or courses which exhibited these characteristics:

(i) They reach only a small percentage of teachers;

(ii) They rely on those who attend the workshops to pass new information on to their colleagues through the cascade or multiplier mechanism;

(iii) There is rarely a mechanism in place for the cascade or multiplier to work;

(iv) Workshops or courses are "expert-driven" in that a desk-bound specialist typically transmits abstract information to teachers;

(v) Workshops or courses are often based on a series of presentations or lectures and therefore provide negative models of passive learning;

(vi) They tend to be ad hoc in content and rarely provide a comprehensive learning program for teachers;

(vii) They lead to little change in teachers' classroom approaches, in part because they depend on exhortation rather than modeling, process, and structured practice in which teachers play an active role (p.3).

The cascade or multiplier model of providing in-service training for teachers, however, has been criticized for being ineffective taking into consideration new reforms which are being introduced (Leu, 2004). The past decade has witnessed the introduction of reforms to teaching and learning. And these reforms placed much emphasis "on active-learning, student-focused, critical-thinking and problem-solving approaches" (Leu, 2004, p.3). Both old and new teachers are expected to develop better understanding and be prepared to adopt the new models in their classrooms. And many governments are exploring the best ways that are effective, cost-effective, and develop teachers understanding in their training (Leu, 2004).

Contributing to the ineffective nature of in-service training in sub-Saharan Africa, Kavenuke (2013) describes that in a sub-Saharan Africa country like Tanzania, school leaders have shown little support for teachers who attempt to go on further studies to improve themselves as form of in-service training or professional development. The requests put in by teachers for professional development are not handled in the best ways. For example, the release letters that teachers need to participate in in-service training and professional development programs come too late when teachers had already left for the year or have limited time to attend. This compels many teachers to leave unceremoniously without the permission of school leaders. These teachers pursue different programs outside teaching, thus forcing them to leave the teaching profession for other professions such as law, administration, and Information Communication Technology. This is a major source of teacher attrition in Tanzania, and other sub-saharan Africa countries (Kavenuke, 2013).

*Namibia.* Namibia gained its independence in 1990, and after that recognized education as critical ingredient in the social and economic development of the country. As such, it embarked on educational reform process in 1990s which focused on "social constructivism; equity and democratic participation; critical and transformative pedagogy; learner-centered and democratic education; and conceptual learning and integration of knowledge" (USAID/EQUIP1, 2006, p. 2).

To achieve this goal, the country put in place the Basic Education Teacher Diploma (BETD)—a pre-service teacher training program which was fashioned out as the mainstay of the new education policies (USAID/EQUIP1, 2006). The BEDT was a three-year program and was considered initially as the best program to train effective teachers because it had strong principles and practiced oriented for school-based learning. Despite the initial praise of the program, it has lately received widespread criticism for decline in quality and for not being able to provide both the needed subject knowledge and the teaching skills necessary for teachers to enhance effective student learning; and only half of teachers in the lower primary schools in Namibian are holding the diploma (USAID/EQUIP1, 2006).

As researchers in teacher education have pointed out, pre-service education provides a comprehensive training for teachers while in-service training provides continues professional development to "support teachers in their practice throughout their careers" (USAID/EQUIP1, 2006, p.3). And considering the BEDT diploma or pre-service education which is held by about half of teachers in Namibia, in-service training was critical for these teachers. USAID/EQUIP1 (2006) points out that teachers in Namibia have little access to in-service professional development. The regions are primarily responsible for in-service programs, "but consistent policies, programs, and budgets to support in-service do not exist" (p.6). This has resulted in

majority of teachers taking part in irregular professional development such as workshops and the visiting of schools by Advisory Teachers and Circuit Inspectors. USAID/EQUIP1 (2006) notes that international donors have contributed funds to organize many in-service training activities, however, few have been able to have long effect on the system.

However, Namibia is now trying to design "policies, programs, and budgets to support a comprehensive system of continuous in-service professional development" (USAID/EQUIP1, 2006, p.3).

In an effort to ascertain the effectiveness of a donor-funded professional development in Namibia, USAID/EQUIP1 (2006) conducted a study which was funded by USAID through Education Quality Improvement Program One (EQUIP1) with support from the Academy for Educational Development (AED) and the Namibian National Institute for Educational Development (NIED). The study sampled 40 BEDT teachers, two teachers each from each of the 20 schools located in the rural areas in two regions in the northern part of Namibia through an in-depth interviews. Principals in the 20 schools were interviewed, together with a focus group interviews of parents and students. In the schools sampled for the study, half of them took part in the SIP program while the other half had taken part in the episodic in-service program which was provided by the regions. All the teachers who participated in the study had the same pre-service experiences but in-service experiences were different.

The study investigated: "(i) teachers and other stakeholders' perceptions of quality, (ii) teachers classroom practice and (iii) teachers' and other stakeholders' perceptions of the influence of professional development programs on quality in their schools" (pp.3-4). After analyzing teachers' perceptions of the influence of professional development activities on quality by comparing the answers of the SIP and non-SIP schools, the following findings were revealed:

(1) All the 20 teachers in the SIP schools reported that they had taken part in professional development programs which were organized by SIP and mentioned many topics covered in the workshops. On the other hand, the 20 non-SIP teachers stated that they took part in either in-service cluster or circuit workshops which were very few, and the topics covered were not many and random.

(2) Concerning how in-service professional development influenced their practice, SIP teachers enumerated several ways in which SIP had impacted on their practice—about half of them noted that they developed a better understanding and employed the learner-centered education (LCE) in their classrooms. Some of the SIP teachers described that "self-evaluation or reflection" enhanced their practice. Others said that their understanding was enhanced and employed specific instructional strategies in their teaching. On the other hand, all the non-SIP teachers stated in general terms the impact of the workshops on their practice. A number of non-SIP teachers reported "that they had experienced little additional learning after completing the BETD" (USAID/EQUIP1, 2006, p.4).

(3) In strong terms, the SIP teachers described the SIP activities as the most promising support to develop them to be good teachers. Also, the SIP teachers stated the critical role "of supervision visits, peer collaboration, and community involvement in the school" in their teaching (p.4). The non-SIP teachers, on the other hand, viewed professional development as the necessary support in their learning and development, and stressed on the crucial role of accessing "regular and school-based workshops" (p.4).

*Ethiopia.* The government of Ethiopia recognizes education as the cornerstone for the country's development and democracy, and thus has put in place policies that promote equal and quality educational opportunities for all children by expanding access (Asgedom, Desta, Dufera,

& Leka, 2006). Asgedom and colleagues (2006) state that the country witnessed a rise in gross enrollment rates (GERs) from 20 percent in the early 1990s to about 80 percent in the 2004/2005. In spite of this modest achievement, increase in enrollments have made quality a sacrificial lamb—particularly, with constrained resources. For instance, in a national student assessment conducted in 2000 and 2004 at 4th and 8th grades, revealed challenges of poor quality of education, especially with regard to the "achievement in basic academic skills" (Asgedom et al., 2006, p.3).

Asgedom and colleagues (2006) however, note that after conducting a national student assessment in 2004, the findings pointed to "a positive correlation between student achievement and teachers' professional development and their positive attitudes towards students, although the assessment data do not explain the nature of the relationship" (p.3). The government is making every effort to improve quality teaching and learning.

The government of Ethiopia recognizes the critical role of teachers in providing quality education to the citizens, and thus has placed them at the center of issues regarding quality improvement strategies (Asgedom et al., 2006). The government has taken a giant step to overhaul teacher education program quite recently and the Ministry of Education exercises overall supervision of teacher education in the country. There are two types of pre-service programs to prepare teachers for the primary schools: "(1) a grade 10 + 1-year certificate course for first cycle (grades 1-4) teachers; and (2) a grade 10 + 3-years diploma course for second cycle (grades 5-8) teachers that includes a sandwich year of supervised teaching" (Asgedom et al., 2006, pp. 8-9). An induction program has been introduced into the first two years of teachers practice.

In the late 1990s, teacher professional development in Ethiopia relied entirely on the cascade or multiplier approaches where some teachers together with their principals were selected to attend centralized workshops and on return train other teachers in their schools with the knowledge learned  (Asgedom et al., 2006). Asgedom and colleagues emphasize that, still, the country continues to employ the centralized cascade or multiplier models on occasional basis. Policies from both the national and regional states currently are calling for continuous professional development to be "compulsory, comprehensive, and ongoing programs of professional development carried out predominantly at the school and cluster levels to guide in-service teacher and principal professional development" (Asgedom et al., 2006, p.9).

Beginning in 2002, Ethiopia's Ministry of Education had put in place the TESO and CPD as the focal "strategies to develop teacher quality through a continuum of improved pre-service and in-service programs" (Asgedom et al., 2006, p.9). The two programs have been designed to work in such a way that it could enhance excellent understanding and the capacity to execute active-learning models "which form the philosophical and policy base for curriculum and instruction in Ethiopia" (p.9).

In ascertaining the benefits of professional development for Ethiopian teachers, Asgedom et al., (2006) conducted a study on the perceptions of teachers with regard to quality education and the impact of professional development on their practice. The study employed a mixed method approach in collecting data. Interviews were conducted with some observations.

Principals in the schools were interviewed and a focus group discussions were conducted with about eight grade 4 teachers. In all, 24 core teachers, 12 principals, and 89 teachers in focus group were interviewed for the qualitative part. And on the quantitative part, 439 4th grade teachers in all the four regional states completed a survey questionnaire. The study concluded

that teachers and principals valued the critical role of CPD activities which were organized for them both at the school and cluster levels. Both teachers and principals reported that professional development programs rather helped them most in the affective dimension in their teaching and learning than the cognitive dimension (Asgedom et al., 2006).

**Benefits of professional development for teachers in sub-Saharan Africa.** Anderson (2002) undertook a study of school improvement from 1985 to 2000 in East Africa. The study concentrated on sustaining teacher development or teacher education reforms. The study involved six case studies which evaluated both school and district-wide school improvement projects (SIPs), and received support from the Aga Khan Foundation located in Tanzania, Uganda, and Kenya. The study concluded that in-service training is critical in enhancing the instructional practices of teachers. The study enumerated some factors that contributed to effective in-service training/PD for teachers in many of the case studies:" (i) teacher-centered and school-based workshops; (ii) in-class coaching by consultants, supervisors, or peers; (iii) team planning and problem-solving by collegial work groups; (iv) action research; (v) teacher inter-visitation; and (vii) professional study groups" (cited in Leu & Prince-Rom, n.d, p.11; EQUIP1, 2006, p.2).

The study further states that the learning needs of teachers received massive support through promotion of teacher leadership both at the district and school levels. Also, the efforts made by teachers to learn new methods were buttressed by coaching in the schools which were conducted by external consultants; and the teacher resource centers that were located "at the district, school cluster, or school level" helped teachers in their learning by providing services such as workshops, consultations, and libraries (Leu & Prince-Rom, n.d, p.11; EQUIP1, 2006).

Similarly, Mulkeen, Chapman, DeJaeghere and Leu (2005/2007) studied recruiting, retaining, and retraining of secondary school teachers and principals in sub-Saharan Africa. They reported that the conditions that motivated teachers to stay in the profession were: (1) the establishment of learning communities for teachers which afforded them the opportunity to share and discuss issues concerning teaching and learning; (2) the opportunity for experienced teachers mentoring newly qualified teachers and; (3) providing serene classrooms where there were adequate instructional materials-curriculum, books, and learning materials (Leu & Prince-Rom, n.d).

**Summary of professional development in SSA.** From the discussion thus far, the following observations have been made regarding in-service training/PD for teachers in sub-Saharan Africa. The implementation of the Education for All (EFA) goals and the Millennium Development Goals (MDGs) have led to a substantial surge in enrollment of pupils at the primary education level in the sub-region. This is good news as those who were not in schools are being enrolled for the first time. However, this has stretched resources to their limits—like shortage of teachers to teach these pupils. This, thus, has resulted in the recruitment of many untrained teachers with no pre-service or few months of pre-service education to augment the teaching force in many countries in the region. Also, in-service training/PD for teachers follows the cascade or the multiplier approach, and is not available to all of them. The cascade approach has been criticized for not being effective.

**Ghana: pitfalls and potentials of PLCs.** This section reviewed the current state of teacher education and professional development in Ghana to demonstrate effect of the absence of PLCs in the educational system for teachers. As a Ghanaian educator, my interest have been to study teacher professional development because developing quality teachers does not rest solely

on pre-service education, but also induction and in-service training. Ghana does not have a formal professional development program for all teachers in the educational system. I, therefore, decided to study teacher education and professional development in detail in Ghana to see if I could recommend a professional development model that might be available to all teachers in the country. I started the section by first reviewing the history of formal education in Ghana and how it had shaped teacher education and professional development in the country in recent times.

*History of education in Ghana.* Formal education in Ghana started before independence from the British in 1957 (Asare & Nti, 2014; Asare-Danso, 2014; Kadingdi, 2006). European merchants or missionaries were credited for establishing first schools as well as introducing western education in Ghana in the early 1765 (Kadingdi, 2006; Asare & Nti, 2014). Presbyterian and Methodist missionaries established many of the institutions, and were mostly located in the southern part of the country, which later formed the British Gold Coast Colony (Kadingdi, 2006). The purpose for the establishment of these schools/institutions was to train the local people as interpreters as well as communicators so that they could help facilitate trade with the Christian missionaries. Kadingdi (2006) and Asare and Nti (2014) state that the curriculum for these schools was so narrow that it concentrated on basic literacy. The Bible and scripture served as the foundational texts for schooling. Also, some of the missionaries trained the people to serve as catechists (Asare & Nti, 2014; Asare-Danso, 2014).

*Current state of education in Ghana.* Among the developmental challenges confronting Ghana as a nation in the 21st century for the past two decades is the ability of both government and non-governmental organizations (NGOs) to enhance the quality of public education, most especially—primary and junior high school education (Voluntary Service Overseas [VSO] Ghana (2013). Similar to a number of sub-Saharan African countries, a large portion of the

government of Ghana's GDP and annul budget is spent on education. For instance, in the year 2011, 6.3% GDP, representing an annual national budget of 25.8%, was spent on the education sector (VSO Ghana, 2013). This commitment seems to be growing stronger when in December 30, 2014, the President of Ghana, John Mahama, in addressing the 70th Anniversary celebration of staff and students of the Bagabaga Education College in Tamale reiterated that the government was committed to utilizing 1/3 of its annual budget to fund education to improve the country's socio-economic development (Ghanaweb, 2014).

In spite of the commitment and huge expenditures, studies indicate that both education outcomes and pupils' learning outcomes in the country are among the poorest around the globe, pointing out that less than 25% of pupils in primary six (sixth grade) could "read and attain basic literacy skills after" completing six years of basic education (VSO Ghana, 2013, p.10). This, despite the fact that government spends impressively on education, and donor agencies also are contributing substantial amounts. For instance, donor agencies spent more than 3 billion dollars (US$3 billion) in 2010, yet the quality of basic education delivered to many poor children in the rural areas are below standard, especially, in the northern regions of Ghana to perpetuate the circle of poverty (VSO Ghana, 2013).

The quality of education has a direct effect on reducing poverty, as many people in both rural and urban areas suffer from "social exclusion and economic deprivation" (VSO Ghana, 2013, p.6). VSO Ghana notes that a growing body of research in Ghana shows that one key issue missing in many basic schools in Ghana is adequate teaching and learning. This is confirmed in the poor performance of pupils on the National Education Assessment (NEA), which assesses the proficiency levels of pupils in Primary 3 and Primary 6 in English Language and Mathematics (VSO Ghana).

Acheampong (2003) also points out that after the 1987 educational reform and the introduction of the Free Compulsory Universal Basic Education (FCUBE) in 1992, a number of studies—such as the Centre for Research into Improving the Quality of Primary Education in Ghana (CRIQPEG), at the University of Cape Coast, and the annual Criterion-Referenced Tests (CRTs) started by the Primary Education Program (PREP) of the Ministry of Education were conducted to evaluate the performance of pupils. The report of these studies clearly stated that in spite of the massive reforms, effective teaching was not taking place due to poor teacher quality, and thus impacted greatly on the performance of pupils (Acheampong, 2003).

*Teacher education in Ghana.* Agbeko (2003) notes that teacher education has been a great concern for policy makers, education providers, and all stakeholders in education in the country. But there was a turnaround in 1987 when massive reforms hit the general education of the pre-tertiary education in Ghana (Acheampong, 2003). And over the years, the nation has made every efforts to train and develop teachers to provide quality education and skilled workforce to advance the developmental agenda of the country (Asare & Nti, 2014). The Presidential Committee on Education (2002), a committee to review education in Ghana noted that teacher education should be reviewed to make it relevant to the needs of the country.

Teacher education in Ghana, according to Asare and Nti (2014), has the mission of providing "a comprehensive teacher education program through pre- and in-service training that would produce competent, committed, and dedicated teachers to improve the quality of teaching and learning" (p.1). Also, teacher education programs at the pre-tertiary level in the country have the vision of adequately preparing teachers who will be able to discharge their duties "effectively in the basic and second cycle schools in Ghana and to develop and nurture them to become

reflective and proficient practitioners capable of providing quality education for all Ghanaian children" (Ghana Education Service, 2012, p.8).

***Pre-service education in Ghana.*** Pre-service education is offered in 38 public and 3 private colleges of education leading to the award of Diploma in Basic Education (DBE) (Asare and Nti, 2014; Sampong, 2009). A total of between 5,500 and 6,000 teachers have been produced by the colleges of education every year since 1995 (Sampong, 2009). In addition, both University of Cape Coast and University of Education-Winneba, offer bachelor's degree programs to train teachers to teach grades K-9 and high schools (grades 10-12) (Asare and Nti, 2014). To increase access as well as reduce acute shortage of teachers, and reduce cost of training, the Center for Continuing Education of the University of Cape Coast (CCEUCC) had introduced a three-year diploma in Basic Education (DBE) program in 2001 as a distance education (DE) program; and in 2006 had 8,336 students' at its 18 study centers located in all the ten regional capitals in the country (Sampong, 2009). In 2005-2006, the center began Post-diploma (P-DBE) programs to educate untrained teachers and as a form of in-service training for some trained teachers or those with a diploma in basic education (Sampong, 2009).

The University of Education-Winneba, also runs some distance education programs with centers around the country. Apart from these institutions, other universities and tertiary institutions find their graduates enter classrooms as untrained teachers (Asare and Nti, 2014). Asare and Nti (2014) citing Anamuah-Mensah and Benneh (n.d) state that the following pre-service teacher training programs are being implemented in Ghana:

Three-year Diploma in Basic Education (DBE) for teachers at the basic school levels—kindergarten, primary, and junior high schoolteachers. These teachers received their education/training at the Colleges of Education (CoE).

Two-year post-Diploma in Basic Education (DBE) for teachers at the basic school education. These teachers received their training either at the University of Cape Coast or at the University of Education-Winneba. These teachers already have the DBE.

Four-year bachelor's degree for teachers at the basic and high school levels, that is, K-12. These teachers graduated from the University of Cape Coast and University of Education-Winneba.

Master's degree program for teachers at the high school level and Colleges of Education, who received their training from University of Cape Coast and University of Education-Winneba.

Two-year Diploma in Basic Education offers as sandwich program for teachers who hold "A" 3-Year Post-Secondary Teacher Certificate. This program is run by the University of Cape Coast through the Colleges of Education.

Four-year distance education program as Untrained Teacher's Diploma in Basic Education (UTDBE) for teachers who are teaching but have not been trained as professional teachers (untrained or non-professional teachers). This program is run by the Colleges of Education through collaboration with the Teacher Education Division (TED) of the Ghana Education Service purposely to increase the number of teachers to serve in basic schools—particularly, in rural schools or communities.

Three-year distance education program Certificate "A" for teachers who are teaching but have not received training as professionally trained teachers who enrolled in the UTDBE program but were not able to satisfy all the requirements to be awarded UTDBE certificate. Also, this program is run in the Colleges of Education through partnership with the Teachers Education Division of the Ghana Education Service as a way to

increase the number of teachers to serve in rural schools or communities in the country (p.3).

***Professional development in Ghana.*** Ghana Education Service (2012) explains that the core values undergirding professional development as well as the management of teachers in Ghana, "shall reflect commitment, attitudes, ethics, and morals that should promote quality education for all Ghanaian children" (p.8).

Akyeampong (2003) undertook a study on teacher education or training in Ghana. The study was entitled "Teacher Training in Ghana-Does it Count? A Multi-Site Teacher Research Project" (MUSTER) supported by the United Kingdom Department for International Development (DFID). The study explored initial pre-service teacher training to ascertain the changes necessary to provide both quality and adequate supply of teachers for basic schools in the country.

The study designed a "three-stage research framework: inputs, process and outputs" to collect data. The purpose of the framework was to be able to collect systematic data concerning both the experiences and views of student teachers on the ways of becoming a teacher. The study employed a mixed method design in collecting data.

In collecting data at the "input" level, 100 beginning teachers were randomly selected each from four Teacher Training Colleges (TTCs). In all 400 teachers were selected (265 male and 135 female). Again, 18 beginning student teachers (BSTs) were sampled to write autobiographies with regard to their family life and experiences at school. The students were made up of 9 male and 9 female. Out of the 18 students, 12 took part in focus group interviews. In addition, the study sought the views and perceptions of 55 college tutors in the four colleges concerning teacher trainees and the teacher training process by taking part in a questionnaire.

In gathering data at the training "process" level, final year student trainees' (who were about to complete their training) were sampled. Three hundred (300) students were sampled— 184 males and 116 females concerning their perspectives and training experiences. Twelve (12 students—6 males and 6 females) participated in focus group interviews. Three hundred and seventy eight (378) beginning student teachers took part in "a pre and post-achievement test in mathematics" (p.15). The intention of this was to find out whether BSTs teachers had made great progress "in mathematics after completing one year of college remedial instruction" (p.15).

Collecting data at the "output" level, the study concentrated on the newly qualified teachers' (NQTs) early experiences in schools and how they viewed their experiences with regard to their college training. One hundred and thirty-four (134) teachers took part in the survey. The study also interviewed eight head teachers on their perspectives on the experiences as well as the performance of NQTs in schools.

Acheampong (2003) summarizes the findings of the study after analyzing his data in this way:

> …Cumulatively, the evidence gathered by the MUSTER studies point to the need to take a serious view of the methods of teacher recruitment, incentives to make teaching attractive especially at the primary level, and greater emphasis on continuing professional development programs provided through structured institutionalized INSET and a mandatory internship program for beginning teachers" (p.xi).

The study further observes that Ghana as a country should take a holistic approach about the policies of its teacher training if it is to meet the target of achieving high quality in basic education. Traditional practices are no longer sufficient to confront the challenges created by curriculum and instruction of the 21st century (Acheampong, 2003).

Ministry of Education (1995) after the introduction of the Free Compulsory Universal Basic Education (FCUBE) program, and in an attempt to develop better understanding of the reasons why pupils in public schools were underperforming, outlined certain factors as the causes. Among them was, "ineffective pre-service teacher training and inadequate in-service teacher training to introduce teachers to the new curriculum" (cited in Acheampong, 2003, p.3)

Again, VSO Ghana (2013) undertook a study, 'Tackling Education Needs Inclusively' (TENI) in the three northern regions of Ghana—Upper East, Northern and Upper West. These regions were chosen because pupils have not been performing well in the national assessment testing such as the National Education Assessment (NEA) which tries to assess the proficiency level of Primary 3 and 6 pupils in English Language and Mathematics for the past twenty years.

The purpose of the VSO was to find which factors promote or impede pupils across these regions from receiving quality basic education in Ghana. It was also to create an awareness and provide data for policy makers, the officials of government, and non-governmental organizations (NGOs) at the national, regional, and district levels to find effective solutions to enhance good learning outcomes for pupils. The study began in August, 2012, where 24 researchers took four weeks of field study to visit 54 schools (both rural and urban) across the three regions. The researchers interviewed more than 250 teachers, as well as 500 parents and children and observed 86 classrooms. The questions that were asked during the interviews concerned learning, and the reasons why it was taking place or not in primary and junior high school classrooms across the country.

Regarding in-service training/professional development, they found that "there was very little in-service training available to teachers at the district and cluster-based levels despite the introduction of "capitation" grants (payment of all fees at the basic education level by the

government) over the last four years" (p.61). Also, it was reported that the little in-service training that was taking place was funded by the capitation grants at the cluster level and was being supported by the Japan International Corporation Agency (JICA) approach to in-service training. The study further emphasizes that in-service training was only organized depending on the problems that were recognized within the schools. The question then is, if no one is willing to identify a problem in the schools, then why would the teachers receive any in-service training? Is that not the purpose of PD? In addition, the research points out that the District Education Office does organize in-service training for untrained teachers at the beginning of every academic year with regard to how to prepare and deliver lessons.

In-service training for all trained and untrained teachers is depended on head teachers in schools in Ghana (VSO Ghana, 2013). Through the interviews of head teachers, the study reported that many of the 54 schools sampled organized both school-based in-service and cluster-based in-service training for teachers. But many teachers in the focus group interviews "discredited the head teachers' claims" (pp.99-100). Who is speaking the truth?

The study further revealed that many schools or classes in the rural areas were taught by untrained teachers, while those trained were teaching at the junior high schools. And efforts to retrain these teachers were very difficult. For instance, from rural schools in West Mamprusi District, the findings show that overall teachers felt they were not adequately prepared to get to the classrooms to teach because of "lack of proper inputs such as textbooks, teaching and learning materials, and syllabi, but also due to their limited professional development either in terms of in-service training or mentoring by school heads" (p.82)

Kadingdi (2006) undertook a comprehensive historical review of educational policies and practices relating to basic education provision in Ghana. The study examined three phases or

periods— the situation of basic education before independence—from 1951 to 1986 and 1987 to 2003. Some of the policies examined were the Accelerated Development Plans (ADP) for Education of 1951 and 1961; The Dzobo Committee of 1973 and the New Structure and Content of Education of 1974; the crumbling of the Ghanaian Education System and the Provisional National Defense Council (PNDC) regime of 1981; The 1987 education reforms; the Free Compulsory Universal Basic Education (FCUBE) program of 1996 and; the interventions after the introduction of the FCUBE reform.

In reviewing the FCUBE program and teacher education, the author emphasized that the Ministry of Education was very much concerned about effective teaching and learning at the basic education levels—primary and junior high schools. And the Ministry attempted to fashion policies to train quality teachers, and even recognized in-service training as critical part of teacher continuing professional development (Kadingdi, 2006). Concluding his review, Kadingdi (2006) stressed that the effort to provide in-service training and continuing professional development for teachers during the reform period "has been ad hoc and patchy" (p.14).

In addition, Asare-Danso (2014) reviewed the educational policy of the Basel mission on teacher education in Ghana, and the various approaches that governments after independence have managed teacher education. The purpose was to examine how various educational policies put in place from 1848 to 2013 impacted the organization of teacher education in the country in terms of the structure of education, curriculum as well as educational management. In putting forth some recommendations to improve teacher education in the country, the author mentions that based on different quality of teachers, different routes, and different teacher education systems in which teachers are trained in Ghana, there was the critical "need for periodic in-service training program for practicing teachers" (p.64). Provision of in-service training would

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help improve the professional and academic competencies of teachers who are trained from different systems.

Furthermore, Asare and Nti (2014) reviewed major teacher education institutions and their structure in preparing teachers, the type of teacher training that is undertaken, and the routes for developing teachers in Ghana. They suggested that the country should introduce, as a matter of urgency teacher licensure; for the country cannot continue to employ the old approach of doing the same things and yet expecting different outcomes. They emphasized that "in Ghana, individual teachers' efforts at adding quality to their professional practice is very limited" (p. 6).

Asare and Nti (2014) in referring to T. Singer (2013) went further to suggest a modest PLC-type approach for in-service training/ professional development, recommending a

> ...collaborative teacher inquiry around students' learning challenge. This requires teachers to plan lessons together, observe it together, and repeat the cycle with multiple lessons so that every teacher in the team gets the opportunity to apply learned concepts to different lessons (p.7).

Finally, Ghana Education Service (2012) in its policy framework describes the need for training effective teachers to drive quality education in Ghana. The policy framework mentions that Ghana has undertaken various reforms to structure its teacher educational system over the years to respond to the current demands concerning the mission as well as the vision for education. Ghana Education Service—the policy implementer of education in the country, however, in its policy document, admits the flaws in training teachers, especially, in-service training/professional development:

> What has been missing in this entire process is a set of policies that guide the development and management of teachers in ways that commit them and the education

establishment to achieve national education goals. Policies, on the expectations from institutions which train teachers and those offering a range of continuous professional development programs (CPD), as well as the responsibility of government towards teacher welfare and working conditions, have been inadequate (p.7).

***Summary of professional development in Ghana.*** From the discussion thus far on teacher education and in-service training/professional development in Ghana, the following observations have been made. First, various governments and non-governmental/foreign donors have shown commitment to provide quality education—especially, basic education for all the Ghanaian children through reforms, funds, teaching and learning materials, and basic infrastructure.

Second, concerning the teaching force—there are both trained and untrained teachers in Ghanaian educational system. Rural schools/communities have a number of untrained teachers. And those trained as professional teachers are trained from different sources with different training.

Third, in-service training for teachers is limited and inconsistent. It is done on ad hoc basis during reforms. Considering the different routes and training of teachers in Ghana, this calls for the need to have regular access to in-service training/PD to improve their knowledge, skills, and instructional practice to deliver quality education.

Fourth, NGOs/foreign donors contribute funds and organizational structure for the little in-service training for teachers in the country. But will these organizations continue to exist forever to provide funds for professional development? What are Ghanaian authorities themselves doing?

Fifth, teacher licensure tends to make teachers responsible in their practice. It mandates teachers to find ways to enhance their practice as well as holds them accountable (Asare & Nti, 2014). Licensure as found in U.S., South Africa, and other countries, but is conspicuously missing in Ghanaian educational system. It is not a mandatory practice for teachers in Ghana to attend any form of professional development or upgrade as this is not tied to their contract as happens in U. S. and other countries.

***Anticipated challenges of implementing PLCs in Ghana.*** This study suggests the following challenges exist if Ghana were to introduce PLCs in its educational system.

*Inadequate funding.* Embarking on any educational reform require resources—especially, funds to ensure smooth implementation. Inadequate funds impedes the implementation which may result in failure or poor results at the end. Ghana as a developing country, faces this challenge in implementing many educational policies. Despite the commitment of the government to spend 35% of its annual budget to fund education, it is still not enough to support the implementation of programs. As such, it depends primarily on loans from international financial organizations such as the IMF/World Bank, developed countries, and foreign donors/non-governmental organizations to implement major education and economic policies. Sometimes, these loans are tied with conditions as to their use, and with high interest rates.

Not only does the government rely so much on loans to finance education and other projects, but also it depends on foreign donors/NGOs to support the implementation of educational policies. For instance, after the implementation of the FCUBE program in 1996, Kadingdi (2006) points out that many donor agencies such as the United Nation's Children's Educational Fund (UNICEF), the Department for International Development (DFID) of the United Kingdom, the World Bank, the European Union (EU), the Swedish International

Development Agency (SIDA), the United States Agency for International Development
(USAID), and the Danish International Development Agency (DANIDA), among others
provided substantial amount of money to support primary education in the country. These donor
agencies support in-service training for teachers. VSO Ghana (2013) emphasizes that non-
governmental organizations/donor agencies including World Vision, United Nations
International Children's Emergency Fund (UNICEF), Partnership for Accountable Governance in
Education (PAGE), Educational Quality Improvement Programs (EQUIPS), and LETs READ
were all providing various support for in-service training for teachers in the three northern
regions of Ghana. Also, VSO Ghana notes that while Tackling Education Needs Inclusively
(TENI) and World Vision made available funds as well as organization of in-service training for
"teachers, head teachers, and curriculum leaders in schools" (pp. 61-63), TENI alone had been
organizing workshops for teachers to improve their pedagogical skills; PAGE has been
organizing workshops concerning effective school management for teachers to be able to
monitor and check exercise books for pupils as well as other conditions prevailing in the
classrooms (VSO Ghana, 2013).

Again, Kadingdi (2006) notes that after the FCUBE implementation the United Kingdom
through DFID tried to support primary education to ensure effective teaching and learning. It
therefore introduced the Whole School Development (WSD) program in 1998 with the aim of
stimulating:

> …Child-centered primary practice in literacy, numeracy and problem solving with the
> view to improve the quality of teaching and learning in basic schools, encourage
> community participation in education delivery, and to promoting the competencies of

teaching and learning through school-based in-service training (MOE, 1999, p 2, cited in Kadingdi, 2006).

The WSD program put forth a new form of in-service training/PD for teachers. In this approach, teachers were to take charge of their own challenges and find solutions to them via school-based in-service training. There was also to be the District Teacher Support Team (DTST) to be composed of memberships of head teachers and some officers from the district education office to give the needed support at the district level.

However, the Deputy Director General Report concerning the status of the WSD in 2000 said, "…schools and cluster-based, in-service training sessions, which were expected to take off in 1999 in all 30 phase 1 schools have not started because of lack of funds" (Akumfi-Ameyaw, 2000, cited in  Kadingdi, 2006, p.12). Again, the Deputy Director General's report, mentioned that the coordinator of the WSD, together with three Ghanaian educators at the primary school level and "four training supporters from the United Kingdom were scheduled to train the National Training Group" (pp.12-13). Nationally, 3,600 teachers were expected to be trained and was to take place in early 1999 but it could not be done (Kadingdi, 2006). The report further stated that in several districts, the DTSTs were unable to organize the in-service training for teachers due to unavailability of funds (Kadingdi, 2006).

The description thus far points clearly to the challenge of implementing PLCs in Ghana because of inadequate funds from the government. For implementation to take place, resources such as dissemination of "framework of tools and templates" (Hairon & Dimmock, 2013, p.414) for teachers and administrators at all schools should be made available and all require funds.

When we consider the proliferation of NGOs in in-service training in Ghana, we cannot escape the question: Will these organizations continue to be there to provide these services? Will

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they always have the needed financial resources for these activities? What will happen to education provision in Ghana if these organizations fold up?

*Uncoordinated activities of government and foreign donors.* Another anticipated challenge of implementing PLCs in Ghana is the uncoordinated activities of government and NGOs. Each agency initiates its own project with no coordination with the government and other agencies. There is no single coherent program that is designed to take place. This leads to proliferation of small projects which are executed in some schools in selected districts across the country (Kadingdi, 2006). Kadingdi (2006) further remarks, "Throughout the period 1986-1991, donor activity in Ghana in general, was uncoordinated resulting in the creation of several project implementation units within the Ministry of Education (MOE) and a proliferation of micro education projects in the education sector itself" (p.13).

This state of affairs is likely to impede the implementation of PLCs in the country. If donor agencies continue to implement their individual small projects with respect to in-service training without coordination or have a single and coherent in-service training for all teachers in the country, then PLCs implementation may fail at birth.

*Problem of many untrained teachers.* The state or the problem of having many untrained/unqualified teachers in Ghanaian schools—especially in rural schools may hinder effective collaboration/PLCs. Many teachers have not received pre-service education and therefore start on a different page as compared with their trained counterparts. It might be difficult for the untrained teachers to participate meaningfully in discussions due to lack of or inadequate content knowledge and pedagogical skills resulting from lack of pre-service and in-service training. To confirm this, VSO Ghana (2013) interviewed some untrained teachers in rural schools in West Mamprusi district with regard to in-service training or mentoring provided

by head teachers in their schools. Generally, teachers were not adequately prepared to take charge in their classrooms in both content knowledge and pedagogy. One teacher said, "I have difficulty with lesson delivery because I am not a trained teacher. I am okay with the language of instruction. Actually the children are so many I cannot control and manage" (p.82). Their contribution might be below and thereby impede effective collaboration with their trained counterparts. This may be worse in rural schools where there are many untrained teachers. They may also feel shy to contribute to a discussion on pedagogy and teaching practice.

*Issue with the culture of isolation.* Cultural issues can play a crucial role either to promote, shape, or inhibit the implementation of PLCs (Harris & Jones, 2010; Heiron & Dimmock, 2012), especially in the Ghanaian context. In Ghana, teaching continues to follow the approach of isolation—where teachers work alone in their classrooms. The worse of it all is that in-service training/PD is not a common practice embedded into teacher practice in the country. With this state of affairs, how then will teachers embrace or view collaboration? What will their attitude and behavior look like? It would be a challenging task to work together to discuss and share ideas concerning their practice. Teachers will definitely meet collaboration with strong resistance to change since it will be a new concept and approach to them. Harris and Jones (2010) mention that in such a critical circumstance, the leadership is important in leading, championing, supporting, and explaining the importance of PLCs to school development. The head or the leadership also has the responsibility to "create the structural and cultural conditions where PLCs thrive and contribute to school improvement" (Harris & Jones, 2010, pp.178-179). But head teachers in Ghana have no knowledge about PLCs and thus can play no critical role.

*Culture of centralization.* The traditional culture of centralization (centralized top-down) system in Ghanaian education can inhibit the implementation of PLCs. Educational policies are

formulated by the central government/Ministry of Education and trickles down through the regions and districts/municipalities to the schools. The schools finally implement the policies, or not. The same policies from the central government, without any alterations, are expected to be implemented throughout the country. This top-down dictating policies has shortcomings. Miyazaki (2014) describes them this way, "Efforts initiated from above tend to make the program approach prescriptive, teachers being marginalized" (p.22). On the contrary, PLCs hinge on bottom-up approach where principals and teachers play a crucial role in fashioning out their professional learning (Heiron & Dimmock, 2012). This approach thus contradicts the centralized top-down system in Ghana, and poses a serious challenge when implementing PLCs. With this, the questions that arise, according to Heiron and Dimmock (2012) are: (1) How will teachers get the opportunity to serve as agents to determine their own professional learning? (2) How will school leaders and teachers be able to create and sustain effective PLCs in their schools? (3) To what extent may government and other stakeholders' policies and priorities lead to compromise of teachers' own initiated professional development in contexts where many of the most important decisions are already taken by government? (4) How will PLCs involve changes in power and authority relationships within schools, and between schools and system center? (5) To what extent will school leaders and teachers be allowed to re-design the supportive conditions to PLCs, such as flexible structures, in their schools?" (p.420).

**The Current State of PLCs in Sub-Saharan Africa**

Research on PLCs in SSA is scanty. One article, "Building Professional Learning Communities to Enhance Continuing Professional Development in South African Schools," (Steyn, G. M., 2013), reviews the state of professional development in South Africa, and citing Republic of South Africa (2008) mentions that continuing professional development is

compulsory for all registered teachers in South Africa. Its goal is to encourage: "(1) individual teachers' endeavors to improve their own learning and develop themselves professionally, (2) teachers' participation in collectively developing themselves and improving learning within their schools; and (3) teachers' participation in professional development programs offered by employers, unions and others to improve their learning and develop themselves" (p.5). Steyn (2012) states that teachers in South Africa are expected to build up 150 professional development points in a period of three years. The points accumulated "are used to assign a numerical value to a particular professional development activity" (Steyn, 2012, p.279).

Steyn (2013) reviewed the literature on PLCs—the conceptual perspectives (adult learning theory) and Wenger's (1999/2000) social learning theory of community of practice; guidelines for establishing PLCs in schools such as building conducive relations, creation of safe and supporting environment, identifying suitable facilitators, and principals' involvement, among others. The author concludes that: (1) studies had confirmed the critical role of collaboration by enhancing both the performance of teachers and students; however, it is faced with some impediments including teacher isolation and differences in its implementation based on the school contexts and the competence of teachers; (2) notwithstanding the challenges confronting PLCs, the opportunities to learn with peers is a necessary ingredient in enhancing quality education in South Africa.

A second study was conducted by Nkengbeza (2014) titled, "Building a Professional Learning Community in a Conflict and Post-Conflict Environment: A Case Study of a High School in Liberia." The purpose of the study was to ascertain how PLC could be "built in a conflict and post-conflict environment" (p.66). Nkengbeza notes that little or no study had been conducted on establishing PLCs in conflict environments and therefore wanted to find out the

various ways in which educational institutions in such countries could be changed into PLCs, while maintaining the awareness of the differences in culture and other factors.

The research questions that guided the study were: (1) How is a professional learning community built in a school in a conflict and post-conflict environment? (2) How and what core components are used in building a professional learning community in a school in a conflict and post-conflict environment? (p.66). He found:

(1)     That, in building a PLC in  a conflict and post conflict country or environment, the following core components should be present—shared supportive leadership, collective creativity, shared values and vision, supportive conditions, shared personal practice, the international community and other NGOs, physical factors, overcoming psychological challenges and government educational policies (p.158).

(2)     The school studied faced some challenges such as "insecurity and hate, drug use, lack of funding and qualified teachers, low salaries, bringing students back to school and school repairs" after the conflict in Liberia and the new principal played a vital role in transforming the school (p.163).

(3)     It is essential to build PLCs in conflict and post conflict schools because people will love another, avoidance of hate and discrimination, building of trust among all the people or stakeholders, availability of more qualified teachers who are committed to implement the curriculum to meet students and societal aspirations.

Also, the canker of greed which has engulfed society could be tackled. First, the principal would share power with teachers, staff, and other stakeholder in his/her school. Second, teachers would respect each other thereby creating a collegial environment for them to work as a team to

find solutions to the problems confronting schools; it would lead to the enhancement of teaching methodology to provide the needs of all students.

Finally, progress in education in conflict countries should not just be viewed in terms of the number of schools constructed, the total number of enrollments, books available, and the number of teachers recruited, but creating a safe and conducive environment, and strategies to prevent conflicts for children and teachers should rather be paramount. And the type of education given to children should be examined so that it does not "become a major source of conflict generation" (p.165).

**Conclusion**

Teachers working together seemed to be the norm for professional development in the Asian countries of Japan, China, and Singapore. It is linked with their culture. Also, teachers make their teaching public for their colleagues and external educators to observe and give feedback for improvement. Again, the professional development of these countries helps teachers in conducting research (action research).

Concerning sub-Sahara African countries generally, and Namibia, Ethiopia, and Ghana in particular, have high enrollment rates leading to the recruitment of many untrained teachers to augment the teaching force. Professional development was not organized regularly for teachers; and donor agencies continue to support the little professional development organized. While this support is helping teachers, I have learned that a lot need to be done if all children are to have access to quality education as envisioned by Education for All (EFA) and the Millennium Development Goals (MDGs).

**CHAPTER V**

**DISCUSSION AND CONCLUSIONS**

This chapter explores whether there is a relationship between PLCs and democracy as ideally conceived. The reason behind this exploration is to ascertain whether the environment created in schools and activities of teachers in their PLC groups demonstrate democratic ideals; and democracy as the core component of establishing PLCs. For the exhibition of democratic principles ensure active participation of all members in PLCs; members feel they are part of the school system or community to remain committed to the course of the group (PLC); respect and tolerate the views of others, especially minority views and; take part in the decision-making process of the group. The nurturing of these principles develop informed democratic citizens who would be capable of influencing federal, state, and local level decisions and policies**.**

First, I review John Dewey's philosophy of education and its link with the concept of PLCs. The second section defines democracy. The third section highlights on PLCs as social spaces for building democracy in schools. The fourth section provides interpretations of PLCs and democracy. The sixth section steers away from the discussion of democracy, and rather describes the potentials of PLCs in altering professional development of teachers in Ghana. The seventh section discusses the researcher's experience and the lessons learned from the study.

**PLCs and Democratic Principles: Dewey's Influence**

In *Democracy and Education*, Dewey (1916/1944) sees education as social function. He believes that we do not educate as individual but as a collective group. Education, to Dewey is life renewal through transmission. Dewey (1944) emphasizes, "The continuity of any experience, through renewing of the social group. Education, in its broadest sense, is the means of this social

continuity of life" (p.2). Comparing Dewey's conception of education with PLC, teachers continue to renew their knowledge, ideas, and skills as a social group to affect their students.

Also, Dewey (1944) sees education as a form of communication. Dewey points out that society could only continue to live on through transmission and communication. He states that people live in a community based on things which they commonly share, and communication is the avenue through which they share common things. Dewey continues by noting that the common things which they should have to be able to create a community or society include "aims, beliefs, aspirations, knowledge—a common understanding-like-mindedness as the sociologists say (p.4). Teachers in a PLC have the same goal of renewing their skills to improve the learning of their students. In their collaborative approach, there is communication—sharing of ideas and experiences from their teaching activities or practices. Through communication teachers develop better understanding of themselves, their responsibilities, jobs, and build strong bond of trust between and among themselves.

To Dewey (1944), any social life calls for teaching and learning which should be on a permanent basis. Living together is a form of education, "[…as it] enlarges and enlightens experience, it stimulates and enriches imagination; it creates responsibility for accuracy, vividness of statement of thought" (p.6). Dewey notes that living alone—both mentally and physically—affects the individual because it does not help him/her "to reflect upon his past experiences to extract its net meaning" (p.6).

Furthermore, to Dewey, education is seen as a process through which to foster, nurture, and cultivate. As human beings, our activities are associated with others, and what we can do depends on what society expects, their demands, what they approve of, and their condemnations. As human beings and being connected with others, we find it impossible to achieve anything

without taking into consideration the activities or work of others (Dewey, 1944). This philosophy aligns well with the concept of PLC in the sense that it is a process and teachers learn to foster peaceful collaboration, nurture their knowledge and skills through collaboration, and cultivate positive attitudes toward each other and their work.  In PLCs, there is interconnectedness and the ultimate aim is the promotion of students learning outcomes.

In a similar vein, Oliver (1976) in his book, Education and Community: A Radical Critique of Innovative Schooling, describes how these three concepts—education, community, and quality of life are linked and related. He criticizes the limitation of the "two context life, that is, a life spent mainly in the nuclear family and the corporate organization" (p.14). Oliver suggests building of a third context, "a transfamily community-orientated context, concerned less with the promotion of individual growth and more with improving the quality of collective primary group life" (p.14). Although Oliver is suggesting ways various professionals in the education sector—especially, educators can orient their lives in such a way that they do not separate themselves from the common people. This idea relates well with the concept of PLC where individual growth is de-emphasized for collective growth of all teachers. Then, what makes collective growth the cornerstone of PLCs or working collaboratively?

**Defining democracy.** A growing body of study nationally and internationally describes the need to give democracy an important place in education (Mncube & Mofana, 2013). While democracy has been defined differently by many authors, Mncube and Mofana (2013) define democracy as constituting five basic tenets: "(1) Representation, in terms of which individuals are represented on issues affecting their lives or the lives of their children; (2) Participation, in terms of the involvement of individuals in the decision-making process; (3) Rights, comprising a set of entitlements which are protected and common to all individuals; (4) Equity, pertaining to

the fair and equal treatment of individuals and groups, and (5) Informed choice, with tools being provided for decision-making which is based on the provision of relevant information and the application of sound reasoning" (pp.14-15).

On the other hand, Dewey (1944) states that "democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience" (p.87). Biesta (2006) views Dewey's definition as a social concept of democracy, and notes that democracy does not only hinge on making decisions collectively in the political arena, but also involves taking part in the "construction, maintenance and transformation of social and political life more generally" (Quoted Berntein, 2000, p.xxi). In other words, in this social conception of democracy, to Biesta (2006), democracy has to do with inclusive aspects of social as well as political actions.

Mncube and Mofana (2013) contend that two major arguments clearly demonstrate that schools that are democratic are also viewed as effective schools. First, paying attention to the words of parents, motivating them to take part in the activities of the school, and entrusting them with power, authority, and responsibility are the best ways to foster and improve the effectiveness of the school. The authors highlight that a school with an effective culture involves the basic principles and values of democracy which include "tolerating and respecting others, participating and expressing views, sharing and disseminating knowledge, valuing equity and equality and the opportunity for students to make judgments and choices" (p.15).

The second argument deals with the main aims of education. Mncube and Mofana (2013) mention that if the goal of education is to develop citizens who are democratic and a democratic society—then it should be planned and managed in such a way that it could work effectively to realize the needed results.

For Mncube and Mofana (2013), that democracy hinges on some conditions, which can also be considered as the basis of living a democratic life. Some of the conditions include: "(1) the open flow of ideas, regardless of their popularity; (2) the use of critical reflection and analysis to evaluate ideas, problems and policies; (3) concern for the welfare of others and the common good; an understanding that democracy is an idealized set of values that must be lived and guide the life of people; (4) the organization of social institutions to promote and extend the democratic way of life" (p.15). While these conditions provide the basis for democratic living, How are they available and practiced in the school environment?

*PLCs as social spaces for democracy.* Jenlink and Jenlink (2008) employ two terms to describe how schools could be transformed into democratic learning communities —"'social space' and 'spatial practice' where social relationships and actions of individuals" take place (p.312). The authors explain that social space goes beyond just the occurring of social interaction, but it should rather be comprehended as established via "interaction with the social" (p.313). As such, to create learning communities that are democratic, the school is recognized "as a place that shapes and is shaped by space and social practices—spatialized practices" (p.313).

In explaining the differences between "place" and "space," Jenlink and Jenlink (2008) note that "space is a practiced place" (p.313). Therefore, the space located in the school building could be changed into a place of practice by the activities of teaching and learning. Indeed, considering the school as a social space, the activities and actions of teachers and other members of staff mold the school and classrooms within them.

Jenlink and Jenlink (2008) hold the notion that having better understanding of the school as a social space is useful when ascertaining its challenges to make current practices more

democratic. The authors pose a number of questions in their attempt to explore the view of social space and spatial practice within schools for democratic learning communities for teachers: "What is the nature of social space? What does it mean for learning communities to be practiced places? What is necessary and who is responsible for transforming the social space of contemporary schools into practiced places of democratic learning?" (p.312).

First, drawing on Mncube and Mofana's (2013) democratic principle of participation of individuals in making decisions, and PLCs' attribute of shared and supportive leadership, school administrators/principals share power, authority, decision-making, promoting, and nurturing leadership with teachers (Hipp et al., 2008). This attribute conforms to Dewey's (1944) and Biesta's (2006) democratic ideals. Biesta states that democracy relies on collective decision making of the group. As teachers deliberate on their teaching practices to arrive at collective decision to improve the learning of students, this demonstrates democracy in their groups.

Second, Dewey (1916/1944) states that men come together based on different ways and reasons. He notes that any education that any group bequeaths to its members tries "to socialize the members, but the quality and the value of the socialization depends upon the habits and aims of the group" (p.83). Similarly, Jenlink and Jenlink (2008) state that a space or place can be made democratic to some extent by having a common purpose. Dewey (1916/1944) notes, "men live in a community by virtue of the things which they have in common; and communication is the way in which they come to possess things in common" (p. 4). Jenlink and Jenlink contend that if a community is considered democratic, and democracy is viewed as communal, then community denotes a place where democracy is practiced. When schools demonstrate democratic principles through activities such as living in community, communicating, having common purpose, aims, beliefs, aspirations, and knowledge as described by Dewey, then "the

school becomes a democratically practiced place, made so by people's spatial practices. Schools, as transformed democratic spaces of learning, are made so through democratic discourses and practices" (Jenlink & Jenlink, 2008, p.313).

Third, in any social group, members have shared and common interests with some kind of interaction and cooperation. Dewey goes further to pose some questions: (a) how numerous and varied are the interests which are consciously shared? (b) How full and free is the interplay with other forms of association? This idea by Dewey is not different from the concept of PLCs, as there are shared values and vision (i, e., shared mission, focus, and goals). Based on the questions, there are numerous and varied interests that members in PLCs share. And for a group to have common values, Dewey (1916/1944) reiterates, "all the members must have an equable opportunity to receive and to take from others. There must be a large variety of shared undertakings and experiences" (p. 84). And this is common practice in PLCs as teachers share information and experiences from their classrooms through cooperation and interaction with one another.

Fourth, Jenlink and Jenlink (2008) emphasize that democratic teacher leaning community is shown when teachers "openly share, observe, and discuss each other's teaching, methods, and philosophies" (p.312). In this sense, as teachers continue to explore and discuss various approaches to traditional teaching practices as well as developing democratic teaching practices, there is promotion of working, teaming, and learning collaboratively. The authors reiterate that the study groups of teachers and teams of action research provide typical instances of spaces where teachers get the opportunities to work collaboratively and carefully to review common concerns. Spending money, time, and energy into the practice of inquiry, according to Jenlink and Jenlink form the "heart of a democratic community" (p.312). As teachers engage in inquiry,

their practice is made available to the public space in their attempt to find solutions to problems through discussions with their colleagues. Teachers' engagement such as planning the curriculum, program assessment, and meeting in their book clubs and study groups as platforms to deliberate build a community in the social space.

Fifth, Dewey's (1927) idea of democracy is in harmony with community (Jenlink & Jenlink, 2008). Dewey views democracy to be consisting of "having a responsible share according to capacity in forming and directing the activities of the groups to which one belongs and in participating according to need in the values which the groups sustain" (p.147). Members in a community do everything in their power to build the community, share the responsibility of ensuring that the community grows and develops (Jenlink & Jenlink, 2008). Equating democracy with community, Dewey sees them as a combination of activities which serve as benefit to all people who take part in it. "Community, like democracy, demands constant adjustment of individuals to each other, and of social institutions and arrangements to continuing efforts to be inclusive of the interests of all" (Jenlink & Jenlink, 2008, p.313). On the part of the community to display democratic tenets, there is liberation of power of the individuals, thus establishing a vibrant community of learners with a common goal.

Sixth, on the part of Dewey (1927), the process of allowing people to discuss their individual as well as group desires, their needs and the next line of actions provide them with the opportunity to uncover their shared interests based on the results of their actions (Jenlink & Jenlink, 2008). To the authors, this process of discussing, deliberating, and communicating common goals of the group form democratic public.

Seventh, what makes a learning community a place for practiced democracy is based on characteristics such as engaging in discussion on shared common goals and the sharing of

resources in the community (Jenlink & Jenlink, 2008). The authors citing Wenger (1998) note that these resources are made of "routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions, or concepts that community has produced or adopted in the course of its existence, and which have become part of its practice" (Wenger, 1998, p.83).

Eight, in relating learning communities that are democratic to communities of practice, Jenlink and Jenlink (2008) citing Lava and Wenger (1991) mention that they present sophisticated as well as constant changes with a deposit "of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice" ( p.98). Jenlink and Jenlink argue that for a school to be transformed into a democratic learning community, there is the utmost need to clearly and openly respect and uphold individuals' diversity, dialogue in all forms of social interactions, the norms of making decisions, the nature of conflict and it importance, and total participation in the activities of the community. Learning communities that practice democracy need to have or develop full understanding of the process in which knowledge features prominently "into the social and historical nature of the community and also, how knowledge plays into the individual and collective learning" (Jenlink & Jenlink, 2008, p.314). The authors argue that learning communities that are democratic exhibit the characteristics of knowledge creation instead of holding the assumption that others are the only capable people to produce all knowledge, and conflict and controversy form an integral part in the process of learning (Jenlink & Jenlink, 2008).

Ninth, equally important in any democratic community is the provision of time for the ideas of people to be heard (Jenlink & Jenlink, 2008). This aligns with Mncube and Mofara's (2013) democratic condition of free flow of ideas irrespective of their popularity. In learning communities, the space provided for the ideas and voice of teachers to be heard as well as

engaging in dialogue depict democratic ideals. This kind of dialogue should be inclusive and highly respectful of the voice of every teacher.  Not only respecting the voice of individual teacher, but also allowing free flow of ideas, demonstrates strong concern for the rights and dignity of individual teachers, and the well-being of other teachers that help in achieving the common good of the community (Jenlink & Jenlink, 2008). To Dewey (1916), an interest in common good is the ultimate duty of every person in a democratic community.

Tenth, as the social space of the school is being democratized, there is also the need for space where teachers "can act and speak on their own behalf," and actively participate in decisions that influence learning (Jenlink & Jenlink, 2008, p.316).  It is also essential in an effort to democratize the social space of schools as teachers form learning communities, there is engagement "in discursive and inquiry-oriented practices concerned with generating new knowledge while critically examining existing knowledge in relation to existing social practices" (Jenlink & Jenlink, 2008, p.316).

Eleventh, in learning communities, spaces made available for dialogue, inquiry, and taking part in activities are put in place purposely for the learning of the individual as well as the collective learning of the group. These spaces enable teachers to meet and critically scrutinize both practical and experiential knowledge concerning teaching and learning, and thus build new understanding with respect to their practice. As such, learning communities that are democratic help teachers to link both their professional as well as practical knowledge with their practice (Jenlink & Jenlink, 2008).

Twelfth, Jenlink and Jenlink (2008) point out that communication is critical in any learning community that demonstrate democratic ideals. Typical examples where spaces are provided for democratic dialogue are public forums that are organized for the whole school to

look at the needs of teachers, the processes of critical study, taking active part in democratic governance, and sharing values and beliefs.

Based on the discussion thus far, PLCs demonstrate democratic principles such as sharing and collective decision making, respecting the rights of teachers, communication between and among teachers, and hearing the voice of teachers, among others. This democratic and social concept of education should be encouraged in any educational system around the globe that purports to build a better society.

**Interpretation**

It is apparent from my study that countries, states, and school districts had and continue to scramble to implement PLCs because of the marked benefits for teacher learning and improvement in student learning outcomes (Sims & Penny, 2015; Bryk, Camburn, & Louis, 1997). From the study, it is evident that schools that had been organized as learning communities support higher commitment on the part of teachers and greater engagement of students in the work of the school (Bryk et al., 1997). It is also obvious from the study that improved teacher professionalism is sine qua non for "academic [success] for all students" (Bryk et al., 1997, p.4). To Bryk and colleagues, certain factors such as structural, human, and social exert an influence on the development and the promotion of PLCs as viable and productive functioning organization in schools.

PLCs are based on the concept of community. Dewey (1916) viewed community as living together in a social environment. Bellah and colleagues (1985) define community as "a group of people who are socially interdependent, who participate together in discussion and decision making, and who share certain practices that both define the community and are nurtured by it" (p.333, cited in Grossman, Wineburg, & Woolworth, 2001). To Dewey, people

live in a community based on things which they commonly share. Grossman and colleagues (2001) see a strong connection between community and the good life where people work collaboratively for their benefits which are supported with respect. The authors referring to Ferdinand Toennies (1887/1963), a German Sociologist who employed the term gemeinschaft (community) as distinguished from gesellschaft (society) after observing that people develop connections which are stronger in community than in the society at large. The authors note that community is characterized by "loyal relationships and stable social structure" (p.6). In this community, there is sincere social interaction which give individuals a broader sense which goes far and beyond the self with regard to "'me' and 'I' into the 'we' and 'us'" (p.7). Strong social bonds, commitment, shared values, and common understanding (Grossman, Wineburg, & Woolworth, 2001) develop among members in the community to help them realize their goals. In this community, members build "social networks, norms, and levels of trust" that enable them to collaborate for their common benefit (p.7).

Servage (2008) also adds that communities that are established in schools are equally compared to the closeness of a family or even a small village. There is good understanding among people in a community or family. And one undergirding principle of living in a community is common understanding. Dewey (1916/1944) states, "The communication which ensures participation in a common understanding is one which secures similar emotional and intellectual dispositions—like ways of responding to expectations and requirements" (p.4). Thus, PLC or teacher collaboration instills in teachers the feelings of community, with the ultimate goal of collectively enhancing the learning of students (Servage, 2008) through understanding. With common understanding, teachers analyze and clarify and take action on common norms and values in their schools. The question is, how could a learning community be

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created without a common understanding? And it is possible some schools have not been able to establish a learning community because of lack of understanding. Community reduces isolation.

Again, shared or distributed leadership makes PLCs effective as a comprehensive school reform. Spillage and Diamond (2007) define leadership in this way:

Leadership refers to activities tied to the core work of the organization that are designed by organizational members to influence the motivation, knowledge, affect, or practices of other organizational members or that are understood by organizational members as intended to influence their motivation, knowledge, affect, or practices" (p.4).

The authors are noting that leaders play significant roles in motivating other workers under their supervision to give off their best to enhance the organization.

In their concept of distributed leadership, Spillage and Diamond (2007) argue that the distributed perspective recognizes that leading and managing schools as work involves many people. In describing the distributed perspective in terms of practice, the authors note that this is framed "as a product of the interactions of school leaders, followers, and aspect of their situation" (p.7).

Richmond and Manokore (2010) in their social capital perspective of distributed leadership note that social capital is concerned with human relationships between and among people in a team or group which build "trust, collaboration, and a sense of obligation" (p.546). They note that the way in which these categories connect and depend on each other demonstrate the critical need for strong commitment from all parties.

The distributed leadership perspective indicates that there should be support from principals in schools. That is, leadership should not rest solely in the hands of the head teacher/principal or other leaders found in schools, due to increased calls, a lot of

responsibilities, as well as expertise that are being made to assist teachers in current schools are very important (DeMatthews, 2014). Different types of leadership help in building effective PLCs and the opportunities accorded to teacher leadership promote significant transformations of professional as well as collaborative learning. Principals share leadership roles and responsibilities with teachers. Thus, principals and teachers work collaboratively to investigate, participate in leadership, and share both their knowledge and expertise to promote the capabilities of their PLCs to provide the needs of all students' (DeMatthew, 2014). The distributed leadership assists principals, teachers, and other members of staff to elucidate the different roles that they assume, their activities, leadership, and actions contribute significantly to their learning and that of their students.

Engaging collectively in the knowledge and expertise of teachers and other staff members as leaders in the school community, speeds up the process of change instead of relying solely on the efforts of an isolated individual (DeMatthews, 2014). This creates the opportunities and conditions for mutual learning to occur. The distributed leadership enables PLCs to succeed because teachers work together in designing the major elements that enable learning communities to function effectively. To DeMatthews, the employment of shared leadership by principals in PLCs ensures that teachers overcome "fears, emotions, and trust issues," enabling them to succeed (p.184).

Servage (2008) citing Sullivan and Glanz (2006) notes how PLCs build distributed leadership to ensure their success in these words: "[I]ndividual strengths of all educators are identified, valued and nurtured" (p.46). For instance, in presenting evidence to point out how distributed leadership works in a PLC, Cormier and Olivier (2009) citing Leithwwood and Mascall (2008) did a study comprising 90 schools—both elementary and secondary schools in 45

districts across nine states. The study reported that shared leadership revealed important difference in the academic achievement of students. "The differences were most significant in relation to the leadership exercised by school teams" (p.28). Likewise, Printy (2008) conducted a longitudinal study and reported that efforts on collective leadership with respect to intervention within content departments was statistically higher in impacting the learning outcomes of students than intervention in subject areas alone.

Again, generally, PLCs work in improving teachers' practice and students' learning because they embody democratic principles as their foundation. Servage (2008) highlights this further by arguing that two principles are promoted in the PLC literature—"democratic schools, and schools as Geimenschaft or relationally-bound communities" (p.64). Democracy is at play in PLCs through the constant employment of shared leadership, collective decision making, and stress on dialogue (Servage)

Dewey (1916) also holds the view that space should be created in society—especially, in school, to prepare citizens who are democratic (Jenlink & Jenlink, 2008). Dewey suggests that people who take part in this "space" or democracy need to be mindful of their own action toward other members, and also consider other members' action in informing their own action (Jenlink & Jenlink, 2008).  In PLCs, teachers' develop the necessary democratic norms, values, skills, and attitudes by trusting one another, accepting the views of other teachers in their deliberations, understanding different perspectives of teachers, taking part in creative debates and dialogues and reflecting on them, and, in a productive manner, work as individuals as well as a group. Jenlink and Jenlink contend that the participation of teachers, principals, and other members of staff in conjoined professional development that is inquiry-based, results in collaborative

teaming, shared governance, and the chance to practice democracy in their PLCs. The democratic values help principals, teachers, and schools to accomplish their goals together.

In addition, the emphasis on dialogue (communication) enables PLCs to work. Communicating effectively between principals and teachers is considered very valuable in achieving the vision and mission of schools (Cormier & Olivier, 2009), not only communicating between principals and teachers, but also between the schools and parents. Dewey (1916/1944) views education as form of communication, noting that society can only continue to exist by transmission and communication. Dewey emphasizes that people live in a community as a result of things that they share in common, and "communication is the way in which they come to possess things in common" (p.4).

Through effective communication in their learning communities about the vision and mission of the school, study of the curriculum, teaching practices, achievement data of students, lessons and assessment tools, new teaching strategies, and with understanding, teachers' learn the values such as love, justice, goodness, wisdom, and responsibility to be dedicated to the goals of the schools (Servage, 2008). Cormier and Olivier (2008) note that effective communication between principals and teachers in PLCs is very important. The authors citing Slater (2008) in a qualitative study, mention that there was strong consensus among stakeholders—principals, teachers, and parents that clearly laying out the improvement plan of the school through communication made significant contribution to the achievement of students, teachers professional growth, and development of strong working relationships between the school and home. Clearly articulating the roles and responsibilities of all members help to develop in them ownership and involvement. Paving the way for all members to participate in discussion lead to the harnessing of untapped talents to increase capacity (Cormier & Olivier, 2008).

Furthermore, PLCs have been accepted as the best approach to teacher learning because they honor the voices of teachers. Applying Mncube and Mafora's (2013) principles of defining democracy— (1) representation—where teachers are involved in issues that are impacting their practice and that of their students; (2) participation—where individual teachers take active part in deliberations and final decision-making process in PLCs;  and (3) equity—where individual teachers receive equal and fair treatment in their groups.  In PLCs, ideas are openly shared, regardless of their popularity (Mncube & Mafora, 2013). Jenlink and Jenlink (2008) have emphasized the importance of teachers having joint voices. They note that when teachers' speak with one voice, it paves the way to transform schools into places where democracy is practiced. Teachers feel more comfortable discussing personal aspects of their lives as well as their vulnerabilities. Morrisey (2000) contends that in PLCs that tend to support  teachers' continuous learning, with discussion and decisions focusing on enhancing student learning outcomes, "school staff value and appreciate their direct involvement in increasing student learning and improving their school" (p.24). With the voices of teachers heard in their communities, the feeling is that their views and opinions are respected and valued, and thus create the opportunity for them to be more innovative and effective in their teaching (Ivy, Kritsonis, Herrington, & Tanner, 2008). The involvement of teachers in decision making on issues affecting them and their students, and having a comprehensive understanding of their role in the community, teachers tend to be well motivated which in turn influences the achievement of their students positively (Leu & Prince-Rom, n.d).

More so, teacher empowerment tends to make PLCs work effectively. Terry (n.d) notes that empowerment is synonymous with shared decision-making, and is quite essential in reforming schools. Terry citing McKenzie (1989), defines empowerment as, "to allowing

classroom teachers to participate more directly in their schools' decision making" (p.1).

According to Murray (2010) "Empowerment is the process through which teachers become

capable of engaging in, sharing control of, and influencing events and institutions that affect their

lives" (p.3). For Terry (n.d) empowering teachers means that school administrators give teachers

the power to make decisions which in the traditional systems would have been made for them,

providing time and place for them to work collaboratively during school period, and giving them

the necessary voice in an attempt to increase their knowledge and enhance their teaching.  To

Terry, the school principal is responsible for putting in place the structures and time to develop

leaders by empowering teachers and students in the school.

Research indicates that in schools whose principals' rule with total control, there is

absolute jeopardy to that system of education (Terry, n.d). However, the literature on school

improvement notes that leaders who are effective exercise power indirectly and have a strong

impact on the capacity of schools to enhance the achievement of students (Muijs & Harris,

2003). Teachers are empowered as they engage in initiatives, activities and risk taking, and

embracing leadership responsibilities, their confident is developed as professionals (Louis et al,

1995; Cormier & Olivier, 2008). Ivy and colleagues (2008) posit that teachers who were

members of PLCs stated that they were more energized and felt more empowered. Their

empowerment evolved from the notion that their opinions were respected "and the rich teaching

experience allows them to be creative and much more effective" (p.4). Most of the time teachers

revealed that they were challenged with higher sense of accomplishment which was related to

improving the achievement of students.

Louis and colleagues (1995) emphasize the importance of teacher empowerment which

makes PLCs function by noting that empowering teachers leads to effective teaching and

learning because teachers have authority with respect to both curriculum and school organization. Murry (2010) also points out that teacher empowerment develops leadership skills. With the discussion thus far on PLCs and the demonstration of democratic ideals, how might these impacts positively or negatively on teacher professional development in Ghana?

**Potentials of PLC for Ghana**

While the implementation of the PLC model in Ghana faces enormous challenges looking at the educational structure and cultural issues, it would be appropriate to make a serious attempt. It has the potential of transforming the educational system and making professional development accessible to all teachers to improve their practices. However, we see that in a culture with a strong tradition of centralized authority, the professional learning community reform would face a serious challenge from those in authority -whose influence would inexorably decrease as PLCs grew in effectiveness.

Currently I find no real community of teachers in Ghana. Teachers in K-12 continue to struggle and teach alone in their classrooms without any support. Teaching continues to follow the traditional approach—individualistic, private, and isolated (Hargreaves, 2000). This suggests that there are no discussions, dialogue, and deliberations between and among teachers with respect to sharing of ideas, practice, and pedagogy. Also, professional development for teachers relies on the cluster-based or the cascade model where few teachers attend one or two days workshop and are supposed to tell other teachers who were not able to attend what they learned (GES, 2012). But studies suggest that most of the time these teachers do not tell other teachers what they learned (Leu, 2004). The question that follows is, what type of professional development could help all teachers to attend and learn together instead of some one person attending and telling others? And furthermore, does the telling of others improve their practice

all?  Teacher collaboration seems to be the viable option where teachers in schools resolve to come together to learn with the sole purpose of enhancing the learning of their students. Here, the social organization theory could be used to explain how living in a community works. Mancini and Bowen (in press) define social organization as "how people in a community interrelate, cooperate, and provide mutual support; it includes social support, norms, and social controls that regulate behavior, interaction patterns, and networks that operate in a community" (p.2).  The authors emphasize that social organization helps build the capacity of the community through sharing responsibility and the group competency form the major processes in helping communities to provide the needed support for their members. Drawing on the theory, forming a community or teacher collaboration for Ghanaian teachers might help teachers to learn together and tap the full benefits of this approach. For instance, Senge (1990) articulates some of the benefits by stressing that when people learn together, they produce extraordinary outcomes, as well as individuals maturing very fast in the group.

Senge's (1990) five disciplines of learning organizations—specifically, team learning—indicates that the intelligence of a group far outweighs that of the individual, and thus the learning of all the people in an organization together ensures greater outcomes based on their mission and visions. Team learning rests on the notion of dialogue, interaction, and discussion for members to learn to realize their shared goals (Thompson et al., 2004; Senge et al., 2000; Curry, 2010). A growing body of research points to a positive relationship between teachers' practice and students' achievement in schools that have been organized as PLCs (Cherkowski, 2012).  Buffum, Mattos, and Weber, (2009) confirm that there is an "overwhelming evidence and professional consensus on the effectiveness of PLCs, it is unconscionable for educators to disregard these facts and continue to implement ineffective, outdated teaching practices" (p.49).

The authors seem to suggest that every school should implement PLCs based on their effectiveness. And this supports the need for PLCs to be introduced in Ghana since they have the potential of bringing teachers in Ghana together to learn to improve their practice and enhance the learning outcomes of their students.

Also, teachers are not learning enough as expected after pre-service education in Ghana. Acheampong (2003), MOE (1995), Kadingdi (2006), GES (2012), and VSO Ghana (2013) have pointed out that there is limited organization of in-service training/PD for teachers. Not only is PD inadequate, but also irregular.  It is organized on ad hoc basis; and is not available to all teachers, especially, the untrained (VSO Ghana, 2013). Considering the different types of teachers in the Ghanaian educational system—trained and untrained, and the different routes in which they are trained calls for regular professional development for them. Professional Development is ongoing and regular (McLaughlin & Talbert, 2006), and not organized on ad hoc basis during reform period for teachers.

So Leu and Prince-Rom (n.d) argue that teacher professional development should be organized to promote the development of the necessary knowledge, facts, information, skills, and attitudes required for basic teaching, emphasize that it would be difficult for pre-service education alone to develop these skills. The authors' reiterate that teacher education and receipt of teaching certificate must not end after pre-service training, as seems to indicate in Ghana, but rather "must constitute life-long learning through continued learning and socialization, supervised internships and continuing education requirements as the primary vehicles for developing effective learner-centered approaches to teaching" (p.11).

Fredricksson (2004) also contends that pre-service teacher education alone cannot be classified as teacher education, but also having access to in-service training and PD as teachers

continue to practice in order to be up-dated in new developments and findings in their subject areas, as well as continuously getting the needed support to improve their teaching methods is crucial. Fredricksson notes that there is expansion of human knowledge, facts keep on changing, and the likelihood of the teacher getting stuck with old information and repeating the same information in his/her teaching every year is high. The consequence of this is quite glaring—it has negative effects on student learning outcomes and poor teaching quality. To the author, it is therefore important for teachers to be given the needed support and opportunities to look for new methods of teaching (Fredricksson, 2004).

With limited professional development for teachers in Ghana, it is therefore essential to look for PD that can be accessible and organized regularly for all teachers to enhance their teaching. And PLC seems to be the best option. For Cherkowski (2012) notes that sustainable learning communities promote continuous learning which can advance deep learning where teachers work together to develop a school culture which is hinged on "shared beliefs, values, vision, and professional practice" (p.60). It is also characterized by strong collaboration as well as respect for each other. Ghanaian teachers could meet regularly to discuss issues relating to curriculum planning and implementation, teaching practice and pedagogy, developing lessons and assessment tools together, analyzing the achievement data of students together, and implement new instructional strategies (Servage, 2008).

Again, there is lack of teacher empowerment in Ghana. Policies are formulated by the central government—a top to down approach, and so teachers have little or no control at all with respect to policies. They only follow or implement what comes from the Ministry of Education/Ghana Education Service through the regional education office to the district office. Teachers have no control at all over their professional development needs with regard to

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initiating their own at the school level. Even teachers are sidelined on issues relating to curriculum planning and development. What makes the situation even worse is that at the school level, teachers are not included in decision-making by head teachers. The structure of the school system tends to give absolute powers to head teachers and so seem to handle schools as their bona fide property. They perform all roles—managerial, curriculum and instructional, and financial. They therefore dictate everything in their schools. Most, if not all head teachers in Ghana seem to practice autocratic leadership style.

To Lunenburg and Lunenburg (2013) such a situation creates a toxic culture in schools where there is division between and among teachers with no confidence or hope. The goal of providing the needs of students is lost and the norms in the schools are negative talks and criticism. The introduction of the PLC reforms has the potential to reduce this state of affairs and recognizes teacher empowerment. Head teachers could empower teachers by sharing power with them. For creating and sustaining PLCs mostly depend on the leadership of principals, although they are not the sole responsibility of principals, but rather the working together of all teachers. With such environment created, head teachers in Ghana could ensure that their efforts are realized and sustained.

They could create a culture where PLCs would flourish, making sure that there are conditions that build high levels of trust and respect, ensuring teacher empowerment by sharing leadership, creating effective and vibrant communication avenues for the flow of information and feedback, putting in place initiatives with regard to rewards and incentives, and creating a conducive and enabling environment which supports and cares for every member in the community (Cherkowski, 2012).

Lunenburg and Lunenberg (2013) citing Tracy (1990, 2001) notes that giving power to others "operates under the same principle as love: The more you give others, the more you receive in return" (p.196). Headmasters could reduce the power they wield for success if they allow teachers "they supervise achieve their own sense of power and success" (p.4).

Through PLCs head teachers in Ghana could share both responsibilities and power with teachers and this could help them to retain as well as improve their control of schools and further influence (Lunenburg & Lunenberg, 2013). The authors citing Tracy (1990) had recommended ten tenets of empowerment, which include: (1) Tell people what their responsibilities are, (2) give them authority equal to the responsibilities assigned them, (3) set standards of excellence, (4) provide them with the needed training, (5) give them knowledge and information, (6) provide them with feedback on their performance, (7) recognize them for their achievements, (8) trust them, (9) give them permission to fail, (10) treat them with dignity and respect (p.201).

In addition, the school structure (top-down approach), absence of community, and lack of teacher empowerment, all point to absence of democracy in Ghanaian educational system or schools. This suggests the impossibility of the voices of teachers to be heard, participate in the affairs of the schools and decision-making processes. However, the PLC concept espouses on democratic ideals. Therefore, the adoption of the PLC model in Ghana could inject democratic ideals in the educational system. PLCs' members function as a community, which Dewey considers as a form of education and democracy. Head teachers could share leadership by delegating part of their power and work to teachers, which empower them to build their confidence and self-esteem to give off their best to meet the needs of the school—vision and mission. Also, the sharing of ideas and practices by teachers in PLCs through discussion further strengthens democratic ideals where no one imposes his/her will and ideas on others, but through

sharing, critically reflecting, analyzing, and evaluating what is being discussed. Through participation in the discussion, they make collective decisions. This has long-term beneficial implications in the wider Ghanaian society as well.

Teachers de-privatize their practice by making it public so that each can visit other's class to observe and make suggestions which are accepted in good faith to improve practice. There is development of respect and trust. This is quite critical in any community or democratic society for the respect of the views and opinions of every member, especially, minority views. Without this, it is difficult for any learning community to succeed or achieve its goals. Grossman and colleagues (2001) note that taking part in a true learning community is associated with courtesy, good manners, or what they characterized as "the etiquette of democracy," in which every member is cautious concerning the ways they register disagreement, differences in opinion and how they reach and an agreement or compromise. The state of winning an argument in discussion is never at stake in PLCs (Grossman et al., 2001).

**Personal Reflection**

The opportunity to examine teacher professional development in the U.S, specifically has really opened my eyes to the critical role of teacher learning after pre-service education. I never thought of it to be so crucial in developing effective teachers. Throughout my pre-service training and nine years teaching experience in Ghana, it seemed professional development was not stressed. In fact, I never participated in any professional development in my teaching career. In Ghana, on paper at least, there are professional development programs, but in reality they do not exist, or if at all, are minimal.

What is improving in Ghana is in-service training with respect to teachers pursuing further studies. The teacher training universities—(University of Cape Coast and University of

Education-Winneba), have mounted various programs to train new teachers as well as those untrained. The question then is, after this training, is that all that teachers need to practice throughout their careers? If this is the case, then, the consequence is teachers repeating the same information year after year with no update on their knowledge, current methods and practice of teaching and learning. The biggest losers of this condition are students. It is apparent to me that teaching is a case of lifelong learning; and pre-service education alone does not prepare effective teachers with all the requisite knowledge and skills to increase the academic achievement of students.

Also, from the study, I see that having a common vision and mission for schools propel schools to be successful. Principals, teachers, and other staff members work toward that course. This was fascinating to me. For the three schools I taught, there was nothing like collective purpose. Even if we were not in a community, there were to be at least, a common goal for all to follow. Although, we were aware of the purpose of schools—helping our students to learn—we were not aware of an emphasis on that. Without a common purpose, what would be the direction of the school? And working individually without collaboration, I believe, cannot help achieve the broader goal of assisting all students' to learn. For instance, in the high school where I taught, I remember we used to have one staff meeting at the beginning of the semester and that was all for the whole year. During the meetings, the headmaster just read the performance of the final year students' on the West African Senior Secondary Certificate Examinations (WASSCE). He outlined the results based on different subjects and the general performance and that ended everything. We had no opportunity to comment and engage in any analysis. Similar situations occurred in the elementary schools where no analyses were done on the performance of students' on terminal examinations. With shared vision and mission, I believe, we could have been more

committed and worked harder toward the quality learning of our students. The collective vision

from PLCs has really educated me on how schools should have common goals and work towards

them. To Goddard and Goddard (2007), as teachers continue to work together, "the more they

are able to converse knowledgably about theories, methods, and processes of teaching and

learning, [the more they] improve their instruction" (p.879)

Another interesting development to me in the study was distributed leadership. I knew it

was the responsibility of the school principal to take the lead in many aspects of the school

concerning instructional and managerial roles. Nonetheless, it never occurred to me that leading

alone had such significant consequences for teaching and learning. The principals' leadership

determines the types of schools and culture created—good or bad. Principals have great

influence on the academic achievement of students. From the study, successful schools have

principals who share leadership with teachers. Distributing power to other teachers or experts

helps in the smooth administration. Teachers, in turn feel they are part of the system, and thus are

highly motivated to do everything to make the school succeed.

However, I had totally different experiences in the schools I taught. Head teachers never

shared power with other teachers. They only issued out instructions to teachers. Teachers did not

take part in the decision-making of the schools. This created a toxic environment where teachers

engaged in serious criticisms and negative comments concerning how the schools were being

run. Teachers were agitated and angry. Some teachers, at the high school even, decided to leave

campus after teaching their classes for the day. This study has revealed to me that such

conditions were not the best for teachers to contribute meaningfully and positively to the success

of the schools. Rather, sharing leadership with teachers and involving them in the day-to-day

administration and decision-making of the schools would have created a culture that promotes effective teaching and quality students' learning.

With this information, it is my sincere hope to delegate power and involve all members in any institution I were to find myself in a leadership position. I would hope to create a positive work culture that advances the vision and mission of that organization. I would also advise friends and others in leadership positions to try and distribute leadership.

In a nutshell, PLCs, if well implemented promote sustainable transformation in the culture of schools. To make good use of this information, it is my wish to disseminate such information to the government agencies, policymakers, educators, and colleges and universities of education in Ghana in particular, and Africa in general through publications highlighting the strengths and weaknesses of PLCs. To Teague and Anfara (2012) schools that have been considered successful embraced these common features: "supportive working conditions, shared values and goals, collaboration among teachers and administrators, and a focus on student learning" (p.59). I also hope to work with the Ministry of Education (MOE) and the Ghana Education Service (GES) to organize professional development courses/programs for teachers at the local, district, regional, and national levels for teachers in Ghana stressing on the need for teacher collaboration.

# REFERENCES

Acheampong, K. (2003). *Teacher training in Ghana- Does it count? Multi-site teacher education research project (MUSTER)*. Retrieved from ageconsearch.umn.edu/bitstream/12867/1/es030496.pdf

Anamuah-Mensah, J. (2002). *Keynote address on the 50th anniversary celebration of the Jasikan training college*. Ho: Ghana.

Anamuah-Mensah, J., & Wolfenden, F. (n.d). *TESSA OER: A sustainable approach to teacher education in sub-saharan Africa*. Retrieved from gc.aau.org/papers/jophus_anamuah_mensah_full20.pd

Asare-Danso, S. (2014). Effects of educational policies on teacher education in Ghana: A historical study of the Presbyterian College of Education. *International Journal of Humanities and Social Science, 4* (6), 57-65.

Asare, K. B. & Nti, S. K. (2014). Teacher education in Ghana: A contemporary synopsis and matters arising. *SAGE Open,* 1–8. DOI: 10.1177/2158244014529781.

Asgedom, A., Desta, D., Dufera, D., and Leka, W. (2006). *Ethiopia pilot study of teacher quality in education, teaching, and learning: Perceptions and Practice*. Retrieved from www.equip123.net/docs/E1-EthiopiaPilotStudy.pdf

Annenberg Institute (2004). *Professional learning communities: Professional development strategies that improve instruction*. Retrieved from http://annenberginstitute.org/pdf/proflearning.pdf

Astuto,T.A., Clark, D.L., Read, A. M., McGree, K. & Fernandez, L. K.P. (1993). *Challenges to Dominant assumptions controlling educational reform*. Andover, MA: Regional Laboratory for the Educational Improvement of the Northeast and Islands.

Ball, D. L., and Cohen, D. K. (1999). Developing practice, developing practioners: Toward a

    practice-based theory of professional education. In L. Darling-Hammond and G. Sykes

    (Eds.), *Teaching as the learning profession: Handbook of policy and practice*. San

    Francisco: Jossey-Bass.

 Barth, R. S. (1990*). Improving schools from within*. Francisco, CA: Jossey-Bass Publishers.

Bolam, R., McMahon, A., Stoll, L., Thomas, S., & Wallace, M. (2005). *Creating and*

    *sustaining professional learning communities.* Research Report Number 637. London:

    General Teaching Council for England.

Bryk, A., Camburn, E., & Louis, K. S. (1997). *Professional community in Chicago elementary*

    *schools: Facilitating factors and organizational consequences*. Revision of paper

    presented at the Annual Meeting of the American Educational Research Association

    (New York, NY,April 8-12, 1996).

Buffman, A., Mattos, M., Weber, C. (2009). *Pyramid response to intervention: RTI, professional*

    *learning communities, and how to respond when kids don't learn*. Bloomington, IN:

    Solution Tree.

Carron, G., and Châu, T. N. (1996). *The quality of primary schools in different*

    *development contexts*. Paris: UNESCO Publishing.

Cherkowski, S. (2012). Teacher commitment in sustainable learning communities:

    A new "Ancient" story of educational leadership. *Canadian Journal of Education, 35*( 1)

    56-68

Cormier, R., & Olivier, D. F. (2009). *Professional learning committees: Characteristics,*

    *principals, and teachers.* Paper presented at the Annual Meeting of the Louisiana

    Education Research Association Lafayette, Louisiana, March 5-6. Retrieved from

http://ullresearch.pbworks.com/f/Cormier_ULL_PLC_Characteristics_Principals_Teache rs.pdf

Curry, (2010). *The implementation of professional learning communities components and perceptions of self-efficacy by teachers and school administrators*. Unpublished doctoral dissertation, Texas A & M University, Commerce, U.S.A.

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Educational Policy Analysis Archives, 8*(1). Retrieved from http://epaa.asu.edu/epaa/v8n1

Darling-Hammond, L., and Sykes, G. (1999). *Teaching as the learning profession: A handbook of policy and practice*. San Francisco, CA: Jossey-Bass.

Dee, T. S., and Jacob, B. (2011). The impact of No Child Left Behind on student achievement. *Journal of Policy Analysis and Management, 30* (3), 418–446.

DeMatthews, D. (2014). Principal and teacher collaboration: An exploration of distributed leadership in professional learning communities. *International Journal of Educational Leadership and Management, 2* (2), 176-206. doi: 10.4471/ijelm.2014.16

DuFour, R. (2004). Schools as learning communities. *Educational Leadership, 61* (8), 6-11.

DuFour, R., DuFour, R., & Eaker, R. (2008). *Revisiting professional learning communities at work: New insights for improving schools*. Bloomington, IN: Solution Tree.

Easton, L. B. (2008). From professional development to professional learning. *Phi Delta Kappan, 89* (10), 755-759.

Elmore, R.F. (2004). *School reform from the inside out*. Cambridge, MA: Harvard University Press.

European Agency for Development in Special Needs Education (2010). *Teacher education for*

*inclusion: International literature Review*. Odense, Denmark: European Agency for
Development in Special Needs.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to
strengthen and sustain teaching. *Teachers College Record, 103* (6), 1013-1055.

Fredriksson, U. (2004). *Quality education: The key role of teachers*. Working Paper No. 14.
Brussels: Education International.

Gaspar, S. (2010). *Leadership and the professional learning community*. Unpublished
Doctoral dissertation, University of Nebraska, Nabraska, U. S. A.

Ghana Education Service (2012). *Pre-tertiary teacher professional
development and management  in Ghana: Policy framework*. Retrieved from
planipolis.iiep.unesco.org/.../Ghana/Ghana_Pre-tertiary%20teac.

Ghanaweb (2014). *Gov't constructs 73 SHS day schools*. Retrieved from
http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=337170.

Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2007). A theoretical and empirical
investigation of teacher collaboration for school improvement and student achievement in
public elementary schools. *Teachers College Record, 109* (4), 877–896.

Grossman, P., Wineburg, S., & Woolworth, S. (2001). Toward a theory of teacher community.
*The Teachers College Record, 103*, 942-1012.

Hairon, S. & Dimmock, C. (2012). Singapore schools and professional learning communities:
Teacher professional development and school leadership in an Asian hierarchical system.
*Educational Review, 64* (4), 405–424.

Harris, A., & Jones, M. (2010). Professional learning communities and system improvement.
*Improving Schools, 13* (2), 172–181.

Hart, C. (1998). *Doing a literature review: Releasing the social science research imagination*. Thousand Oaks: SAGE Publications.

Hargreaves, A., & Goodson, I. (2006). Educational change over time? The sustainability and Nonsustainability of three decades of secondary school change and continuity. *Educational Administration Quartely, 42* (1), 3-41.

Hargreaves, A. and Lo, L. (2000). The paradoxical profession: Teaching at the turn of the century. *Prospects, 30* (2), 1-16.

Hargreaves, A. (2003). *Teaching in the knowledge society*. Buckingham: Open University Press.

Hipp, K. K., and Huffman, J. B. (Eds.) (2011). *Demystifying professional learning communities*. Lanham, MD: Rowman & Littlefield Education.

Hollins, E.R., McIntyre, L.R., DeBose, C. Hollins, K.S., & Towner, A. (2004). Promoting a self-sustaining learning community: Investigating an internal model for teacher development. *International Journal of Qualitative Studies in Education, 17*(2), 247-264.

Holm, J. R. (2012). *Professional learning community implementation: A comparison of general educators' and specialists' perceptions*. Unpublished doctoral dissertation, University of North Dakota, Grand Forks, U.S.A.

Hopkins, (2008). *New release: Professional development key to improving math achievement*. Retrieved from http://www.jhu.edu/news/home08/dec08/math_achieve.html.

Hord, S. M. (2009, Winter). 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* (pp. 5-14). New York, NY:

College Press.

Hord, S. M. (1997). *Professional Learning Communities: Communities of Continuous Inquiry an*

*Improvement.* Austin, Texas: Southwest Educational Development Laboratory.

IBIS Ghana (2010). *Education for empowerment program: Program document phase II*.

Retrieved from ibis.dk/sites/default/files/PDF%20global/.../ghana_education_tp.pdf.

Ivy, A., Kritsonis, W. A., Herrington, D. E., & Tanner, T. (2008). The challenge of building

professional learning communities: Getting started. *National Forum of Educational*

*Administration and Supervision Journal, 25* (4), 1-7.

Kadingdi, S. (2006). *Policy initiatives for change and innovation in basic education programs in*

*Ghana.* Retrieved from

http://www.educatejournal.org/index.php?journal=educate

Karp, S. (2003, November 7). *The No Child Left Behind hoax. Speech presented in Oregon,*

*Portland*. Retrieved from

http://www.rethinkingschools.org/special_reports/bushplan/hoax.shtml

Kavenuke, P. (2013).  What is it that keeps good teachers in the teaching profession: A

reflection on teacher retention. *SAVAP International, 4* (1), 165-175.

Kilbane, J. F., Jr. (2009). Factors in sustaining professional learning community. *NASSP*

*Bulletin, 93* (3), 184-205.

Kilbane, J. F., Jr. (2007). *Sustaining schools as learning communities: Achieving a vision of the*

*possible*. Unpublished doctoral dissertation, Indiana University, Indiana, USA.

Killion, J. (2002). *What works in the high school results-based staff development.*

    Oxford, OH: National Staff Development Council.

Kleine-Kracht, P.A. (1993, July).The principal in a community of learning. *Journal of School*

    *Leadership, 3* (4), 391-399.

Kruse, S. D., Louis, K. S., & Bryk, A. S. (1995). An emerging framework for analyzing school-

    based professional community. In Kruse, S. D., Louis, K. S. (Eds.), *Professionalism and*

    *community: Perspectives on reforming urban schools* (pp.23-42). Thousand Oaks,

    California: Corwin Press.

Lee, D., Hong, H., Tay, W., & Lee, W. O. (2013). Professional learning communities in

    Singapore schools. *Journal of Co-operative Studies, 46* (2), 53-56.

Lee,V.E., Smith, J.B. & Croninger, R.G. (1995, Fall). *Another look at high school restructuring:*

    *Issues in restructuring schools*. Madison,WI: Center on Organization and Restructuring

    of Schools, School of Education, University of Wisconsin-Madison.

Leithwood, K., & Jantzi, D. (1999). The relative effects of principal and teacher sources of

    Leadership on student engagement with school. *Educational Administration Quarterly,*

    *36* (8), 679-706.

Leu, E. (2004). *The patterns and purposes of school-based and cluster teacher professional*

    *development programs*. Working Paper #1 under EQUIP1's study of school-based

    teacher inservice programs and clustering of schools. Retrieved from

    pdf.usaid.gov/pdf_docs/PNADD973.pdf

Leu, E., & Prince-Rom, A. (n.d). *Quality of education and teacher learning:  A review of*

    *the literature*. Retrieved from http://www.equip123.net/docs/E1-QualityEdLitReview.pdf

Long, C. N. (2008). *A comparison of student achievement between Missouri professional*

*learning project participants and non-participants*. Unpublished doctoral dissertation, Liberty University, Lynchburg, Virginia, U. S. A.

Louis, K. S., Marks, H. M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal, 33* (4), 757-798.

Louis, K. S., Kruse, S., & Bryk, A. S. (1995). Professionalism and community: What is it and why is it important in urban schools. In Kruse, S. D., Louis, K. S. (Eds.), *Professionalism and community: Perspectives on reforming urban schools* (pp. 3-22). Thousand Oaks, California: Corwin Press.

Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis, 15* (2), 129-151.

Lunenburg, F. C., & Lunenburg, M. R. (2013). Convergent roles of the school principal: Leadership, managerial, and curriculum-instructional. *International Journal of Education, 1* (1), 1-9.

Lujan, N., & Day, B. (2010). Professional learning communities: Overcoming the roadblocks. *The Delta Kappa Gamma Bulletin*. Retrieved https://www.questia.com/.../professional-learning-communities-overcoming..

Magolda, P. (2001). Border crossings. Collaboration struggles in education. *The Journal of Educational Research, 94* (6), 346-358.

Mancini, J. A., & Bowen, G. L. (in press). Families and communities: A social organization theory of action and change. In Peterson, G. W., & Bush, K. R. (Eds), *Handbook of marriage and the family* (3rd Edition). NY: Springer.

Marzano, R. (2003). *What works in schools: Translating research into action?* Alexandria, VA: Association for Supervision and Curriculum Development.

McLaughlin, M. W., and Talbert, J. E. (2006). *Building school-based learning communities: Professional strategies to improve student achievement*. New York, NY: Teachers College Press.

Miyazaki, T. (2014). *Is changing teaching the mission impossible? A case study of a continuing professional development for primary school teachers in Senegal*. Unpublished Doctoral Thesis, University of Sussex, Sussex, England.

Mkhwanazi, S. (2014). Crossing the past political boundary: Teacher professional learning in a South African reform context. *Mediterranean Journal of Social Sciences, 5* (10), 425-432.

Mncube, V., & Mafora, P. (2013). School governing bodies in strengthening democracy and social justice: Parents as Partners? *Anthropologist, 15*(1), 13-23.

Moolenaar, N. M., Sleegers, P.J. C., & Daly, A. J. (2012). Teaming up: Linking collaboration networks, collective efficacy, and student achievement. *Teaching and Teacher Education, 28*, 251-262.

Moon, B., & O'Malley, B. (2008). *Every child needs a teacher: The primary teacher supply and training crisis in Sub-Saharan Africa*. Retrieved from www.unesco.org.uk/.../EveryChildNeedsaTeacher-June08.pd

Morrissey, M. S. (2000). *Professional learning communities: An ongoing exploration.* Austin, Texas: Southwest Educational Development Laboratory.

Muijs, D., & Harris, A. (2007).Teacher leadership in (In) action: Three case studies of contrasting schools. *Educational Management Administration and Leadership, 35* (1), 111–134. DOI: 10.1177/1741143207071387.

Mulkeen, A., Chapman, K. W., DeJaeghere, G. J., Leu, E., & Bryner, K. (2005). *Recruiting,*

retaining and retraining secondary school teachers and principals in Sub-Saharan Africa* (World Bank Working Paper No. 99). Washington, D.C.: The International Bank for Reconstruction and Development/World bank. Retrieved from Siteresources.worldbank.org/…/Resources/No.4Teachers.pdf.

Mundry, S., & Stiles, K. E. (2009). The promise of professional learning communities. In Susan Mundry and Katherine E. Stiles (Eds.). *Professional learning communities for science teaching:Lessons from research and practice*. Arlington, VA: National Science Teachers Association Press.

Murray, A. (2010).  Empowering teachers through professional development. *English Teaching Forum, 1*. Retrieved from http://americanenglish.state.gov/files/ae/resource_files/10-48-1-b.pdf

National Center for Literacy Education (2012). *Building capacity to transform literacy learning*. Retrieved from www.ncte.org/.../NCLEshortlitre..

National Commission on Excellence in Education (1983, April). *A nation at risk: The imperative for educational reform. A report to the nation and the Secretary of Education*. United States Department of Education. Washington, DC: U.S. Government Printing Office.

Nkengbeza, D. (2014). *Building a professional learning community in a conflict and post-conflict environment: A case study of a high school in Liberia*. Unpublished doctoral dissertation, University of Jyväskylä, Jyväskylä,Finland.

Oliver, D. W. (1976). *Education and community: A radical critique of innovative schooling*. Barkeley: McCutchen Publishing Corporation.

Pankake, A. M., and  Moller, G. (2003). Overview of professional learning communities.

In J. B. Huffman & K. K. Hipp (Eds.), *Reculturing schools as professional learning communities* (pp. 3-14). Lanham, MD: The Row & Littlefield Publishing Group, Inc.

Phillips, J. (2003). Powerful learning: Creating learning communities in urban school reform. *Journal of Curriculum and Supervision, 18* (3), 240-258.

Philips, P. (2008). Professional development as a critical component of continuing teacher Quality. *Australian Journal of Teacher Education, 33* (1), 1-9.

Pomson, A. D. M. (2005). One classroom at a time? Teacher isolation and community wiewed through the prism of the particular. *Teachers College Record, 107* (4), 783-802.

Porter-Magee, K. (2004). Teacher quality, controversy, and NCLB. *Journal of Educational Strategies, Issues and Ideas, 78* (1), 26-29.

Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.

Richmond, G., & Manokore, V. (2010). Identifying elements critical for functional and sustainable professional learning communities. *Science Education, 95* (3), 543–570.

Rivers, J. C., and Sanders, W. (2002). *Teacher quality and equity in educational opportunity: Findings and policy implications in teacher quality*. Stanford, CA: Hoover Institution Press.

Sampong, K. A. (2009). An evaluative study of a distance teacher education program in a university in Ghana. *International Review of Research In Open and Distance Learning, 10* (4).

Schwille, J., Dembele, M., & Schubert, J. (2007). *Global perspective on teacher learning:*

*Improving the policy and practice*. Paris: UNESCO, International Institute for

    Educational Planning. Retrieved from

    http://www.unesco.org/images/001502/150261e.pdf.

Schmoker, M. (2006). *Results now: How we can achieve unprecedented improvements*

    *in teaching and learning*. Alexandria, VA: Association for Supervision and Curriculum

    Development.

Seashore, K.R., Anderson, A.R. & Riedel, E. (2003). *Implementing arts for academic*

    *achievement: The impact of mental models, professional community and interdisciplinary*

    *teaming.* Paper presented at the Seventeenth Conference of the International

    Congress for School Effectiveness and Improvement, Rotterdam, January.

Selwyn, D. (2007). Highly quantified teachers: NCLB and teacher education. *Journal of*

    *Teacher Education, 58* (2), 127-137.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New

    York: Doubleday.

Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2000). *Schools*

    *that learn*. New York: Doubleday.

Servage, L. (2008). Critical and transformative practices in professional learning communities.

    *Teacher Education Quarterly*.

Sims, R. L., & Penny, G. R. (2015). Examination of a failed professional learning community.

    *Journal of Education and Training Studies, 3* (1), 39-45.

Smith, E. Y., and  Kritsonis, A. W. (2006). National research focus: Investigating

the differences in professional development with corporate companies and public

education in the United States of America. *National Forum of Educational*

*Administration and Supervisional Journal, 23* (4).

Smith, M. K. (2003, 2009). *Jean Lave, Etienne Wenger and communities of practice*. Retrieved

from www.infed.org/biblio/communities_of_practice.htm.

Sommers, W. A., &  Hord, S. M. (2008). Leading professional learning communities:

Voices from research and practice. Thousand Oaks, CA: Corwin Press.

Sommers, J. W., & Plyley, S. (2009). Late-start Mondays: The catalyst for change in an urban

high school. In Susan Mundry and Katherine E. Stiles (Eds.), *Professional learning*

*communities for science teaching: Lessons from research and practice*. Arlington, VA:

National Science Teachers Association Press.

Spillage, J. P., & Diamond, J. B. (2007). Talking a distributed perspective. In Spillage, J. P., &

Diamond, J. B. (Eds), *Distributed leadership in practice* (pp. 1-15), New York: Teachers

College Press.

Steyn, G. M. (2013).  Building professional learning communities to enhance

continuing professional development in South African schools. *Anthropologist, 15* (3),

277-289.

Talbert, J. (2010). Professional learning communities at the crossroads: How systems hinder or

engender change. In Hargreaves, A., Lieberman, A., Fullan, M., & Hopkins, D. (Eds.),

*Second international handbook of educational change* (pp. 555-571). New York:

Springer.

Terry, P. M. (n.d). *Empowering teachers as leaders*. Retrieved from

www.nationalforum.com/.../Terry,%20paul%20M.%20Empowering%20.

Thakrar, J., Zinn, D., & Wolfenden, F. (2009). Harnessing open educational resources

    to the challenges of teacher education in Sub-Saharan Africa. *International Review of*

    *Research in Open and Distance Learning, 10* (4), 1-15.

The Report of the Commission for Africa (2005). *Our common interest*. London: Commission

    for Africa.

Thompson, S. C., Gregg, L., & Niska, J. M. (2004). Professional learning communities,

    leadership and student learning. *Research in Middle Level Education Online, 28* (1).

    Retrieved from http://www.nmsa.org/Publications/RMLEOnline/tabid/101/

UNESCO (2008). *Education for all by 2015: Will we make it*? Paris: UNESCO.

USAID/EQUIP1 (2006). *Professional development and quality: Perspectives of Namibian*

    *teachers.* Retrieved from

    www.equip123.net/docs/E1IssuePaperNamibiaTeacherPerspectives.pd

Verspoor, A., & Bregman, J. (2008). *At the crossroads: Choice for secondary education in sub-*

    *Saharan Africa.* Document prepared by ADEA for its Biennale (Maputo, Mozambique,

    May 5-9, 2008). Retrieved from

    www.adeanet.org/.../adea/Biennale%202008/Documentation/.../Final%20P...

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional

    learning communities on teaching practice and student learning.

    *Teaching and Teacher Education, 24*, 80-91.

Voluntary Service Organization (VSO) Ghana (2013).*The quality and inclusivity of basic*

    *education across Ghana's three northern regions: A look at change, learning*

    *effectiveness and efficiency*. Retrieved from

    www.vsointernational.org/.../VSO_Ghana_TENI_summary_tcm76-4152...

Wei, R. C., Darling-Hammond, L., & Adamson, F. (2010). *Professional development*

*in the United States: Trends and challenges*. Dallas, TX: National Staff Development Council.

Wei, R. C., Darling-Hammond, L., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Dallas, TX: National Staff Development Council.

Wells, C., and Feun, L. (2007). Implementation of learning community principles: A study of six high schools. *NASSP Bulletin, 91* (2), 141-160.

Williams, R., Brien, K., Sprague, C., & Sullivan, G. (2008). Professional learning communities: Developing a school-level readiness instrument. *Canadian Journal of Education Administration and Policy*, 74.

Wolfenden, F. (2008). *Building new modes of teacher education: Research analyses for the teacher in education in sub Saharan Africa program*. In BERA Annual Conference 2008, 3-6 Sep 2008, Heriot-Watt University, Edinburgh, UK. Retrieve from oro.open.ac.uk/27189/2/Bera_08_fw.p