Institute of Education

University of London

Understanding Teacher Professional Learning through a case study of a school implementing the practice of Teacher Learning Communities in India (Gujarat – Ahmedabad)

Written by:

Ashraf Vishram

Dissertation submitted in partial fulfilment of the requirements for the degree of Master of Arts in Curriculum, Pedagogy and Assessment

Abstract

This research study looks into the qualitative factors that make a Professional Learning Community a sustainable avenue contributing towards the professional learning of teachers at a private kindergarten and primary school in Gujarat (India). The research adopts the case study methodology as a qualitative approach to enquire into the practice of Professional Learning Communities with data obtained through multiple methods. These include questionnaires, direct observations, semi-structured interviews and audio-visual materials.

The dissertation which is theoretically grounded in the constructivist paradigm of learning has revealed that several qualitative factors seem to contribute towards sustaining a Professional Learning Community as an avenue for the teacher professional learning. These include an environment of support from the leadership, interdependence in terms of learning through opportunities for peer learning (shared learning and thinking together), a culture of trust and respect, openness to learn from every available opportunity and quality consciousness through a focus on improvement in teaching quality and student learning. Besides, it also suggests that teachers view both avenues for collaborative reflection on practice through a Professional Learning Community and participation in workshops leading to acquisition of knowledge as effective mediums contributing their professional learning.

Acknowledgements

There are several individuals I would like to thank for supporting me in bringing this research to a culmination. However, prior to that, I would like to thank the Almighty for giving me strength, courage, motivation, fortitude and insight to make this learning experience fulfilling.

Secondly, I would like to thank my supervisor Dr. Susan Askew for her academic support and advice.

Special thanks goes to my dear friends Mr. Anis Siddique, Ms. Shiobhan Hickey, Ms. Modupe Adefeso and Ms. Yussra Jamjoom who were throughout available to give me their critical inputs and feedback as peers. I would also like to express my gratitude to Ms. Uma Oza a professional colleague and a dear friend who introduced me to the founder of the school where the study was conducted. Besides, I would like to thank Anar for extending her expertise in facilitating the video recordings at the case site.

I would like to thank my parents who have always encouraged me to pursue further education and keep growing as an individual. I would also like to thank my sisters who were pillars of emotional support throughout this journey.

Besides, I would really like to thank the academic director and founder of the school Ms. Renita Handa without whose forthcoming attitude and openness, implementing this research would have been an inconceivable reality. Lastly, I would like to thank all the research participants including the school leadership and each and every teacher who were so generous in their

contributions in terms of their thoughts and views that gave meaning to this research.

Table of Contents

Abstract	2
Acknowledgements	3
List of Annexures	6
Chapter 1	8
Introduction	8
Theoretical paradigm guiding the research	11
Rationale for the study	12
Research questions	13
Research objectives	14
Structure of the dissertation	15
Chapter 2	16
Literature Review	16
Chapter 3	40
Research Methodology	40
Chapter 4	61
Research Findings: A Report	61
Chapter 5	73

Analysis and Discussion 73

Chapter 6 96

Conclusive Thoughts 96

References 97

Annexures 101

List of Annexures

Annexure 1: PowerPoint Presentation for Introducing the Research (Initial Briefing)

Annexure 2: Data collection schedule and Informed consent letter and form formats

Annexure 3: Biographical data form format and completed forms

Annexure 4: Historical data form format and completed forms

Annexure 5: Scheduling of interviews and video recordings

Annexure 6: Semi-structured Interview Schedules

Annexure 7: Transcripts

Declaration and Word Length:

I hereby declare that this MA dissertation has not been submitted either in the same or different form, to this or any other University for a degree. I also declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own. The word length of this dissertation (exclusive of bibliography and annexures) is: 21,112 Words.

Chapter 1

1. Introduction:

As in any other profession, teachers too need to be provided with life-long learning opportunities in order to continuously learn and grow as professionals so that they can constantly endeavour towards enhancing their teaching practice to promote students' learning. Such continuous professional development opportunities can help teachers make their profession ever evolving, experience fulfilment through personal and professional growth, and develop greater self-awareness regarding their practice through opportunities for individual and collaborative reflection with colleagues, thereby providing insights for further enhancement of practice. Such opportunities may create possibilities for innovation and bring in a sense of novelty to their profession thus helping to ensure that they do not experience professional monotony. In order to facilitate this process of professional development that would bring about an overall improvement in the teaching and learning processes which is an important educational goal of schools, professional development of teachers has become an increasingly important concern (Opfer & Pedder, 2011). Besides, professional development can potentially have a transformative influence on teaching practice; therefore it is important that teacher educators and leadership who are responsible for organising, conceptualising, planning and facilitating such professional development opportunities make sure that they are well thought-out.

Traditionally teachers have perceived as ‘human capital’ (Webster-Wright, 2009) who deliver the curriculum (Askew & Carnell, 1998). They were looked upon in terms of what they could do rather than what they are or can become (Blackman, 1989 in Askew & Carnell, 1998). They were also seen in isolation from others in their work environment. Therefore, professional development opportunities planned for them only focussed around developing their craft by exposing them primarily to methodologies and techniques in their practice, based on the agendas of what their school management (Askew & Carnell) considered as appropriate learning outcomes for such professional development (Webster-Wright, 2009) that would lead to better performance. This has led to a performance orientation rather than a learning orientation amongst teachers. However, it is important to be mindful that recent research has indicated that only if teacher learning opportunities provide a platform for discussing classroom experiences, time for reflection, opportunities to understand oneself in a non-threatening environment where teachers feel challenged and exposed to novel situations of learning, and are provided exposure to applied knowledge about teaching and learning; that’s when teachers are more likely to develop a learning orientation which may not get altered very easily (Opfer and Pedder, 2011, pp. 389 & 390). This also indicates that it is important to integrate theory with practice while conceptualising and designing professional learning opportunities. If theories regarding effective teaching and learning are integrated into practice in terms of how they could be translated into the classroom, it would facilitate teachers in applying their theoretical understanding to inform on-going decisions regarding practice. On the other hand, a skills only approach would not be

effective since without a deep in-depth understanding of the theoretical constructs teachers may not be aware as to whether they are effectively translating them into practice or not (Timperley, 2008). One such practice that incorporates all these elements in terms of exploration on teaching practice as well as delving into the necessary theoretical understanding regarding the same is that of Professional or Teacher Learning Communities. This practice has been explored in-depth through this research.

Research indicates that Continuous Professional Learning (CPL) can take place through the implementation of practices such as 'Professional Learning Communities' (PLC) (Wiliam, 2008; Hargreaves, 2012b). This practice involves school based meetings that provide teachers with platforms where they could share about their practice and teaching experiences with colleagues (Wiliam, 2008), make suggestions and plan practice together (Hargreaves et al., 2012a). Based on discussions with peers, teachers may make a specific plan of action regarding an autonomously chosen area in which they wish to bring about change in their practice (Wiliam, 2008). They may wish to try out something in their own classroom that they themselves have identified in discussion with colleagues whose practice may differ from their own and at a later stage share with them in terms of how it worked or did not for further discussion (Hargreaves, 2012b). The PLC group may members meet on a regular basis to reflect upon their own and their peers teaching practice (Hargreaves, 2012b) and discuss the implementation of their plans with their peers to support their team members in further refining their plan of action (Wiliam, 2008). Thus, teachers become continuous autonomous

learners wherein they follow a consistent cycle in which they meet to grapple with new ideas, apply these to their teaching practice and reflect at an individual level and in collaboration on the effects of their implementation (Stoll et al. 2006).

Besides, teachers' commitment to learning and CPL is heightened when they are provided with opportunities to initiate changes in their practice autonomously and supported to plan and implement those changes through the platform of PLCs (Lom and Sullenger, 2011; Mushayikwa and Lubben, 2009; Pedder, James and McBeath, 2005 in Hargreaves, 2012b; Wilkins 2011 in Hargreaves et al., 2012a). When the need for change is identified by the participants themselves as individual professionals and this need is valued and respected by school leadership, CPL is most useful (Hargreaves et al., 2012a). Thus, autonomy is experienced by the teachers when they are able to act independently without experiencing pressure from an authority (Karagiorgi, 2012). Besides, they are able to sense that they have equal rights within the community to explore their own independent views and express them without being inhibited by judgements made by any other member or that on part of the leadership (Karagiorgi, 2012).

1.1 Theoretical paradigm guiding the study:

1.1a Learning as meaning-making or constructing knowledge

This conception of learning visualises a learner making sense of their experiences in terms of the lessons learnt or the insights gained and also making conscious efforts towards carrying that learning forward into

experiences of the future (Watkins, 2005). Therefore, the role of those facilitating learning experiences or processes for such teaching professionals also gets re-conceptualised in terms of how they create opportunities for the learners to make sense of the world and construct meaning from existing knowledge (Watkins, 2005). This conception also focuses on what kind of approaches or perhaps strategies individual learners adopt to make sense of their own world and what kind of sense-making conversation they engage into in order to make their learning effective. This process may be referred to as construction of knowledge (Watkins, 2005).

1.1b Learning viewed as building knowledge by doing things with others or as co-constructing knowledge:

This view of learning recognises that learning has a social dimension and that knowledge is constructed socially rather than only being constructed at an individual level (Watkins, 2005). Language and conversation are considered to be elementary features of the process of shared meaning-making that may involve creation and negotiation of ideas or concepts (Watkins, 2005). In relation to this conception someone who is facilitating learning would require to engage learners into collaborative interactions with peers. This conception of learning requires a shift in focus from viewing learning from the point of view of acquisition of knowledge to the process of collaboratively constructing knowledge by being a part of a community of learning. Collaboration amongst teachers has been identified as a key determinant leading to effective learning amongst pupils (Smith and Scott, 1990, Renolds, 1992 in Askew & Carnell, 1998). Sharing of professional experiences as critical friends in pairs, small

groups or whole group tasks is of great value in bringing about change in practice (Askew & Carnell, 1998).

1.2 Rationale for the study:

Reflecting on my personal practice in India as an educationalist, in my experiences as a teacher educator responsible for the professional development of teachers, it has emerged that in-service teacher education in private schools in India primarily revolves around the training and development model. Besides, my experience in a leadership position as a teacher educator travelling to various schools in India has also revealed that although teachers appreciate and show signs of learning through comprehension during training and development endeavours, in the long run they often do not show signs of translating that learning into practice.

Research evidence claims that the practice of PLCs can facilitate the translation of learning into daily practice and also enhance teaching practice and student learning. Besides, as suggested by research, a combination of various models of professional learning, for example, individual reflective practice and collaborative reflective dialogue amongst teachers forming networks with colleagues through PLCs to discuss and reflect upon practice can influence student achievement (Villegas-Reimers, 2003). Through this research I have tried to explore how this practice of PLC is implemented.

Research also indicates that being engaged in tasks or activities, structures or processes involving collaboration and those situated in practice are not independent indicators of effective practice (Opfer and Pedder, 2011).

Teacher professional learning consists of a repertoire of these activities, processes of learning and is determined by the frequency of such forms of engagement (Opfer and Pedder, 2011). Therefore, in my study, it was important for me to explore how an integration of avenues for professional learning through the practice of professional learning communities as well workshops (that explore theoretical understanding of concepts related to teaching and learning) implemented in a school in India influenced the learning of teachers from their own perspective. The aim of this research would be to gain insights into what kind of processes and experiences can make teacher professional learning effective by exploring the practice of professional learning communities (Pedder & Opfer, 2011).

1.3 Research Questions:

- What can be learnt about teacher professional learning through a case study of a private kindergarten and primary school in India (Gujarat – Ahmedabad) that has adopted and sustained the practice of Professional Learning Communities?
- What are the perceptions and experiences of teachers and the leadership at the school regarding the impact of the Professional Learning Community Practice on teaching and student learning?

1.4 Research Aims:

The following aims have been set as foundational achievements through the course of this research project:

- To enhance the current understanding of teacher professional learning by exploring the practice of professional learning communities (PLC).
- To understand the perceptions and experiences of teachers and leadership regarding the influence of the PLC as a practice (individual and collaborative learning processes) on classroom teaching and student learning.
- To create research literature on Professional Learning practices being implemented in the private school sector through an exploration of a private kindergarten and primary school in India in this domain of knowledge.
- To identify specific processes and practices undertaken by Professional Learning Communities that facilitate teacher professional learning.

1.5 Structure of the dissertation

The rationale for the study in Chapter 1 is followed by a literature review on the practice of Professional Learning Communities in Chapter 2. Chapter 3 provides details regarding the Research Methodology adopted to implement conduct this research study. Chapter 4 is a report on the findings of the study followed by Chapter 5 which is an analysis and discussion of the findings. The last chapter provides some conclusive thoughts post the completion of the research.

Chapter 2

2. Literature Review:

2.1 Viewing teacher professional learning and its importance through a different lens: The practice of Professional Learning Communities

In 1989, Rosenholtz emphasised the importance of workplace conditions of teachers and its impact on the quality of teaching in classrooms (Hord, 1997, p. 10; InPraxis Group Inc., 2006, p. 7). According to him, teachers who experienced on-going support in their learning and classroom practice were more likely to be committed and effective in their practice than those who did not receive such support. Similarly, Fullan (1991) recommended that for teachers to be effective, innovation and improvement must be inbuilt within their daily practice (Hord, 1997, p. 10). Further research in early nineties illustrated that staff development efforts, in particular workshops organised randomly in isolation, that did not have a clear focus and an effective follow-up mechanism could be a waste of time especially if there was no long term vision for teacher development (Hord, 1997). It was also suggested that workshops did not necessarily bring about change in teachers' views and dispositions independently (Floden et al. 1995 in Hord, 1997). Therefore, staff development needed to extend beyond workshops to community interactions regarding student learning that could lead to greater sensitization of teachers towards student needs (Hord, 1997). Besides, in order to build teacher capacity and bring school wide reform in the

quality of teaching and learning, a wide variety of strategies besides workshops were needed (Hord, 1997). These activities could include discussion and examination of ideas between teaching colleagues and peer observations and reflections that are generally associated with the practice of Professional Learning Communities (PLCs) (Hord, 1997). The Professional Learning Policy of the Northern Territory Department of Education and Training (NT DET) (2007) defined professional learning as 'opportunities or experiences that promote enhanced skills, knowledge, attributes, attitudes and behaviours of staff.' Echoing with this understanding, forums of professional learning like PLCs are believed to provide on-going focussed support for collective learning and shape the attitudes and abilities of teachers, in other words, lead to their professional development (Hord, 1997).

Research during that phase also suggested that a paradigmatic shift in terms of the roles played by teachers and the kind of tasks they are engaged into at school was crucial to enhance their professional learning (Darling-Hammond (1994 and 1996) in Hord, 1997, p. 25). Traditionally the role of teachers was perceived as that of standing in front of the class and directly engaging with students (Hord, 1997). However, teachers also needed to spend time on collaborative planning, interacting with colleagues regarding practice, working individually with students, observing peers in their classroom practice and engaging in other professional development activities (Hord, 1997). Darling-Hammond (1996) observed that shared decision making amongst teachers led to curricular reform and change in roles of teaching in certain schools

wherein teachers spent time together planning the instructional methodology, observing each other's practice and providing feedback (Hord, 1997).

McLaughlin and Talbert (1993) also emphasised that sharing of practice and collaborative enquiry lead to wisdom about practice or teaching that could be further shared widely (Hord, 1997, p. 10). All these thoughts recurrently hinted towards processes and structures which are integral to PLCs, in particular, the idea of collaborative learning. Cowan (2003) suggests that, 'Substantial and continuous improvement of schools requires a context that is conducive to change – one that supports both individuals and the organization as a whole – like in a Professional Learning Community.' (Cormier and Olivier, 2009). There is "overwhelming evidence and professional consensus on the effectiveness of PLCs…' (Buffum, Mattos, & Weber, 2009 in Cormier and Olivier, 2009). Hopkins and Reynolds (2001, p. 468) suggested that professional development of teachers entails, '…a focus on improving instruction within the context of the curriculum, using the methodology of collaborative inquiry into student learning that provides the usefulness for… school improvement efforts.' (Baccellieri, 2010, p. 49). PLCs focus on learning and the questions of what, why and how learning should take place amongst teachers and pupils (InPraxis Group Inc., 2006). Let us explore this conception of Professional Learning Communities that has been associated with school improvement and enhancement of teaching and learning in further depth.

2.2 Professional learning communities: An exploration in greater depth

There is no universal definition regarding Professional Learning Communities (PLCs) (Hord, 1997). Most definitions or descriptions primarily revolve around attributes, dimensions and characteristics associated with them (Hord, 1997). Various terminologies regarding PLCs are found in literature and research on school improvement and teacher professional development (InPraxis Group Inc., 2006). These include learning communities, communities of practice, professional learning communities, professional communities of learners, communities of continuous inquiry and improvement, learning organizations, professional schools, problem-solving schools or teacher learning communities (InPraxis Group Inc., 2006). However, they refer to similar processes and attributes associated with PLCs. The terminology Professional Learning Communities and the acronym PLCs would be used to refer to this practice in the context of this research. Let us first examine some descriptions and definitions associated with PLCs and then explore some of the attributes, dimensions or characteristic features that are considered to be significant structures and processes integral to the practice of PLCs in order to sustain it.

2.3 Some definitions and descriptions of PLCs:

It is important to highlight that descriptions in literature regarding 'Professional Learning Communities' (PLCs) attach significance to learning amongst its members including teachers and leaders who are encouraged to engage in

cooperative and collegial relationships in their endeavour towards learning. This is evident in the following description by Speck (1999):

> *'A school learning community is one that promotes and values learning as an on-going, active collaborative process with dynamic dialogue by teachers, student, staff, principal, parents and the school community to improve the quality of learning*…' (Roberts and Pruitt, 2003, p. 6)

The above description emphasises that efforts by the learning community are geared towards the professional learning and growth of its members. Conversations regarding the basic issues that may influence the quality of learning for each and every member of the school community are at the forefront. Therefore, schools enrol all those who come in contact with the community to contribute in this direction. This also suggests that in case of PLCs, learning is personalised and that variety of stakeholders including teachers, students, staff, principal, parents and the school community are involved in the endeavour towards school improvement (Stoll and Louis, 2007) which is linked with the quality of teaching and learning. These stakeholders may also include external experts who may be invited to serve as coaches in order to provide critical feedback which may give an impetus and a sense of urgency to the development of the learning community (Stoll and Louis, 2007, p. 2; Baccellieri, 2010).

Another understanding of PLCs that emphasises upon this inclusive nature and also upon the role of teachers as members of the PLCs suggests that PLCs exists when one witnesses:

'…a group of teachers sharing and critically interrogating their practice in an on-going, reflective, collaborative, inclusive, learning-oriented, growth promoting way (Mitchell and Sackney 2000; Toole and Loius 2002 in Stoll and Louis, 2007, p. 2) towards both the mysteries and problems of teaching and learning (Hord, 1997, p. 6)

The above view of a PLC places emphasis on learning and growth. At the same time, the choice of words suggests various other facets regarding a PLC's functioning. If we consider the word 'inclusive', Senge suggested that it is imperative that while developing a learning community, it is important to begin with those who are willing to start (Hord, 1997, p. 44). Hargreaves (2007) emphasised that membership to the PLC is either voluntary or invitational rather than be enforced. However, Kruse and Louis stressed that it is important that all staff of the school are enrolled as part of the community or else the initiative would remain fragmented (Hord, 1997, pp. 44 - 45).

Mixed groups can be formed to develop a PLC defying what is conventionally practiced in schools as far as teacher professional development is concerned (Hargreaves, 2007). Membership of a PLC can be determined by its specific focus (InPraxis Group Inc. 2006) rather than creating homogeneous groups in terms of role and subject area expertise. Thereby, PLCs may bring together people teaching in different grade levels or subject areas, teachers and

leadership not necessarily teaching in the same context. The underlying understanding is that people who are into the same field or profession and experience similar challenges and frustrations at work (Hargreaves, 2007) can understand each other's perspectives. This also highlights that PLCs are organised such that they are non-hierarchical in nature (Hord, 1997). The principal is not considered to be 'omni-competent' (Hord, 1997, p. 15). All those who are members work together towards augmenting the capacities of their peers and together achieve the purpose for which the community has been instated (Hargreaves, 2007). Besides, the word 'on-going' suggests that members of the community are consistently engaged into activities or processes that promote learning. These processes can be planned at regular intervals by the school (Baccellieri, 2010).

Similarly the terms'critically interrogating' and 'reflective' imply that members of the community as part of their endeavour towards growth and learning, engage into critical reflective enquiry (Stoll and Louis, 2003) about their teaching and learning practice to envisage improvements that will benefit all students (Hargreaves, 2007). Roberts and Pruitt (2003) quote Senge et al. (2000) and suggest that what most experienced teachers know about teaching and learning is an understanding acquired through systematic reflection on practice. This is especially because they acquire the working knowledge regarding their teaching which would be indicative of how they can improve their own practice. This kind of engagement may involve elements of group and self-reflection. As part of this engagement, the teachers would raise

questions regarding their own practice or even that of their colleagues' through platforms for shared practice. Questions can be raised around why a particular strategy or product was used? How did the children respond to it? What did they learn from its use? The teachers would together think about what has worked and what did not work? What could be modified in their classrooms and how?

This kind of reflective engagement is undertaken in a collaborative manner through reciprocal peer interaction, sharing of practice and mutual critique (Hargreaves, 2007, p. 184). This implies that such reflections would take place in a group wherein there is room for autonomous reflection and at the same time feedback from peers thereby leading to 'collaborative learning' (Stoll and Louis, 2003, p. 7). Besides, sharing of practice can also take the form of peer observations wherein feedback would be focussed on instructional strategies and student learning (Cormier and Olivier, 2009). This kind of an interaction is more about a peer helping another peer through 'de-privatization of practice' (Robert and Pruitt, 2003, p. 8) wherein teachers provide access to other teachers into their own classroom for making observations and learning rather than a kind of peer evaluation (Cormier and Olivier, 2009; Hord, 1997).

Besides, members of the community would collaborate as a cohesive group in an environment of interpersonal caring to re-invigorate and re-invent their practice by sharing ideas and discussing their practice (Stoll and Louis, 2007, p. 3; Hargreaves, 2007, p. 185). Thus, there is focus on

‘collective learning’ (Hargreaves, 2007; Cormier and Olivier, 2009) and ‘collective knowledge’ (Stoll and Louis, 2007, p. 3). This can be created through a process of generative conversation or dialogue (Little and Horn, 2007, pp. 79-81) due to the existence of divergent knowledge bases amongst members of the PLC to bring about improvement in practice. The knowledge that individual members can bring to the PLC is valued and recognised by effective PLCs (NT DET, 2007). This reflective professional dialogue is focussed on school improvement and student achievement (Hord, 1997 in Cormier and Olivier, 2009; Baccelieri, 2010; NT DET, 2007; Roberts and Pruitt, 2003). It entails active discussion on strategies, critical inquiry and feedback from peers (NT DET, 2007).

Besides, individual and collective growth is cherished and processes for the same are valued as far as the implementation of PLC is concerned (Hargreaves, 2007). This collective learning is a kind of professional development that is embedded within the job context (Cormier and Olivier, 2009). PLCs are based on the ‘situative perspective of learning’ according to which the context wherein learning takes place influences the cognition and learning of the individuals involved within that context (InPraxis Group Inc., 2006, p. 5). Situational theorists believe, ‘… How a person learns a particular set of knowledge and skills, and the situation in which a person learns, becomes a fundamental part of what is learned.’ (InPraxis Group Inc., 2006, p. 5). This idea focusses on how various kinds of contexts give rise to different kinds of knowing and learning for teachers (InPraxis Group Inc., 2006, p. 5). A school context

which is related to individuals and is interactive is likely to influence learning amongst teachers (InPraxis Group Inc., 2006). PLCs create learning opportunities for teachers within such an interactive context.

They also provide opportunities for dialogue. This kind of dalogue could entail purposeful conversations that involve the processes of ‘noticing, making sense, making meaning, working with meaning and transformative learning’ that would bring about change in practice (NT DET, 2007). The above understanding of dialogue hints towards the constructivist approach to learning wherein individuals engage into co-construction of meaning through collaborative reflections and interactions (James, 2006). Such collaborative interactions create opportunities for developing shared meaning (Lieberman, 2007, p. 199).

Recent research in teaching and learning focusses on the understanding that learning involves co-construction of meaning amongst the teacher and students in a classroom scenario (InPraxis Group Inc., 2006). This view of learning has led to a re-conceptualisation of professional development endeavours for teachers that are premised on a similar understanding based on the constructivist learning paradigm (InPraxis Group Inc., 2006, p. 25). According to this learning theory, professional learning amongst teachers can also be facilitated through opportunities for co-construction of meaning through interaction with peers or other teaching colleagues that can shape the thinking and learning of individuals within a community of learners (InPraxis Group Inc., 2006).

Elmore and Burney suggested in 1999 that, ‘Good ideas come from talented people working together’ and that ‘shared practice is the driver for instructional change’ (Cormier and Olivier, 2009, p. 15). During collaborative exercises teachers engage into ‘thinking together’ and ‘learning together’ rather than working on the premise as to ‘how you can do it better’ as suggested by Senge in 1990 (Stoll and Louis, 2003, p. 6). PLCs create a platform for sharing of ideas and innovation in practice. Innovation would be an important criterion for PLCs to function and bring about school-wide reform since it involves seeking new ideas, new learning and problem solving through innovation to address challenges in practice and student underachievement (Baccelleiri, 2010, p. 126; Hord, 1997; InPraxis Group Inc., 2006). Thus, through the platform of PLCs, there would be opportunities for ideation, collaborative planning and reflection wherein people turn to each other for ideas and feedback (Stoll and Louis, 2007; Lieberman, 2007; NT DET, 2007). This would lead to shared learning or interdependence in terms of learning (NT DET, 2007), re-invention of practice and sharing of professional growth (NT DET, 2007).

This would depart from the traditional practice of teachers engaging into professional development activities wherein they would be responsible for honing their own skills and knowledge base. In this scenario, they are responsible not only for their own learning, rather also for the learning of their peers. However, there can be certain dilemmas while solely relying on such collaborative processes and the collective knowledge base of

teachers in addressing the challenges that are faced in practice and in case of the students in the classroom (Stoll and Louis, 2003). However, this challenge can be addressed by the involvement of education, child development, behaviour management or pedagogy experts who can be invited as members of the community. These individuals can sometimes take the lead in steering the wheel whenever required in facilitating the community's direction to counter the possibility of community members reinforcing ineffective teaching practices (Baccellieri, 2010).

Another aspect that could be questionable about this practice is that if the community is constitutive of diverse individuals that may have divergent subject expertise, how would it be beneficial for them to collaborate for the learning? However, one must bear in mind that a teacher's knowledge base may not only include their understanding of subject matter, rather it may also entail a nuanced understanding of pedagogy; the development of children and what is developmentally appropriate; classroom and behaviour management strategies based on which they can exchange ideas and address challenges together.

2.4 The primary focus of PLCs: Enhancing student learning

While collaborative efforts are targeted towards improvement in teaching practice to enhance the teacher's knowledge, skills and at the same time strengthen instruction (Baccellieri, 2010), the larger aim is towards bringing about improvement in student learning. Professional teacher learning is currently taking the form of teachers being engaged into a

collaborative culture and also undertaking the collective responsibility to develop their practice such that it further enhances student learning and achievement (NT, DET, 2007). Research has indicated that efforts in the direction of enhancing teaching practice through the collaborative works of PLC have led to improvement in the learning, achievement and lives of student in schools (Hargreaves, 2007; Louis and Marks 1998 and Bolam et al. 2005 in Louis and Stoll, 2007; Baccellieri, 2010). This requires that teachers are willing to examine student work in their collaborative discussions (NT, DET, 2007). In alignment with this thought, Sparks (2003) emphasises that informal and formal interactions amongst colleagues that entail problem solving, analysing student work, dealing with issues concerning the learning needs of the students, planning lessons together and deepening understanding regarding teaching are elements are central to the functioning of a PLC (NT DET, 2007). The community would pay attention to all aspects of a child's development as far as student learning is concerned covering the depth and the breadth of all areas of the curriculum (Hargreaves, 2007). All discussions and decisions concerning teaching, learning and the curriculum would focus around catering to the learning needs of the students with their growth and development as the foremost priority (Roberts and Pruitt, 2003). However, reflection on student achievement can bring further improvement only when it is complemented by relevant changes in curricular planning (Baccellieri, 2010). Besides, their interactions must therefore involve ethical deliberations, courageous questioning and intelligent conversations in terms of what counts as

learning and what does not even if this implies doing away with measurement tools or methods that are not in alignment with their collective understanding on student learning (Hargreaves, 2007). Let us now explores some attributes and characteristic features that are believed to make PLCs a sustainable endeavour.

2.5 Attributes that make Professional Learning Communities sustainable:

Some attributes, dimensions or characteristic features associated with PLCs are believed to make them sustainable. In 1997, Hord described five of these characteristic features for PLCs that must be embedded in the culture of a school for it to thrive (NT DET, 2007; Baccellieri, 2010; Maloney and Konza, 2011, Cormier and Olivier, 2009). These five characteristics for which Hord (1997) that have been quoted by many authors mentioned above, are outlined below:

1. Shared personal practice
2. Collective learning and application of learning
3. Supportive and shared leadership
4. Shared values, vision and understanding
5. Supportive conditions and

Some of these attributes are common to core principles of PLCs defined by DuFour and Eaker (2004 & 2006) (NT DET, 2007; Cormier and Olivier, 2009, p. 22):

(a) A shared mission, vision, and values,

(b) Collective inquiry by stakeholders,

(c) The application of collaborative teams,

(d) A systemic process of action orientation and experimentation and

(e) The commitment to continuous improvement towards results by shifting focus from teaching to student learning to ensure learning

Fullan (2006) similarly suggest five critical elements for PLCs to function (NT DET, 2007):

1. Reflective dialogue
2. De-privatisation of practice
3. Collective focus on student learning
4. Collaboration
5. Shared norms and values

In literature some of the features, characteristics, dimension and attributes of PLCs practice occur recurrently. The following list is a summary of these adapted from those suggested by all above-mentioned authors:

1. Inclusive membership
2. Collaborative learning and application of learning on practice
3. Acknowledgement of collective responsibility / commitment towards learning and interdependence in terms of learning
4. A focus on student learning and achievement
5. A culture of trust, respect and mutual support

6. Supportive and shared leadership
7. Have shared vision, values and understanding as a community
8. Supportive structural and human conditions

The attributes of inclusive membership, collaborative and collective learning, and focus on student learning that are essentials for a PLC to sustain itself have been discussed in some depth above. We will now explore some of the other qualitative features that encourage the development of a sustainable PLC further on in this paper. To begin with, let us first explore the idea of a culture of trust within a PLC

A. A culture of trust and collegial relationships for sustaining learning communities:

In order for the community to function collaboratively, it is important that members of the community share cohesive, collegial, constructive and trusted relationships that are energised with strong internal ties (Stoll and Louis, 2003, pp. 7 & 8; Hargreaves, 2007, p. 183; Baccellieri, 2010; NT DET, 2007) wherein they are able to work in harmony as a community. Developing and maintaining such social collegial relationships that create a variety of avenues for teachers to interact and engage into reflective enquiry can also help reduce teacher isolation and develop in its members a sense of belonging (Lieberman, p. 199; Baccellieri, 2010, p. 47). Sustaining such a scenario can be challenging when there is rapid turnover of staff which may reinforce the beliefs of the community

members that they must be more self-reliant in their growth than trying to gain support from peers and school leaders (Stoll and Louis, 2003). This challenge can be faced with efforts towards the enrolment of newly hired staff members who can be ushered into the community, the responsibility of which lies within the community members and the leadership. As suggested by Hargreaves (2007), their loyalty and commitment must be actively pursued.

Besides, in order for a PLC to sustain itself, it must be built on the foundation of trust and understanding (NT DET, 2007) which according to Hargreaves (2007, pp. 187-188) takes time and effort to build. Hargreaves (2007) suggested that while fulfilling its mandate for improvement, change and reducing underperformance, members of a PLC, in particular teachers, may experience fear, anxiety, loss or even feel threatened in their jobs. They may even start questioning their own efficacy and potential professionally. Confronting such emotions or situations requires an individual to function in an environment of trust, wherein, people believe in each other's potential to grow and enhance their skills. In such an environment of trust people are willing to challenge, agree or disagree with each other so as to improve their practice with the benefit of all their students at the heart. At the same time, they value each other personally and professionally. Besides, they have the conviction that members of the community undertake such an endeavour with integrity, sincerity and good intentions. In such a scenario all feelings of doubt are suspended (Hargreaves, 2007). Wignall (1992) suggested that due to the mutual understanding and respect that teachers share, they:

'…tolerate (even encourage) debate, discussion and disagreement. They are comfortable sharing both their successes and their failures. They praise and recognize one another's triumphs, and offer empathy and support for each other's troubles." (Hord, 1997, p. 23).

The importance of supportive and shared leadership in creating sustainable PLCs:

In addition to the attributes of reflective enquiry into teaching and learning and a culture of trust, a supportive leadership makes a learning community sustainable (Hargreaves, 2007, p. 186). Besides, relying on shared learning, such efforts need to be supported by the leadership for the community to bring about improvement and achievement (Hargreaves, 2007) and drive change at schools (Hord, 1997). The role of the leadership is that of bringing members of the community together to focus on issues and concerns that are of relevance to all of them as far as their teaching practice is concerned (Hord, 1997). Support from the leadership is crucial so that teachers are willing to de-privatise practice, undertake the risk of being critical in their reflections about their practice and experiment with alternatives to enhance it (NT, DET, 2007). Leaders can 'get the ball rolling' by initiating the change process of development (Hord, 1997, p. 53). However, at some stage, they need to create opportunities for distributed leadership wherein there is provision for shared decision making and greater autonomy for teachers in matters concerning choice of curricular materials, assessment strategies, pedagogical practices concerning teaching and learning, the school's

functioning and their own on-going professional learning in order to develop leadership capacity amongst team members (Lieberman, 2007; Hargreaves, 2007; NT DET, 2007; Cormier and Olivier, 2009; Hord, 1997). The principal and other school leaders must be willing to decentralize their own authority and share their power for decision making with teachers (Cormier and Olivier, 2009, p. 28). Such a practice helps to move away from the typical leadership follower model wherein the onus for school improvement invariably lies with the leadership (Roberts and Pruitt, 2003).

Leadership that in not dominating and encourages participatory decision making or behaviours like communicating ideas, ideals, shared concerns and interests amongst the PLC is likely to be more successful (Hord, 1997). Shared decision making recognises the greater potential of a team in solving problems (Solansky, 2008 in Cormier and Olivier, 2009). A supportive leadership can encourage active and open discussion and identification of the school's emergent leadership in order for the community to be sustained even when the leader leaves the organisation (Hargreaves, 2007, p. 189). Thus, shared leadership can be instrumental in creating a conducive work environment that that can lead to teacher retention (Baccellieri, 2010; NT DET, 2007). Not only that, it can bring stability and longevity to a PLC (Hargreaves, 2007, p. 189).

Therefore, besides assuming the role of practitioners and learners, teachers also assume the role of the leaders within a PLC (Cormier and Olivier, 2009, p. 2). On the other hand, the leaders in the organisation assume the roles of a coach modelling feedback and on-going dialogue;

an active communicator role-modelling the school's vision; a collaborator bringing the best ideas together in a collegial manner; a change agent; a capacity builder and a conflict manager (Cormier and Olivier, 2009, p. 2) who encourages resolution of conflict through continuous debate, discussion and exploration. This can be encouraged by accommodating differences and helping the community arrive at a consensus that everyone can live with even if they are not in favour of it whole-heartedly (Hord, 1997, p. 44). This kind of a stance is in opposition to the traditional position of avoiding or ignoring conflict (Hord, 1997, p. 44). If individuals function as transformational leaders and effective facilitators, PLCs are likely to be more successful (Cormier and Olivier, 2009, p. 40).

B. Shared values, vision or understanding:

Another important attribute that helps to sustain a PLC is that of shared values, vision or understanding amongst its members. This entails that the teachers have together arrived at a vision as a school that guides their behaviours as professionals (Roberts and Pruitt, 2003). PLCs that have a common vision and have identified a common need towards which they work collectively are likely to experience success (NT DET, 2007). This may also include their understanding about teaching and learning, their education philosophy. It is believed that when teachers get opportunities to collaborate in order to reflect upon and make alternative decisions regarding issues faced in teaching practice, they can arrive at a common understanding of what effective teaching for all students looks like or what are the possible forms that would effective teaching for all students can take (Roberts and Pruitt, 2003).

As pointed out by Maloney and Konza (2011) arriving at this understanding may be challenging since individuals may differ in their philosophical perspectives. At the same time, perhaps creating room for common vision may be crucial since it may guides the community's decisions and choices concerning assessments, student learning, teaching pedagogy and various other matters concerning schooling. While at the same time it may be essential to create room for diversity in perspectives and individual differences that are respected since reliance on such pedagogic diversity and pooling together 'collective experience' that can lead to increased learning (Hargreaves, 2007, p. 190). In order to promote such diversity, one needs to give 'voice' to each and everyone within the community so that the domineering voices do not overshadow some who are hesitant to express themselves (Maloney and Konza, 2011). At the same time sustainable PLCs acknowledge the 'wisdom, memory and accumulated knowledge and resulting intuition' of the school's experienced teachers especially so that such unheard wisdom may not express itself in the form of frustration (Hargreaves, 2007).

C. Supportive conditions for PLCs to function effectively and sustain themselves:

Lastly, there are certain structural, human and social conditions for teacher learning communities to function effectively (Hord, 1997; Roberts and Pruitt, 2003; Cormier and Oliveir, 2009 and NT DET, 2007. The structural conditions include the following:

- Allocation of time, resources, facilities and space for teachers to communicate and exchange ideas and
- Provision of inbuilt schedules and structures that reduce teacher isolation and make provision for teachers to observe, collaborate and interact with peers who are in physical proximity
- Teacher empowerment and autonomy in terms of teachers having the choice to do what *they* (emphasis added) believe is best for students
- Regular school-wide communication platforms focussed on teaching and learning

The human and social conditions include the following:

- Human conditions also require people to be accepting of feedback, manage conflict, willingness to be an active member and contribute to the learning of other team members as a member of the learning community and adhere to the decorum and protocol of the collaborative learning processes (Cormier and Oliveir, 2009; Hord, 1997)
- Opportunities for teachers and other members to acquire new knowledge and skills
- Encouragement is provided to the teachers to analyse and reflect on their teaching practice and try out new strategies to enhance the same and promote student learning. Thus, there is room for continuous enquiry and improvement.
- Collective learning platforms can be created for the learning community through study groups

D. What are study groups?

According to Murphy (1991) and Marsick and Watkins (1994) collective learning can be pursued through study groups. Members of the groups can read a book or a relevant piece of literature and convene together to discuss its application and implications in the classroom context sharing of ideas and experiences on a regularly scheduled basis (Hord, 1997; Roberts and Pruitt, 2003). They would meet to address issues on matters previously agreed upon for discussion (Roberts and Pruitt, 2003). Members of such groups may have similar interests or may be teaching the same instructional levels due to which there would be an inclination towards working with each other (Roberts and Pruitt, 2003). Study Groups offer opportunities for collaboration, reflective dialogue, sharing of practice and teamwork that may influence teachers' views and also opinions regarding their roles and practice (Hord, 1997). The aim behind formulating these groups is to help teachers alleviate their everyday problems and issues concerning student learning (Roberts and Pruitt, 2003). Having professional groups can lead to improvement in the teacher's sense of the craft of teaching and also increase overall commitment of members involved in the group towards their work context (Roberts and Pruitt, 2003). One of the most significant requisites for such a group to function effectively is to ensure voluntary participation on part of the teachers (Roberts and Pruitt, 2003).

2.6 A reflective summary on PLCs:

In the above discussion it is evident that there is considerable literature on the characteristic features and processes associated with PLCs. At the same time research indicates that it is extremely challenging to implement the practice ensuring that all these characteristic qualities have been actualised in a school context wherein the PLC practice related core concepts are understood, initiated and implemented (DuFour, Eaker, and DuFour, 2005 in Cormier and Olivier, 2009). First of all it is difficult to arrive on a premise where there is a unified understanding of shared knowledge in order to be able to implement it. Secondly, it is difficult to sustain a PLC beyond the initiation stage. Thirdly, it is very challenging to bring about a change in the culture of a school to bring in a collaborative mind set instead of an individual one. (DuFour, Eaker, and DuFour, 2005 in Cormier and Olivier, 2009). The question is what does the communication or dialogue between the community members do like? What kind of relationships do members of the community share? How do they collaborate and learn collectively? Besides, how is this culture of trust created and how does it manifest itself in the functioning of the community? In what ways can leadership be distributed?

As suggested rightly by Stoll and Louis (2007), *'…if we are to theorize the significance of professional community, we must be able to demonstrate how communities achieve their effects…' (p. 6).* Hopefully the data gathered through this research will bring out the nuances of how PLCs work in a cultural context like India.

Chapter 3

3. Research Design: Methodology, Data Collection Methods and Analysis Strategy

3.1 Methodology:

In this research, the case study methodology (Cohen et al. 2011; Simons, 2009) was adopted as a qualitative research approach (Creswell, 2007; Lodico et al., 2006; Anderson, 2005; Groundwater-Smith and Irwin, 2011; Brown and Dowling, 2010) to gain insights and an in-depth understanding about teacher professional learning at a kindergarten and primary school by investigating into their practice of professional learning communities. The emphasis was on *understanding* (emphasis added) the processes and structures associated with the PLC to discover meaning regarding teacher professional learning (Anderson and Arsenault, 2005). It is also an enquiry into the experiences, perceptions and views of teachers regarding how they think Professional Learning Communities (PLCs) impact their teaching and student learning and 'what it is like' for them to be part of this learning community (Cohen et al, p. 290).

This project is not an evaluation research (Anderson and Arsenault, 2005) rather an appreciative inquiry (Hammond, 1998). It simply seeks to appreciate how the practice of PLC is implemented at the school, why does it work, that is, what qualitative factors have contributed to its functioning and sustainability

(Hammond, 1998)? These qualitative factors highlight the finer nuances, *intricacies and subtleties* of the scenario in which the practice is implemented including relationships shared by community members and how the processes are undertaken in order for the PLC to run smoothly. As the case study approach provided an opportunity to explain this *why* (emphasis added) aspect of the PLC's functioning at the case site, adopting this design was suitable for this research (Denscombe, 2003, p. 30).

The approach allowed the researcher to gather data from multiple sources of information using a variety of data collection methods (Denscombe, 2003). Qualitative research methods for data collection including questionnaires, observations, interviews and audio visual materials have been adopted (Creswell, 2007; Anderson, 2005). Direct observations and video recordings of the PLC collaborative learning processes have been made in conjunction with a questionnaire that offers insights into how the PLC evolved over the years and is currently sustaining itself. Besides, audio recorded semi-structured interviews were conducted to get the perspectives of those involved in the practice (Anderson and Arsenault, 2005). The multi-methods approach allowed the researcher to see things from different perspectives (Denscombe, 2003). It also made it possible to check or corroborate findings by comparing data obtained from different methods through the process of triangulation enhancing the validity of the findings (Denscombe, 2003; Anderson, 2005). Observations made by the researcher supported the analysis of findings obtained through interviews. Besides, the research was

based in a natural setting (Denscombe, 2003) wherein naturally occurring PLC processes on a case site were studied rather than artificially created one as in an experiment (Denscombe, 2003).

Some limitations of the approach:

The findings from the case are interesting, at the same time they may be unique to the particular circumstances of this case and therefore it may not be possible to generalise these findings across other contexts where the PLC practice is being implemented (Denscombe, 2003, Anderson, 2005). However, this being a qualitative research at a unique case site, the researcher does not intend to generalise the findings to another context. Readers are welcome to assess to what extent the findings can be applicable to another case and to what extent are they relevant to this particular case site (Denscombe, 2003). Another limitation of the case study approach is that it can be prone to observer bias despite efforts made by the researcher to exercise reflexivity (Cohen et al., 2011). However, the researcher has sought inputs from peers and the supervisor who have served as critical friends during the data analysis stage to mitigate this challenge.

A single case design:

This is an exploratory qualitative case study with a single-case design wherein the practice of professional learning communities within a school has been studied through immersion in the context for 4 weeks and has been reported

as a case description (Anderson and Arsenault, 2005, p. 164; Yin 2003 in Creswell, 2007, p. 73).

Why a single-case design?

Cohen et al. (2011, p. 289) suggested ‘a case study provides a unique example of real people in real situations, enabling readers to understand ideas more clearly than simply presenting them with abstract theories and principles.’ The aim of this research was to enquire into the professional learning experiences of actors involved in real life situations, in this case the teachers participating in a PLC. Therefore, it was important to identify a unique case where the practice was being implemented with required resources and processes put into place in order to examine its influence (Cohen et al, 2011). Secondly by focusing on a single case the researcher could dedicate efforts towards delving into matters in greater depth. This helped to discover that which may have not been apparent with a superficial enquiry (Denscombe, 2003, pp. 30-31).

The limitation of this single-case design was that unlike multiple case-designs, it did not offer the possibility of obtaining data for comparative purposes. However, it was indeed challenging to find another case site implementing the same practice and having a similar context that could be compared in the Indian context. Besides, this was not feasible due to the limited scope of this small-scale research project.

3.2 The sampling strategies and context of the study:

In this sub-section firstly, an explanation of the sampling strategies adopted and participants involved is given below along with the context of the school or the case site where the study was conducted.

Why this case site?

Previously the researcher intended to conduct an action research project regarding how a PLC could be established at a school in the capacity of a coach. The researcher initially approached one school in India where she had implemented teacher professional development programmes and had a rapport with the principal. However, this school withdrew participation due to health issues with the principal. Later the researcher approached 3 other schools in India with the support of a professional colleague. One of the school leaders, the academic director and founder of the school (where the study was conducted) demonstrated interest in the study and agreed to know more about the project through an online video conference. A PowerPoint presentation was made to her regarding the action research project. Post the presentation she revealed that the school already implements the practice of PLC and discussed the details of how it is implemented. Post this conversation, the academic director invited the researcher to enquire into the practice implemented at the school. This case site was intrinsically interesting and therefore an exciting experience for research (Denscombe, 2003). It served as a ‘unique case’ where the practice was implemented already (Cohen et al., 2007). Therefore, the case study research design was adopted

to enquire into the PLC practice at this school in consultation with the research supervisor. Later another presentation was made on the revised methodology at the school with the leadership. (Refer to PowerPoint Presentation in Annexure 1.) This is an intrinsic study conducted to gain an understanding of the specific case – a school where practices associated with a Professional Learning Community are already implemented as part of the school's professional learning endeavour in the Indian context (Creswell, 2007, p. 74; Anderson, 2005, p. 164). Thus, a 'purposive sampling' procedure (Creswell, 2007, p. 75; Cohen et al., 2007) was adopted to identify the empirical setting - the school in this study (Dowling & Brown, 2010, p. 27).

A 'voluntary sampling' procedure (Cohen et al., 2007, p. 116.) was adopted to identify the volunteer teachers who were willing to be observed, video recorded during the collaborative learning processes and interviewed for the purposes of the study. Although such a sample may be constitutive of a biased group as participants would volunteer due to their interest in the study (Cohen et al., 2007), having research participants who were willing to invest their time and participate in the study was necessary. Out the 20 teachers (10 from kindergarten and 10 from primary) who were oriented regarding the study during the initial briefing, 11 teachers volunteered to be interviewed, whereas, all teachers agreed to be observed and video recorded during the collaborative meetings. They all completed consent forms that were signed and returned to the researcher. The interview sample constituted 5 teachers from kindergarten and 6 teachers including two mentor teachers from primary. Besides, the principal of the kindergarten and primary school, as well as two

academic resource team members including the academic director and founder of the school were interviewed. Thus, the sample size for the interviews was 13, whereas that for the observation and video recording was 13 for kindergarten and the same for primary level collaborative meetings. The sample size for teacher interviews was determined considering feasibility in terms of time. Since this is a qualitative research study, representativeness was not a consideration since the richness of the data obtained in a qualitative study is not compromise by the sample size (Dowling and Brown, 2010).

Context of the school:

The study was conducted in a private school that runs a pre-school with a nursery, a kindergarten and a primary school from grades 1 to 5. It offers the ICSE (national) and the IGCSE (international) curriculum. There are 20 teachers in all who are from a multi-ethnic background. The school adopts a project approach and an integrated approach to curriculum design. The pseudonym Blooming Bird School has been used to maintain confidentiality.

3.3 Data Collection Methods:

The data collection process was spread over a period of four weeks. (The data collection schedule and informed consent letter and form can be found in Annexure 2.)

During the first week the teachers and the concerned leadership were recruited for the research project by providing them with an initial briefing regarding the study. The initial briefing informed them about the purpose of

the study, the method of data collection, their choice to be involved and ethical considerations including those of voluntary participation, privacy, confidentiality and anonymity.

Post the initial briefing, the participating teachers and school leadership were requested to complete a biographical form (Helen, 2009) after obtaining their voluntary consent for participation in the study. Those who wished to participate in the study, be interviewed and video recorded during the study had specifically indicated the same on the consent forms they submitted. The data collected through this form had information about their educational background, work experience, age, gender and other professional learning experiences apart from their participation in the teacher learning communities at the Blooming Birds School. The biographical data form was only filled to maintain a detailed record of the identities of the persons interviewed so that the sources can be retraced for verification or clarification of the data (Anderson and Arsenault, 2005). (Please find the biographical data form and completed sample forms attached in Annexure 3.) These biographical forms were distributed during another meeting post the initial briefing where the teachers were gathered and they were returned to the researcher in person by the teachers so that confidentiality could be maintained. The names and other identification details have been erased in the copies attached to the dissertation to facilitate confidentiality. In all 23 Biographical Data Forms were completed by the research participants.

In addition, they were requested to complete a historical data questionnaire (Helen, 2009). This form primarily collected information about how the practice of a Professional Learning Community had been implemented at their school historically. The data gathered was in terms of the professional learning processes the teachers were involved in, the frequency of their involvement and the school context that in their opinion facilitated and hampered their learning or participation in the community. The idea behind collecting this information was to gather as much factual information about the practice through a questionnaire so that the interview focuses on the participants' experiences and perceptions regarding these practices and relevant questions can be raised based on the information gathered through the questionnaires with each research participant. Besides, this historical data form was collected so as to understand when, how and why the practice of professional learning communities came into place in the school context so that it could be reported. These served as basis to identify and understand the contemporary processes and events as far as the practice of PLC at the case site were concerned. These have simply been reported into the 'findings' section in the report (Please find the historical data form along with the completed ones attached in Annexure 4.) Although these are not anonymous to facilitate the planning of the interview of individual teachers based on their involvement details provided in the responses, the names and other identification details have been erased in the copies attached to the dissertation. In all 13 Historical Data forms were completed by those who were interviewed.

Post the completion of the biographical and historical data forms; observations of the collaborative learning processes that were naturalistically scheduled for the teachers during that 4-week period of data collection were conducted. These were not set-up by the researcher since the enquiry was focussed upon reporting the professional learning experiences of members of the teacher learning community at the case site as they were planned in the school context.

1. Two large-group weekly pre-implementation meetings were observed - each one held separately for the primary and kindergarten teachers each lasting 45 minutes to an hour approximately.

2. 2 fortnightly reflection meetings were observed – each one held separately for the primary and kindergarten teachers and each lasting around two hours approximately.

3. One small group class level reflection meeting between the grade 4 primary teachers with their respective principal that lasted for around 50 minutes was observed.

4. One study group interaction amongst members of the kindergarten Teacher Learning Community that lasted for around 2 hours 30 minutes was observed. This entailed peer observations and collaborative reflections on two classroom videos pre-recorded and shared by two teachers with their peers to obtain their feedback. It also entailed a presentation by two small groups of teachers – one who had reviewed a

book and the other an article and presented their learning to their peers. Observing this collaborative interaction was not initially planned by the researcher since it was expected to take place in the forthcoming month. However, this peer learning interaction was incidentally implemented during the data collection period and the researcher took advantage of this fact to observe it.

The researcher visited the school at least thrice 4 times a week for entire days over a period of four weeks for the purposes of the initial briefing (2 visits with a separate presentation for primary and kindergarten teachers), orientation of biographical and historical data forms (1 visit with two separate meetings for primary and kindergarten teachers), data collection through observations (6 visits) and interviews (8 visits). (Scheduling of interviews and video recordings at the school has been attached in annexure 5 and Semi-structured Interview Schedules in in annexure 6.)

Incidental field notes were maintained with a clear distinction between raw data (a chronicle of events including actions and interactions) and the emerging preliminary analysis (researchers own ideas and connections established with other data) (Dowling & Brown, 2010, pp. 61-62). For example, if the researcher noted that participants were exchanging laughter during the collaborative discussion, the researcher made a note of the impression that the teachers seemed to share a collegial friendly relationship in terms of preliminary analysis. If it was observed that teachers were raising issues concerning the behaviorial or academic issues faced with individual

children, the researcher made a note that the teachers seems to share a relationship of trust and comfort with the colleagues since they were willing to take the risk to share about the challenges that they faced in their practice with them. Along with this data, video recordings were made of all collaborative learning interactions observed with prior written consent from the participants. These were later transcribed in order to obtain verbatim interactions during the stage of data analysis. Two cameras were used for this purpose so as capture the interaction between the teachers using one camera and other capturing teachers in another frame from a different angle. Besides, since the researcher wanted to capture a social situation in which the individual participants were interacting in a collaborative context it was crucial to video record the session to capture facial expressions and gestures that would be difficult to recall during the phase of analysis (Creswell, fourth edition). Besides, audio recordings would have made it challenging to decipher and distinguish between various voices and their sources affecting the analysis process and therefore video cameras that facilitated the same were used.

Post the observations, semi-structured individual interviews were conducted with 11 volunteer teachers (5 from kindergarten and 6 from primary). These teachers were identified through the method of ‘volunteer sampling’ (Cohen et al., 2007) to gain insights regarding their perceptions and experiences concerning their participation in the practice of Teacher Learning Communities implemented at their school. (Sampling strategy elaborated further.) A set of informal questions had been planned prior to implementation

based on areas that were characteristic features typically associated with Teacher Learning Communities. The major themes covered during the interview were related to how things are taking place at the school (Anderson and Arsenault, 2005) and why since the emphasis in this research was to understand and explain how professional learning is taking place at the school. Observations made during the collaborative professional learning interactions amongst members of the Teacher Learning Community at the school. The interviews had some structure with certain broad questions areas pre-planned to know more about the influence of teachers' participation in the Teacher Learning Communities on their practice and student learning. It was difficult to expect teachers to share the influence of their current discussions on their practice since the interviews and the collaborative discussions were taking place within a short span of time. The leadership had informed the researcher that teachers undertook these collaborative reflections not just to inform short-term but also to bring about long-term curricular changes. Therefore, it was important to collect some data about past reflections on their practice and student learning in the form of anecdotes. Quotes were provided to the teachers and leadership in order to facilitate reflection upon their involvement in the teacher learning community at the school. These were highly appreciated by most participants since they helped to break the monotony of a typical interview process which revolves around a pre-defined questionnaire and the same time prompted them to think about their participation.

The interview generally worked as a naturally flowing conversation (Cohen et al. 2011). It was conducted in a quiet place where there were minimum interruptions (Anderson and Arsenault, 2005) since signs of interview in progress were placed outside on the doors. The researcher maintained eye contact with the interviewee and was faced opposite or adjacent to them depending upon their comfort (Anderson and Arsenault, 2005). Comments were made or questions were raised based on what the topics that the interviewee had raised in the conversation so that to develop a natural uninterrupted flow in the conversation rather than alternating randomly from one subject of conversation to another (Anderson and Arsenault, 2005). The researcher used paraphrasing as an active listening technique occasional nodding, making affirmative sounds and thanking the participant for their contributions with illustrative examples to explain their responses in order to demonstrate respect (Anderson and Arsenault, 2005). Paraphrasing and occasional summarising or recapitulation of what the research participant had said in order to crystallise it in a coherent and integrated manner. It also served as a perception check to ascertain whether the researcher had understood what was said correctly (Anderson and Arsenault, 2005, p. 209). This also sometimes served as a stimulus for further exploration of an idea expressed. The researcher tried to use effective probes to follow-up on comments made by the respondents (Cohen et al., 2007). The interviews were audio recorded with prior permission to facilitate analysis (Cohen et al., 2007).

The data obtained through these teacher and leadership interviews was qualitatively analysed to serve as a basis to determine whether and how the practice of Teacher Learning Communities had an influence on teaching practice and student learning and also what factors facilitated the implementation of the practice in a school context.

4.4 Ethical Considerations:

This study is guided by the British Educational Research Association (BERA) (2011) 'Ethical Guidelines for Educational Research'.

Firstly, voluntary participation of teachers was sought during the initial briefing. They were provided with a voluntary informed consent form accompanied by a letter that informed them regarding the aim of the research project, process involved in it, and their participation, how the data gathered would be used, and how and to whom it will be reported. Besides, as informed by Creswell (2007, p. 123), the consent form also elaborated on the right of the research participants, in this case the teachers, mentor teachers, principals, academic resource team members at the school and the academic director, to withdraw from the study at any given point in time. This helped ensure that they understood and agreed to their participation without any duress, prior to the research getting underway (BERA, p. 5). They were also given the choice of whether they wished to be interviewed and video recorded during the collaborative meetings by letting them know that they would not be captured on camera if they wished. Besides, they were also informed that the data obtained through the project will be utilized only for research purposes

and prior permission will be sought for further use in terms of publication or future research.

Secondly, privacy, confidentiality and anonymous treatment of participants' data were considered the guiding norms for conducting the research. Considering that teachers' are willingly and generously giving their time and point of view for this project and that their views could possibly affect their professional position; the researcher recognised the participant's rights to privacy, confidentiality and anonymity (BERA, pp. 7 and 8). These were maintained in relation to the data gathered while reporting the findings. Individual data from research participants was collected in privacy through the support of school leadership. Video recorded data of collaborative learning processes and audio recording of individual interviews was password protected on the systems. Besides, the participants would have access to any personal data that is stored in relation to them (BERA, pp. 7 and 8). This was communicated to them during the initial briefing provided for the study.

Thirdly, follow-up clarifications were made through electronic media via email and telephone. Besides, the participants were provided a copy of the report (BERA, p. 8).

Suitable fictional names / pseudonyms for both the research participants and school have been used while reporting the findings. Fictional names / pseudonyms have been opted over using letters or numbers so that readers of the report would be able to better associate a specific perspective to a specific participant (Oliver, 2003). Besides, these also help to impersonate the same gender and ethnic group of the participants (Oliver, 2003).

3.4 Data Analysis Strategies:

In this sub-section, the process of data analysis is discussed.

A preliminary phase of analysis began during the data collection process itself (Anderson and Arsenault, 2005). The data was later coded and organised into themes and constructs engaging into reflection, interpretation and contemplation (Anderson and Arsenault, 2005). In case of data gathered through teacher interviews; ‘significant statements’ that provide an understanding of how they experienced the practice of the PLCs at their school were identified and these were organised into themes to develop ‘clusters of meaning’ (Creswell, 2007, p. 60). The data obtained from observations was represented and interpreted based on extracts from transcripts and summary of field notes (Creswell, 2007, p. 86) and these were organised into themes.

A combination of two approaches was adopted while organising the data (Anderson and Arsenault, 2005). Firstly, the data was organised into descriptive themes that emerged during the data collection and the preliminary analysis (Anderson and Arsenault, 2005). Later an analytical strategy was used wherein existing literature (Anderson and Arsenault, 2005) on the characteristic features associated with PLCs was used to organise the data into a framework (Anderson and Arsenault, 2005). Case based themes have been identified to undertake an analysis of the data collected (Creswell, 2007).

In the following report the researcher offers a detailed description of the case (Creswell, 2007, p. 75) to capture its uniqueness by giving a descriptive (narrative) and interpretive account (Cohen et al., 2011, pp. 290-291; Lodico et al., 2006). This includes a chronology of events and the regularly scheduled processes associated with professional learning communities implemented at the school (Creswell, 2007, p. 75).

A factual account of how the professional learning practices changed over a period of time and what have they culminated into during the current year has been provided in the findings section of the report. This is based on data gathered from the historical data questionnaire and the interviews.

In the final discussion the researcher offers an interpretative analysis with a reflective account of the meaning derived from this unique case where the practice of PLC is implemented (Anderson and Arsenault, 2005). After this description an analysis of some themes emerging from the data have been provided not for the purposes of generalising, rather to understand the qualitative factors or attributes that contributed to the sustainable functioning of the PLC at the case site. The analysis is rich in context of this case at the same time attempts have been made to look for themes that transcend beyond the case (Yin, 2003 in Creswell, 2007, p. 75).

3.5 Limitations of the study and Mitigation of foreseen Challenges:

While this study was conceptualised, it was important to pre-empt some of the challenges that could have arisen during implementation and find out ways in

which they could be possibly mitigated. It was also important to acknowledge some limitations in terms of design and implementation. These have been elaborated upon below:

- Firstly, it was anticipated that it would be challenging to find teachers who were willing to participate in this study since as part of the design they may be required to honestly share their personal thoughts and feelings regarding their experiences as members of the TLC at their school. Efforts were made to give participants the confidence that the purpose of the study is to facilitate understanding regarding the influence of the practice on their teaching and student learning so that understanding regarding how to facilitate teaching professional learning experiences can be further deepened. Besides, assurances of confidentially, privacy and anonymity further encouraged some of the teachers to participate.

- Participating teachers needed to take time outside their working hours amidst busy schedules to be involved in the study in particular during the semi-structured interviews. Being cognisant of this issue, each teacher was interviewed for a brief period of 30-45 minutes at their convenience based on their own availability.

- One challenge was to ensure that the presence of the researcher may have the ‘observer effect’ on the people involved in a naturally occurring situation due to which those being researched would behave very differently from how they would otherwise in a naturally occurring situation (Denscombe, 2003). However, the researcher’s assurance to prospective

research participants prior to commencement of the research was that this research is not an evaluation; rather an appreciative enquiry to understand how the PLC in their school functions. The rapport built during the initial briefing and the unobtrusive manner in which the video recordings during the collaborative processes were done helped to make participants feel comfortable in the presence of the researcher. In fact some of them commented that they were unusually surprised that they did not feel distracted by the presence of the researcher during the recordings. Besides, the observation schedule and the positioning of the researcher during the observations were planned in advance so that they do not feel distracted or disturbed.

- In the researcher's role while enquiring into the case, it was important to be flexible, ask good relevant questions, be a good listener, keen observer and keep an open mind. This was challenging since it was the researchers first experience to implement such a research design especially to conduct semi-structured interviews. However, based on mock practice interviews with professional colleagues and as the interviews progressed with the research participants, the researcher developed the skills of making effective probes and be flexible about the order in which the questions were raised so that the conversation flowed naturally from what the research participant had shared.

- It was challenging to develop trust, relationships and encourage dialogue at the school site. Maintaining a balance wherein personal views, values

and opinions as a researcher do not get conveyed at the same time to indicate that I am interested in understanding the processes in depth was crucial (Anderson and Arsenault, 2005). The researcher primarily adopted the strategy of paraphrasing to indicate the same.

Chapter 4

4. Findings of the study: A Report

The following section reports on how professional learning was initiated for teachers in the school, how did it shape into a PLC over the years since the year of inception and how is the practice implemented currently.

According to the academic director who is also the founder of the school, not all professional learning processes that are currently implemented as part of the PLC's practice were introduced at the same time, these have been introduced gradually over the years. During the first year, the school had a curriculum team referred to as the Learning and Development Team (LDT) and a teaching team. The former developed lesson plans and the latter implemented them. The understanding was that teachers would not be able to develop the curriculum. However, during this period teachers and members of the LDT were always having clashes. On one hand, the LDT would not be aware of what's going on in the classroom. On the other hand, since the teachers did not develop the plans, they did not have a stake in what was being implemented in their own classrooms. The plans would be incorporated with beautifully thought-out activities. However, they would not get implemented in the classroom as visualised as there was no ownership for them on part of the teachers.

At the same time, as part of the teacher professional development endeavour, only training sessions were organised for teachers during this year. Every month, during weekend, generally on a Saturday, an external expert on

education would be invited to conduct a professional training and development programme for teachers. Experts or members of the LDT conducted these workshops. During the interview the AD mentioned,

> "If all the time I go and an expert trainer goes and tells them (teachers) the same thing, it becomes very monotonous. Teachers feel experts come and go. … How do they understand what challenges I (the teacher) am facing in the classroom? So we thought, let teachers get into groups. Let them research. Let them do and share those things with each other."

Therefore, during the 2nd academic year, the LDT was dissolved. Members of the curriculum development team started teaching as well while the teachers got involved in developing lesson plans. Instead of the LDT, an Academic Resource Team that constituted the principal, the academic director and an education or child development expert was formed at the kindergarten and primary school level. At the primary level, this team included experienced teachers who functioned as mentor teachers for other teachers in school by supporting them in devising their lesson plans. That year the approach of creating developmentally appropriate curriculum was given significance by the entire team including teachers and members of the ART. A complete week was dedicated to entire-day's workshops for 6 hours on each day. In all 36 to 40 hours were devoted by all teachers and members of the Academic Resource Team to the conceptualisation and planning of the curriculum. Some of the questions they addressed were:

- What's our philosophy (as a school)?

- How should (the curriculum) be like?
- How should assessment be like?
- How do children learn?

As per the academic director, this exercise brought people to a common platform. Engagement in exercises that involved members of a professional learning community with a common vision and understanding about teaching and learning, which is typically associated as a characteristic feature of PLCs, was implemented at the school. It provided teachers with opportunities for decision making as far as the learning of their children and their personal teaching practice was concerned according to the director. Once teachers developed lesson plans, development experts would go through them, make changes or provide teachers with feedback to make necessary changes. Teachers would feel happy to know that they were improving based on the feedback received from the experts while at the same time they had a stake in the whole curriculum.

The academic director also mentioned that during the first year she also realised that when she increased personal interaction with teachers she recognised that they had many ideas of their own. Thus, she felt a need to create a platform wherein teachers could share best practices amongst each other. According to her this provided extensive learning for all of them. She added during the interview,

'…Teachers are motivated (to learn) when they get ideas from people like them. People whom they feel understand them and that is mostly colleagues like them and expert teachers. Not experts. Teachers need to research and grow themselves.' At another juncture she said, 'What motivates teachers is that they get an opportunity to give ideas to each other.'

Therefore, in the second academic year when the LDT was dissolved, monthly meetings with all teachers were introduced. At that time the biggest issue in these meetings, was that of trust and confidence among teachers towards the leadership. So during the meetings, the leadership and members of the ART would just request teachers to share how things were progressing in their classrooms. The sole objective would be to share whether the plans were working in classroom and were there any issues with the curriculum. Sharing of practice and discussion on challenges faced during implementation which is typically associated with PLCs thus became a regular feature at the school.

According to the academic director, during the second year, workshops which were earlier conducted by external experts were now being conducted by internal faculty members including teachers with specialisations, either through Montessori method of teaching and using the Montessori equipment or by a workshop on portfolios as a method assessment for children (reported by an academic resource team member during the interview who has done some research in this area and presented a paper on the same during a conference.) During these workshops demonstration lessons were conducted by internal faculty members wherein teachers would simulate children. These

workshops had themes like how to conduct art lessons in the classroom, how to manage indoor play or on the idea of enquiry based learning (Academic Director Interview). Such workshops facilitated bonding between the teachers besides being opportunities for professional growth for the teachers conducting them and the peers who were participating. These were a kind of platform for peer learning.

According to the academic director, during the third academic year, the planning of the entire curriculum was primarily the responsibility of teachers. Teachers would meet together in small groups at each grade level and design lesson plans together while the principal would assist them. The academic resource team / education expert members would review the lesson plans and make changes only if they observed that a particular aspect was developmentally inappropriate.

Study groups were introduced in the third year and monthly meetings were converted to fortnightly reflection meetings wherein large groups of all kindergarten and primary teachers would meet with their respective colleagues for collaborative reflections on their practice. These are still implemented in the current academic year and are referred as Academic Reflection meetings. As observed during both video recorded ARMs by the researcher, issues concerning academic performance with each and every individual child in classroom especially those who were facing challenges were discussed. The focus of discussion was on student learning and discussing possible strategies to address some of the challenges that were being faced with individual pupils in classroom.

In her interview the academic director mentioned:

> The agenda at the large group meetings is that the teachers report on their classroom practice. This kind of sharing becomes a platform to know what's happening across the school. If one teacher has a question and I give her an idea, just by hearing the other teacher, they will get some idea. That's a professional development for her also. When she has to deal with such a child, she might be reminded of this strategy that was discussed. This kind of a discussion is never a waste of time. Always people are learning from each other's issues and cases.

She provided an example of how one of the teachers had raised an issue regarding children's engagement in the annual day event had affected her curriculum implementation. Later when all teachers expressed similar concerns a strategy to address the issue was discussed. Thus, ARMs become platforms for discussing everyday implementation issues faced by most teachers.

Other than the small and large group meetings, they also have pre-implementation meetings wherein a week prior to the implementation a lesson plan, kindergarten teachers met with the principal and primary teachers meet their mentor teacher to discuss foreseeable challenges and discuss strategies to address them. This meeting is also a platform for them to ideate in order to implement lesson plans with a different strategy depending upon the teacher's current understanding of the pupil's needs in her classroom and to what kind of activities the pupils respond.

During the third year, the teachers at the pre-school and primary level began meeting as a study group. There were two platforms for them to interact as a study group – as a book or journal article review study group or for peer observation and feedback and peer learning. Both these were opportunities wherein they would be responsible for their own professional development and of their colleagues.

As part of the book or the journal article study group interaction, once a year each teacher would review an article connected to the field of education and present her understanding to the rest of the group. The school subscribed to a few research journals, in particular, one titled ‘Young Children’ by the National Association for the Education of Young Children (NAEYC) and the local early childhood journal. The teachers also make use of free resources from the internet which they believe are teacher friendly. The principal maintains a database of all these articles in a printed and soft copy format. Teachers can select an article that interests them. The articles are based on diverse themes across different areas of education including curriculum, education philosophy and child development. Because teachers are also extended autonomy they have an option of bringing in an article if they find something interesting. However, this article has to be validated by the principal who ensures that everyone is selecting a variety of topics so that the presentations are based on a variety of theme.

However, the book reviews are done in small groups. Teachers from same grade level formed a group to present about one book they have read during the course of the year in particular a chapter they found appealing. Books are

selected at the beginning of the year from the teacher resource library that has been set-up at the school. The teacher again has a choice in terms of which book she wishes to select. Such a practice made it evident to the researcher that teacher autonomy was encouraged in the school by providing choices in terms of the article or the book they would like to review according to their personal interest. As reported by the AD during her interview and also the teachers in the questionnaire - based on the reading and reflection done by the respective teacher or groups, they would make a presentation to members of the study groups mainly their peers. This practice is being continued during the 4th academic year especially at the pre-school level.

The books for this library are identified by the academic director and the collection is renewed every summer when the academic year ends. Books are added based on what the director believes they need to keep abreast of as far as the field of education is concerned.

As far as the different genre for the books are concerned, according to the AD,

'…Books (identified) are related to the entire gamut of education - philosophy of education to child development, early childhood years and primary years education, curriculum and teaching, teacher resource books, activity ideas for teachers and books having ideas on activities. (The) curriculum section is vast – how to teach language, how to teach math, how to conduct (the) project approach. All kinds of pedagogies and approaches are covered; assessment and evaluation, certain policies.'

Thus, it was evident that one of the requirements of the supportive structural conditions for the PLC to function effectively was fulfilled through the allocation of material resources and facilities for the project (Roberts and Pruitt, 2003; NT DET, 2007)

During the third academic year, the school also started the practice of peer observations as part of their study group activities. As part of this exercise teachers would record any classroom session of their own for an activity for which they would like to receive feedback from their peers. As per the pre-school principal, if the teachers felt they were facing challenges with their reading readiness programme, they would record a video for the same so that they would get input from their peers. The teachers had the freedom to edit the video the way they would like and select only a 2 to 3 minutes clipping based on what they want to highlight and receive feedback on (AD).

In the second academic year, prior to the commencement of this PLC practice, the academic director, leadership and the external education experts would conduct classroom observations and provide feedback to the teachers. Later when they thought about the situation from a teacher's perspective they felt,

> '… when a third person comes and observes something (the class and gives feedback), I (the teacher) may not take it so well. However, if then I observe myself conducting a class, it would throw up (bring to the fore) so many surprises and help me on 2 o 3 things.'

To put it in her own words, the academic director (and the leadership) introduced the practice of peer observations,

'…because I wanted a lot of self-reflection to come about. That's the scariest thing to do. (However) it leads to greater (self) awareness.'

This is very similar to the understanding of learning that involves construction and co-construction of meaning that has been facilitated through collaborative interactions. According to the AD, when some of the teachers watched themselves and observed their own classroom videos during the study group interactions, they themselves would realise that they were not making eye contact with the children. They became more aware of their tone, their own body language and the silent messages that they gave the children. They would engage in these exercises so that they could learn from each other's mistakes and best practices. She mentioned that teachers are generally engaged in their own classes and therefore they do not get an opportunity to attend and observe their peers' classes. However, when they get a chance to view a 3 minute clipping of a peer's classroom, they get some ideas from it. When they get an opportunity to hear other people reflecting on own their own classes, they also get to learn from it.

Guidelines on conducting the peer observations and presentations were also provided by the leadership: On the day of the presentation, maximum three teachers would present for a period of an hour and a half. Each teacher would get 15 minutes to present and after 45 minutes of presentations. Audience

would form 3 groups for the three people presenting and reflect using following questions:

- What did we connect with that we can use?
- What do we have questions about?
- What is my take away?

They would have ten minutes to reflect and later the groups would re-convene as a large group to discuss their reflections.

However, as per the observations made by the researcher, they reflected individually and shared their individual observations. According to the AD, during the initial few exercises, no one would raise questions. Then the leadership brought to the fore the understanding that if someone has taken so much effort for the others, you need to at least acknowledge them and add some reflection to their own so that it gets converted into some learning.

In the fourth academic year which is also the current academic year of the school the following PLC practices that have either been redefined or newly introduced over the years are being implemented:

- Collaborative Planning and Pre-implementation meetings
- Academic reflection meetings – sharing of practice
- Reflection meeting between principal and grade level teachers
- Study group interactions
  - Book and journal article reviews and presentations
  - Peer observations, feedback and reflections

According to the AD, since these practices have been tried over a period of time, they have developed into something ‘more refined’ and this refined level has not been achieved immediately. Rather it is state that the school has been able to reach through introduction of ‘ideas gradually’. Thus implementing practices associated with teacher learning communities was a gradual process in this school that could be implemented over a period of time through trial and error. The changes that came in did not take place overnight. It was important is to be open to change, reflect and be critical of oneself as a school in terms of what is working and what’s not and think of alternative ways of providing opportunities to teachers to harness their experience and knowledge based on their needs, expectations, interests and personalities.

Chapter 5

Analysis and Discussion:

After being aware of the depth and the breadth of processes (reported in the findings section) implemented at the school as part of their Professional Learning Community (PLC) practice some questions arise - What makes these practices work effectively despite the fact that they are demanding on the teachers' time and effort? What has sustained this learning community since the school was started four years ago? These questions attempt to respond to the research questions on 'what can be learnt about teacher professional learning' by exploring some of the qualitative factors that contribute to the effective functioning of a PLC – a practice implemented at the school for encouraging professional learning amongst teachers. The following analysis also explores the perceptions, experiences and views of teachers regarding the qualitative factors that make professional learning communities effective by quoting excerpts from their interviews.

Some of the following qualities/characteristic features to which the effectiveness and sustainability of this learning community can be attributed have been identified during the research enquiry. (Note: These do not only reflect in the actions and choices of members of the learning community. Rather they have been reported by members during the interviews as significantly contributing factors.)

1. An environment of support from the leadership (Stoll et al., 2006)

2. Interdependence in terms of learning through opportunities for peer learning (shared learning and thinking together) (Hargreaves, 2007)
3. A culture of trust and respect (Hord, 1997)
4. Openness to learn from every available opportunity
5. Quality consciousness through a focus on improvement in teaching quality and student learning

There are several instances reported by the research participants who are members of the PLC at the school that reflect examples of the existence of the above mentioned characteristic features or qualities. Some of the above are typically associated with the effective functioning of PLCs across relevant literature. This section will give evidence of each of these factors.

1. An environment of support from leadership was apparent in the following ways:

a. The head asked open questions to enable reflection
b. leadership was shared

Through some of the examples shared by the leadership during the interview and what was observed during the collaborative meetings, it was evident that members of the community were provided support from the leadership in order to facilitate their growth and learning by raising questions with them that would encourage them to think (Stoll and Louis, 2007).

An example of how questions were raised by the leadership to make teachers think deeply about their lesson planning was witnessed during an academic reflection meeting with the kindergarten teachers that was video recorded by

the researcher. During the reflection meeting the academic director pointed out that the written fortnightly reflections on the lesson plan indicated that the teachers were to discuss the myths that the children had during the food project. The director pointed out that if a child holds a myth, he or she may not be aware of the same. In that case, how did the teachers go about making the children undergo that discussion on myths that was planned? Each of the kindergarten teachers then responded to this questions and clarified how they dealt with the activity as follows:

Academic director: One more reflection. In senior kindergarten, the strategy mentioned was to ask children about myths. But for children myths are not myths. They are real. Did it work out? How did you conduct those sessions?

Teacher 1: Initially they (the pupils) thought you get everything from milk – proteins, calcium, vitamins. Now they say only calcium and we must drink three times. They (pupils) used to think one time is ok (alright) before meeting the nutritionist. I asked them what they used to think before and what they think after the nutritionist visit and the field trip.

Teacher 2: Before going for field trip (to the restaurant) they (pupils) used to think that the chef also serves (food). But they observed that (the) waiter serves food (at the restaurant). Before the pupils used to think that the bread has to be washed before along with (the) vegetables (for making) sandwiches. After the father's cooking day they observed that the fathers did not wash the bread before making the sandwiches.

Principal: Henceforth in our planning we can be more clear about what kind of questions we will ask our children (while conducting the lessons).

Pre-school academic reflection meeting, 2013

At the end of the discussion teachers appeared to realise that they need to be careful in their choice of pedagogy and clear in their articulation of the same in their lesson plan so that they can engage the students appropriately.

This practice of raising questions to make teachers think about their practice was also observed during one of the collaborative discussions. This was a reflection meeting between the primary level principal and two of the primary grade teachers. During the reflection meeting the principal asked the teachers to reflect on the last two projects they implemented in class. The questions raised by the principal and further in-depth probing encouraged the teachers to critically reflect on their practice which is evident from the following excerpts:

Primary Principal: '…Now you have done your two projects. Which are the areas you feel there is improvement from the last and when you compare both, where do you see I still have a scope for improvement?'

Mamta: We could be more organised compared to the first (project)?

Principal: When you say, you could have been more organised, which are the one or two things that came to your mind, that you could have done this in a better way?...

Sapna: Mam I think when we are doing this project … I had a lot of things to do… (In the project) Signs and symbols you see traffic symbols, Braille, international symbols. You see all different types of symbols and all of them

were clubbed in phase 3 (of the project). Everybody (the children) wanted to do something or the other. They were not specific …

Principal summarised: I think what you both are trying to say in a nutshell is – we need to re-evaluate our topics for the projects next year and we take things that are more specific and not such broad topics.

Sapna: May be in signs and symbols, let us short (narrow) it down to natural symbols, currency, flags… If we had specific topics, we could have gone to the depth of it. But this we had to do everything.

Excerpts - grade-level reflection meeting with primary principal and teachers

In all the above-mentioned scenarios, the role played by the leadership was just to facilitate reflection by raising questions that would encourage teachers to think during the collaborative discussions as recommended by Stoll and Louis (2007).

Besides, having a supportive environment from the leadership, there were also opportunities created for shared leadership in order to develop leadership capacity at the school (Cormier and Olivier, 2009). Other teachers were also encouraged to take the lead in facilitating the professional learning of their peers based on their individual strengths and capabilities identified by the leadership. One example being the pre-school principal had identified a teacher from amongst her team to lead the collaborative reflection processes because she herself showed the potential for the same by raising questions and showing signs of thinking and reflecting during the collaborative reflection meetings lead by the principal. Another kindergarten teacher had a

specialised experience and training for using Montessori equipment. Based on this strength of hers, she was encouraged to conduct a hands-on workshop for her peers on the usage of Montessori equipment. Post the completion of the workshop she was also given the opportunity to observe her peers in their classroom and give them her inputs regarding whether they were encouraging the children to use the equipment effectively. Another pre-school teacher was made responsible to take the lead in facilitating the planning, conceptualisation and implementation of special events organised for the children during the course of the academic year in conjunction with her peers. This was because she was an experienced and talented person in this area. Another teacher was made responsible for taking the lead in planning and organising the study group interactions for all the other pre-school teachers. Thus, it was evident that although a selected few had been given opportunities to take leadership positions in facilitating the practice and learning of their peers, attempts were made in order to develop leadership capacity amongst the teachers at the school. (Cormier and Olivier, 2009)

2. Interdependence in terms of learning through opportunities for peer learning, (shared learning and shared thinking)

Processes such as the study group interactions in which the teachers shared their own learning from journal articles or books they read were obvious examples of how peer learning was promoted at the school set-up. An example of this openness to share was given by a kindergarten teacher. She mentioned how one of the books read and presented brought about a change in the teaching practice of the entire pre-school team. They had read a book

titled ‘How to enhance self-esteem in young children’. The book recommended that in order to develop self-confidence in children, teachers must allow pupils to select artefacts from their own pieces of work for display in the classroom. After the idea was shared by the presenters, the teachers mutually decided to implement it in their respective classrooms. Another kindergarten teacher mentioned during her interview that this attitude of sharing according to her reflects in the quality of teaching across all the classrooms. She suggested that if they do not have this attitude, there would be discrepancy in the quality of teaching across all classes.

Another example of shared learning was evident during the study group interactions where teachers generously and openly shared what they had read about with their colleagues. This kind of exchange indeed created a platform for shared learning. During this interaction, a small group of teachers had presented their understanding of a chapter from a book they had reviewed titled ‘Skills to invite children to cooperate.’ The teachers made the presentation of the key themes of a chapter in an interactive experiential manner through a role play which they asked their peers to observe and derive meaning from by relating it to their own practice. Teachers observing the role-play were quite interested and focussed which was evident in their smiles, attention through eye contact and the laughter they exchanged when the actors did something dramatic to convey an idea from the book during the role play. They appeared to have enjoyed the presentation while making observations to learn from it. This learning experience for the teachers was thus innovatively designed by their peers. When the presentation was

completed, one teacher asked the teachers presenting to give a real life example to illustrate of how they could apply the ideas from the book in their classroom. One of the presenters shared an example of how they had utilised a strategy of giving children choices from the book in case of a child who was scared to visit the cobbler because he had been frightened by a fictional character that was played during a dramatic exercise on the previous day. The child was unwilling to visit the cobbler because he was scared that the negative charter from the play would re-appear. The teachers gave him a choice of staying in the classroom and coming downstairs to visit the cobbler when he is comfortable. Then they made the child wait near one of the classroom windows from where the cobbler was visible polishing the shoes of other students. The child felt comforted by the choice of staying in the classroom and when he saw the cobbler polishing shoes, he felt safe to come downstairs the school building to engage with him similarly. This shows that the teachers were constructing meaning from what they were reading by trying to apply it to their practice (James, 2006). Sharing of ideas was encouraged by the principal who also personally reflected on the presentation to share the meaning she derived from it with the teachers as their peer learning with them at the same platform:

Pre-school principal: A very good strategy. Rather than forcing the child, you gave a choice so the child cooperated… What we should try to do is understand the intention of the child – was it to play, to explore, to experience, to get clarity on what questions they have, or it was to irritate my teacher. Understand the feeling of the child as they rightly put it.'

Pre-school study group interactions

One presenter recommended the book to peers giving the following rationale:

Divya: I would like to recommend this book to my colleagues because it will give a brief idea about what are the alternative methods which we can give to the children to be more self-directed and self-disciplined.

Study Group Interaction – Pre-school Teachers

There were instances of peer support mentioned by some of the teachers in which there was sharing of ideas as well. For example, a primary level teacher mentioned how she sought support for ideas in terms of pedagogy from her peers to plan her math classes since she personally found that challenging.

Punita: I was not very keen on teaching math. But when I intercat with other colleagues, I also learn from them how math can be taught in class… It helps me to integrate it well with what I am doing.'

Primary teacher interview with Punita

She mentioned an instance in which she engaged into collaborative planning with a colleague in which she implemented an idea shared by the colleague.

Punita: It was an interest centre activity. We had planned a strategy to help children form a naturalist viewpoint. I felt this was not working so either my strategy is not good or I as an implementer, I need to work on it. I talked with my colleague who had also taken up interest centres last year. She told me why don't you create an environment before children enter class and let them

explore? So I did that. The children were more interested. They were also asking questions when they were touching and exploring things.

Another kindergarten teacher mentioned how she was personally not very creative and so she sought support from the art teacher to plan creativity exercises for her pupils at school.

Mrignaini: If I am short of art activities, there are some teachers very good at art. I ask them, can you please give me some ideas based on the theme? One teacher gave me the idea of how to make children design their own footwear.'

Kindergarten teacher interview.

These are examples of how members of the community relied on each other's strengths to enhance their planning / teaching methods.

An instance during which a collaborative reflective dialogue and thinking together to resolve issues in practice along with leaders and peers was observed during the academic reflection meeting with the kindergarten teachers. This conversation also reflects how their interactions were focussed on student learning (Hord, 1997). Excerpts from the discussion below are indicative:

Education expert: In terms of letters and association of letters to sounds, are most kids (students) comfortable or some kids (students) can't do it.

Devaki: In my class most kids are very clear with the sounds. They are able to identify. Sometimes some sounds they forget but then they remember. One child is new. He is able to write and recognise. He has started learning (letter) s sound. S says, /s/. Most other kids when we say the sound, they are writing the letter also.

Bhavani: Except for one kid – Parineeta. Numbers and alphabets all mixed up.

Sanya is not good with sounds. But good with letters.

Education expert: There'll be kids who may not be able to see (identify) numbers in a sequence but be able to write 4. There are going to be kids who would be ok verbally but not in writing. When they don't write, you need to find out – is the formations that are creating a problem or is it that the child is unable the recall.

Bhavani: Drawing also they are scribbling. Not forming a structure in drawing.

Education expert: Then is it a fine motor issue? … Is it that the child does not know what a 5 looks like or an N looks like? If it is fine motor, then we need to give them practice in writing standing and sitting lines (pre-writing readiness patterns). If they don't only know (the letter or number), then it is a different ball game.

Devaki: When I said /l/, Aryaman did not write it. When I said, (letter) l says, '/l/', he was able to write it. … It is not that they are not understanding. Some child understands the sound and some the actual letter.

Education expert: That's fine. But some may not be able to write. They may have a problem with putting pencil on paper. There could be different categories of issues. Find out what is the basis of the problem for children who are a little slow – the physical writing part or the mental association. We need to start intervening according to the problem.

Academic director: Formations and directions of letters is an issue in grade 1.

Shazia: I have observed a child with this issue (in my class).

Bhavani: Are we supposed to rectify?

Education expert: Use dotted letters with arrows.

Academic director: Now onwards teacher (students to write letters) with directions. Next year we ensure the same. We have worksheets (for letter-writing) with arrows (marked for directions).

It is evident in the above interaction that they were thinking together and trying to analyse the root cause of academic issues facing children and sharing strategies with peers so that they could accordingly think of ways in which the issues could be resolved. They were also contemplating changes in the teaching practice during the next academic year in terms of designing of teaching-learning resources to resolve the issues. Thus, reflections on practice brought about awareness of relevant changes required in curricula implementation.

Peer learning was evident during study group interactions when the teachers had a collaborative reflective dialogue of an education based article presented by two teachers. They teachers had the freedom to debate, agree or disagree

with each other during the dialogue. The article recommended that parents are made aware of the math and language skills that are developed in the children at every grade level. It also recommended parental involvement in curriculum design and implementation. The principal was aware that some parents were very demanding on their children and wanted to over burden them with skills that are not developmentally appropriate. She raised a question for everyone to think critically about the article presented:

Pre-school Principal: How many of you agree to this? As a school our philosophy is that we will have only developmentally appropriate programme. Reading and writing will come only when children have learnt listening and speaking. We can have a good debate on this. If you agree why and if not why?

Deepshikha: Previously we used to give parents hand-out of daily calendar. Parents make them (students) do it (study) at home. After that we found out it was pressure on the child. A child was not responding at school because he was frustrated at home. We asked the parent, 'Why are you doing it at home?It was just for your knowledge. Then we had a discussion with the mentors and stopped it (the daily calendar). It is a very big pressure for the child.

Mrignaini argued: Parent involvement in activity is fine. But in curriculum, there are mentors. They are qualified to design the curriculum. They can give inputs.

Bandana: We can take suggestions (from the parents) at the beginning of the year.

Sakshi: Parents are not qualified.

Principal: Pre-schools that take suggestions from parents, their children are writing from the beginning of the year on pencil and paper. …

Deepshikha: We brought up this article because we wanted to discuss. …

Bhavani: At the beginning of the year we can list down ideas where parents can be involved. We can involve them in a variety of other ways.

Deepshika (raising a concern and a dilemma with peers): Just wanted to ask, is is advisable that in the initial year opening, in the first meeting, is it advisable to orient the parents about the language (programme) - formation of letters and sounds. We are facing this problem. Parents were regularly coming and asking what is the sound (of the letter), how are you doing it. It is about letter formation also.

Ambika: We can discuss the 1st string of letters by the time the 2nd PTM comes (so parents can reinforce at home).

Bandana: Some parents may force their children and start it (teaching) on their own…

Deepshikha: Then what should we do?

Bandana: Not all parents ask.

Deepshikha (requesting a consensus for further action): Then too. We should have some conclusion. What should we do?

Principal: Phonic method orientation should happen at the beginning and it should be gradually in a process. You can give clarity to the parent that let the first alphabet (letter) learning be from the school. Once we complete one string, we will get back (to them). Then you can tell them directions (to write the letter) when you complete. So parental involvement, as a school, we must make it very clear that it is at the reinforcement level and not at the initial

learning level. Let it happen with the teacher. Tell them the pros and cons and they'll understand.

Study group interaction – article presentation

Thus, peers debated with each other and engaged into 'thinking together' on matters concerning their teaching practice. Decisions concerning practice took place in an environment of healthy debate, trust and comfort to speak up what is on your mind without being evaluated or judged. Besides, a supportive environment provided by leadership and peers who facilitated each other's thinking, learning and reflection on practice; a culture of trust also facilitated the community in its functioning as discussed further.

3. A culture of trust, openness in communication and respect

During the academic reflection meetings, it was observed that the teachers openly shared the classroom practice related challenges that they faced. They were not hesitant to express the problems they were facing with their leaders and their peers. On the other hand, they sought support from their colleagues and the leadership to resolve some of the issues that they were facing. Besides sharing concerns related to teaching practice, the teachers also shared instances in which they were faced with academic and behavioural issues concerning individual pupils in their classroom. When asked why did they feel comfortable to express these challenges, one teacher expressed that she would accredit that to the attitude of the leadership. (Deepshikha: I think it comes from the leader. It is always how your leader treats you.'). Another teacher shared that the leader has always encouraged them to raise

their classroom related concerns with her so that they could work on strategies to resolve them together. (Mrignani: ‘Comfort is that mam gives us. She treats all people equally. She always says, whenever you have a problem in class, you are stuck somewhere and don’t know what to do, you can always come to me and we will think why and find out solutions.’) The teacher appreciated this atmosphere of ‘transparency’ (Mrignaini). Another kindergarten teacher mentioned that she was also confident that when she gets stranded or is faced with a challenge, she trusts that her colleagues would be around to support her. (Deepshikha: I can frankly talk to my team when I need help from anybody.) She also added, ‘It is a very good team. United. They don’t feel bad why you are giving them a suggestion.’ Thus, an environment of trust and openness was evident in their interactions.

Mutual respect was shown with openness to learn even from a junior teacher: *Mrignaini: Irrespective of whether it is a new or senior teacher… Every day I am observing from her (referring to a newly recruited teacher) and learning from her. She is very patient with children and me… Why not take ideas from new person? … Every person will have their experience and you will learn from them.’* An atmosphere of non-hierarchy was observed wherein experienced teachers respected the ideas of those newly trained and suggested them to communicate their ideas in the larger forum with peers. Such encouragement seemed to provide opportunities for shared learning as well.

Besides, an environment of trust and mutual respect was created by providing room for improvement by the leadership when teachers made mistakes. The leaders encouraged the teachers to learn from mistakes rather than blaming and reprimanding them. This was evident in an example of an interaction between the primary principal and two of her teachers. The principal was once disappointed to know about a child who was punished by one of the teachers to stand outside the classroom. The teacher had lost her patience with the child when she could not handle his misbehaviour anymore. The principal did not penalise the teacher for her action. Rather she discussed the instance with both the home room teacher and the co-teacher during the grade level meeting with the principal. She brought it to their attention that this kind of an act was against the education philosophy of the school. At the same time she empathised with the teachers who were struggling with managing the behavioural challenges faced by them in the classroom. She instead suggested strategies and recommended books that could help them manage the child. She made them realise that the child seeks attention from them and therefore is willing to engage in any kind of misbehaviour to draw their attention. The key would be to provide him with attention when he is engaged in positive behaviour so that it gets reinforced. She also made them understand that if they pay attention to him when he displays negative behaviour, it is likely to surface again since it fulfils his need for attention. That's when the teacher herself recollected an example of when she fulfilled the child's need for attention while narrating a story in which she mentioned his name intentionally to which the child responded very positively. Besides, at this stage, the teachers also acknowledge their mistake and felt

comfortable in doing so. The intention of the leadership was not to engage into any accusations but to support the teachers to overcome the challenges that they were faced with. Such open communication leads to the creation of an environment of trust, comfort, open communication and mutual understanding (Hord, 1997).

4. Openness to learn from every available opportunity

The teachers were willing to learn from every opportunity available – whether it would be through reading in their study groups, from peers or from workshops. What was important was an openness to learn. The following examples illustrate the same.

A pre-school teacher appreciated workshops by saying,

Prajakta: I learnt a lot from workshops. The workshop on story telling was very good. I learnt how to modulate my voice, how to use different props, flashcards and materials and get the attraction of the children. It makes (teaching) session more interesting.' Preschool teacher interview with Prajakta.

Another teacher Punita who had attended a workshop on 'Understanding by design' (a curriculum design approach) at the school along with her team members found the interactive approach used during the workshop and the opportunity to later apply what she had learnt in her classroom very beneficial. This was the first time she had come across this curriculum design approach. When asked how the workshop affected the way she was planning her class, she explained that it brought in the enquiry approach in her lesson planning. The approach encouraged her to plan such that it leads to the understanding

of a whole big idea around which the entire plan revolves. To explain this application, she gave the example of the body system in which children learnt about how different body parts are interconnected to form a system and each part serves a unique function to make that system work.

Another teacher shared the example of how she learnt different strategies to teach the topic shadows and light to the children from a journal article she had read on the theme as part of her study group tasks. She shared that it made her teaching and learning experience very interesting for the children.

Prajakta: We read about measuring shadows, exploring shadows outdoors and indoors in artificial light, observing shadows at different times of the day, how shadows change when the source of the light moves forward and backward. … When we included these activities, all these experiences were explored by the children. Their responses were amazing. They learnt a lot.

This teacher also added that, 'Peer learning is the best way how we learn. If we get feedback from others, I can improve (my teaching practice).' When asked whether she would prefer workshops or peer learning, she said. 'There has been a lot of learning since I joined. I would prefer workshops because we are getting knowledge from experts. If we have a query, that person's response is more satisfactory on a professional basis. Peer learning is important, but workshops are even better.'

The study group interactions lead to knowledge building and critical appreciation of what teachers read as per the pre-school principal. The

principal shared how a teacher critically reflected on a journal article she had read:

Pre-school principal: The teacher said, 'We read an article how to bring nature in the classroom. When we implemented an activity of bringing a turtle to the class and making the nursery children touch it, some children started crying. They should have suggested what age group to use it for. But this activity made the nursery children think about how having an animal in water is important otherwise it would die. But I don't agree with this part in the article on parental involvement. Including parents in the Indian context is challenging. This article is written in the western context.one reason is it is very difficult to convince a parent in India about a child doing a messy activity, playing with sand and throwing sand at each other.'

5. Quality consciousness through a focus on improvement in teaching quality and student learning

During one of the academic reflection meetings, the learning experiences of the pre-school children who had gone for a field trip to the supermarket were being discussed. The following conversation which is an excerpt from the academic reflection meeting reflects how the academic director was keen of how the learning of the students could be further enhanced by improving the teaching strategies and making the lesson more experiential and application oriented.

Academic director: During fieldwork what kind of representations and drawing did they (students) do there? That was not represented in the feedback. Only the kind of interactions they did were recorded. Did they sit down? Did they draw or record? What kind of representations they did then and there?
Bhavani: They did the representations after coming back to class. It was not feasible (for them) to draw there. They drew the chef and the waiter. The also made the chef with clay. Star bazaar (name of supermarket) they drew the layout with fruits and vegetables.

The leader took lead in providing critical feedback while giving a rationale for the question she was raising as seen below.

Academic director: When you are a researcher, a lot of recording is happening on the field. There is at least some form of recording feasible. We need to think what form? Did they take rubbing, tally marks, check lists and record things they were observing? How many tables and chairs. Then they could make some graphs. Academic reflection meeting, Preschool

She recommended to the teachers alternative ideas to enhance observation and recording skills amongst the students which are important research skills to develop the learning. She emphasised upon the same qualitative focus on students' learning during the primary academic reflection meeting:

Academic director: … writing is not as complex for that age group. They must be able to use more complex research methods, even during (project) culmination. They could make list of sources of data collection or the methods

used for research. Make them think from a researcher's point of view. How did the data collection take place? How was the interpretation done? In the 4th and 5th grade, they can do much more at a cognitive level. It (the data gathered) can be represented in a complex manner. The project approach (we adopt at the school) is to make children think as researchers. It is not just about covering content.' Primary Academic Reflection meeting

Another example is a small excerpt from a primary level academic reflection meeting. The school uses an integrated approach to design their curriculum. However this approach was not used in case of math for one of their monthly thematic projects. The academic director pointed this out very subtly in the group discussion and asked the teacher:

Academic director: Math was not integrated with the topic. Was it because fractions was as such a topic?

Math teacher Mamta: Math was stand alone – HCF and LCM. We could not connect it to body systems.

Academic director: Are there any other written LOs (Learning Objectives) that we could bring forward?

The teacher seemed to realise by this conversation that teaching a math topic in isolation was not in alignment with their curricula philosophy. She later even suggested that they could have brought the math learning objectives related to calculations forward during that month so that it could be integrated with the topic on body systems. Thus, conversations during the reflection meeting

were focussed on how the teaching practice could be enhanced by implementing the curriculum in an integrated manner.

Chapter 6

6. Conclusive Thoughts:

Research in this case site suggests that several qualitative factors seem to contribute towards sustaining a Professional Learning Community as an avenue for the teacher professional learning. These include an environment of support from the leadership, interdependence in terms of learning through opportunities for peer learning (shared learning and thinking together), a culture of trust and respect, openness to learn from every available opportunity and quality consciousness through a focus on improvement in teaching quality and student learning. Members of the community also suggest that these qualitative factors have been instrumental in making the PLC at their school run effectively and smoothly. The practice in their opinion has impacted their teaching quality and student learning. However, their accounts also suggest that their professional learning has been facilitated not only through the avenue of PLCs that provide opportunities for peer learning and collaborative reflection on practice. Rather workshops that provide opportunities for developing further theoretical understanding and knowledge have also contributed to their effective practice. The findings of this study seem unique to this case site. It would be interesting to introduce this idea into another similar school context being mindful of the identified qualitative factors to replicate such an effectively running PLC through an action research project and enquire whether these factors indeed contribute to the creation and sustenance of an effective learning community.

References:

Anderson G. and Arsenault N. (2005) *Fundamentals of Educational Research.* Pennsylvania: Taylor and Francis Group

Askew, S. and Carnell, E. (1998) *Transforming Learning: Individual and Global Change,* London

Baccellieri, P. (1996) *Professional Learning Communities: Using Data in Decision Making to Improve Student Learning,* California: Shell Education.

Blaxter, L., Hughes, C. and Tight, M. (2006) *How to Research*. Berkshire: Open University Press

British Educational Research Association (2011) *Ethical Guidelines for Educational Research In British Education Research Association.* UK: BERA

Cohen, L., Manion, L., Morrison, K. (2007) *Research Methods in Education*, Sixth Edition, New York: Routledge

Cormier, R. and Olivier, D. (2009) *Professional Learning Communities, Professional Learning Committees: Characteristics, Principals, and Teachers.* http://ejournal.narotama.ac.id/files/Professional%20Learning%20Committees.pdf

Creswell, J.W. (2007) *Qualitative Inquiry & Research Design – Choosing Among Five Approaches*. London: Sage Publications

Creswell, J.W. (2012) *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research.* London: Pearson Education

Denscombe, M. (2003) *The Good Research Guide.* London: Open University Press

Dowling, P. and Brown, A. (2004) *Doing Research/Reading Research – Re-interrogating education*, Second Edition, London: Sage

Dowling, P. and Brown, A. (1998) *Doing Research/Reading Research: A Mode of Interrogation for Education*, First Edition. New York: Routledge

Flick, U. (2001) 'Triangulation in Qualitative Research' in Steinke, I., Kardoff, E., Flick, U. (Ed.) *A Companion to Qualitative Research.* London: Sage Publications Ltd., pp. 178-183

Hammond, S. (1998) *The Thin Book of Appreciative Inquiry.* Texas: Thin Book Publishing Company, pp. 1-54

Hargreaves, A. (2007) 'Sustainable Professional Learning Communities' in Stoll, L. and Louis, K. S., (ed.) *Professional Learning Communities – Divergence, Depth and Dilemmas*, Glasgow: Open University Press. pp. 181-195.

Hargreaves, E., Berry, R., Lai, Y., Leung, P., Scott, D. and Stobart G. (2012a) *Teachers' experiences of autonomy in Continuing Professional Development: Teacher Learning Communities*, London and Hong Kong: Taylor and Francis

Hargreaves, E. (2012b) Assessment for Learning and Teacher Learning Communities: UK teachers' experiences, *Cambridge Journal of Education*, 35, 2, pp. 213-224. DOI: 10.1080/03057640500146880

Helen, S. (2009) *Case Study Research in Practice*. London: Sage Publications

Hord, S. (1997) *PROFESSIONAL LEARNING COMMUNITIES: Communities of Continuous Inquiry and Improvement*, Texas: Southwest Educational Development Laboratory

Horn, I. and Little, J. (2007) 'Normalizing Problems of Practice: Converting routine conversation into a resource for learning in professional communities' in Stoll, L. and Louis, K. S., (ed.) *Professional Learning Communities – Divergence, Depth and Dilemmas*, Glasgow: Open University Press. pp. 77-92.

InPraxis Group Inc. (2006) *Professional Learning Communities: An Exploration*. Alberta: Alberta Education.

Irwin, J., Markauskaite, L., and Freebody, P. (2011) *Methodological Choice and Design: Scholarship, Policy and Practice in Social and Educational Research,* London: Springer

James, M. (2006) Assessment, teaching and theories of learning, in: J. Gardner (Ed.) *Assessment and learning*, London: Sage

Karagiorgi Y. (2012) Peer observation of teaching: perceptions and experiences of teachers in a primary school in Cyprus, *Teacher Development: An international journal of teachers' professional development*, 16, 4, pp. 443-461

Lieberman, A. (2007) 'Professional Learning Communities: A Reflection' in Stoll, L. and Louis, K. S., (ed.) *Professional Learning Communities – Divergence, Depth and Dilemmas*, Glasgow: Open University Press. pp. 197-204.

Lodico, M.G., Spaulding, D. T., and Voegtle, K.H (2006) *METHODS IN EDUCATIONAL RESEARCH: From Theory to Practice*. San Francisco: Jossey-Bass

Maloney, C. and Konza, D. (2011) 'A case study of teachers' professional learning: Becoming a community of professional learning or not?', *Issues in Educational Research,* 21, 1, pp. 75-87.

Northern Territory, Department of Education and Training (NT DET) (2007) *Building Professional Learning Communities in the NT*. Australia: Northern Territory Government www.det.nt.gov.au

Opfer, V. and Pedder, D. (2011) Conceptualizing Teacher Professional Learning, *Review of Educational Research,* 81, 3, pp. 376–407

Roberts, E. and Pruitt, S. (2003) *Schools as Professional Learning Communities: Collaborative Activities and Strategies for Professional Development,* London: Sage Publications Company.

Stoll, L., Bolam, R., Mcmahon, A., Wallace, M. and Thomas, S. (2006) 'Professional Learning Communities – A Review of Literature', *Journal of Educational Change*, 7, pp. 221-258.

Stoll, L. and Louis, K. S. (2007) 'Professional Learning Communities – Elaborating new approaches' in Stoll, L. and Louis, K. S., (ed.) *Professional Learning Communities – Divergence, Depth and Dilemmas*, Glasgow: Open University Press. pp. 1-13.

Timperley, H. and Alton-Lee, A. (2008) 'Reframing Teacher Professional Learning: An Alternative Approach to Strengthening Valued Outcomes for Diverse Learners, *Review of Research in Education*, 32, pp. 328-369.

Villegas-Reimer, E. (2003). *Teacher professional development: An international review of the literature* [online]. UNESCO http://www.unesco.org/iiep

Watkins, C. (2005). *Classrooms as learning communities: what's in it for schools?* London: Routledge.

Webster-Wright, A. (2009) Reframing Professional Development through understanding authentic professional learning', *Review of Educational Research*, 79, pp. 702-739

Wiliam, D. (2008) Changing classroom practice: Meeting regularly in teacher learning communities is one of the best ways for teachers to develop their skill in using formative assessment. *Educational Leadership*, *65 (4),* 36-42.

Annexures