Developing a professional learning community in a Ghanaian School: Teachers' Perceptions of Important Characteristics of PLC Katariina Huusela

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ABSTRACT

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Teachers are one of the most essential resources that any school or other educational facility can have; they are the very central figures in providing quality education for children, therefore it is vital to provide teachers with opportunities to develop professionally and to enhance high-quality teaching. A professional learning community (PLC) brings teachers' professional learning to the school context and emphasize teachers as active and self-developing learners. Teachers' should have agency in their own professional learning and opportunity to take responsibility of their development, instead of being recipients of predetermined professional development training.

This case study aims give teachers' opportunity to voice their perceptions about a professional learning community and express what they perceive as their most essential learning needs. The following research questions are guiding the research: 1) What do teachers perceive as important characteristics of a professional learning community? 2) Which learning needs teachers' express in relation to professional learning community? The study was implemented in a Ghanaian-American elementary school, and the data consists of teachers' empathybased stories, workshop observations and group interviews. The data was analysed by qualitative content analysis.

In the findings, eleven important characteristics were identified. Structural matters, such as space and allocated time for collaborative learning, safe and unjudgmental environment and opportunities to learn from one another and possibility to harness teachers' own capabilities and potential were viewed as most important characteristics of an PLC. Furthermore, teachers' most essential earning needs in relation to PLC were related to improvement of communication, teamwork and teaching skills.

Keywords: Professional development, professional learning, Teacher Professional Learning Community, Ghana,

TIIVISTELMÄ

Huusela, Katariina. 2020. Ammatillisen oppimisyhteisön kehittäminen ghanalaisessa koulussa – opettajien käsityksiä oppimisyhteisön tärkeistä ominaisuuksista. Kasvatustieteen pro gradu- tutkielma. Jyväskylän Yliopisto. Kasvatustieteiden ja psykologian tiedekunta.

Opettajat ovat yksi tärkeimmistä resursseista, mitä kouluilla on, ja opettajilla on keskeinen rooli laadukkaan koulutuksen toteuttamisessa. Tämän vuoksi on tärkeää, että opettajille tarjotaan mahdollisuuksia kehittää omia taitojaan ja valmiuksiaan koko uransa ajan. Ammatillinen oppimisyhteisö tuo opettajien ammatillisen kehittymisen kouluympäristöön, tukee opettajien kiinteää yhteistyötä, ja painottaa opettajien roolia aktiivisina ja itsekehittyvinä oppijoina. Opettajilla tulisi olla mahdollisuus toteuttaa ammatillista toimijuuttaan ottamalla vastuun omasta ammatillisestä kehittymisestään; opettajilla tulisi olla mahdollisuus vaikuttaa siihen, miltä heidän ammatillinen kasvunsa ja oppiminen näyttää.

Tämän tapaustutkimuksen tavoitteena on luoda kokonaisvaltainen käsitys siitä, millaisten ominaisuuksien opettajat kokevat olevan tärkeitä ammatillisessa oppimisyhteisössä. Lisäksi, tutkimuksen tarkoitus on luoda kuvaa opettajien oppimistarpeista suhteessa oppimisyhteisöön. Tutkimusta ohjaa kaksi tutkimuskysymystä: 1) Mitkä ominaisuudet opettajat kokevat tärkeinä ammatillisessa oppimisyhteisössä 2) Millaisia oppimistarpeita opettajilla on suhteessa ammatilliseen oppimisyhteisöön? Tutkimus toteutettiin Ghanassa, ghanalaisamerikkalaisessa yksityiskoulussa. Aineisto on koottu opettajilta eläytymistarinoilla, haastatteluilla ja observoimalla, ja analyysi on toteutettu laadullisena sisällönanalyysinä.

Tutkimustuloksissa identifioitiin yksitoista ominaisuutta, jotka ovat opettajien näkemyksien mukaan tärkeitä oppimisyhteisössä. Rakenteelliset tekijät, kuten tilat ja oppimiseen tarjottu aika, turvallinen ja tuomitsematon ympäristö, ja mahdollisuudet oppia yhdessä ja opettajien omien kykyjen ja potentiaalin käyttäminen oppimisen tukemiseksi olivat tärkeimmäksi koettuja ominaisuuksia. Opettajien oppimistarpeet liittyivät vahvasti kommunikaatiotaitojen kehittämiseen, tiimityöskentelytaitoihin sekä uusien opetusmetodien oppimiseen.

 $\label{thm:continuous} A vainsanat: Ammatillinen kehittyminen, Ammatillinen kasvu, Opettajien ammatillinen oppimisyhteisö, Ghana$

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ABBREVIATIONS

CPD Continuous Professional Development

GES Ghana Education Service

INSET In-Service Education and Training

MEBS Method of Empathy-Based Stories

MOE Ministry of Education (Ghana)

PD Professional Development

PLC Professional Learning Community

PTPDM Pre-tertiary Teacher Professional Development and Management

1 INTRODUCTION

Teachers are important; they have very central role in the whole education system, and it is generally recognized that teachers are significant factors in strengthening student achievement. Therefore, besides providing quality initial teacher training, teachers should be provided with high-quality professional development opportunities throughout their career. Pre-service training alone cannot produce competent teachers who are able to meet challenges in the fast-changing world (Asare, Mereku, Anamuah-Mensah & Oduro, 2012). Larger amount of opportunities for continuous learning may be an important tool to impact teacher instruction and classroom practices in a positive manner (Atta & Mensah, 2015). By providing teachers possibilities to develop themselves and learn, high-quality teaching, and consequently learning, can be preserved. Previous research suggests that effective teacher learning is significant factor in improvement of student learning and achievement (Mensah & Jonathan, 2016). Teachers must be provided with opportunities to develop their skills and knowledge, in order to be able to provide quality teaching for their students and help them to improve.

In Ghana, the critical role of teachers has been recognized in attempts to enhance the quality of basic education (Mensah & Jonathan, 2016). So far, development and training opportunities offered for in-service teachers in Ghana have been inadequate. The development of education quality in Ghana has previously mostly been focusing on the initial teacher training, neglecting the importance of in-service teachers' professional learning. Fortunately, the importance of teacher in-service training and learning is increasingly acknowledged by the Ministry of Education (MOE) and Ghana Education Service (GES) due to local research evidence indicating that student learning and achievement are linked to the effec-

tiveness and quality of teachers (Mensah & Jonathan, 2016). Yet, efforts to enhance teacher training have not yet led to desired outcomes and student performance in the basic education continues to decline. Teachers' work takes place in isolation, and professional development and professional learning are still often unknown concepts for teachers and school leaders in Ghana and thus development of teacher professional learning communities have been hampered by lack of knowledge, resources and motivation (Mensah & Jonathan, 2016). Nevertheless, the role of teachers' professional development and learning should not be underestimated, and Mensah & Jonathan (2016) recommend that there should be more focus in teacher professional development and learning programs. Currently, inadequate support is available to Ghanaian teachers for their professional development (Amoah, 2011). Besides, according to Amoah (2011), Ghanaian teachers are not motivated to attend professional development activities. One of the reasons for the lack of motivation is, that teachers do not perceive the PD activities to truly increase their skills and that it does not have direct impact on their teaching or their students (Amoah, 2011). Furthermore, the activities do not meet teacher's learning needs as the needs are not being identified and the activities do not encourage reflection (Amoah, 2002).

Teacher professional development requires reflection of one's teaching practices and discussion about teaching-related matters with their colleagues (Tigelaar, Dolmans, Meijer, Grave, and Van Der Vleuten, 2008; Amoah, 2002). According to Hopkins (2002), quality of education can be increased when teachers are working together on inquiries focused on development of teaching and student outcomes. Junaid & Maka (2015) suggest that, in planning of professional development activities, involvement of teachers is crucial to determine the most appropriate approach for professional development and learning, and teachers should be consulted. Thus, teacher professional development activities need to move further away from traditional information provision in lecture-like setting, to activities that are reflective and collaborative (Palincsar, Magnusson, Marano,

Ford, and Brown, 1998). Additionally, teachers should be included in the development process of any in-service training as they are the experts of their own, and the schools', learning needs.

During the writing process of this thesis, the Ministry of Education of Ghana published a new curriculum for kindergarten and primary education (MOE, 2019). This new curriculum mentions importance of teachers' continuous professional learning and suggesting that schools should start building professional learning communities. Thus, there is a policy demand to construct professional development processes that meet Ghanaian teachers actual learning needs and that effectively support their professional development and learning through continuous collaboration, collective inquiry, reflection and sharing of practices with colleagues. Curriculum states, that continuous professional development (CPD) should be embedded in the practice (MOE, 2019). Additionally, the new curriculum describes that in order to promote teacher professional development, there should be a broader understanding of what makes teacher professional development effective (MOE, 2019). Successful programs are such that encourage development of teachers' learning communities and developing schools as learning organizations, and in which teachers openly share their expertise and learning (MOE, 2019).

Professional learning communities and their development are current topics in Ghanaian education, and more research is much needed to support implementation of the new curricula. My motivation to conduct this study raises from a 3-month volunteering experience in a Ghanaian school where my tasks were related to developing TPD practice. This research aims to understand teachers' perspectives of professional learning communities. These perspectives are crucial to be acknowledged in the process of building sustainable and effective professional learning communities in Ghanaian schools.

2 TEACHERS' PROFESSIONAL LEARNING COM-MUNITIES

The chapter introduces the previous research and major concepts related to this study. The aim is to clarify the concept of professional learning community by introducing the main characteristics of it, and briefly explain the difference between professional learning and professional development. Furthermore, this chapter describes the situation of TPD in Ghanaian schools by explaining how teachers' professional development is organized, and the chapter closes with introduction of the main challenges in teachers' in-service training in Ghana and previously identified solutions for improvement.

2.1 Definitions of a professional learning community

A universal definition of professional learning community does not exist, as communities develop in a certain context that influences how they take form and how they function. Professional learning community is not a new concept, and researchers have been writing about PLC's since the last century (Stoll et al., 2006). For example, Clark & Astuto (1994) described in their research that learning communities are structures that provide time for dialogue, support interaction between teachers and collaboration in learning activities. Astuto and colleagues (1993) have also used, instead of professional learning community, a term *professional community of learners* to describe a professional learning community that encourages teachers to share their knowledge, to pursue learning and reflect on their development. Additionally, Hord (1997) has described PLC as community of continuous improvement and inquiry in which group of teachers are seeking for and sharing learning. Dufour, Eaker & Dufour (2005) argue, that a PLC is a

community that develops collaboration between the staff, encourages teachers to work together to achieve high levels of learning for both, students and adult and makes professional development continuous and school based. The aim of PLC is to help educators to accomplish collective goals with their colleagues and school, rather than individuals working based on their personal interests and agendas. (Dufour et al, 2005). In similar way, Stoll et al. (2006) summarize that PLC focuses on learning in community context instead of individual's learning. The term has been used to describe all kind of settings; from few individuals with the same interest getting together, to long-term, structured PLC programs. The term keeps constantly growing its popularity and becoming so commonplace and ambiguously used that there is a risk the whole term will lose its meaning (Dufour, Dufour & Eaker, 2016). Lack of accuracy is significant obstacle for the development of professional learning communities (Dufour et al., 2016), and thus it is important to clarify what the term means, and what are the main characteristics of a PLC in a certain context. In this thesis, definition of PLC by Dufour et al. (2016) is used because it explains thoroughly the main characteristics of a PLC and clearly distinguishes PLC from professional development.

Firstly, Dufour et al. (2016) underline, that PLC is not a program. They emphasize that PLC is not something that a school can buy or ask somebody to implement for them. PLC can only be implemented by the staff, and it is a continuous, never-ending process of organizing teachers learning in a way that they can thoroughly impact the school structure and culture, and the practices of teachers (Dufour et al., 2016). Additionally, PLC is not a about structured meetings where colleagues try to find a solution to a task; Dufour et al. (2016) suggest to think that the school is the PLC, and the collaborative teams of teachers in the school are the building blocks of the community. In conclusion, professional learning community is not just a meeting happening from time to time, but a process impacting the school and its staff profoundly. Hence, meetings are significant part of professional learning community, but not a defining factor or a factor that creates PLC.

Secondly, professional learning communities' main purpose is to improve student learning and achievement, and the belief that the key for achieving that goal is educators continuous on-the-job learning, is the driving force of PLC (Dufour et al, 2016). Additionally, Dufour (2004) suggests that the professional learning community (PLC) model arises from the idea that the core mission of education is not just teach students, but to make sure they learn. The intention is not to improve the morale of teachers or their technical skills, but to enhance student learning (Stoll & Louis, 2007) In PLC, teachers focus on the "learning for all"-statement by building a shared knowledge and a common ground on questions such as "What do we want our students to learn? How will we know when each student has learned it? How will we respond when a student has trouble in learning?". (DuFour, 2004). Stoll et al. (2006, p. 223), have introduced the following simple conclusion of the purpose a professional learning community: "...a range of people based inside and outside a school can mutually enhance each other's and pupils' learning as well as school development".

In conclusion, professional learning communities are places where teachers are committed to learning, caring and inquiring. Teachers and principals inquiring together creates a professional learning community; inquiry encourages to create a community of learners. (Sergiovanni, 1994).

2.2 Characteristics of a professional learning community

Based on existing descriptions in the literature, six main characteristics of a professional learning community can be identified. These include sharing values and vision, focusing on student learning, making teaching public, sharing experiences and expertise, collective responsibility for student learning and mutual respect and support for teacher colleagues (Dufour et al.; 2016; Hord, 1997; Newman et al., 1996; Owen, 2014). Newman et al., (1996) have established that in a

professional learning community, shared values and norms must be developed about issues and views about children and things related to their learning, and coherent focus on student learning is a requirement. Additionally, professional learning community should be characterized by a dialogue that is leading to broad and continuing conversations between teachers, practice and teaching should be made public within the school, and focus should be on collaboration (Newman et al., 1996). According to Hord (1997) there are five similar characteristics that are required for development of a teacher professional learning community: supportive and shared leadership, shared values and vision, collective learning and application, shared personal practice and supportive conditions. Moreover, Dufour et al. (2016) list similar feature to be essential in a professional learning community; shared values and vision, collaborative culture, collective inquiry, commitment to continuous learning and results orientation. The following Figure 1 presents, drawing on various previous studies, the six essential characteristics of a professional learning community. Focus on learning is the most fundamental characteristic, and therefore it is located in the center of all the other characteristics. Focus on learning is tied to every other characteristic of a PLC, and every action in PLC is aiming towards the fundamental aim of learning for all, thus it cannot be disconnected from any aspect or characteristic of the community. Furthermore, all the six characteristics are elaborated in the following chapters.



Figure 3 Six essential characteristics of a professional learning community (Dufour et al.; 2016; Hord, 1997; Newman et al., 1996; Owen, 2014)

2.2.1 Shared values and vision

When aiming to improve results in any organization, the first questions that should be addressed include; what are we trying to achieve, and why? (Dufour et al., 2013). Establishing a professional learning community should begin with clarifying of the vision, values and goals of the community. Firstly, shared vision, the idea of what the school should become so that achievement of the purpose is possible, should be collectively formulated by the teachers. Then, vision should be followed by shared values, that present the means; how are we going to achieve the vision we created and what kind of collective commitments we must do? (Dufour et al., 2013; Hord, 2009). According to Hord (1997), having a shared vision is not just about agreeing with something, but about creating an image of what is important to the organization and individuals in it; shared vision is an ideal image of the future. More specifically, this means that all teachers part of PLC should have steadfast, and collectively agreed, commitment to students'

learning, and the members of PLC should continuously reference to this commitment in their work (Hord, 2004). To achieve the goal of enhanced student learning and achievement, the members of PLC develop, and will be guided, by a clear vision of what kind of organization they want to create. Every member of PLC will have precise roles in the process and outcome-oriented goals are used to keep up with the progress the community have made (Dufour et al., 2013).

Andrews & Lewis (2007) suggest that shared meaning and vision provides foundation for developing of a culture of the PLC. Furthermore, they highlight that shared values leads to improved student learning. Shared vision should be used for guiding staff in decision-making about teaching and learning related issues in school, as well as lead to development of behavioural norms that the staff shares and commits to (Hord, 1997). Also, the values and goals that are included in the vision, are reminding the staff about how they should spend their time, what kind of problems they should focus on and how the resources for doing this are allocated (Hord, 2004).

2.2.2 Collaboration

In order for a PLC to reach the goal of enhancing students' learning, collaborative work and collective responsibility for student learning is required (Dufour et al., 2013). Collaboration between teachers is not voluntary but expected and required from teachers. In the heart of collaboration lays the idea of members of a PLC working interdependently to achieve the mutually agreed goals (Dufour et al., 2013). Hence, teachers should work together to achieve the common goal of improved learning for all. Teachers limited readiness to collaborate can create significant barriers for a community to function effectively, as the aim is to improve teachers' skills and consequently student learning, it would be significant that the collaboration within PLC members would reach classroom practices (Dufour,

2004). In a PLC, it is expected that colleagues meet and observe each other, provide feedback for one another and, if needed, teachers assist each other in student learning (Hipp et al., 2008). This is also what Dufour (2004) refers to; genuine and powerful collaboration is a process, in which teachers are working together to analyze and enhance their classroom practices. Powerful collaboration means that teachers work as a team and engage in discussion and reflection on questions related to their classroom practices. Commitment to the discussion promotes every PLC members' learning, and this process will lead to the fundamental aim of the PLC; improved student achievement (Dufour, 2004).

Collaboration is not the end, but the means to an end; it serves as a process that allows teachers to work together to impact their classroom practices in a way that leads to better results for everyone's students, the whole team and the school they are working in. The importance of collaboration and collaborative teacher teams cannot be overstated - members of PLC are expected to learn and work together. (Dufour et al, 2013).

2.2.3 Focus on learning

In a professional learning community, the focus in education shifts from teaching to learning and through PLC, the aim of "learning for all" is taken literally (Dufour, 2004). Members of a professional learning community are working together to clarify what students must learn and to monitor their learning (Dufour et al., 2013).

As members of PLC, teachers are required to reflect on questions about student learning. For instance, teachers must consider successful practices, what they want their students to learn and on what level, how they will measure that students have learned what they need to learn, and how can they support struggling students (Dufour, 2004). To find answers to these questions, and to achieve effective student learning, teachers are required to commit to the PLC and to the focus of student learning (Dufour, 2004). Besides student learning, there need to

be structures that ensure also teachers' job-embedded learning (Dufour et al., 2013).

Educators aim at high levels of student learning, and in order to do this, members must be committed to the community and be guided by vision and purpose they have collectively created. The vision and purpose of a PLC is to guarantee that every student learns skills and knowledge that are essential for them. Furthermore, the other characteristics of a professional learning community should arise from the unequivocal focus of student learning. (Dufour et al., 2013).

2.2.4 Results orientation

Members of PLC are working together to enhance student achievement and are committed to provide evidence of success (Dufour, 2004). All the efforts made within PLC should be evaluated based on results instead of intentions (Dufour et al., 2013). Generally, teachers a do not suffer from a lack of data, but schools do suffer from data rich/information poor- syndrome, meaning that data is not put into proper use (Dufour, 2004). However, result-oriented professional learning communities are turning data into information that is relevant for the staff; results are crucial in ensuring effectiveness of the professional learning communities (Dufour, 2004). Additionally, focus on results is a way to help PLC members develop and pursue measurable goals and to create assessments to provide evidence of student improvement and results (Dufour et al., 2013). Teachers may use the results to understand their own strengths and areas that need improvement in their teaching, and this can support learning from one another (Dufour et al., 2013). Teachers need to see results; they need evidence of student learning to inform, and if necessary, to improve their instruction (Dufour et al., 2013). In conclusion, according to Dufour et al. (2013) continuous assessment of achievements and reached goals, thus in other words continuous focus on results, is one of the most important tools in a professional learning community.

2.2.5 Commitment to continuous learning

One of the most important condition to implementing and sustaining a PLC is commitment and persistence of the educators within the community (Dufour, 2004). A professional learning community requires commitment to continuous improvement, and commitment to the community itself; participation in the PLC process is a responsibility of every member in the organization (Dufour, 2004). According to Dufour (2004), members of PLC are expected to focus on learning, work collaboratively and hold oneself accountable for the results. Members of PLC are expected to commit to their share of the work by engaging in important activities of the community, such as collecting evidence of student learning and improvement (Dufour et al., 2013). Additionally, PLC members are expected to be committed to

- Address weaknesses and strengths in learning and develop strategies and ideas basing on the gathered information
- Implement of the strategies and ideas
- Analyse and evaluate what has been effective, and what has not
- Apply the newly constructed knowledge in the continuous improvement (Dufour et al., 2013).

Furthermore, Stoll et al. (2005) emphasize the importance of everyone's commitment to the roles of originator and receiver of information. In sum, members of a PLC are required to commit to learning, and more importantly, to sharing what they have learned to support the continuous improvement and learning of all.

2.2.6 Collective inquiry and responsibility

One characteristic distinguishing professional learning communities from other forms of professional development is the strong emphasis on collective learning (Bolam et al., 2005). For instance, King and Newman (2001) discuss that even though high-quality teaching is depending on the competences of one individual teacher, the individual knowledge and skills should be shared within school in order to create a professional learning community.

Collective inquiry is about teams of teachers constantly seeking for new teaching methods and testing the methods, leading to reflection of the results (Dufour, 2004), and according to Dufour et al (2013), collective inquiry is the best way to achieve the goals that has been set collectively by the PLC members. Additionally, Hipp et al. (2008) suggest that in collective inquiry and learning, the teaching staff is sharing information and working together to find solutions to problems, and to plan ways of improving everyone's learning. Members of professional learning community are expected to engage in development of shared knowledge, and continuous collective inquiry about best practices in each members' teaching and learning, and the process of shared knowledge construction should include both, the current situation and new best practices (Dufour, 2004). Through collective knowledge seeking and learning, team members may obtain new skills and knowledge which they may then put into action in their own classrooms (Dufour et al., 2013). In collective learning, the learning community engages in discussion and deliberation about information and data they have gathered by interpreting it collectively and distributing each one's individual knowledge among the community members (Bolam et al., 2005).

It is widely agreed that members of a professional learning community are sharing the responsibility of student learning, thus taking collective responsibility of it (King & Newman, 2001). Furthermore, PLC members are not just responsible for their own and their students' learning, but also for their team members' learning. Recognizing and accepting the responsibility for one's own and also others' learning is a central element of professional learning community (Gross-

man, Wineburg & Woolworth, 2001), and shared understanding of collective responsibility within team members will reduce the need for rules or regulations to guide their everyday work as a part of the community (Dufour et al., 2013).

2.3 What is the difference between professional development and professional learning?

Professional learning and professional development are intertwined concepts and not easily distinguished from one another. In general, professional learning is putting the teacher, who is the learner, in the center of learning experiences and giving teachers' more agency in their learning, while in professional development teachers are seen as recipients of information that has been decided to be important and relevant for them. According to Easton (2008), the word development builds an image of someone developing someone else, and especially in education development has been representing what someone does to others. Therefore, teachers should "move from being trained or developed to becoming active learners" (Easton, 2008, p. 755).

Typical professional development efforts in schools include a meeting in the beginning of the year, aiming to motivate teachers for the new academic year. Besides that, few times a year, teachers are offered to take part in workshops or trainings, that are typically short-term. In contrast, when the focus is on professional learning the school identifies the teachers' professional learning needs, helps to set goals, emphasizes problem-solving, supports observing and mentoring and organizes follow-up activities and initiates learning (Easton, 2008).

Additionally, professional learning is continuous and does not have a certain ending point, whereas in professional development it often occurs through one-time workshops. In professional development, the traditional assumption is that teachers are in need of training or developing, and the content of training comes from top-down, following a one-size-fits-all model. In professional learning, the focus is on acknowledgement of teachers' own expertise and skills, and

there's a firm belief that teachers are the best resource for understanding their learning needs. The context of professional learning is the school itself, and its staff and learners, and actual situations and practices that are happening within the school. Furthermore, in professional learning teachers' learning needs and the whole schools' situation are recognized in the planning of the learning activities, whereas in professional development content is not necessarily based on teachers' needs and content is made and decided by PD experts from outside the school. Professional learning engages teachers in creating understanding of how they can improve every single students' learning by using their skills and knowledge. Teachers are encouraged to collect evidence and data, interpret the information and adjust their actions based on the results. More importantly, in professional learning, the aim is to work in collaboration with colleagues to share knowledge and learning experiences. (Easton, 2008; Park & So, 2014; Stewart, 2014; Webster-Wright, 2009).

According to Calvert (2016), one of the main factors causing the differences between professional development and professional learning is, that professional development does not support agency. Calvert (2016) explains, that the lack of teacher agency can be seen for example in that the source of expertise comes usually outside of the school, that decisions what teachers need to learn are not decided by the teachers themselves and that teachers' role is only to receive the information. Conversely, in professional learning that is supporting teacher agency the source of expertise is usually found internally, learning goals are identified by teachers themselves and teachers' role in professional learning is to plan, advise, present and design the activities (Calvert, 2016). In conclusion, in professional learning teachers to become active learners who are responsible for their own learning, and the focus changes from teachers being developed by someone, to teachers being self-developing (Easton, 2008).

2.4 Sustaining professional learning communities

Sustaining professional learning communities is a complex and challenging task. Previous research has found several factors that affect sustainability of a PLC, and they are; supportive school culture, collaboration focused on goals, supportive leadership, staff commitment, positive student outcomes and practical professional learning forms structured into daily life in school (Kilbane, 2009). Sustainability cannot be achieved without growth or determination (Hipp et al., 2008). School leaders' focus on these factors enhance the possibilities for success in sustaining of a professional learning community (Kilbane, 2009).

According to Hipp et al (2008), sustainable professional learning communities are characterized by strong teacher collaboration and learning. Sustainable PLC requires a school environment that support collaborative environment, by for example providing time for educators to come together, making staff learning and development to be a routine and by providing teachers possibilities to try new practices. Organizing time for teachers to collaborate is both a requirement and a challenge to sustaining professional learning communities. (Kilbane, 2009).

Another factor affecting on the sustainability of PLC is coherence. School leaders and teachers should all have coherence between their efforts in order to improve the school and student learning. Coherence should reach the whole community; the structures of it, the leaders, teachers and their professional learning and school goals. (Kilbane, 2009).

Supportive leadership has crucial role in either strengthening or hampering the sustainability of a learning community (Kilbane, 2009). Leaders should show facilitation skills that sustain the energy withing the PLC, by supporting the idea that the community is never ready, but rather a process where community members continually seek ways to improve the learning community (Hipp et al., 2013).

The lack of collaborative structures, time and other resources, and supportive and consistent leadership are significant factors decreasing the sustainability of a professional learning community. Environment that is limiting teachers' possibilities to professional learning lead them to disengage from the learning com-

munity. Previous research suggests that from all the factors, supportive leadership, collaborative structures and coherence are the most significant ones that should be all present and nurtured in order to support the sustainability of a professional learning community. Leadership support plays a particularly important role in the sustaining the process. Due to power in decision making, school leaders are key persons in the process of sustaining PLC, and their actions may either promote or hamper it. (Kilbane, 2009).

2.5 Teachers' professional development in Ghana

In Ghana there are some training opportunities for trained and untrained teachers to upgrade their knowledge and improve their pedagogical skills (Cobbold, Ghartey, Mensah, & Ocansey, 2009). Nevertheless, there is notable amount of teachers who are not able to access professional development facilities, thus their professional learning ends after the pre-service training program, or in the case of untrained teachers, there was no teaching related professional learning at all before entering the job nor during their career (Atta & Mensah, 2015). Defined standards for teacher development and consistent professional development programs have been lacking (Agbeko, 2007), but through the education reforms that has been going on in the country, focus on continuous teacher learning programs has grown (Atta & Mensah, 2015). The Ministry of Education has focused on creating policies to institutionalize continuous professional learning and to provide teachers with more opportunities for professional development (Atta & Mensah, 2015). One of the recent policies is Pre-Tertiary Teacher Professional Development and Management in Ghana-framework (PTPDM), which will be elaborated in the Chapter 4.1.

Professional development programs for teachers are mainly provided by governmental organizations, such as Ghana Education Service (GES) and Teacher Education Division (TED), but also by NGOs and other developmental organizations. The GES and TED work together to provide professional development programs for in-service teachers (INSET), and MOE provides a Staff Development Centre for GES for supporting the capacity of in-service training of teachers. (Asare, Mereku, Anamuah-Mensah & Oduro, 2012). These INSET programs are responsible for identifying teachers' professional development needs and connecting teachers with suitable training institutions which usually offer short programs that last from few days to few weeks. Teachers are also provided with distance education training by University of Cape Coast and University of Education in Winneba. Distance model was created to enable teachers to receive professional training without causing interruption in their teaching and other tasks in the school. (Asare et al., 2012).

Majority of methods that are used for teachers' professional development in Ghana are either based on lecture or cascade model (Amoah, 2011). Both of these models are focusing on moving information from top to down and aiming to train large amount of teachers in little time, without supporting or using much of collaborative activities that both have been proven to be efficient ways to enhance teachers' professional learning and development (Amoah, 2011; Akyeampong, Pryor & Ampiah, 2006). Information flows from top to down; first, from Ministry of Education (MOE) to Ghana Education Service (GES), and from GES to the heads of schools through circuit supervisors (Amoah, 2002). In the cascade model, the circuit supervisors receive a specific in-service training and are required to give the same training to schools and head teachers (Akyeampong, 2004). Activities are organized by formal and traditional learning approach and information is prescriptive and transmitted to the teachers without giving them chances to question the information they are given (Amoah, 2002). Structures for supporting teachers' professional development has been created, but these structures do not support the development of professional learning communities or enhance teachers' professional learning in as effectively as possible.

2.6 Challenges of teacher professional development in Ghana

Atta and Mensah (2015) found in their study that in Ghana, professional development opportunities are rarely organized, they are limited to only small number of teachers and implemented in traditional, ineffective ways, making PD trainings to have only little impact in the quality of teachers' instruction and student learning. Usually, teachers' professional learning ends, or at least reduces to a very minimum, after the initial teacher training program, due to teachers' limited opportunities to access professional development facilities and activities. Lack of ongoing support, such as funding and structural support to professional learning makes obtaining current information, knowledge and skills challenging for Ghanaian teachers. (Atta & Mensah, 2015). However, there are occasional opportunities for teachers to take part in professional learning activities, but the activities are usually planned by an external body and the training is often provided on quick, one-time basis to respond to specific problems or challenges (Asare et al., 2012). Professional development activities that are located outside the school context have been reported to be problematic when it comes to transferring the skills and knowledge to the classroom practice after the training (Akyeampong, 2004). Furthermore, according to Osamwonyi (2016) in-service training content usually lacks uniformity and the content is perceived impersonal and unrelated to the real job settings, and the approaches to training are often inconsistent. These programs are also often poorly organized and planned (Osamwonyi, 2016).

Poor organization can be seen for instance in the content of the training; usually, training programs do not give teachers the opportunities to gain new perspectives, share opinions or understand their professional capability, neither does it help teachers to understand problems and challenges in their own schools, nor to find solutions for the problems or challenges they face in their everyday work (Asare et al., 2012). Besides that, according to Amoah (2011) it is common

that Ghanaian in-service training programmes do not encourage teachers to share their own classroom experiences with their colleagues, which would help teachers to identify similarities and differences between instructional practices, classrooms and teaching methods. Development of deep understanding of one's own practices and teaching methods are not fundamental part of in-service training in Ghana even though it should be in the core of designing effective professional development for teachers (Amoah, 2002). Asare et al. (2012) suggest that these may be the reasons why teachers appear not to adhere professional interest towards development activities they participate. Many of them participate in programs simply because they have been authorized to do so, not because they perceive the programs as important part of their professional development. (Asare et al., 2012).

Furthermore, follow-up programmes are not usually implemented, which makes it impossible to follow the impact of these trainings, and teachers' development and growth, or lack of it (Amoah, 2011). Teachers' in-service training programmes are failing in providing models for teachers to help them to understand and reflect on their instructional practices in their classroom context (Amoah, 2011).

This problematic nature of professional development activities organized outside the school context has been somewhat acknowledged by the in-service training organizers such as MOE or GES, however arranging on-site development activities for teachers is challenging, too. Generally, the main challenge lies in the lack of sufficient resources, such as money, time and materials, which consequently leads to difficulties in motivating and engaging teachers in the on-site professional development (Akyeampong, 2004).

Suggestions of solutions to in-service teachers' professional development challenges have been suggested. Akyeampong (2017) suggests, that to change and improve teachers' instruction, professional development should be brought closer to the classroom context and teachers' professional learning should happen through approach that is collaborative, and inquiry based. Accordingly, Amoah (2011) suggests enhancement of teacher collaboration. To understand

one's classroom practices, teachers should take part in reflective discussion about their instruction methods and practices in the classroom, and. This may motivate teachers to build more knowledge about their own practices and make them more open to their colleagues and besides that to view and understand other teachers' perspectives (Amoah, 2011).

Another solution that has been discussed is school-based in-service training (SBI). School-based approaches to teacher professional development have been proven more effective and relevant to teachers' needs, compared to other in-service training approaches such as face-to-face or distance learning approach (Junaid & Maka, 2015). Nevertheless, participation in school-based in-service training (SBI) activities has been hampered by lack of teachers' motivation. SBI is perceived as time-consuming, unnecessary extra work and teachers do not feel comfortable showing their own teaching to their colleagues (Junaid & Maka, 2015). Thus, the challenges with professional development and in -service training in Ghana are a combination of ineffective implementation and motivation issues.

3 RESEARCH QUESTIONS

In Ghana, teachers are receiving in-service training opportunities from top to down, without being able to express what they do perceive important and necessary for themselves. Therefore, teachers have a little say in the professional development activities that are organized for them, and they have a limited chance to take responsibility for their own growth and learning (Amoah, 2002). In this case study, teachers' views and needs are examined in the light of development of professional learning community. The purpose of this study is to capture teacher's perspectives on what are the important characteristics of a PLC that is easy to access and engage in. Furthermore, this study seeks to map out teachers' learning needs attached to a professional learning community. Overall, the aim of this study is to, by qualitative methods, explore, understand and explain teachers' views and to give them opportunity to articulate what they perceive as important characteristics in a professional learning community and what kind of learning needs they have in relation to PLC to support development of practice in the research school. To find answers to these questions, the two following research questions are studied:

- 1. What do teachers perceive as important characteristics of a professional learning community?
- 2. Which learning needs teachers' express in relation to professional learning community?

4 IMPLEMENTATION OF THE STUDY

This section describes the research context, explains how the research participants were chosen and how the research was implemented. The qualitative approach that was chosen for this research will be explained. Furthermore, this section is introducing data collection methods and, the data analysis process used in this research and the ethical issues related to the research process.

4.1 The Context of The Study

In Ghana, the Education Act of 2008 guarantees that basic education is compulsory for all children, until grade nine. Six years of elementary education is preceded by two year-long kindergarten, and the compulsory part of education ends after three years of junior secondary. Junior secondary is followed by voluntary three years of senior secondary, after which students can continue in tertiary education (WENR, 2019). Ghanaian children have relatively good access to education, as more than 84% of children were in school according to the statistics of World Education News and Reviews (WENR) in 2017. For comparison, for instance in neighbouring Nigeria, the enrolment rate was 63% in 2015 (WENR, 2017).

Basic education in public schools is free in Ghana, but nevertheless families are charged some fees, such as teaching material payments and uniform fees. This causes a situation where the fees of the "free education" at public schools are only 21 percent lower than what education costs in private schools. This has boosted the increase of private schools, especially in rural areas of Ghana. In 2018, the percentage of children enrolled in private schools was 28%. (WENR, 2019). About 29 percent of all the primary schools in Ghana are private and the number of private schools keeps increasing swiftly.

There are 38 public teacher training colleges in Ghana, two universities with education institutes and three private colleges of education, from which students may obtain Diploma in Basic Education (DBE) that is the minimum qualification for teachers in basic schools (Asare & Nti, 2014; Akyeampong, 2017. For kindergarten, primary and junior high teachers, it takes three years to obtain DBE in college of education, whereas initial training for K-12 teachers is a bachelor's degree organized in the two education universities and takes four years. For practicing teachers who do not have qualifications, also referred to as non-professional teachers, have the opportunity to obtain Untrained Teachers' Diploma in Basic Education (UTDBE) through a four year-long distance education (Asare & Nti, 2014).

In 2012, Ministry of Education (MOE) published *Pre-Tertiary Teacher Professional Development and Management in Ghana*-framework (PTPDM). PTPDM was created to specify the generally agreed framework for employment of teachers, in-service training of teachers and ethical standards (Armah, 2016). The policy framework is addressing the issues related to teacher development in Ghana, providing vision, core values, goals and institutional structures for developing teachers that are competent in facilitating quality education (Asare, Mereku, Anamuah-Mensah & Oduro, 2012). The present challenges of education in Ghana requires prepared and motivated teachers who are required to have a conducive attitude (MOE, 2012). According to Ministry of Education in Ghana (2012), the policy is aiming to prepare teachers to respond to the present and continuously changing educational needs in Ghana and the framework is focusing especially on the issues of teacher professional development. To reach these aims, the policy includes specific principles for teacher management to motivate teachers for exceptional performance and commitment to lifelong learning.

The PTPDM framework has several core policy areas, for instance focusing on policies for teachers' professional standards, teacher development program, career structure, initial teacher training program and In-Service Education and Training (INSET). The PTPDPM has led to development of structures for institutionalization of INSET in the whole country, and these structures have potential

to assist the development and sustenance of INSET programs (Asare et al., 2012). According to the policy document, all programs related to teacher professional development should meet two requirements. First, professional development activities have to fit for the purpose, implying that programs and activities have to provide equipment for teachers to meet specific teaching demands and to manage responsibilities that comes with these demands. Secondly, programs and activities have to be relevant to national needs, therefore they should be designed so that they reflect the aims of pre-tertiary education in Ghana and the main objectives of the policy. (MOE, 2012).

4.1.1 Characteristics of the research school

This research is based in Western Region of Ghana, this area has industrial, agricultural and fishing enterprises, with fishing being one of the most significant way of making living (Encyclopaedia Britannica, 2013). The school is located at relatively large city with population of approximately 445 000 people and the city has several private and public primary schools. Accra, the capital of Ghana is in about 500km distance from the city.

The research was conducted in one Ghanaian school, to create holistic understanding of this specific school and its teachers' views. The private school where the study was conducted has a creche, pre-school and primary school, and in the future, these will be accompanied by junior high school. The school was selected based on author's internship placement, and its staff's willingness and enthusiasm to participate in this research. The head of this school is committed and motivated to improve the school and understand the need for teacher's professional learning and development, thus research that is closely related to their teachers' professional learning and enhancement of it, was happily accepted.

4.2 Research Methods

A qualitative case study approach is chosen as method for this research for several reasons. Qualitative case study method provides researcher with an opportunity to investigate one case in considerable depth, and in a case study researcher is allowed to aim towards capturing the uniqueness of the research case, instead of providing generalizations or theoretical implications (Gomm, Hammersley & Foster, 2000). As this research is focusing on small number of teachers in one school and aiming to gain deep understanding of their perspectives and needs, and since in a qualitative research the focus is more on the quality than the quantity (Eskola & Suoranta, 2008) the method of qualitative case study is suitable for this research setting. By using qualitative data, one has access into cultural activities and aspects that could be overlooked in other methodological approaches (Tracy, 2019). Also, according to Tracy (2019), qualitative research method is invaluable when participants viewpoints and stories are in the focus, and when the research is concentrating on participants lived experiences in their real contexts and wants to respect and understand the local meanings of things researched. This research aims to listen teachers' ideas and views, thus in other words, voices, and qualitative research has great potential to uncover unknown insights and to give voice to the people who normally are not listened to (Tracy, 2012). Qualitative method offers the researcher an opportunity to discover perspectives of people that are often neglected and for whom decisions are made for, without investigating their point of view (Tracy, 2012).

4.3 Data collection

The research was conducted in a Ghanaian school among 10 teachers that were working in the school that time. The school was contacted in September 2018, and permission to conduct a research was issued shortly after the first contact.

The participating school was open to any kind of data collection and gave permission to choose the most suitable techniques to collect data from the teachers. As the purpose of this research was to build deep understanding of research participants views and ideas, interviews were a natural choice to be one of the data collection method. Thus, interviews gave teachers a chance to use their own voice and express their views and opinions and elaborate them if needed.

Nevertheless, interviews can be experienced as stressful and unnerving situations, and teachers may not feel fully comfortable sharing their ideas and thoughts to the interviewer. That is why the Method of Empathy-Based Stories (MEBS) was used beforehand, to give teachers a chance to express themselves entirely anonymously, and to convey their thoughts by writing instead of speaking (Posti-Ahokas, Haveri & Palojoki, 2015). Data collection process started in May 2019 and ended three months later in July. As mentioned, several data collection methods were used; collection started with the Empathy-Based Stories, continued by observations at workshops organized for the teachers, and ended in the interviews that were conducted in July. Interviews were purposefully left to the final stages of data collection, as the intention was to build trust and rapport with the teachers during the months of May and June.

4.3.1 Method of Empathy-Based Stories (MEBS)

The first step in conducting the data collection process was to collect data by the Method of Empathy-Bases Stories (MEBS). In the method of empathy-based stories, research participants are asked to write stories based on a short introductory frame story. Empathy-based stories do not necessarily have to be stories about reality, but they can rather express the meanings research participants give to different things, and things that could happen in the lives of research participants (Posti-Ahokas, Haveri & Palojoki, 2015). The research participants, in this case the teachers, narrated stories based on the two different frame stories that were provided by the researcher (Appendix 1 & 2). These frame stories were planned and written before entering the research field and given to teachers soon after

arriving to the school. There were two versions of the frame story: one negative variation and one positive variation. Variation between stories gives the researcher possibility to research how the stories differ when one or two elements are changed (Wallin, Koro-Ljungberg & Eskola, 2017). Negative and positive frame stories were distributed evenly among the teachers; five teachers received the negative frame story and the other five received the positive frame story.

MEBS is an applicable method for researching the participants' perceptions, expectations, values and reasoning. Furthermore, the stories may bring new perspectives to the research topic (Wallin, Koro-Ljungberg & Eskola, 2017). By using the method of empathy-based stories, a researcher may obtain such information, thoughts and practices from research participants that could not be accessed through other methods (Posti-Ahokas, Haveri & Palojoki, 2015). In this case, MEBS was chosen for few reasons; first of all, the stories were collected in very early stage of my data collection process, thus there was not strong trust or rapport between the researcher and the participants. MEBS allows anonymous participation and thus gave teachers a chance to share their thoughts to the researcher by using written language instead of spoken. Another advantage of the method is its pace; MEBS is convenient method for obtaining written data fast (Posti-Ahokas, Haveri & Palojoki, 2015). The aim was to get the data collection process started as soon as possible after arriving to the research field, so that the following data collection processes could be planned in an efficient manner. Teachers' stories provided important insight for planning the next steps for the collecting of data through observations and interviews.

There are also various limitations and risks with the method. Production of the empathy-based stories is dependent on the writing abilities of the research participants, thus participants, who are not motivated to write a story or have issues with expressing themselves in writing, may produce short and incomplete stories. However, these kinds of participants could have interesting experiences related to the frame story, that could be important for the research. It may be significant limitation as the experiences of those research participants will be excluded from the research in such situations. Another risk with the use of MEBS

is the data collected may be challenging to analyze, if the frame story has not been carefully created and pre-tested. (Posti-Ahokas, Haveri & Palojoki, 2015). Teachers had some difficulties in understanding the task and the method was completely new to them. Even though negative and positive stories were distributed evenly, there were only two negative stories and eight positive stories. Nevertheless, stories provided important material for preparation and implementation of the following data collection methods and gave researcher an understanding of teachers' views about the topic in the stories.

4.3.2 Observation

Observation was used to support the main data collection methods; empathy-based stories and interviews. In this research, the observation data that was used was collected from only one workshop addressing teachers' learning needs. Observations were conducted during workshops I organized for the teachers; thus, it was participatory observation. Participant observation is a method for building understanding and gaining knowledge by for instance viewing the situation, inquiring and collecting documents (Lofland & Lofland, 1995 in Tracy, 2019). Naturally, the researcher should try to have as little effect as possible on the activities and situations the researches is doing the observations. However, this is challenging as usually observing researcher will be given some kind of role in the research situation (Eskola & Suoranta, 2008). Researchers role can vary in the observation situation, so that researcher can be "insider" taking part in the situations and activities, and at some moments be "outsider", observing and taking field notes from outside of the situations (Eskola & Suoranta, 2008).

My role was two-fold, as my role in the situation was both a facilitator and a researcher. Therefore I had to try to maintain a position where I tried to affect the situation as little as possible, nevertheless researcher always has effect on the phenomena being observed and previous experiences may affect researchers' perceptions about situations or research participants (Eskola & Suoranta, 2008). Additionally, Eskola & Suoranta (2008) suggest that researcher's expectations

may guide observation focus; therefore, some situations or things may be left unnoticed.

Just as in the interviews, trust plays an important role in observations too. If the researcher is trusted by the participants, he or she will be accepted to be part of the group and take part in the activities while also observing the participants. Observers actions at the observation situation can be divided to two groups. Firstly, the researcher may take "go with the flow" -attitude, and let the situation guide observations and questions, or researcher can follow specific observation plan made beforehand. Usually, these two are intertwined together. (Eskola & Suoranta, 2008). In this case, observations were not planned beforehand, and the situation guided the observations. Writing notes, collecting teachers' written workshop assignments and asking specifying questions about them and engaging in discussions, which were immediately after reported to the field notes, were the main ways observation data was collected (Appendix 4).

All in all, observation is a very subjective research method. Expectations may guide observation focus; therefore, some situations or things may be left unnoticed. Researcher has effect on the phenomena being observed, previous life experiences may affect researchers' perceptions about situations or research participants. Also, mood and energy level may influence the observation results. (Eskola & Suoranta, 2008).

4.3.3 **Group interviews**

Group interviews were chosen over individual interviews mainly because the teachers had never participated in a research before. Interviewing research participants in groups, instead of individual interviews, is a great way to obtain information from participants for whom the interview situation may be novel, exciting and distressing. Research participants may receive support from one other, and in ideal situation motivate each other to discuss about topics in a broader nature which could lead obtaining more information than in individual interviews. (Eskola & Suoranta, 2008). On the other hand, group interview is not a

trouble-free data collection method. In group interviews, some of the group members may be more active and talkative than the others, and this may lead to situation where only one or two participants are responding to the interview questions, whereas more quiet participants do not have chance or courage to bring up their responses. Additionally, some of the research participants may not feel comfortable sharing their responses in front of the whole group. Dynamics of the interview group may have effect on the responses each participant is willing to give, and the researcher has responsibility to make sure, that everyone has a chance to equally express themselves in the interview. (Eskola & Suoranta, 2008).

Interview is a well-suited method when the researcher wants to find out what the research participant is thinking, or for example why the participant is behaving in a certain way (Tuomi & Sarajärvi, 2009). One of the biggest advantages of using interviews as data collection method, is its flexibility. Interview happening face-to-face enables researcher to for example repeat the question, clarify misunderstandings, ask specific questions and have a discussion with the research participant (Tuomi & Sarajärvi, 2009). Questions can be asked in the order that the researcher sees sensible, and in order to obtain as much information as possible, research participants can familiarize themselves with the research questions beforehand. Another advantage is, that in the interview situation, the researcher can also take the role of an observer, and this way besides getting information of what has been said, researcher may also observe how it was said. Researcher also has the opportunity to choose to interview research participants, who they think may have significant information/knowledge related to the research topic.

One of the limitations of interview is, that it's a time consuming method. Transcribing the recordings may take a lot of time and can be especially challenging if the interview has been done in a group. Participants may be talking at the same time, and it may be challenging to recognize who is speaking and when.

Semi-structured interviews were used in this research. In a semi-structured interview, questions are same for each participant, questions are open-

ended and can be presented in different order (Eskola & Suoranta, 2008). The semi-structured interview that was conducted had notions of thematic interview, as the form and organization of questions was not specifically decided beforehand. In thematic interview the order of questions and the amount of questions may vary, depending on the situation and interviewees answers. In this research, three group interviews were conducted, and they all had variations, depending on the participants' answers and researcher's decision to ask more or less questions.

Interviews can also be used to strengthen other data that has been collected; in interviews, researcher can ask participants to elaborate, verify and explain things that researcher has collected through other methods (Tracy, 2019), such as in this research through observations and MEBS. Interview gave possibility to elaborate issues and topics that came up in the stories, and observations directed me to ask certain questions or confirm if I had correctly understood things I had seen or heard.

Trust between the researcher and research participant may have great impact on the outcomes of the interview. In the interview situation, the researcher is part of a social interaction process, and can affect negatively the atmosphere and the interviewees behavior and agreeableness to answer interview questions. (Eskola & Suoranta, 2008). The interviewer has usually, without exception, more control in the situation than the interviewee, at least in deciding the topic and the terms of dialogue (Tracy, 2019). Therefore, it is important to try to make sure that the research participants are feeling comfortable and amenable during the interview, as well as before and after it. Also, due to the unbalanced power relation between the interviewer and research participant, the researcher must treat the respondent and interview data with ethical care (Tracy, 2019).

4.4 Description of Data Collection

The first set of data, MEBS, was collected in the first week of the 3-month long period in the school. Teachers were asked to come to my office, where I explained

them the idea of the stories, and answered their questions about the method. After that teachers received the stories; five teachers wrote their stories basing on the negative frame story, and the rest five teachers wrote stories basing on the positive frame story. This was a completely novel activity for the teachers, and they had difficulties to understand the concept of writing stories that could either be imaginary, or stories that had happened to them or somebody they know. Writing stories were unexpectedly challenging task for the teachers, but after the difficulties in the beginning, each of the participants were able to finish their story. Especially writing of negative stories was perceived challenging, thus I received more positive stories than negative, even though the frame stories were distributed evenly amongst the ten teachers. Some of the stories were only 5 sentences long, but most of the stories were about half a page long.

MEBS were followed by observation in the learning needs-workshop. The workshop duration was about 3 hours. In the beginning of the workshop, I shortly introduced the idea and gave instructions, and then started observation; I observed teachers discussions, asked them to elaborate some things they had mentioned or discussed and listened to their presentations about their learning needs, and the discussion of the whole group of ten teachers after each presentation.

The group interviews were organized last. Teachers formed 2 groups of 3 participants, and one group of 4 participants for the interviews. I let teachers decide the groups by themselves, so that they could form groups in which they would feel the most comfortable in. Interviews were conducted in English, and I specifically asked teachers not to discuss in any other language than English, so that I would be able to understand everything. The first interview took about one hour and ten minutes, the second interview was 50 minutes long and the third interview was 36 minutes. Once all the interviews were transcribed, I had about 100 pages of interview material. There was no need for translation, as the teachers used only English during the interviews.

4.5 Data Analysis

The data was analysed by the method of qualitative content analysis. Content analysis is a research method for making valid interpretations of collected data in relation to the research context, with the purpose of it being to provide new insights or representations of the research topic (Elo & Kyngäs, 2008). The aim is to develop comprehensive description of the researched phenomenon by creating concepts or categories in the analysis process (Elo & Kyngäs, 2008). In this study, analysis process of the data was not straightforwardly inductive or deductive, but rather included elements of both. There was some prior knowledge of the phenomenon, which to some extent directed the identification of categories that are existing in the previous literature.

The first phase in the data analysis process started already in the early stage of the research once the empathy-based stories were collected and combined into one text file. However, the actual analysis process started after the stories were collected, interviews transcribed, and observation data organized and collected to the same file. In the beginning of the research process, the empathy-based stories were collected and immediately read few times, and the main points and recurring themes were organized to another file. Interview and observation were planned after the information and material the stories provided were organized and partly analysed. This was to make sure, that the following data collection would supplement the information that was gathered through the stories, and that researcher would be able to obtain enough data to answer the research questions.

The collected data underwent phases of organization, coding and creation of themes and ended with reporting of the results. First, each data set collected with different methods were kept in their own files and organized and coded in their own groups. Interview data was read in detail after transcription, and the first patterns based on research questions was instantly identified. Through these patterns, categories were created, and direct quotations were collected to support the reporting of findings. After each data set was organized and coded, the

whole data was collected under each research questions, accordingly to the data collection method and the responses. The data was categorized basing on the research questions, in a way that would provide direct responses to the research questions. All the data was utilized to response to the research questions; first research question responses were collected from the interview data and the empathy-based stories and the second research question responses arises from the interview and observation data. Once all the data was distributed under appropriate categories, the data was read carefully several times to establish comprehensive image of the emerging categories and to ensure that the results provided by the content analysis process were responding to the research questions accordingly.

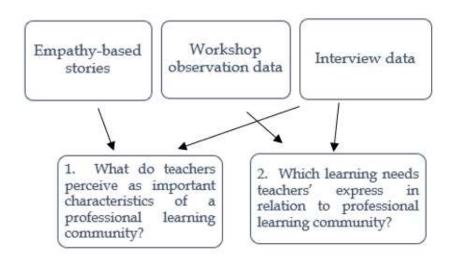


Figure 2 Illustration of how the collected data responded to the research questions.

4.6 Trustworthiness

The trustworthiness of this research has been constructed through the whole research process. In terms of trustworthiness, it is essential to focus on the validity and representativeness of the data, objectivity and the voice of the researcher in every phase of the research process (Tracy, 2012). Additionally, bringing up the

context of the research is crucial; this research was conducted in foreign language and culture, thus linguistic and culture-related challenges are important to be acknowledged when the trustworthiness of this research is discussed (Pietilä, 2010).

Trustworthiness may be presented by using variety of terms. For instance, in qualitative analysis trustworthiness can be presented by using terms validity, reliability and credibility (Elo et al., 2014). Elo et al. (2014) mention in their paper, that Lincoln & Guba (1985) have described that trustworthiness is a tool to communicate readers that the research findings are valuable and should be noticed. Thus, qualitative research can provide useful and reliable information, even though if the findings cannot be generalized.

A checklist created by Elo et al. (2014) is going to be used in order to discuss the trustworthiness of this research. Elo's et al (2014) checklist is prepared for researchers to improve trustworthiness of their qualitative research and the checklist is divided to the three phases of research: preparation, organization and reporting.

In the preparation phase researcher must consider questions related to the data collection and analysis of the data (Elo et al., 2014). It is essential to scrutinize, for instance, how researcher can collect the most suitable data, whether the chosen methods are the best fit for the purpose of research. Besides that, researcher must think who the best informants for the study are, what is appropriate number of the informants and whether it is enough (Elo et al., 2014). In this research, data was collected by three different methods: through observation, group interviews and empathy-based stories. Collecting data by using both, written and verbal language, researcher ensure that collected data is rich. Written and verbal data may complement one another, and participants who may have difficulties in either, providing information in writing or expressing themselves verbally, have opportunity to express themselves also in the way that is more comfortable for them. Additionally, observing participants, besides listening them and reading their texts, improve the credibility of the data as the researcher has

a chance to observe whether participants are acting in the way they have communicated through writing and interviews (Tuomi & Sarajärvi, 2009). Also, this research, the method of empathy-based stories was completely new to the participants. Some challenges were encountered, especially in the understanding and completion of the task. For these, and probably various other reasons, the stories collected were shorter than expected, and even though negative and positive stories were distributed evenly, there were only two negative stories and eight positive stories. Nevertheless, this did not create obstacles nor had significant effect on the trustworthiness of the research, interviews and observations were used to supplement the lack of written data.

Furthermore, researcher must consider who are suitable informants for the research, and how many of them there should be. Qualitative research does not aim at generalization, but deep understanding of the research phenomena and its participants (Tuomi & Sarajärvi, 2009). Limited number of research participants can be perceived as a factor reducing reliability, however, since the purpose of this research was to gain deeper understanding of one group of teachers, it was reasonable to focus on small number of participants (Tracy, 2012). Moreover, one of the core concepts of qualitative research is *thick description* of researched topic and the goal is to find answers and information from a small, but dense, amount of facts (Tracy, 2012). This research is aiming to explore the topic and encourage discussion and actions in the target school. Additionally, author wanted to create understanding of participants, in this case teachers, viewpoints, focus on lived experience and obtain more than just a snapshot of the topic. For these reasons, choosing only small group of teachers from one specific school is well justified and contributes to the trustworthiness of the research.

In the organization phase, focus should be on the interpretation level of the analysis. Data should represent accurately the information provided by participants, and the trustworthiness of the analysis process should be considered (Elo et al., 2014). As this research is aiming to bring out teachers' perspectives and ideas, it is important that the analysis is representing the whole idea, and that the

degree of interpretation is appropriate. In a qualitative content analysis, it is crucial to acknowledge that there is always some amount of interpretation when researcher is looking into the data (Graneheim & Lundham, 2004). Every researcher should consider the conformability of the data, meaning how to make sure that the findings represent the real information gathered from the participants, and that the interpretations done by the researcher is not changing the nature of the data (Elo et al., 2014). To enhance the trustworthiness of the data analysis phase, a thorough description of the data analysis process was provided in chapter 5.4 Data analysis. Besides that, it is essential to elaborate the context and the culture in which the research is conducted, which can be found from the chapter 5.1 Context of the study.

The last part of the checklist is reporting. In this phase researcher should consider the trustworthiness of the reporting of the results. Results should be reported systematically, connections between the data and the results should be clearly represented and there should be full description of the analysis process. To improve the trustworthiness of the result reporting, quotations are used in the findings report. The findings must not be affected by researcher's perspectives or biases, and this is one reason why quotations are represented in the findings chapter. Author is aiming to provide readers clear image of the connection between the data and the results, which is supporting the trustworthiness of the research.

Besides representing the phases openly to the reader, it is essential to bring up the discussion about linguistic and cultural challenges related to this research. As the researcher's and research participant's first language is not English, it is necessary to consider the effects of possible language barriers and misunderstandings it may cause. Additionally, the context and the culture where the research was conducted, is foreign to the researcher. Even though researcher and research participants have sufficient level of fluency in English, there may still be misinterpretations and confusions, which could have affected the trustworthiness of the research. Therefore, it is crucial to consider what kind of effects collecting and analyzing data in a foreign language may cause and to acknowledge

what kind of pitfalls researcher may encounter and how to avoid them (Pietilä, 2010). In this case, researcher was prepared for the possible language barrier and the confusions that could follow from it. Even though English is one of the 11 official language of Ghana, it had to be acknowledged that level of English language skills may vary strongly between the research participants, and that the local context has a strong effect on the English language that was spoken. For instance, to the researcher, some of the Ghanaian English words and phrases that are used in the local context, are new. To avoid issues that could arise from this, I started to familiarize myself with the Ghanaian English by investigating phrases, vocabulary and idioms that are used in the local context. Besides that, the local way of pronouncing words was examined. By doing this, I was better equipped to communicate with the research participants more efficiently from the very beginning of the 3-month long research period. Moreover, in 3-months' time researcher was getting more familiar and comfortable with the local English, and as the group interviews were left to be the last phase of the data collection process, by that time I had the ability to communicate with the research participants without major misunderstandings or confusions. During the interview, there was chance to correct confusions and ask interviewees to elaborate or explain their answers. Furthermore, I had the opportunity to elaborate unclarities that came up in the transcription phrase, which supplemented to the trustworthiness of the interview data. Finally, to add to the trustworthiness of the research, it is important to emphasize that besides interviews, I had opportunities to gain data through written language, and through observations. During the 3 months period, I could experience the research context and engage in discussions with the research participants and conduct observations which provided with valuable observation data (Appendix 4) to complement the interviews and the written stories research participants provided. I was aware of my role as a foreigner and an outsider to the research context and it was important to be mindful about and reflect the outsider position throughout the research process (Pietilä, 2010).

4.7 Ethical Solutions

Ethical questions are essential part of the research process, and just as in the creating trustworthiness of the research, researcher has full responsibility to make sure that appropriate ethical guidelines are followed and the research participants are treated respect. In this research, ethical matters were taken into consideration before and during the research process in order to guarantee reliability and quality of the research. Procedural and relational ethics (Tracy, 2012) were acknowledged and all the research-related actions were conducted according to appropriate ethical guidelines.

Firstly, it was made sure that the universal procedural ethics were followed, meaning that no harm was caused, research participants privacy and confidentiality was ensured and participants were asked consent and provided with informatin about the research aims, methodology, possible risks of the research and it was made clear that they have every right to not participate the research or withdraw from the research without any consequences (Tracy, 2012). Research supervisor and one Ghanaian colleague were consulted when the consent form (Appendix 5) was developed, to assure that the form was informative and clear enough, and that the language on the consent form was appropriate for the Ghanaian context.

Furthermore, qualitative researcher must reflect on relational ethics which means, according to Tracy (2012), recognization of mutual respect and dignity. Researcher needs to be aware of their own role and impact on the research context and subjects, and acknowledge that the research participants should be treated with respect and care, and the researcher should collaborate with their research participants in a way that builds rapport and trust between them (Tracy, 2012). Thus, it is important that the researcher tries to make sure that the research participants are feeling comfortable and amenable during the whole research process; before, during and after. Researcher must treat the respondent and interview data with ethical care and make sure that participants are safe (Tracy, 2019). This has been achieved by for example ensuring that teachers' anonymity

has been preserved by not revealing their names at any point of the research, and by keeping the name of school and the city hidden. Also, the analysis of the data has been done only by the researcher, and the data that have been showed to peers or supervisor, is not showing any details of the participants.

The data collection processes, especially when the writing of the empathy-based stories and interviews, were conducted in environment that was comfortable for the participants and provided them with privacy and peace. In the beginning of empathy-based story writing, teachers were reminded that stories are anonymous, thus they did not have to write down their names, or anything else that would have made it possible to identify them. Interviews were recorded with the permission of the participants, and in the beginning of every interview, interviewees were reminded of their right not to answer questions if they felt uncomfortable and their right to stop the interview if they so wanted.

Lastly, it is important to note that in every research, there is unbalanced power relationship between the researcher and research participants (Tracy, 2012). Researcher had a dual role in the school, as a researcher but also as an intern providing teachers with in-service training. To the research participants, researcher's Western and somewhat privileged background may have been affecting their thoughts and opinions about the researcher, and consequently affected on what they have felt comfortable to share and what they have decided not to share (Pietilä, 2010).

5 FINDINGS

This chapter introduces the findings of the research. The first section covers the first research question, presenting teachers' perceptions of what important characteristics of a professional learning community include. The second section introduces findings on teachers' learning needs and how a professional learning

community could respond to them. Lastly, the findings about how to motivate teachers to engage in a PLC are presented.

To respect the anonymity of participating teachers, teachers were numbered instead of using names. Teachers in each interview group were numbered from 1 to 4, and interviews were numbered from 1 to 3. T*n* and I*n* informs which teachers' quotation is mentioned, and in which interview, for instance T1, I1 indicates that it is teacher number one discussing in the interview group number one. EBS refers to empathy-based story.

In total, there were 10 participating teachers, who were all Ghanaian. Six of the teachers were females and four of them were males. All the teachers had approximately one to five years of experience in teaching, and they had been working in the research school from few months to a year once the research process begun.

5.1 Teachers' perceptions on important characteristics of PLC

Teachers' perceptions of important characteristics of professional learning community were questioned in both, the interviews and empathy-based stories. Teachers described 11 main characteristics which are presented in the following table 1. The table presents all the themes that rose from teachers' interviews and empathy-based stories and indicates how many times each theme was mentioned.

Table 1 Characteristics of a learning community and frequency of mentions in the interviews and empathy-based stories.

Characteristic	Frequency
Time and location	24

Safety and comfort	23
Learning from each other	20
Goals and outcomes	18
Learning new	17
Supportive leadership	17
Skill improvement	15
Trust	14
Collaboration	14
Shared values and vision	10
Decreased isolation	6

Eleven characteristics that have been listed in the table above (Table 1), will be elaborated in the following chapters. Time, and location that was closely related to the discussion about time, was emphasized most in teachers' discussions. Safety and comfort were perceived almost as important characteristic as time and location, as it was mentioned almost as frequently as time and location. Knowledge building and supportive leadership reached the same frequency, and only decreased isolation was a characteristic that was mentioned fewer than 10 times.

5.1.1 Time & location

Time

Teachers reported that time is one of the biggest considerations they have when it comes to collaboration with other teachers, and to learning from each other. Time was discussed in the terms of the importance of time, lack of time and organizing time for teachers. Teachers' mentioned a number of times how important it is to have enough time for different activities, such as for collaboration, for learning from each other and for planned meetings. Teacher 3-1 stated clearly that "Timing. To have time. It is a big factor" when it comes to the development

of a professional learning community. Organizing time for teachers to get together in meetings, or just go and visit other teachers in their classrooms during the day were seen as important time-related matters that would support PLC development. Time was needed for various occasions, such as Teacher 2-3 said: "We need time so we can sit down and learn". Additionally, Teacher 1-3 expressed that "Time is important. We are in school and we must have time for the children and ourselves as well. Timing needs to be organized well". Another reason, why having time for each other was seen important, was to battle isolation. Several teachers mentioned that they felt they are stuck in the classroom, and thus do not have the possibility to collaborate and learn from each other. Sometimes, as Teacher 3-3 mentioned below, teachers do not even know if one of their colleagues is absent.

"Isolation is bad. Sometimes you don't even know if some teacher is absent, you are stuck in the class. We have to have time to meet." (T3, I3)

"Like we teachers, we shouldn't be working in one class, one teacher in isolation. What she knows, may I not know, so us getting together, it will help us to learn new things. We want to collaborate, and that is the key; time and chance to collaborate" (T2, I2)

Time for organized and spontaneous meetings was perceived as important factor in a professional learning community, but time can also be wasted when the teachers feel that they are either not learning anything, or that the meetings only provide the same information they have received before and the meetings taking too long.

"Information we received was not impressive, it was boring and waste of time"

EBS

Another aspect teachers discussed about in the interviews was that there simply is not enough time. They described how they are lacking time to meet and to learn from each other, and even though they are being encouraged to work together, they do not have time to do so. Teacher 1-1 described that "You can get together and share ideas. But the time is so small". Other teachers supported this view, such as these following statements.

"Head should encourage us to work together by providing us actual time, like now every Wednesday we had [workshops]. Now we don't have actual time for learning", (T3, I3)

"Like... They do encourage us to work together, but normally there is no time to do so, there is no actual time" (T2, I3)

According to the teachers, there should be more time for working together, and Teacher 3-3 mentioned the workshops that the researcher organized for teacher every Wednesday morning while their students were occupied in other activities. This was considered as an "actual time" for learning, which teachers do not normally have. Administration is encouraging to work and learn together and from each other, but the "actual time" for it is still deficient.

Teachers highlighted the role of the school head in organizing and allowing time for them to meet and work together. Time to meet was perceived as important factor in PLC development, and from teachers' perspective, the school administration had the biggest responsibility in organizing that time. For example, Teacher 3-3 demanded that the: "head should encourage us to work together by providing us actual time". Teacher 1-3 agreed on this by stating that "Head of school should allow us time, time for whatever we will need to do. It will help us to make learning possible". Besides that, Teacher 2-3 mentioned the need for "more money and effort, so that we can all attend professional learning and have

actual time for it". Other teachers did not specifically mention the head of school, but nevertheless agreed on school's responsibility to organize time for teachers to work together.

"Another key is, that school gives us time, makes it possible for us to meet" (T1, I2)

"So the school should organize so that we have time, otherwise we are not able to do the work together" (T2, I3)

Lastly, teachers mentioned that it is important that everybody agree with time and location, such as Teacher 2-2 expressed: "We must all agree on time and location, and it must be voluntary". Teacher 1-2 added to that: "Like we all agreed on the time, and we are sitting down then. So, when it is time, we know, oh we have to now go there". Teachers perceived it so that when everybody agreed on where and when the official meetings were happening, they could all attend. Thus, according to them, teachers should be included when the time allocated for their collaboration is discussed, and everyone should be on board with the meeting times, so that everyone can be there when the time comes.

Location

Another aspect tied to the theme of time was location. Teachers were mostly talking about time-related issues and location was mentioned fewer times. Teachers had differing perspectives on where the official meetings of PLC should happen; some teachers considered that the meetings should be held at the school facilities, to make them easily accessible, as in following descriptions. Teacher 1-2 discussed that "Meeting should be held during school hours and at school facilities". Teacher 2-2 agreed with this: "When the meeting is held within the school facility,

then it is very accessible". Teacher 1-3 voiced that "we need staff common room at the school, where we can meet planned or spontaneously."

Nonetheless, other teachers explained that the planned meetings should happen outside the school facilities and not in classroom-like settings.

"It [the location] shouldn't be like a class, so not that we are straight ahead learning." (T2, I1)

"Should be relaxing environment, where you feel free. In a classroom, it is too stressful and uncomfortable." (T4, I1)

"Within the school, you will anyway see students, even though there would be specific room for meeting. It is stressful." (T2, I2)

In addition, teacher 2-2 mentioned first, that the meeting should be held within the school facility, but later added that "But sometimes we have to bring the meeting outside the school facilities, like that day [teachers' refreshment day]". Generally, teachers agreed on the significance of the lack of staff room, and everyone shared the opinion about classrooms being uncomfortable environment for their professional learning community meetings.

5.1.2 Safety and comfort

The second most often mentioned characteristic was safety and comfort. The terms of safety and comfort were closely tied together in teachers' expressions, both supporting one another. For instance, Teacher 3-2 described it so that "safety would come from feeling of comfortable when sharing ideas". Another important aspect related to the feeling of comfort and safety was possibility to share ideas without being judged. Teachers described, that in a PLC, everyone should

be able to express themselves without the fear of being for example ridiculed or criticized, and Teacher 1-1 described it in the following way: "we should be able to say what we want, without being judged or criticized by anyone. That is safety". Similarly, Teacher 2-3 discussed that "We should make everyone feel that they are part and sharing is okay. That we accept whatever anyone is saying". This perspective was shared by several teachers, as it can be seen in the following quotations.

"It is important that I can freely express my ideas" (T3, I3)

"All ideas should be welcomed in PLC. That would make me feel comfortable." (T2, I3)

"When you have, like, you are free to disagree without being judged, so it makes the class very quite interesting and you can learn more." (T4, I1)

Teacher 2-2 added that rules about not judging and accepting everyone are important to make members of PLC to feel comfortable; "Rules and norms are important, like every answer is accepted, there is no right or wrong answer. Rules need to be made clear in a PLC, to make everyone feel comfortable".

Besides being able to express themselves freely, teachers described that understanding brings them comfort, such as Teacher 1-3 said: "It makes me feel comfortable when I can do a task in the best way, so when I understand the content of a meeting. We must know what we are doing, and how to do it". Not understanding something was experienced as a comfort and safety-reducing factor, and Teacher 4-1 expressed that "understanding brings comfort. Content of a meeting should make me comfortable. Not understanding something is stressful".

Teachers were also discussing about feeling uncomfortable, and where the feeling arises from. Teacher 3-1 said that "To me, comfort comes from the person taking the lead. Nothing goes through, if the person makes me uncomfortable.

We need to be on a same level". Teachers acknowledged that they have different qualifications, and some of them have higher levels of education than others. Nevertheless, they discussed the importance of everyone being on the "same level", meaning that teachers with higher education or more qualifications would not set them on a higher level and see them superior, and thus try to obtain more power in a PLC.

"And also the qualification barriers, we the teachers, so when we meet as a group, and your qualification is higher than my qualification, you are like I know my qualification is higher, you are always trying to impose those who have lower qualification so it is kind of...bad" (T2, I2)

Additionally, Teacher 1-1 was bringing up another similar, colleague-related issue: "consulting colleagues and admitting that you don't know something may cause insecurities and feelings of weaknesses", and Teacher 3-1 immediately added to this that "But if there is trust, then it is not an issue". Trust is another theme that rose from teachers' responses, and those findings will be presented in the Chapter 5.1.7.

5.1.3 Learning from each other

Learning together and learning from each other was the third most often mentioned theme. The importance of learning from each other and how the development of PLC should support and enhance it, came up in teachers' discussions several times. According to teacher 1-2 "community should foster collaborative learning, so learning from each other". Other teachers agreed with this statement, for example Teacher 1-1 explained that "it is important that we are learning from colleagues and adopting new ways of teaching". Teachers clearly stated that a requirement for a PLC is that it would enhance their learning together, and from

each other, without bringing "outsiders" to the school. Learning from each other was seen as important in the light of being able to develop professionally and learn without having for instance outsiders facilitating workshops or organizing other kind of training for the teachers, thus PLC should support teachers' own potentials and use of them, and this was explained by for example Teacher 2-1 "Each of us have our own potentials and should use them, instead of brining an outsider." And Teacher 4-1 added to this that "also, it is better when we do it ourselves [teaching each other]".

"Being able to use colleagues for improving oneself if you are not good in some area. That is what the community is for." (T1, I1)

"In a learning community, we should be learning from each other, so you can go to other teacher and ask. You don't know something, and you can go for assistance for this other teacher." (T3, I2)

Teachers believe that their colleagues have potential to teach each other, and that they can learn something from every teacher. As Teacher 1-2 expressed: "We can use each other's knowledge for learning". Teacher 4-1 stated that "you [other teachers] know you can teach your colleagues, and when it happens like this, it will be interesting".

"We know we can teach each other and it would boost everyone's confidence and motivation." P3, I1

Besides that, teachers discussed that teachers are not alone able to teach each other, but also should be required to do so in a PLC. Commitment to not only one's own, but also to others' learning was perceived as an important factor, as Teacher 3-3 described: "And the environment needs to be, like teachers must be ready to help each other. So, in a community, when I need help, somebody will help me". Everyone's responsibility to contribute to the learning community was

also discussed, for instance Teacher 1-1 said that "Everyone can, and should explain something, to contribute to it, to learning".

"So, every teacher should commit and contribute to the professional learning, it is must." P4, I1

"Everyone should contribute, to take part in discussion and activities in the community meetings." P2, I2

In conclusion, possibility to utilize teachers' skills and knowledge to enhance everyone's professional learning was essential factor, according to the teachers. Teachers believe in each other's potential and skills, and consider that they can learn from each other, without the need of having outsider helping them in professional learning and development.

5.1.4 Goals and outcomes

Setting and achieving goals was the fourth most often mentioned characteristic of a PLC. Teachers mentioned several times, how in a PLC it is important to understand why they are doing it, for what purpose and what kind of outcomes they are expecting and able to see after creating the PLC. Setting clear, and common, goals were seen as important aspects of a PLC, and crucial for effective learning and professional development. Teacher 2-2 stated that "there needs to be specific goals and realistic expectations. Like what do we expect to happen after learning this?" and, also added that "learning community needs to be goal driven". Other teachers were in unison by declaring the importance of having a goal, for instance Teacher 3-2 said "And the key is that there is a goal we are trying to achieve, that will give strength for the community".

"You need to set goals. If you set goals it will make you learn more and when you learn, you learn for the goals, so you have something to achieve."

(T2, I2)

"Setting goals is crucial. If you set goals, it will help you to learn more." (T1, I2)

Collective goal setting and having a common goal, was mentioned a number of times – only few teachers mentioned individual goal setting or individual goals. Most of the teachers emphasized that commonly created goals are the core of a PLC and learning, as Teacher 2-2 said "Creating a PLC should be a process of organizing teachers in a group to achieve a goal that has been set together". Teacher 1-2 continued, that "If you set goals, you have something to achieve as a group of learning teachers". Common goal was also described to be a motivating factor by Teacher 3-3: "When we have chance to work together, towards a common goal, that will motivate us".

"Key is also that we have common goal when we come together as a group. Like a common goal for professional development, whatever the goal is, it is very important." (T1, I3)

Teachers described that it is important to understand what they are achieving by engaging in a PLC. Such as Teacher 2-1 put it: "The ending matters. What one gets out of the community. Is it bringing us something valuable?". Teacher 2-3 was in sync with this statement, by saying "It is what you get in the end, not just the knowledge and skills, but the good feeling is also important". Few other teachers were in the same page, affirming that understanding possible beneficial outcomes are important.

"Also, understanding of what we are achieving in a learning community. I don't achieve anything, I will not go anymore." (T2, I2)

"We must be able to understand what we achieve in this." (T2, I3)

"I need to see my students improving. If it's not happening, it is not motivating." (T1, I1)

In conclusion, teachers emphasized importance of setting goals and significance of goals being commonly created and agreed on. Having clear goals was seen as important tool for guiding, and enhancing, their learning. Additionally, clear commonly set goals were not sufficient; having understood of how achieving these goals benefit teachers and their learning was expressed to be essential. Teachers discussed that understanding "the ending", in other words the learning outcome and the achievement of the goal they had set for the PLC, is important besides having the goals. So, besides setting and having goals, understanding what goal setting and achieving those goals was bringing them, is crucial.

5.1.5 **Learning new**

Logical continuum to the discussion of setting goals was a discussion about what those goals could be; what do teachers want to achieve from a PLC. Teachers' discussions about learning outcomes of a PLC included mostly themes of "learning new" and "skill improvement". One teacher described how learning new made they feel: "Learning new things brings me joy and happiness to continue in the programme", and another one described what they achieved from an ideal meeting: "It was very educative and taught me new skills" and "It gave me new ways of thinking". Desire to learn something new was clearly articulated in the empathy-based stories.

"Teachers are going to be introduced to a modern way of teaching and new methodology.", EBS

"Continuous meetings would help me to acquire more new knowledge and skills.", EBS

"I was able to share my ideas with others, and receive new ideas.", EBS

Learning anything new seemed to be motivating; new ideas, methods, skills, ways of thinking and so on. Similar things were discussed in the interviews, but the collaborative nature of learning was emphasized more. Teacher 2-2 described, that "...so us getting together, it will help to learn new thing. We want to collaborate.". Teacher 2-1 discussed about PLC meetings: "new things come up, our learning comes up". Learning new was also described as a motivating factor by Teacher 1-2: "Knowing that you will learn new skills, and a lot from others, even that will motivate you to join" and "Another motivating factor is that then we are always learning new things, new ideas and new skills, so you are always building yourself".

Being able to learn new things collectively, and from each other, seems to be important characteristic for a PLC from teachers' perspective. Interestingly, when teachers discuss about learning new, they mostly use "we", or if they talk about their individual learning, they mention that they are learning from each other. Teacher 1-1 expressed the collective nature of improving oneself: "Being able to use colleagues for improving oneself if you are not good in some area. That is what the community is for". Teacher 1-1 and 1-2 summarised it: "It is important that we are learning from colleagues and adopting new ways of teaching." and "In a community like this, you can go to your colleague and learn new skills and adapt your own skills".

Besides learning new, teachers discussed about improvement, as improving and updating the skills they already have. Teacher 1-3 mentioned that "PLC should improve the skills and knowledge of a teacher". Skill improvement was mentioned in both, empathy-based stories and interviews. In the stories, teachers for example described the following: "It helped to get experience, improve on

teaching skills and develop our teaching" and "It [PD meeting] had great impact on teaching and learning".

5.1.6 **Supportive leadership**

Teachers brought up the role of school leaders in enabling development of a PLC. According to the teachers, head of school has an important role in encouraging teachers to get together and learn from each other, in organizing time for them to be able to collaborate more and creating environment that enhances learning. Headmaster's role in supporting and encouraging teachers to collaborate was mentioned by several teachers. For instance, teacher 1-3 described: "we would need more support and motivation from the headmaster to work as a team rather than as individual". Teacher 4-1 had similar thoughts: "Head of school should support us to meet teachers and give guidelines. Headmaster should bring teachers together to work as a team". Additionally, besides providing support, teachers expressed that headmaster has essential role in providing time for learning community. Teacher 1-3 said that "Head of school should allow us time, time for whatever we will do there. So, it will help us to make it possible" and Teacher 3-3 added "and head could encourage us to work together by providing us time".

"Head of school should always help us to come together, as one, to work together without any division among us.", T2, I2

"Head of school encouraging us to collaborate with colleagues would be the key.", T1, I1

"The head should support and encourage us to work as a group, to achieve something as a group.", T3, I2

Teachers trusted head of school's expertise and skills, and discussed that the head

should use them in order to help them create PLC. Teacher 2-2 discussed that "through their leadership skills, they could advise and encourage us on how we can go about learning together". Teacher 2-3 had similar idea: "The head should use their achievement and skills to encourage us to do such a thing [develop a learning community]". Besides that, the head of school should not only just help to develop a PLC, but to engage in it too as Teacher 3-2 stated: "I think also headmaster should be involved in development of the community and in the community itself". The power relation between teacher and a headmaster was also discussed, and admittance of weaknesses to one's boss was perceived challenging. Teacher 3-1 stated that "headmaster should make learning in a way that teacher won't feel bad that they don't know something, would be the best encouragement for learning".

In conclusion, comprehensive support was expected from the headmaster: support by providing their expertise and experience, by allowing time and providing understanding by true involvement in the community was described as important characteristic of a PLC. Teacher 4-1 described headmaster's role in PLC development in a nutshell: "Head of the school is number one in promoting professional learning. They create environment that motivates to do the work and improve".

5.1.7 **Trust**

Mutual trust, and respect among teachers was perceived as important characteristic of a PLC. Trust was discussed to be crucial in order for teachers to be able to work in a group and learn from each other. According to teachers, sharing own practices, ideas and feelings would not be possible without trust, as Teacher 1-3 said: "Trust is a key. When I trust you, I can share with you my feelings and anything". Teacher 3-3 added to this: "yeah and if there is no trust, we will not

be able to work as a group in the community and will not be able to succeed in that end".

Trust was connected to the ability to share ideas without being judged and, also to being able to share feelings and admit that one does not know something. If there's no trust, teachers are not able to share their ideas or thoughts, and do not feel comfortable. Teacher 3-2 described that "We also need to trust. Then we can plan and reflect together, we can move forward and achieve a common goal. If I don't trust, I don't share". Teachers also described that they need to trust that everyone is sharing their knowledge when needed, as Teacher 2-3 described: "And when there is trust, even if I don't know something, in a meeting maybe she knows and I can trust she will help me if she can, so it is like a real community then".

Planning and reflecting, sharing and achieving a common goal were all things that require trust, according to the teachers. Teachers emphasized that trust is "the key", and even if teachers are feeling insecure about showing their weaknesses, such as things they do not know and admitting that they are lacking some knowledge, if there is trust among them, it is possible to express these weaknesses to the others. Two teachers discussed about admitting lack of knowledge to each other: "Consulting colleagues and admitting that you don't know something may cause insecurities and feelings of weaknesses.", (T3, I1). "But if there is trust, then it is not an issue." (T1, I1)

"No one is going to judge, I can trust what I say is not going to be for example laughed at." (T1, I2)

Moreover, teachers believe that if there is not trust, it can be built. Having meetings, discussing about concerns and just utilizing the learning community are ways to build trust.

"And also if it is not there before, we have to learn at the learning community, to learn to trust each other. So you learn how to trust ourselves, it is very important, right? One of the most important...", T2, I2

"When we are having meeting, we talk about the things that concern everyone, the classroom or us or anything, that is how we trust more. So, trust comes with spending time together and doing this community thing, it grows so the key is to do it [meetings]." T2, I3

Learning to trust each other, and oneself, was seen important aspect in a PLC. As in the last quotation, teachers believe that if there is no trust, it will come, and grow, by spending time together and by "doing this community thing".

5.1.8 Collaboration

Teachers discussed the importance of collaboration in a professional learning community. Collaboration was perceived both, as a mean to develop a PLC, but also as an outcome of the community. Teacher 3-1 described collaboration as an important aspect of professional learning: "Collaboration, strong collaboration is the important thing in professional learning. Helps you to develop your skills and face other issues, other teachers might know how to do about it, getting together should help you to find solution faster". Whereas, Teacher 1-2 described that collaboration is the outcome of professional learning: "And working in collaboration has strengths, like you learn some skills, like communicating skills, you learn not to be afraid to share your ideas, so it is a strength and should be the outcome of professional learning, it is important factor", and the same teacher also discussed how PLC should also maintain collaboration: "Community should also foster collaborative learning".

"We want to collaborate, and that is the key: time and chance to collaborate." (T2, I2)

Collaboration was described to be the key for achieving something as a learning community. Teacher 1-2 stated that "The key is that the community is working in a group to achieve a common goal". When teachers discussed about collaboration in the interviews, achieving goals as a group, in collaboration, was emphasized over working individually to achieve goals, and for instance Teacher 2-2 said "it has to be like, not so I alone achieved it, but you working as a group to achieve something". Working in collaboration was also seen as a tool that could help teachers to achieve things in a PLC: "And also we are working as a group and it will help us to achieve something" (Teacher 3-1).

Chance to work in collaboration was seen as motivating factor too. Having chance to work as a group was seen as a tool for knowledge building and self-development. Teacher 2-2 described it in the following way: "Group work motivates me. I know I don't really know anything, so some adapt, and can help me. When I work with other's they help me to know this". Teacher 3-2 had similar thoughts about collaboration enhancing motivation: "It motivates me when I don't know something, so we meet and talk about it, like in group work. And I will get to know something, it will develop me". Teachers also described, how they are more powerful together, and how by collaborative work they are able to do more, than as individuals. Teacher 1-1 said this well:

"We should be able to work in a collaboration and show what we are able to do and receive help when needed." T1, I1

To enhance collaboration, head of school was seen as a key agent. Working in collaboration was seen as a mean to show the head of school teachers' abilities and expertise, but teachers perceived that they would not be able to properly collaborate without supportive leadership. Teacher 1-1 said: "Head encouraging us to collaborate with colleagues would be the key. You can get together and

share ideas". Thus, teachers perceived that collaboration was important characteristic, but having opportunities to execute it was not in their hands; head of school has, according to the teachers, the keys to the enhanced collaboration.

5.1.9 Shared purpose

Teachers discussed what is important to them, and what is motivating them, and why they want to develop themselves. These discussions brought up quite clearly their shared value and purpose: improving students and their achievement. Students were mentioned several times, and for instance Teacher 1-2 stated very clearly that: "If you don't improve yourself more, you are letting your students down". Teacher 1-1 was also passionate about their students' improvement and expressed that "If I don't see my students improving, if it's not happening it is not motivating. You [PD facilitator] are just wasting my time".

Professional learning activities should have impact on students, and the content of PLC meetings should be about students and their learning. In empathy-based stories, one teacher described the ideal professional development meeting outcomes: "Meeting improved my learning and teaching skills and it had good impact on the children". Another teacher wrote in their empathy-based story that "Professional development meetings would improve children's academic performance". The same theme continued in few other stories as it can be seen in the quotations below.

"It [PD meeting] helped teachers to improve their skills and teaching methods in order to help pupils understand and reproduce what they have been taught." (EBS)

"Meetings would improve children's academic performance.", (EBS)

Similar things were discussed in the interviews where teachers described that PLC should have impact on students and their learning. Teachers shared the same value of pursuing growth, learning and academic success for their students. Following quotations are from the interviews:

"It [PLC] should also have effect on student learning." (T3, I2)

"We should learn each other's method of teaching, maybe someone has better method and when I learn, our kids can perform better." (T2, I2)

Themes of helping the students and letting them down if teacher was not improving oneself, were discussed several times. Teachers shared the idea of how professional development is their responsibility, and if not doing it, they are not able to support their students in the best possible way and they felt that they would "let their students down" or "be disgrace as a teacher".

"Love for the kids. It is the motivation. You are looking at the kids you are teaching and their level of thinking, you realize if you do not improve yourself, you will be disgrace as a teacher, so to motivate myself I just have to concentrate on the love for the students." (T1, I1)

"If we improve, we are going to help the kids and build this school." (T3, I2)

Teachers perceived the purpose and vision of a PLC to be improved student achievement, and according to the teachers, PLC should provide means to achieve this purpose through learning new skills and knowledge.

5.1.10 Decreased isolation

"Like we teachers, we shouldn't be working in one class, one teacher, in isolation. What she knows, I may not know, so us getting together, it will help to learn new things." (T2, I2)

Lastly, teacher's responses brought up the need for battling their isolation at work. In teachers' discussions, isolation was closely related to the need for collaboration and to be able to learn from each other. Teachers expressed, that isolation is real issue at the school. Teacher 2-2 said: "As a class teacher, you are always in your class, so in the primary, it is always kind of isolation for us". Other teachers agreed with their colleague:

"Isolation is bad. Sometimes you don't even know if some teacher is absent, you are stuck in the class. We have to have time to meet." (T3, I3)

"You are always in the classroom, you hardly go out, so we are always working in isolation." (T2, I1)

During the interviews, teachers had discussions that one important characteristic of a PLC should be that it would reduce isolation. Few teachers did not feel that they work in isolation, and this was mainly due to the structures in the school; these teachers were working in contiguous classrooms, and thus had chances to collaborate with one another. Other teachers agreed that they experience feelings of isolation continuously, and according to them PLC should be characterised by isolation reduction. Teacher 2-3 stated that "[In an ideal PLC] isolation reduces which is important and motivates me to engage in it". Teacher 1-3 agreed by saying that "If PLC would help to reduce isolation, it would be motivating factor to take part in it".

5.2 Teachers' learning needs

Teachers' learning needs were identified through interviews and a workshop facilitated by the researcher. In the interviews, teachers were asked to identify they learning needs. In the workshop, teachers were asked to first list individually three of their personal professional learning needs they perceive as the most significant ones. After that, teachers were organized in groups of three to four teachers, and they were asked to share their learning needs with other teachers. They then had to prioritize which of all group members' learning needs were the most crucial ones, and in the end each group had to come up with three most important learning needs that they all agreed on together.

Teachers expressed a variety of learning needs, with some of them overlap-



Figure 4 The three main categories of teachers' learning needs

ping, and some of them being specific or unique. Overall, teachers shared some learning needs, and some of the needs were quite divergent. The figure (see Fig-

ure 3) below presents in simplified manner the two main categories of the learning needs teachers expressed, and a third category of "other learning needs" that were mentioned only few times and did not fit so clearly under the two main categories that include the learning needs that had larger number of mentions.

The first category, communication skills, was mentioned 7 times by the teachers, and thus was the most often mentioned learning need. Teachers discussed, that they would like to learn how to express themselves effectively both, in front of their students and colleagues. Additionally, teachers want to learn how to work as a team, and create good inter-personal relationships with each other and how to "live and work in harmony" and "to team up with collagues". Teachers were also concerned about their skills and abilities to share the knowledge and ideas they have, and perceived that lack of communication skills was serious issue, as one teacher expressed in the learning needs worskhop:

"We must learn ommunication skills. Lack of communication skills makes it so we hardly learn from each other."

"How to share ideas together and with the school management to make learning more successful for pupils."

Teachers shared fairly similar learning needs in the teaching skills category. Four teachers discussed that they want to "learn how to assist students individually" and "how to teach pupils individually based on their level of understanding". Besides that, teachers voiced that they would need to learn how to "make lessons more practical and realistic" and "encourage and motivate students more". Two of the teachers were also concerned about their teaching skills and stated that they must learn "how to help pupils understand my teaching better". Generally, teachers were saying that their learning needs are related to learning new teaching methods and creating lessons in a way that would enhance practicality and

problem-solving, instead of the memorizing and repeating methodology that is traditionally used in Ghanaian classrooms.

"We need to learn how to learn new techniques of teaching, like methods of teaching. Like real pedagogy. To bring out the best in my students and making them become great."

The last category of "other learning needs" holds quite variety of specific learning needs teachers expressed they have. For instance, two teachers brought up the need to learn how to control the classroom since the caning is a method that teachers are not allowed to use anymore. Besides that, few teachers discussed about relationship-building, either with the parents or the students. One teacher said that "We need tools for creating good relationship with students and their parents". Specific subject-teaching learning needs were expressed by two teachers: "I need to learn how to turn theoretical math problems into practical problems" and "Creative arts teaching, it is challenging, and I would need to improve in it".

Overall, teachers had no issues to express their learning needs, even though they are rarely asked about them. Teachers discussed that they meet some challenges almost daily, and that their learning needs are rising from these challenges. They believed, that through improved communication and teamwork skills, they could battle most of these challenges with their colleagues, by sharing their knowledge and ideas. Nevertheless, they are still lacking the skills, and time and other structures that are needed for it.

6 DISCUSSION

6.1 Discussion of findings

This study focused on teachers' perspectives on important characteristics of a professional learning community and to professional learning needs teachers have in relation to a PLC. The aim was to understand what kind of characteristics should be emphasized in the development of a professional learning community, so that the teachers would be willing to engage in the community and perceive it motivating and something they want to engage in. In addition, teachers' learning needs were mapped to create holistic understanding of the schools' overall learning needs and to develop an idea of how a PLC could meet the needs.

Characteristics of a PLC

Teachers expressed structural characteristics, time and location, to be the most important one. Teachers responses indicated that a lack of time is a constant challenge in their everyday work and thus they should be provided with sufficient amount of time to do PLC related activities, such as collaborate with their colleagues. Teachers are already burdened with a heavy workload and adding PLC responsibilities and opportunities on top of that, without changing anything in teachers' work schedules, could lead to negative outcomes such as decreased motivation towards professional learning. For example, Junaid & Maka (2015) found in their research that teachers perceived professional learning negatively because it was seen as unnecessary extra work and time-consuming activity. That is why it is important to note teachers' need for sufficient amount of time to engage in professional learning, in a way that it does not affect negatively on their already heavy workload. Teachers have significant amount of administrative responsibilities, for which they do not have any allocated time - teachers are expected to take care of their administrative and bureaucratic responsibilities during or in between the lessons. Thus, the school should allow time for teachers to meet regularly; if there is not enough time for learning it will remain on only superficial level (Louis et al., 1995; Stoll & Earl, 2003). It is not just a question about timetables and being able to attend training, but how schools organize time for spontaneous, non-planned learning opportunities that may happen anywhere in the

school; classrooms, staffroom, in a meeting or in or just in the hallway (Bolam et al., 2005). This leads to another structural characteristic, location, that teachers brought up. Teachers mentioned that they do experience isolation at work, due to the lack of time to collaborate with other teachers. Location of classroom is another factor affecting on the isolation: four of the classrooms are located in the same building, share a hallway and do not have proper doors, therefore teachers can discuss with each other for instance during short breaks, and teachers can see and hear what is going on in the other classrooms. Teachers in these classrooms have more chances to collaborate with their colleagues, whereas teachers in classrooms that are isolated from this building, do not have chance to see their colleagues during the day. The challenge is that teachers do not have their own staff room, or any space where they could get together, nevertheless teachers stated that PLC related meetings should be held at the school facilities, but not in a classroom. According to Bolam et al. (2005), missing staff room, or a staff room that is located in another building than where the classrooms are, is significant factor inhibiting school-wide collaboration.

Teachers perceived it important that they can freely express themselves in the community. In the discussions, teachers mentioned that they should be able to share anything that is on their mind, without the fear of being judged or neglected. Teachers had previous experiences of professional development activities, where sharing ideas or opinions was perceived negative, and sometimes was not even allowed. Especially younger and less experienced teachers emphasized the importance of expressing oneself without being judged by others. Younger teachers need more support and help from the more experienced teachers, but other teachers' judgmental attitudes hinder their courage to ask for help. If teachers do not feel comfortable and safe, it is unlikely that they will engage in discussion about issues or innovations in their classroom or open themselves up to learning or share their classroom activities or instruction methods (Bolam et al., 2005). Furthermore, according to Dufour (2004), learning collectively is one of the key characteristics of a PLC, thus sharing practices and knowledge are inalienable activities of a learning community. If teachers are not able to express

themselves freely, this may be significant barrier to collective inquiry, thus it can be judged that safety and comfort are essential characteristics of a PLC, and it should be noted that teachers perceive it as important characteristic as well.

Teachers emphasized the importance of learning from each other in a **PLC.** Teachers voiced clearly that they acknowledge the potential in one another, and that they perceive the key idea of the learning community to be that they have opportunities to learn from each other, without the need of bringing outsiders to the school. It was recognized essential that the community would be able to use each one's potential to enhance all teachers' learning, in addition it was also a requirement; everyone should commit to not only own, but to other's learning too. Thus, teachers perceived that a PLC should be characterized by real opportunities for learning from and with colleague, rather than having a training person brough from the outside of the school. Teachers truly believed in their own and each other's capacities, and this implies strong teacher agency. According to Calvert (2016) teacher agency refers, in the context of professional learning, to teachers' capacity to direct their own professional learning and development, and capacity of teacher to contribute to their colleagues' growth as well. Teachers with strong agency are aware of their own role in professional growth, and rather than acting passive receiver of professional development training, teachers make learning choices by themselves to achieve their goals (Calvert, 2016).

Understanding of what they are doing, why they are doing it and for what kind of outcomes they are aiming for, seemed to be vital to the teachers. Teachers needed guarantee of clear, achievable outcomes, as they discussed the need for understanding reasons why they should engage in PLC. Recognizing the possibility of beneficial outcomes for teachers and consequently for their students, was mentioned when teachers discussed about the importance of goals and outcomes. Goals and outcomes were established as a relevant characteristic of a PLC, especially in relation to motivation to engage in professional learning community; if there's no understanding of goals of their actions, and achievements they have already reached, teachers are not likely to be motivated to engage in the community, as they cannot recognize the benefits it brings to them. This is what

Dufour et al. (2016) have also discussed in their article, by stating that members of PLC should be guided by clear, result-oriented goals that has been created together. To establish a sustainable PLC, goals should be specified and unanimously agreed on; teachers must clarify, collectively, what is to be accomplished, how and what are the responsibilities of the individual, as well as of the whole group in initiating and sustaining steps towards the goal (Dufour & Eaker, 2006).

Teachers expressed a strong desire towards new knowledge, and knowledge building was considered as important characteristic of a profes**sional learning community**. "Learning new" and "always learning new skills" was described as motivating factor and defining an ideal professional learning experience. Teachers explained that they expect to receive for instance new skills, knowledge and methods of teaching by engaging in professional learning community. According to Hord (2004) seeking of new knowledge is one of the characteristics defining professional learning community, and collectively applying new ideas and knowledge to practice are one of the key activities in a PLC (Louis et al, 1995). Apparently, in their previous professional development experiences, teachers have been revisiting the same, "old", information from time after time, which was affecting negatively on their motivation to attend professional development activities. In turn, building new knowledge and skills would bring teachers motivation and happiness and help them to build and improve themselves as professionals. Furthermore, teachers emphasized, that they could acquire these new skills and knowledge from their colleagues, and by doing so they underlined teacher agency in their professional growth.

Teachers perceive headmaster's role significant in the establishment and sustaining of PLC and they expect headmaster to take a considerable role in the development and maintaining of PLC. Headmaster was described to have important task in supporting and encouraging teachers in collaboration and power to organize and provide time for teachers for PLC related activities. Additionally, the head of school was seen as more powerful, skilled and experienced member of a PLC; headmaster was described as "number one in promoting professional learning". Teachers appreciated headmaster's expertise and

knowledge, and perceived it important, that the headmaster would be part of the learning community, although they were also worried about the unbalanced power relations between teachers and the headmaster and its effect on the PLC. Headmaster had significant power over the teachers, and teachers did not all the times feel comfortable to express their lack of knowledge or ideas when headmaster was around. The tension between teachers and the headmaster was visible, and it was clear that they would take the role of the leader, rather than a peer, in the community. It is vital to acknowledge that while headmaster does have a crucial role in creating conditions that are fostering professional learning and providing opportunities for teachers to collaborate, the responsibility of making it happen is on a responsibility of the whole learning community (Bolam et al., 2005). Even though headmaster's support is needed, the responsibility of sustaining a PLC belongs to every member of it. That is why the head of the school should consider distributive leadership, and see themselves as a leaders of leaders, rather than as leaders of followers (Dufour & Eaker, 2009). Sustainable professional learning community does not rely on just one single leader and promotes the concept that leadership is not a one-man job, head of the school should empower and support teachers' leadership (Dufour & Eaker, 2009).

Trust in a professional learning community was stated as "the key"; teachers expressed, that without trust, there is no teamwork, no sharing or learning. Learning together was described as a process where teachers have to reveal their weaknesses to each other. With weaknesses they meant teaching-related things that they don't now know, understand or are able to put in practice. Also, in a PLC, teachers are expected to contribute something to everyone's learning, meaning that they are expected to share their ideas, opinion and thoughts. Teachers stated that this requires trust within the learning community. If there is no trust, teachers will not feel comfortable to ask for help, offer help for others or share their ideas. Engrossing in learning with teacher colleagues is experienced as a sensitive and a risky process by most of the teachers, therefore opening up to sharing and learning requires safety and mutual trust (Bolam et al., 2005). Mutual trust between colleagues is one of the key characteristics in a PLC (Louis et

al., 1995), and productivity of collaborative work lies in the positive relationships and collegiality between teachers (Louis et al., 1995).

According to the teachers, collaboration is an essential characteristic of a PLC; it is a mean to an end in PLC development process, but also an outcome of the PLC. Collaboration was seen as a way to achieve common goals, as working together was perceived to be more productive and efficient than trying individually achieve set goals. This is the major idea embedded in the concept of PLC; teachers are not able to help students to learn at high levels unless they work in a truly collaborative manner. Collaboration is one of the main characteristics of a PLC. (Dufour & Eaker, 2009). Collaboration was also perceived as motivating characteristic; teachers voiced that collaboration is a crucial tool for knowledge building and self-development that would not be possible without teaming up with colleagues. This kind of feeling of interdependence, when members of community consider achievement of goals impossible without collaboration, is pivotal to collaboration and to the sustainability of professional learning communities (Bolam et al., 2005). Trust, safety and comfort, the characteristics that teachers have mentioned, are vital for true collaboration, as according to Dufour & Eaker (2009), the eagerness to collaborate with colleagues usually stops in teachers' classroom doors. If teachers have mutual trust, and the environment of the PLC is safe and comfortable, it may have crucial effect in supporting collaboration that surpasses the classroom doorstep.

Teachers main motivation to engage in professional development training, or in a professional learning community, is to pursue growth, learning and academic success for their students. Teachers quite evidently shared the same purpose of aiming to achieve improved student learning outcomes. Improving children's academic performance was repeatedly mentioned when teachers discussed what motivates them to develop professionally and why they perceive professional learning community important. By not developing themselves as professionals, teachers perceived that they would be letting their students down and being a "disgrace". Thus, teachers have collectively committed to the purpose

of achieving better learning outcomes for their students by developing themselves professionally. Clarity on collectively established purpose of the PLC and shared values guides each members' work and defines how each member can contribute to the process, and previous research has recognized that there is a strong and positive correlation between evident and shared purpose and the effectiveness of PLC (Dufour & Eaker, 2009).

Finally, a professional learning community was considered as a solution toward decreasing professional isolation. Teachers experience, that isolation is a genuine issue in their school, and that inhibits the possibilities to learn from each other, and affects their motivation too. Teachers linked decreased isolation to growing motivation to engage in PLC. Battling isolation is important; according to Dufour et al., (2005) isolation is significant barrier to the development of professional learning communities. Previous research has indicated that teachers' isolation at work has negative impact on teachers' wellbeing, motivation and professional development (Schieb & Karabenick, 2011). The issue of isolation lies in the physical and psychological level; both factors may create such an isolation that is almost impossible to overcome and makes turning isolation into productive and collaborative learning a challenging task (Dufour, Eaker, Dufour, 2009). Teachers' experienced, that their isolation was mostly due to the structural arrangements of the school. Some classrooms were located in a way that made teachers' being physically isolated from other classrooms, and additionally teachers were not allocated any time to leave their classroom during the day. These are significant factors creating isolation within the school, and teachers expressed that a PLC should be outlined by isolation reducing characteristics.

Teachers' learning needs

The second research question was concentrating on teachers learning needs in relation to professional learning community. Teachers acknowledged that they need to be able to voice their learning needs in order to create true learning opportunities for themselves, but they had been rarely, if at all, asked what they need to learn. According to Calvert (2016) professional learning activities should be based on teachers' learning needs and should help teachers to construct solutions for challenges they have experienced in their classrooms or within the whole school. Also, creating solutions for real problems and challenges teachers have experienced in their daily work is from where the real motivation for learning comes from (Calvert, 2016). Thus, it is important to acknowledge teachers' individual, and collective, learning needs in order to truly support their learning. Generalized, one-fits-all professional development settings, where the topics and learning targets are predetermined for the teachers are falling short as empty exercises and seldom actually improves professional practices (Calvert, 2016). Therefore, it was important to ask teachers, what they perceive as their most important learning need; in a PLC, teachers should be able to take the lead of their own learning, and teachers should become self-developing learners (Easton, 2008), instead of being receivers of predetermined learning goals that has been set for them by somebody else.

Teachers expressed communication skills to be one of the most essential learning need they have. When teachers discussed important characteristics of a professional learning community, they listed characteristics such as collaboration, collective learning and decreased isolation; these all being things that require good communication skills. Working together and learning together seemed to be important for the teachers, but they expressed concerns related to their skills in communication. Teachers wanted to learn to be better in sharing knowledge and teach each other, and they perceived lack of communication skills as significant barrier for learning from each other. Teamwork skills and building of good professional relationships within the school was also discussed, teachers wanted to "live and work in harmony".

Another most often mentioned learning need was closely related to the purpose and values teachers shared. Teachers wanted to learn new teaching techniques in order to "...bring out the best in my students and making them become

great". Teachers voiced, that PLC should be characterized by the shared purpose and goal of improved student learning outcomes, and their learning needs were related on *how* to achieve this purpose. Teachers had either very generally expressed learning needs of improving instruction in the classroom, such as "how to encourage and motivate students more", or more detailed need to for example "learn how to assist students individually" or "need to learn how to turn theoretical math problems into practical problems". Most teachers expressed learning needs that were closely related to the problems they had faced in the classroom lately and had not found solutions for.

6.2 Towards a Conclusion

How can teachers be motivated to engage in the learning community, and what makes the professional learning community "real"? To the teachers, a real community is a place where they can trust that they will get help from each other, and in a PLC, the focus shifts from I to We. Teachers are learning together and from each other, and work in strong collaboration. Individual goals are shifting towards collectively agreed goals; what do we and our students need? Purpose and the vision of the learning community is shared, and teachers aim all their actions towards the goal of enhanced student achievement and learning for all. All in all, reciprocity and trust are essential characters; teachers want to get help from each other when they need it, and they need to be able to trust that help is achievable all the times. In a "real" PLC, teachers' isolation would decrease, and there would be both, allocated time and spontaneous opportunities to collaborate. Teachers truly believed that they could get help from each other, meaning that teachers had confidence in each other's abilities and potential. Teachers are working within the same school, thus they understand the issues, challenges and strengths of their work environment. There is understanding of what they, their school and their students need and therefore, their potentials and expertise should be harnessed to support their professional learning.

Furthermore, PLC should make sense for the teachers. Teachers are allocating their valuable time and knowledge for the community, thus it needs a) be responding to their needs and b) bring them desired outcomes. In a PLC, teachers want to understand what they are doing and why, and make sense of expectations; what are the outcomes of the PLC? This demand requires strong focus on **goal setting**. Goals should be tangible, and outcomes measurable, since if teachers are not able to monitor achievements and progress, it may affect their motivation negatively. According to teachers, if there simply are not any concrete benefits and outcomes, there will not be motivation to continue as a member of the learning community.

All perceived important characteristics of PLC can be linked to teacher **agency.** Professional learning, that supports teacher agency, has led to increased teacher motivation and encouraged teachers to engage more fully in professional learning (Calvert, 2016). Therefore, in the development of PLC, attention should be paid to its characteristics supporting teacher agency. In a PLC, teachers should be able to identify and decide what they need to learn, and professional learning should be planned and presented by the teachers. Actions should be goal-oriented, and goals should be meaningful, and communities should base on mutual trust and each other's expertise. (Calvert, 2016). When compared to the current situation in the school, there is a lot of work to do. By starting to acknowledge the aspects and importance of teacher agency correct steps towards the development of PLC teachers find motivating, safe and are willing to engage in, can be taken. Teachers' learning needs should be recognized, and instead of looking for "an outsider", the sources for problem-solving should be looked internally (Calvert, 2016). Professional learning should be allowed to happen **during t**he school day and should focus on teachers' and students' continuous growth (Calvert, 2016). Structures that support collaboration, such as structure of the workday and physical structures, and supportive leadership have significant role in the sustainability of a professional learning community (Kilbane, 2009). Thus, resources, such as time and funding, should be directed towards a PLC and its needs. Teachers need time collaborate. Collaboration includes all the activities from identifying together their and students' learning needs to learning together and from each other. In between these, there is a need to collaboratively plan and implement professional learning, discuss the purpose of the community, set goals and measure the progress, and have fun.

In conclusion, the development of PLC could be initiated by **listening** to what teachers have to say. Teachers should be recognized as experts of their own learning, and attention towards their knowledge of schools' challenges and strengths should be paid.

6.3 Limitations of the Study and Further Recommendations

It is important to note, that it is a case study made in a one school, therefore there was only small amount of research participants, which may be perceived as a limitation. However, the study was initiated to understand research participants and their perspectives about their own, school based professional learning community. Therefore, this study does not aim to provide findings that could be generalized.

Furthermore, as a Westerner, my different perspective, and status in the school, may have caused limitations in interpretations. Additionally, spending only three months in Ghana was not sufficient amount of time to learn to understand the culture thoroughly. Furthermore, not being able to understand the local language and the differing ways of the use of English language, especially vocabulary, may have caused misinterpretations between the researcher and the research participants. This may have been affecting for example teachers' understanding of the interview questions, or the empathy-based stories. These effects have been acknowledged in methodological choices and reflected in the chapter 4.5 Trustworthiness.

To conclude this study, some suggestions for future research will be proposed. Teachers' professional learning is critical for sustaining and improving

quality of teaching and there is critical need for further research, especially in Ghana where only small amount of previous research about teachers' professional learning has been done. As this research was made in a private school, it would be interesting to conduct similar research in a public school. There is a significant research gap in the field of the in-service teachers' professional learning in Ghana, and it is essential that the current situation of teachers' professional learning would be researched, as there is a lack of information about the present situation in Ghanaian schools. Moreover, based on my experience, it would be invaluable and important to give teachers' more opportunities to voice their opinions and perspectives, thus further research could focus on providing information from teachers' point of view. Now that the concept of professional learning communities has been acknowledged in the current curriculum in Ghana, it would be useful to research how PLCs could be developed in schools and conduct longitudinal research about their impact. This would greatly support development of guidelines and most importantly, developing and sustaining PLCs for the future.

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APPENDICES

Ap	pendix:	1	Positive	MEBS	frame	story
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Empathy-based stories/1

Your school has initiated a new professional development programme for all teachers. After the first workshop, you feel happy and energized. You were able to express your learning needs and discuss how you could together develop professionally. You are motivated to actively continue in the programme with your colleagues.

Please continue from here and write a story of what happened in the workshop.

Participation in this study is voluntary and anonymity of informants will be ensured when presenting the results of the study.

The research data will be used for the purposes of Master's Thesis research. The aim of research is to identify preconditions for development of teacher professional learning community and to support implementation of teacher professional learning community.

Further information: katariina.huusela@student.jyu.fi

Please tick the appropriate box: This story can be used anonymously for research purposes I don't want this story to be used for research

Appendix 2: Negative MEBS framestory

Empathy-based stories/2

Your school has initiated a new professional development programme for all teachers. After the first workshop you feel drained and disappointed. You were not able to express your learning needs. There was very little discussion on how you could together develop professionally. You are not motivated to continue in the programme with your colleagues.

Please continue from here and write a story of what happened in the workshop.				
				

Participation in this study is voluntary and anonymity of informants will be ensured when presenting the results of the study.

The research data will be used for the purposes of Master's Thesis research. The aim of research is to identify preconditions for development of teacher professional learning community and to support implementation of teacher professional learning community.

Further information:
katariina.huusela@student.jyu.f

Please tick the appropriate box: This story can be used anonymously for research purposes I don't want this story to be used for research			

Appendix: 3 Interview questions

Understanding and experiences of professional development

How would you describe the meaning and importance of professional development?

Do you think the school environment promotes professional learning and development? How?

Have you had opportunities to attend workshops or other professional development activities during your career?

- a. If yes, please tell what kind of activities you have participated in, when and how many times approximately?
- b. How would you describe the workshop/activities you have attended before?

If you have attended PD activities before, were they beneficial? If yes, explain why. If not, what would you change to make PD activities better?

What kind of guidance or support for professional development have you received?

How do you keep increasing your knowledge and improving your teaching skills? What would you suggest being the best way to do it?

Have you heard of the Pre-tertiary teacher professional development and management (PTPDM) framework? If yes, what?

Collaborative professional development

How much importance do you give to working together with other teachers? Why it is or is not important?

Do you feel like you work in isolation from other teachers, or do you have chances to collaborate with your colleagues? How does the isolation/collaboration appear and affect your everyday work?

What are the possible strengths of working in collaboration with other teachers? How about weaknesses or challenges in collaboration?

As a teacher, are you learning from each other? If yes, how? If not, should this be changed? And how could this be changed?

Have you experienced some specific practices you have found beneficial for your professional development?

How does the school community support teachers' collaboration?

How often do you share teaching experiences with your colleagues?

How would culture of shared learning look like?

Professional learning community

What comes to your mind of the term teachers' professional learning community?

How would you define teacher learning community's role in professional development and learning?

How professional learning communities can develop and benefit teachers?

How would ideal professional learning community look like? What would it consist, and what would be excluded from it?

What is the role of teachers in development of a professional learning community within the school?

What would motivate you to take part in professional learning community meetings?

What makes you feel comfortable in a professional development meeting?

How the head of the school could support and encourage teachers to engage in professional learning community and participate actively?

What suggestions do you have to make teacher professional learning community easily accessible for every teacher in the school?

What actions would support the feeling of safety in the learning community?

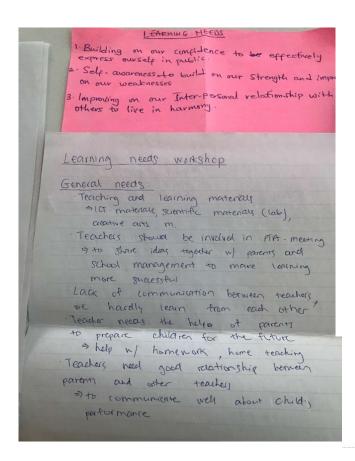
Suggestions for the future

What suggestions do you have for supporting professional learning and development in your school?

What should the school do to support and enhance teacher collaboration in the future?

Is there something else you would like to say about professional development?

Appendix 4: Example of observation data from learning needs-workshop



29.5.2019 Workshop, learning needs

- 10 teachers attended

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- I offered water and ice cream for the teachers
- To warm-up and relax teachers, I organized "competition" first. Teachers were put in groups of 2 people, and they got to give a name for their team, and got a score board
- First task was to build as tall tower as possible from one A4 paper and piece of tape
- "There's no way we can build a tower from materials like this"
- -Team 1---> 1: "You do it, I don't know how" 2: "No no this is team work you give me the tape and tell me if we should rip the paper"
- Teachers were first struggling with building, they weren't too creative, but they sure were
 having fun I gave them some tips how to build taller buildings, and they started to redo their
 towers
- Team 3 \rightarrow 1: "Team 2 is doing way better they do it together" 2: "you need to get up and work with me"
- Team 2: 1: "I have an idea but help me to cover it so the other teams cant see" 2: "okay okay we are going to win this one, our team is the best"
- This was clearly making teachers more relaxed they got to compete, laugh, talk to each other and be all relaxed
- After that, I gave them the lecture slides and explained them that this was going to be a learning needs-workshop
- I gave them 10 minutes to individually think about their learning needs/challenges related to teaching
- Some thought it was simple, for some teachers it was more difficult task and 10 minutes didn't seem enough → I went to discuss with teachers who had difficulties and explained them again what they were asked to do.
- Then I asked them to be in groups of 3 people, to discuss about their individual learning needs, and to think what would be the 3 most important ones they had as a group, I gave them 10 minutes for this as well
- After this, each group came to the front and presented their 3 learning challenges to the whole group, and explained why they chose the ones and I asked if others agreed with the learning needs → there was lots of discussion between the whole group of teachers
- "Yes yes exactly what Teacher 1 is saying. It's like we have so many needs but who is going to help us with all of them?" Group 1: "We have not been asked about learning needs before in this school, we need more time to think together [think learning needs]"
- "I understand that learning needs is the same that material needs but now I understand what you (facilitator) mean"
- "Are you (facilitator) going to help us with the needs? Like we can not cane but how to control the class, the kids are fooling around too much?"
- I also gave them homework again, asking about their learning needs so they have more time to think and reflect, than in the workshop, to get deeper knowledge about every teacher
- Teachers were concentrating well, and active, way better than in the first meeting. Working individually, deciding their own learning needs, seemed to be difficult tho they really wanted to discuss with their peers about this, I had to remind them few times that it was (the first part) individual task. "But I need to see what others are writing down" "I just want to ask

Appendix 5: Consent form



<u>Consent to participate in research:</u> Identifying Preconditions for Development of Teacher Professional Learning Community in a Ghanaian School

I understand that it is voluntary to participate in the Master's thesis study conducted by Katariina Huusela, from University of Jyväskylä, Finland. I have the right to interrupt my participation or cancel my consent at any time and without explanation during the study. Interruption of participation or cancellation of consent for the study have no negative consequences for me.

I have read the notification and have received sufficient information on the study and its implementation. The content of the study has been explained to me and I have received proper answers to all my questions concerning the study, and I have had sufficient time to consider participating in the research. I understand the purpose of the research, and the use of the research materials. I understand that my identity will be treated as confidential information following the ethical guidelines and data protection regulations binding University of Jyväskylä.

With my signature I confirm my participation in the study. The data can be used in the research report that will be publicly available through University of Jyväskylä website.

Signature of research participant	Date	
Name in print		
Signature of the researcher		
Name in print		