ESTABLISHING INQUIRY-BASED PROFESSIONAL LEARNING COMMUNITIES IN AN INTERNATIONAL SCHOOL

Ву

JASON SCHIPPER

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To all my family, friends, and colle	eagues who have supported me throughout this process

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Abstract of Dissertation Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

ESTABLISHING INQUIRY-BASED PROFESSIONAL LEARNING COMMUNITIES IN AN INTERNATIONAL SCHOOL

Ву

Jason Schipper

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Chair: Alyson Adams

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The concept of international schools is growing in popularity as science and industry bring professionals and their families to international contexts far from home. International schools are often designed to mirror curriculum and structures of schools from well-developed nations (such as the US, UK, and Canada) no matter what country they are located in. These international schools employ over 300,000 educators who have cultural origins and training backgrounds from all over the world. Due to this, a major challenge within international schools is establishing supported and sustainable teacher collaboration structures among their heterogeneous faculty. As a practitioner scholar in an international school, I sought to examine this teacher collaboration challenge by assuming the role of implementer of a teacher collaboration initiative. This study seeks to answer the research question of how I, as an embedded researcher and novice teacher leader, implemented inquiry-based professional learning communities (PLC) within an international school.

The study took place over a nine-month period in which I implemented and facilitated an inquiry-based professional learning community within my international high

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school social studies department. I also participated in the PLC alongside my six department colleagues. Guided by an interpretivist research lens, I utilized the Self-Study of Teaching and Teacher Education Practices (S-STTEP) methodology to establish a conceptual framework as an embedded researcher in the international school context as both a facilitator and participant in the teacher collaboration initiative. Through this inductive, iterative analysis method, I was able to continually analyze data and subsequently adjust implementation as I studied the process.

Research data consisted of my observation and reflection journals throughout the ninemonth study, as well as participant surveys and evaluations.

This study adds to the research literature regarding international school teacher collaboration as findings indicated that an inquiry-based professional learning community promoted collaboration and professional growth among the international school faculty. Also, findings indicated that the challenges I experienced in planning, facilitating, and participating in the initiative influenced my identity and professional growth as a practitioner scholar. My study has implications for teacher leaders, administrators, and practitioner scholars attempting to study and improve collaboration in international school settings.

CHAPTER 1 INTRODUCTION

Over the past two decades, significant research has outlined the benefits that occur when educators study their own teaching practices (e.g. Cochran-Smith & Lytle, 2009; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Ermeling, 2010; Goodson, 2003; Putnam & Borko, 2000; Zeichner, 2003). When education professionals become reflective practitioners and examine their own practice, they identify ways in which they can improve their knowledge of both their learning and their students' learning (Dana & Yendol-Hoppey, 2008, 2009).

Simultaneously, there is a parallel push for a similar stance in doctoral education.

This has led to the development of the Education Doctorate (Ed.D.) and the development of practitioner scholars who study their own educational practice. As defined, practitioner scholars:

generate, develop and disseminate professional knowledge and support innovation that will have social, educational and practical impact. [They] are committed to extending their understanding and improving practice in their schools and educational systems through researching and theorizing policy and practice (University of Cambridge, 2014).

As a practitioner scholar, my journey to establishing myself in this role has taken an unconventional path. I began my teaching career as a high school social studies teacher in the southern United States. After three years in this position, I decided to pursue my passion of international cultures and travel, and accepted a social studies teaching position at an international school in Thailand. It was during my time teaching abroad that I realized students' general knowledge needs to transcend national borders and evolve into a more connected international perspective. It was my belief that this global connectedness was a crucial element needed in the curriculum of contemporary

social studies courses. I recognized the need to modernize the curriculum to provide a larger global connectedness focus for social studies students. Therefore, I enrolled in a Social Studies Education Ph.D. program focused on social studies curriculum development.

As a Ph.D. student, I was assigned to teach a social studies teaching methods course for pre-service teachers. This position had a profound impact on my personal development as a teacher, teacher educator, and educational researcher. Through teaching this course, I kept returning to the need for "connectedness" that I felt all students needed to share with each other regardless of their background and differences. I realized this feeling needed to be embedded in teachers, especially international school teachers, before this can be taught to their students. If teachers are not able to share a collective connectedness with their diverse group of colleagues, then it is doubtful they will have the knowledge to teach the concepts of connectedness and collaboration to their students. With this revelation, my focus shifted to establishing collaborative communities of connectedness among teachers. I switched to the Ph.D. program in Curriculum, Teaching, and Teacher Education.

Through two years of coursework and conducting numerous empirical studies on teacher education, I continued to come across extensive studies (i.e. Cochran-Smith & Lyte, 1999a; Darling-Hammond & Young, 2002; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Fullan, 2007) that indicate researchers who are embedded in context, especially for professional development and school improvement purposes, are most effective in their research collections, conclusions, and achieving their stated goals. In order to effectively pursue my collaborative teacher community

research, I knew that I had to transform my approach from theoretically-based research, to research into practice. As I finished my doctoral coursework, I switched degrees from Ph.D. to Ed.D. and accepted a teaching position at an international school in Europe where I could conduct teacher collaboration research while embedded in the context of my research.

Therefore, as I began the role of practitioner scholar pursuing an Education Doctorate degree, my professional goals were: 1) to conduct authentic research through an informed scholar lens, 2) to research my own practice as an educator, as well as the educational environment that I am embedded in, and 3) to be in an environment where I can implement changes concurrently with the research I am conducting. I identified a problem of practice in my professional context that would inform my professional knowledge pertaining to teacher collaboration within an international school.

International schools frequently experience challenges in establishing collaboration among their faculty for a number reasons including diverse teacher backgrounds, differing native teaching philosophies, short contract-stay of teachers, and veteran teacher resistance (Cambridge, 1998; Hayden & Thompson, 2011; Odland & Ruzicka, 2009; Squire, 2001). I have also witnessed these international school teacher collaboration challenges in my previous international teaching experience. Therefore, I began generating knowledge for solving this problem while also seeking to establish my identity as a practitioner scholar. I conducted a study in which I implemented a professional learning community (PLC) structure within my school using an inquiry-based learning model. I documented the entire process focusing on my own role as implementer of this initiative. I then reflected on this self-study and the actions of our

inquiry-based PLC group to create a manual for teacher leaders who may be interested in implementing a similar initiative within their international school.

Thus, the self-study and manual contained in this dissertation are directly related and could be presented in any sequence. The products disseminated in this dissertation are in a non-traditional format to target the various stakeholders of the international school context as well as the practitioner scholar researcher role. It is the intent that these dissertation products promote immediate action among international school administrators, educators, and practitioner scholars. As the study preceded the manual, the study is presented first in this dissertation as Chapter 2. It is presented in a traditional academic manuscript written for university-level researchers and other practitioner scholars interested in establishing collaboration in international schools. It was written to target an international journal using their submission criteria for authors. Specifically, I targeted *Teaching and Teacher Education* as it focuses on scholarship concerning teachers and teaching in international contexts.

The self-study took place over a nine-month period at an American international school in the Mediterranean region of Europe. Members of the PLC documented in this study were teachers in the secondary social studies department. During the nine-month period, teachers completed an individual inquiry and met in a PLC to support each other through the process. Utilizing the S-STTEP methodology (LaBoskey, 2004; Loughran, 2004; Pinnegar & Hamilton, 2009) to frame my approach to address this problem of practice, I was able to participate in this study as both a researcher and PLC participant. I recorded the events and my reflections throughout the nine-month process in a journal which served as my primary data source. Throughout the cycle, members were solicited

for their informal feedback and they completed a formal evaluation at the end of the cycle process. This feedback served as my secondary data source. Using an inductive and interpretive analysis method, I was able to constantly analyze my data and make any pertinent changes throughout the implementation process. Through my reflection and analysis methods, conclusions and implications were derived concerning the problem of practice and my role as practitioner scholar addressing this problem.

After conducting the self-study, I reflected upon the data and conclusions and began to establish tips, strategies, and vignettes of my experience that could be shared with educational leaders who may desire to implement a similar teacher collaboration model in their international school. Specifically in examining the various implementer roles that were highlighted in the self-study, I was able to identify approaches to planning, facilitating, and sustaining an inquiry-based PLC that would be helpful to international school teacher leaders. Some of the strategies mirror the strategies that I conducted with my PLC while others are strategies derived from identifying my lack of preparation or mistakes I made as implementer. By also using my self-study as a trial run for implementing inquiry-based PLCs within an international school, I was able reexamine my findings to create a manual for international school teacher leaders.

Thus Chapter 3 of this dissertation is a guide for teacher leaders interested in implementing an inquiry-based PLC within their international school. It was written in a style and format consistent with other texts and manuals targeting practitioners. It has since been modified to fit into the university electronic dissertation template. The manual contains instructions, advice/tips, and vignettes from my personal experiences

implementing the initiative. Diagrams, charts, and reproducible materials are included as appendices to aid the first-time international school implementer.

Chapter 4 of the dissertation then provides a more in-depth description of the relationship between the self-study and the manual as well as connections to empirical research. The chapter ends by providing a summary of implications for the various audiences that this dissertation targets.

In its entirety, this dissertation is a demonstration of practitioner scholarship in an international school context, and the research contained within addresses major dilemmas that international schools around the world are facing concerning their faculty. In its entirety, this dissertation provides an in-depth and authentic account of my experiences as I establish my identity as a practitioner scholar attempting to develop and generate knowledge concerning a problem of practice.

CHAPTER 2 METHODS AND FINDINGS

It is estimated that there are currently over 7,000 English-language primary and secondary international schools throughout the world. These schools employ over 300,000 teachers who educate more than 3.5 million students (Hayden & Thompson, 2011). The term "international school(s)," as it is used in this study, refers to private primary and secondary schools that have an educational structure different from the country they are established in. Often, these schools are established for the purpose of educating students of expatriate families, though they do not exclude the enrollment of local students. Typically, an international school has a split majority of expatriate students who belong to the country of the school's education structure, and local students who desire to be a part of this non-native educational system. The vast majority of international schools utilize English and are based on the United States or British educational structure.

Regardless of the school's educational structural alignment and student enrollment demographics, the teaching pools at these schools are typically comprised of a heterogeneous group of transient individuals that represent different cultural backgrounds, different teaching practices, and different educational philosophies. Most international school teachers are fluent in English, yet not all represent a national origin to the country that the school's educational structure is based on. More specifically, international school faculty typically include a combination of veterans at the school for several years, new hires on their first international school contract, new hires who have other experience in international schools, and local hires added to teach cultural and language courses. The average contract stay for an expat teacher at an international

school is only three years (Hayden & Thompson, 2008; Squire, 2001). This short-term, transient, and heterogeneous teacher population subsequently results in significant difficulty for schools to establish effective and sustainable patterns of professional practice among their staff (Cambridge, 1998; Hayden & Thompson, 2011; Odland & Ruzicka, 2009; Squire, 2001). This challenge of sustaining strong educational practice is not unique to international contexts. One strategy that has emerged in the United States for sustained school-based collaboration focused on improved teacher practice is a professional learning community (PLC) (Andrews & Lewis, 2002; Cochran-Smith & Lytle, 1999b). Although the premise should translate well to an international school context, there is limited research to date on the topic.

The intent of this embedded researcher self-study study is to document the implementation of an inquiry-based professional learning community in an international school that had previously demonstrated a history of minimal teacher collaboration and a lack of sustained professional development structures. The study will seek to identify the roles and responsibilities that I experienced as the implementer of the PLC, and the various successes, challenges, and adjustments that I experienced throughout this process. This study has implications for those attempting to establish sustainable teacher collaboration structures within international school contexts.

Conceptual Basis

The basis for this study and subsequent actions that I take as researcher and implementer are based on the concept that international schools have a teaching population that makes collaborative professional learning structures difficult to implement and sustain. In order to gain more insight into this difficulty, I will describe the history of and impetuses for the creation of international schools, existing international

school conditions that make it challenging to establishing professional collaborative learning structures within international schools, and a potential approach to establishing a successful teacher collaboration structure.

History of International Schools and International School Faculty

In the 1960's, there was an estimated 50 international schools throughout the world (Jonietz & Harris, 1991). The vast majority of these schools were K-12 Englishspeaking schools established for the purpose of educating students of expatriate families in their mother country's educational structure and language. In just over 30 years, the number of these schools had ballooned to over 1,000 worldwide by 1995 (Hayden & Thompson, 1995). This exponential growth pattern continues as there are currently an estimated 7,000 international schools worldwide (Hayden & Thompson, 2011). Through their research, Hayden and Thompson (2011) discuss the current issues with the international school context. They describe that over the last two decades, international schools have experienced increased student enrollment as prominent local families of the cities where these English-based international schools were located began requesting the opportunity to send their kids to these schools to get a western education and establish fluency in the English language. As the majority of these international schools were privately funded and operated on a business model, school leaders were quick to accept these parents' request in order to increase enrollment and tuition revenue. To address this growing student enrollment, schools began to seek out English-speaking teachers who were not native to the country where the school was located, or native to the country that the educational structure was aligned to. In addition, local teachers were hired for international schools to teach the language and cultural components of the local context that expatriate teachers were not familiar with. Schools began to include in their missions that they offered "global education" and created "leaders for the global community" which even further increased the desire for local as well as expatriate parents to send their children to these schools (Richards, 1998, p.177).

Challenges in Establishing Professional Collaborative Learning within International Schools

The overall characteristics of the teaching staff at international schools pose major issues in establishing effective and sustainable teacher collaborative learning structures. Of primary concern is the transient nature of the faculty and subsequent high teacher turnover. Hayden and Thompson (2011) describe international school teachers as those who "combine a relatively portable career with a desire to travel the world...with the expectation of eventually returning home" (p.84). Because of this, the contract stay of an international school teacher is typically very brief. Squire (2001) claims that many international schools opt to forego extensive professional development as many school owners and school boards do not see the reason to "invest money into professional development when the recipients will be going elsewhere in one to two years" (p.106).

Challenges also emerge with the current faculty of the school. Divisions often appear between the local teaching staff and the international teaching staff who respectfully hold allegiance to their native cultural teaching practices (Hayden & Thompson, 2011). For returning international school faculty extending their contracts past two or three years, studies have shown that egos play a big part in dividing the faculty and forming cliques (Cambridge, 1998; Richards, 1998). Many international school teachers feel that their tenure of experience has resulted in them being an expert

teacher who does not need any collaboration models to improve their practice. Richards (1998) states that in international schools, "differences in teaching methodologies, experiences, perceptions, and contractual statuses all seem to undermine the unity and consistency that school administrators hope to achieve" (p.182). Therefore, there is a significant issue within international schools in getting teachers to collaborate to accomplish school-wide improvement and enhance their personal professional practice.

Selecting a Professional Collaboration Structure for International Schools

Several structures for professional learning in United States schools offer promise for use in international schools. It makes sense to draw on professional learning structures from the US as these should be somewhat familiar for the majority of teachers in international schools who are hired from US locations. Keeping in mind the nature of the international school teaching pool and the challenges outlined above, ideal professional learning would include structures that allow for customized, individual learning to occur within collaborative supports, while also providing opportunities for teachers to lead and share their expertise, and create pervasive expectations for collaboration that include teachers at all levels of experience. One structure that fits these criteria is a practitioner-focused professional learning community (DuFour, 2004). This professional development platform brings teachers together through a structured collaborative format in which they learn with and from one another as they focus on teacher and student learning (Nelson & Slavit, 2008; Putnam & Borko, 2000). Successful practitioner focused PLCs serve to "build and manage knowledge, create shared language for practice and student outcomes, sustain aspects of school culture that are vital to continue, and create consistent norms of instructional practice" (McLaughlin & Talbert, 2006, p.5). PLCs are typically composed of teachers and staff at

the school, sharing a common vision and goal that they work towards achieving through group collaboration, sharing, and reflection (Kilbane, 2009; Thessin & Star, 2011).

One specific practitioner-focused PLC structure that has emerged to promote individual reflection and self-paced learning within communities is a practitioner inquirybased PLC (Gallimore, Ermeling, Saunders, & Goldenberg, 2009). International school teachers come from a broad base of worldwide educational settings and therefore have developed very independent and individualistic teaching practices (Cambridge, 1998; Squire, 2001). It is difficult to successfully implement one standard professional development initiative in an international school where faculty possess so many different individual teaching styles and teaching backgrounds. Inquiry-based PLCs utilize a cycle approach in which teachers create a question or wondering about their individual practice, collect data to support this question within their own classrooms, collectively analyze their data and problematize their practice, and present their findings collaboratively to create both change within their practice and within the culture of the school (Cochran-Smith & Lytle, 2009; Dana & Yendol-Hoppey, 2009; Zeichner, 2003). Dana and Yendol-Hoppey (2008) state, "there is greater likelihood that the learning that occurs from individual teacher inquiries will spill over into collective inquiries conducted by a group of teachers sharing a goal for school improvement" (p. 11).

In addition, research indicates that the inquiry-based PLC structure has the strong potential to be sustainable through the years as it focuses on individual teacher wondering that can be renewed or regenerated every year (Dana, Burns, & Wolkenhauer, 2013; Dana & Yendol-Hoppey, 2009; Ermeling, 2010; Vescio, Ross & Adams, 2008; Zeichner, 2003). A typical inquiry cycle lasts one full academic year.

Therefore, the success of the initiative is not dependent on the individual teacher staying at the school for a number of years, or having previously been at the school. Professional growth and student achievement results can also be established within one academic year. Its renewable quality means that the structure can continue at the school the following year, regardless of PLC membership. The cycle format (wondering, formulating inquiry and action plan, collecting and analyzing data) is something that the individual teacher can continue to conduct if they move on to a new school the following year. However, it is suggested that the individual teacher seeks to join or establish a critical friends group or learning community as significant learning occurs through the team aspect with sharing and discussion amongst colleagues (Curry, 2008; Dana &Yendol-Hoppey, 2008; DuFour, 2012).

In addition, unlike some collaboration models that require heavy facilitation, inquiry-based PLCs should share facilitation equally amongst participants. Though there is often one experienced person facilitating the meetings, there simply needs to be someone to direct members through the agenda and any protocols. In this way, the success of the PLC is not solely dependent on one person as leader. Anyone with general knowledge of the Inquiry-based PLC structure can serve as the coach for any number of meetings (Dana & Yendol-Hoppey, 2008). Yet, all successful school collaborations must have a solid foundation to its beginning. As mentioned earlier, the inquiry-based PLC structure does not have a designated "Team Leader," but it is important that the individual(s) implementing the inquiry-based PLC structure have a degree of experience and background knowledge with this structure. This is the role that I assumed within the school described in this study.

In considering the novelty of inquiry-based professional learning communities in international schools, the struggles and successes of implementing this new approach needs to be documented and shared to the greater field of international school scholarship. As this study focused on details related to implementation, and facilitation of an inquiry-based PLC by an embedded researcher, I situated the research as an embedded self-study. With this in mind, the research question that framed my study was to explore how I, as an embedded researcher and novice teacher leader, implemented an inquiry-based professional learning community within an international school.

Methodology

Although the structure of inquiry-based PLCs seems like a strong theoretical fit for international school contexts, there are no studies that analyze how to establish these structures in this context. Therefore, to gain an insider perspective of this process in action, I designed my research as a self-study of an embedded teacher-researcher with an interpretivist research paradigm (Crotty, 1998; Hatch, 2002). I used the methodology of the Self-Study of Teaching and Teacher Education Practices (S-STTEP)(LaBoskey, 2004; Loughran, 2004; Pinnegar & Hamilton, 2009). This methodology allowed me to be embedded in the context as an implementer and fellow participant in the teacher collaboration initiative. It also allowed me to constantly analyze and subsequently adjust what was being researched and how the implementation was conducted.

Further, the methodology provides a format for me to discover how I could improve in my role as an embedded practitioner-scholar implementing a professional development initiative. This is the ultimate purpose of S-STTEP methodology: "the

understanding and improvement of practice" (Pinnegar & Hamilton, 2009, p.7). Pinnegar and Hamilton (2009) suggest that S-STTEP methodology is more based on an ontological stance of "what is" rather than the epistemological stance of "what we know what is real" (p.8). The ontological stance of the S-STTEP methodology is "a focus on what is real, constructed from our place within that experience" and then taking what is real and conforming it to what we perceive as being valuable and important (Pinnegar & Hamilton, 2009, p.5). My authentic observations, reflections, and conclusions of the inquiry-based PLC initiative in action and how this served to inform various implementation strategies used, can inform others who may be considering implementing an inquiry-based PLC structure in their educational settings. As there are no similar inquiry-based PLC studies in international school contexts to base this study on, new knowledge will be continuously created as the process is carried out. This focus on process, rather than outcomes, has been an emphasis by many education action-researchers (Adelman & Fletcher, 1982; Carr & Kemmis, 2003; Stringer, 2004)

As an S-STTEP researcher, my self-perception and achievement of professional learning and growth are dependent on the actions of both myself and others through an interactive collaborative process (LaBoskey, 2004). In the context of this study, I aimed to have this stance influence my implementation. Any alteration to the PLC structure that I made during the implementation had to be both a result of my personal belief derived from scholarly background knowledge, but also based on the needs of my colleagues. As Pinnegar and Hamilton (2009) state, the S-STTEP approach, "positions the researcher as the prime source of coming to know through acting and being in relation to others" (p.83). Therefore, it can be deduced that throughout the study, my

role identity as PLC implementer and the changes that I made to the inquiry-based PLC structure were all derived from my own knowledge and from my observations and interactions with my colleagues.

Context of Study and Participants

The study took place over a 9-month period at an international school in the Mediterranean region of Europe. The K-12 school was originally created in 1947 for American expatriate students but has since expanded to welcome all students. The mission of the school is to prepare future leaders for global challenges. The school follows the general American public school curriculum structure, administrative structure, and typical American public school daily and yearly academic schedule. At the time of this study, the total student body was 626. The majority of students claim to have American or local origins but there were also students from national origins all over the world. There were approximately 122 professional and support-staff, of which 88 served in the role as full-time or part-time teachers. The teacher population consisted of an American majority followed by an eclectic teacher pool from Canada, the UK, Australia, France, China, South Africa, the Netherlands, Spain, and Austria. There were also a significant number of locally-hired teachers who primarily were responsible for teaching culture and language courses. Range of experience among teachers varied from first-year teachers at the school to veterans of 20+ years.

The study focuses on an inquiry-based PLC structure that was conducted with the secondary social studies department at the school. The department included six full-time teachers (including myself) and one part-time teacher. One teacher had national origin in the country of context, while two others were born in America but had lived in the country of context for 20+ years. The remaining three teachers were American and

had lived in the country of context for less than five years. One teacher had over 15 years of experience at the school, one had 10 years of experience at the school, with the remaining four teachers had less than five years experience at the school.

I am of American origin and was hired by the school to begin teaching in the fall semester when the study began. The school directors indicated that my professional preparation in a university center focused on collaboration and teacher learning played a large part in my hire. Their expectation was that I would implement a sustainable teacher collaboration structure within the school during the after-school department meetings. This assigned professional development role was in addition to the full-time secondary teaching assignment, assistant sport coaching duties, and two after-school club advisement roles that I also was to assume.

The inquiry-based PLC meetings began in September of the fall semester and were conducted on Thursdays between one and three times a month. They were held for 90 minutes after the commencement of the school day. A typical meeting structure began with the department chair sharing five to ten minutes of any pertinent administration-directed information or content related information. I then began the PLC portion of the meeting by reviewing what we conducted during the previous inquiry-based PLC meeting. Next, I would explain the protocol of the day or review the protocol that we were continuing with from the previous meeting. Any protocol or sharing sessions would then begin and be carried out to its full completion as time permitted. Following the end of the protocol, I would review the information shared during the meeting and ask other members to share their thoughts. I would end the meeting by describing what the next stage of the inquiry cycle consisted of and what members

could expect at the next PLC meeting. The inquiry cycle stages conducted throughout the year consisted of: self-observation of practice; generation of wondering/inquiry; creation, sharing, and revision of action plan; implementation of action plan; collection of data; data analysis, sharing, and critical feedback; summary of results, reflection, and future action.

Data Sources

Because this study was framed as an embedded self-study, the primary data source was my researcher journal that I used to chronicle the entire process from start to finish. Journal entries included reflections before and after meetings, noting what went well and what needed revision, as well as impressions of school conditions that impacted implementation. This follows the S-STTEP methodology in that "self-study may be best regarded as a sequence of reflective instances as the problematic situation is not only reframed and redefined, but is also changed as a result of the intended action designed to resolve the problem" (Loughran & Northfield, 1998, p.15). Journal data will be cited in this paper numbered consecutively with the month only (ex. Journal 2, September).

To complement the journal entries, I also solicited feedback and input from colleagues of their perceptions of the PLC and the impact it was having on their growth as professionals, their student achievement, and their overall perception of the collaborative nature of the group. Some colleague feedback was solicited informally at the end of the PLC meetings throughout the year while the majority was collected through a formal written evaluation completed by all my colleagues at the end of the school year (NOTE: pseudonyms are used throughout this manuscript).

Data Analysis

Thematic analysis was conducted on the journal entries using an exploratory inductive approach (Miles & Huberman, 1994). Twelve hundred lines of text from 13 journal entries were randomly combined and all chronological identification was removed. This allowed me to take an open-minded approach to what I was analyzing and contribute towards the reliability of my interpretations (Charmaz, 2006). The initial data analysis resulted in 116 codes. I then separated these codes from the original data, randomized their order, and conducted a double read to identify any emergent thematic categories. I initially was able to identify three thematic categories with two to three sub-themes for each category. With these themes and sub-themes identified, I then re-read the initial thematic codes as well as the original data set to ensure the validity of my identified thematic categories. Through this process, I was able to identify two additional sub-themes from the data. Finally, chronological identifiers were re-added and the emergent themes were then examined through a chronological lens. This approach was conducted to hold true to the personal progression and growth ideal that is at the heart of the S-STTEP theory.

It is important to note that the analysis methods described above were conducted post-hoc to help provide clarity to the overall facilitation and implementation of the initiative. Ongoing analysis also took place throughout the implementation of the inquiry cycle as journal entries from the previous meeting were read and considered when planning the upcoming meetings. Effects of this ongoing analysis and subsequent changes were described in the journal entries. Therefore, these ongoing analysis results are encompassed by the emergent themes identified in the post-hoc analysis.

Accuracy and Researcher Role

These data were triangulated for accuracy through the consultation of participant reflection surveys and member checking following the entire data analysis process. The emergent themes were cross-referenced with the end-of-year PLC evaluation surveys. These responses were used to determine if the themes I generated were also perceived by the entire group. In addition, as noted by Montecinos, Cnudde, Ow, Solís, Suzuki, and Riveros (2002), self-studies conducted by educators focusing on their practice will often take the form of a narrative. Though I attempted to follow the reporting of findings and discussions typical of thematic analysis studies, the data being discussed was personally lived and experienced. Therefore, I found it valuable to the reader to include these narratives, and nearly impossible as the self-study researcher and subject to exclude narratives in the following sections.

A significant body of research exists that lauds research that is conducted with the researcher embedded in the context (Cochran-Smith & Lytle, 1999a; Darling-Hammond & Youngs, 2002; Darling-Hammond et. al; Fullan, 2007). These studies conclude that researchers who are embedded in the context, especially for professional development and school improvement purposes, are most effective in their research collections, conclusions, and achieving their stated goals. Yet as Bullough and Pinnegar (2001) and Feldman (2003) address the issue of accuracy and partiality in self-studies, it is important for me to be honest and transparent in my data analysis, discussions, and conclusions so that the accuracy of self-study can be measured by the connection that all readers can make to the findings and conclusions (Bullough & Pinnegar, 2001; Montecinos et. al, 2002; Zeichner, 2003). Therefore, it is my belief that the emergent themes discussed in this study can be relatable to all educators, regardless of their

teaching location or international teaching experience. The findings provide new perspectives on conducting professional development and facilitating inquiry-oriented PLCs that could be useful to all educators.

Assertions for Action and Understanding

The purpose of this study was to analyze the implementation of inquiry-based PLCs by an embedded teacher researcher at an international school. The intent of this study is not to prove whether this implemented initiative was successful or not, but to study the implementation of inquiry-based PLCs to learn more about the entire process, the role of an implementer, and how this initiative would apply to an international school setting.

What emerged from the data was my identification of three roles that I assumed throughout the process as the PLC implementer. Those roles were: Planner, Facilitator, and Participant. The planner role was assumed before the inquiry cycle and before each meeting in planning the agenda items to be conducted. The facilitator role is what I assumed during the meetings in coordinating the work of the group. The participant role is what I assumed both during and between meetings as I was conducting my own personal practitioner inquiry cycle along with my colleagues. Significant instances occurred in which the various roles I assumed influenced the other roles. Their unique overlapping connected relationship is depicted in Figure 2-1.

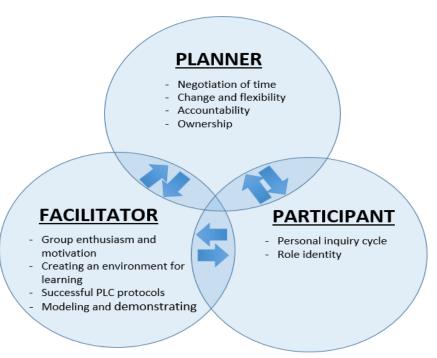


Figure 2-1. Implementer roles

The diagram in Figure 2-1 is designed to convey that many sub-themes applied to more than one role and I had to seamlessly transition between roles throughout the implementation process. For example, in the facilitator role, if there were any last-minute absences by my peers for a meeting, I had to immediately be flexible in altering the current meeting agenda and protocols if needed. If the meeting agenda was altered, then following the meeting, when I assumed the planning role, I had to change the agenda of the upcoming meeting to accommodate those who were absent for the previous meeting. The directional arrows in the diagram indicate this movement between the various roles. In order to not be repetitive throughout the document, I assign these multiple-role sub-themes to only one thematic role.

Inquiry-based PLC Planner

On arrival to my school at the beginning of the year, I came prepared with a suitcase full of books, protocols, scholarly journals, personal notes/tips, etc., so that I

could draw from any of those needed for the design and implementation of the inquiry-based PLCs to my secondary social studies colleagues. There was no collaborative community structure in place at my school besides academic departments. Therefore, the initial planning and subsequent planning of the PLCs were all conducted by me and heavily influenced by existing protocols, scholarly books and journals, my own previous participation in inquiry cycles, and the functioning of each meeting. My previous teaching experience also influenced my planning as I was aware of the similarities and differences that international school teachers share with their colleagues. As the PLC began to develop, I had a general timeline/goal in mind for subsequent meetings, but was planning every meeting just prior to when it was actually held. Planning was a major factor during PLC implementation, and included the subthemes of time negotiation, flexibility, accountability, and ownership.

Influence and negotiation of time on planning

In almost every teacher learning opportunity, finding time to collaborate is a common barrier to implementation (Killion, 2008). Not surprisingly, time allocation for the PLC and my negotiation of this time were major issues in the implementation of the inquiry-based PLC at my school. Specifically, the challenges of meeting frequency and duration of the meetings emerged repeatedly throughout my data.

Journal data indicate that at the beginning of the year, I was stressed and frustrated with having to alter the end of protocols, or not complete a full round of participant sharing due to the brief meeting times that we had (Journal 2, September). Although I perceived the actual meeting times as too short, I perceived the frequency of the meetings to be overly excessive. Certain months we would have meetings only a week apart while other times throughout the year we would go almost an entire month

without a meeting. A journal entry at the end of the first semester reads, "our department meetings are a bit excessive in my opinion so it is really hard to generate agenda items while keeping motivation within the group" (Journal 8, December). As planner, I was constantly tasked with generating new activities and protocols that followed the inquiry cycle process. I felt that if I did not have something new and complex on the agenda for each meeting, I would lose the motivation of my participants.

In consulting the end-of-year survey questions related to frequency and duration of meetings, my participants indicated that they felt the meetings were too infrequent and wanted to have more gatherings of our PLC. This was surprising to me and made me realize that I needed to constantly assess my participants' satisfaction with the meeting times and agenda items. In light of this conclusion, I changed my negative perception of the meeting schedule and ended the year with a renewed sense of energy in planning the final meeting.

Lessons learned about time negotiation:

- A schedule of meeting times throughout the year should have been created in which I could have mapped out a tentative schedule of the PLC structure for the year.
- My colleagues should have been frequently surveyed as to their views on the meeting times and frequency. Appropriate adjustments could have been made based on their feedback.

Change and flexibility of a planner

The planning of a professional development initiative needs to include an element of flexibility. Then, due to unforeseen outside influences or for the needs of the participants within the group, meeting agendas can be altered efficiently and effectively.

Numerous instances emerged in my data in which I needed to show flexibility for the benefit of group members.

I often altered previously-created protocols to better fit what I perceived as the needs of my colleagues. For my planning, I primarily consulted the *National School Reform Faculty* website (National School Reform Faculty, 2012) and *The Reflective Educator's Guide to Professional Development* (Dana & Yendol-Hoppey, 2008) in selecting protocols. Then based on time consideration or the needs and power dynamics of my department colleagues, I altered the protocols to better suit the need. My journal notes indicated that my adapted protocols were successful. Members claimed the changes deepened their understanding of student data and subsequent analysis (Journal 9, February).

The need to be flexible as a PLC planner in dealing with the outside influences is also a component of this sub-theme. Specifically, there were a number of meetings in which I had "derailers"- people who were conducting themselves in ways that were preventing the planned protocol to be completed, or preventing the planned PLC meeting agenda items to be covered. In considering the specifics indicated in my data, when there was an occurrence of a "derailer," I was not open to their question or their need if I did not consider it to be directly related to our planned PLC agenda. In considering this, I realized that throughout my data I was not open to the suggestions of my group concerning the alteration of a protocol, extension of a meeting agenda, or any other related matters. There were suggestions by my members for team building exercises and open-sharing session that I never even considered. All of the changes and flexibility that I exhibited were due to my own observation and conclusion of the

groups' needs. Though often these alterations seemed to benefit the group, I was not allowing them voice and input into the group functions. I was not willing to have my personal sense of self and position as professional development implementer be disturbed, even if it could have resulted in personal growth (Bondy & Williamson, 2009).

This behavior is counter-productive to a successful PLC and not something that should be exhibited by a PLC planner. Loughran and Northfield (1998) state that in collecting data in the way that I did, I needed to identify problems and create "intended action designed to resolve the problem" (p.15). In this instance, my unwillingness to be flexible based on my peers' suggestions was a problem. I was open to flexibility and change in the PLC structure, inquiry-cycle timeframe, and meeting agenda only if this flexibility was a result of my own personal conclusions.

Lessons learned about flexibility:

- I need to view the diverse opinions and backgrounds of the participants in an international teacher learning community as potential enhancements to the professional development initiative, not potential detractions.
- The need for alterations to a set agenda may occur organically in a meeting, and, when followed, may be more beneficial to the group.

Planning accountability

Dana and Yendol-Hoppey (2008) describe an essential element of healthy inquiry-orientated PLCs that "hold the group accountable for and document learning" (p.39). In reflecting on my journal entries and the responses of my PLC members, this is something that was lacking in the PLC structure that I planned. I never included plans to collect materials from my participants, keep members accountable with student data analysis, or conduct a final inquiry-cycle presentation session for the entire school.

Hollins, McIntyre, DeBose, Hollins, and Towner (2004) emphasize the importance of the facilitator to constantly keep the PLC members focused on the goal of improving student learning by keeping members accountable with their data results. In addition, Philips (2003) describes the role of student data collection and analysis as the most important aspect of teacher growth and learning. The lack of accountability in my planning for this stage of the inquiry cycle resulted in a number of members collecting insufficient data, or producing incomplete protocol documents when it was time for group sharing. I believe that a number of my department members knew that there were not any accountability activities planned and they could essentially produce sub-par work with zero consequences.

Another critical mistake that I made was not planning a final presentation session of the individual inquiry cycles by our department members for the rest of the faculty (Journal12, March). Sharing this process, the inquiries, the student and teacher growth with the inquiry process, and the overall failures and successes of the process is a crucial part of the inquiry cycle and the development of the individual teacher (Dana & Yendol-Hoppey, 2008, 2009). It causes the teacher to reflect on the entire process and identify where growth took place among them and their students, and changes to practice that need to be made. Vescio, Ross, and Adams (2008) state, "to demonstrate results, PLCs must be able to articulate their outcomes in terms of data that indicate changed teaching practices and improved student learning" (p.82). Yet, as PLC planner, I did not arrange for any showcase of this nature to take place.

Lessons learned about accountability:

 For numerous reasons, I needed to start planning at the beginning of the year for a school-wide showcase of participants' inquiry-cycles.

- As PLC planner, I needed to create goals for the year and a corresponding schedule. Dana and Yendol-Hoppey (2008) highlight the need for "establishing and maintaining a vision that creates momentum for the work" (p.26).
- I needed to apply more pressure to my members in achieving our goals and plan more sharing activities that keep members accountable in the inquiry cycle structure.

Planning ownership

Numerous learning community scholars (e.g. Dana & Yendol-Hoppey, 2008; McLaughlin & Talbert, 2006) suggest the need for professional development planners and facilitators to include the input of their participants and allow them to take some ownership of the learning community. The most frequent appearances in my journal reflections and PLC member feedback data was the sub-theme of ownership of the initiative. Specifically, instances emerged of my unwillingness to relinquish any ownership, and my failure to plan activities in which members could take ownership.

For this inquiry-based PLC implementation and facilitation, I viewed its proper functioning as crucial to my "success" as a first-time professional development implementer. I attempted to conduct and micro-manage every single aspect of this PLC. A selection from one of my journals reflects this realization:

It made me realize that I am a facilitator who really really likes order and control. I am not sure that those are the best qualities for a facilitator to have. It's just that since none of them have done an inquiry-based PLC before, I want to be in control as much as possible to make sure that the products are not [sub-par quality] (Journal 9, February).

At the end of the year, when I was asked by my administration to share what we had done in our PLC to other department chairs, I never asked any of my PLC members to join me and share their progress and development with other faculty. The feedback from my participants never indicated any issue with my control of every meeting, or the lack of opportunities for them to lead meetings. Yet I believe that had I made these

leadership options available to them, they would have taken advantage of them. It would have ultimately increased their motivation as active members of the initiative.

I was aware that Dana and Yendol-Hoppey (2008) suggest that other members of the PLC should often lead a meeting or a protocol, but there is only one instance in which I allowed this to happen. For one meeting, I was going to be out of town for a conference and asked my department chair to lead the session. I met with her the week before and went through the agenda with her. After she conducted the meeting, she reported to me that it was a complete failure. She stated that nobody took her facilitation role serious, no one followed the protocols she tried to conduct, and two members shared their results of their data analysis, which she stated was "completely not what they were supposed to do. And they knew that" (SMS transcript, March 21). I was crushed and initially puzzled by this. In looking back through my data for answers, I began to realize that what occurred was what I call the "substitute teacher effect." When a substitute teacher conducts a class session, regardless of how well prepared the lesson plans are, the students will misbehave or exert minimal effort on an assignment because they know it is not for their main authority. It occurred to me then that I took too much of a leadership role with this inquiry-based PLC group. I believe the participants recognized the benefits of the project, but they simply saw it as "Jason's project" and another hoop they needed to jump through for professional development. They did not personally embrace the benefits that it could offer because frankly, I did not allow them any ownership of the collaborative structure.

Strahan (2003) found that teachers who worked together to formulate shared goals and approaches to collaboration and student learning established a culture of

mutual respect. If I gave my department members more ownership in the entire process, they would have been more committed to the success of the entire group and felt like they played a key role in that success.

Lessons learned about ownership:

- I needed to include members in selecting protocols, activities, and meeting agenda items.
- I needed to plan opportunities for members to take leadership roles in the group in rotating the leading of meetings or specific protocols.
- Opportunities should have been made for members throughout the year to share their on-going experiences with the PLC with other faculty members and administration.

Facilitator of the PLC

As PLC implementer, my role was not simply to design the PLC model that would be appropriate for my school, but also to facilitate the inquiry-based PLC meetings for my department throughout the year. Often the role of the PLC facilitator is taken on by educators in roles such as staff developer, coach, mentor, teacher leader, or principal. It is also suggested that this position alternate throughout the PLC process so that all members serve in some sort of leadership role during the inquiry-based PLC meeting cycle (Dana & Yendol-Hoppey, 2008). As international schools are rarely part of a larger district or organization of schools, professional development facilitators are typically inhouse and serve in another capacity as well- be it a teacher or administrator. Since I was specifically hired to take on the role of PLC implementer and then PLC facilitator, I held tightly to this subsequent role and facilitated almost every meeting myself. In this facilitator role, a number of related positive and negative sub-themes emerged including the need to facilitate enthusiasm and motivation, facilitating an environment for teacher

learning, facilitating successful PLC protocols, and facilitating through modeling and demonstration.

Facilitating enthusiasm and motivation

It is crucial to the success of a professional development initiative that all participating members are cognizant of the benefits and value of the initiative. One of the initial sub-themes that emerged from the data was my action towards creating enthusiasm at my school for the inquiry-based PLC structure, and then keeping the members of my department motivated throughout the PLC cycle.

During my hiring process, I described the inquiry-based PLC structure to my administration, and they were immediately interested in having me introduce such an initiative at their school. Inquiry-based PLCs were a new concept for international school contexts and they were enthusiastic to apply it to their international school. Once I arrived at the school and described the inquiry-based PLC process to my social studies colleagues, they provided positive feedback and interest in taking part. As noted in my reflection journal:

When I asked questions/thoughts, one male member, Ben, exclaimed that he thought it was a great approach because "we are actually doing something this year" and how it could even improve practice. A female member, Theresa, said that she liked it because it was structured (Journal 3, September).

It also was important for my colleagues to understand that they all could investigate their own area needing improvement. All members, regardless of experience or international origin, were equal members of the learning community. They seemed to really embrace this and find the inquiry-based PLCs to be effective (Journal 5, October). At the end of the inquiry cycle, department members expressed enthusiasm to create and investigate a new wondering for the following year. This same enthusiastic reaction

was also provided by other subject department heads when presented the possibility of this initiative being school-wide in upcoming years (Journal 13, May). It seemed that these international school teachers were very interested in applying a collaborative structure and teacher learning opportunity that is typically used in an American domestic setting to their international school context.

Also during the meetings while we were conducting protocols or sharing our experiences, it was important for me to be encouraging and motivating. One example in particular was during one of the final meetings of the year when members were sharing their findings from their data analysis. While sharing, one member was constantly apologizing and criticizing herself and her analysis. She stated that she did it wrong because her inquiry did not provide her an answer to her inquiry. Yet I informed her that she actually did learn from the experience and had nothing to be discouraged about. I told her that by identifying an approach that did not work, she discovered that vocabulary would not have an effect on her students' social studies AP scores. She can now move on from this approach and create a better inquiry question in the future should she intend to pursue this same topic. After repeating this stance frequently during the meeting, members changed the way that they presented their findings. The meetings progressed to reflect that they were not necessarily disappointed in their analysis and conclusions if it did not provide them concrete answers to their inquiry.

Lessons learned about motivation:

- It was important for me to know my colleagues well and what motivation approach works best for each of them.
- It was important for me to make it clear to members that success of their inquiry could be based on whether their own professional learning increased, not simply on student scores.

Facilitating an environment for learning

Any effective professional development leader needs to know the context and the people that he or she is leading to create approaches and activities that best fit with the members. I was new to the school and new to the role as implementer. Therefore, my personal knowledge of my international school colleagues as learners was built during the meetings when I served as facilitator. I learned that my PLC members were a results-oriented group. My members also had negative opinions of the departmental structure and there had been animosity among members in the past.

After the first two meetings, I discovered what type of meeting structure my colleagues needed and the general role that I needed to play as facilitator. Admitted by both my administration and department chair, the department meetings last year were poorly attended with poor participation in any initiatives that were attempted. Reflective of the international school nature, there was a high turnover in the department members and it was conveyed to me that many of the veteran faculty did not feel they needed the meetings. The members also seemed to be a group that needed immediate explicit results with what they were doing. I found that if they were not tasked with something between meetings, they tended to forget what we had covered in prior meetings (Journal 2, September; Journal 8, December; Journal 12, March). Because of this, I made a point to end every PLC meeting recapping what we went through and providing the members with an objective to complete prior to the next meeting concerning their personal inquiry cycle.

Another issue affecting the learning of the group was their negative attitudes toward the entire departmental structure and lack of professional development initiatives within these structures. Some of the veteran members expressed in the first meeting

that they hoped something effective would be done with the departments this year as there had not been in the past. According to the data, during our first two department meetings, I noticed that when an agenda item went longer than expected or there was lag time between agenda items, members were quick to be distracted or quickly lost interest (Journal 4, October). As the school did not previously have any established expectations for collaboration and group learning in the department, I was constantly battling learned behaviors from the existing school cultures. In rereading through my journal notes it was clear that direct succinct instruction and structured protocols were effective in creating group learning and keeping the attention of all members. This approach held their attention and limited their distraction, thus allowing for an adequate learning environment. In my journal, I mentioned how I imposed a strict 30-minute time frame on a protocol and notified the members of this time limit before we began. They seemed more relaxed in knowing that the meeting would not go past the allotted time. As the protocol began, they seemed more motivated and participated fully (Journal 9, February).

In addition, there was resentment between members in the department based on a previous issue of departmental leadership. I knew that during facilitation, I needed to be mindful of this throughout the year and ensure that all members felt "safe" in the sharing environment. In one particular incident, an argument between the two members ensued concerning the amount of transparency the group should have to the administration. In my role as PLC facilitator I wanted to make sure that the meetings were collegial and all members felt safe and willing to participate. Therefore I talked to one of the two members afterwards to ensure he was comfortable with the group and

his learning could continue unimpeded. I documented the follow-up encounter in my journal notes:

He told me that he was sorry for being resistant but just had reservations about sharing things with the administration as this has negatively affected him in the past. I told him it was all good and that a PLC relies on everyone's feedback and he had a bunch to offer so I was keen on his input. He seemed receptive to that. I think things are good (Journal 5, October).

I also needed to make sure that none of the members would ever feel the need to withdraw their participation or shut down if they felt uncomfortable with the power dynamics or felt some members were dominating discussion within the group. A successful learning community is based on all members participating. A facilitator needs to know what approaches to take for the learning of their members to ensure that all members are willing and able to participate.

Lessons learned about environment:

- A safe learning environment that is welcoming and encouraging is conducive to the learning of all PLC members.
- Learning about my PLC members is an on-going process that takes a significant amount of time. Yet it is key to the planning of the PLC and the coordination of the meeting as facilitator.
- It was important to make notes of specific events that occurred with group members during meetings. I could use this to work at facilitating the following meetings to best meet the learning needs of all members.

Facilitating successful PLC protocols

Curry (2008) found that the use of protocols in a PLC can directly contribute to the professional growth of its members. However, these protocols need to be sequenced, structured, and thoroughly implemented in order for professional growth to occur. My data indicated that there were protocols and meeting structures I conducted in which all items of the protocol were followed by a group without prior established

collaboration skills. Members commented during the meetings and in their end-of-year surveys that professional learning and growth did occur within them due to the protocol experiences (Journal 2, September; Journal 4, October; Journal 11, March; End-of-year surveys).

A major contributing factor to the successes of the meetings was the connection I made between my role as planner and facilitator. This was evident in introducing the creation of the inquiry action plan. Based on what I believed would be most appropriate for my colleagues, I modified an action plan protocol from the *National School Reform Faculty Resource Book* (NSRF, 2007) and then created a PowerPoint that described each part of the action plan in detail. I noticed that members needed instructions presented to them in a direct organized format. An excerpt from my journal reflection indicates the success of presenting the action plan in this format, and the subsequent successful work of my colleagues:

Needless to say, it went awesome!! Everyone listened and even asked questions at the end! One teacher said that she was really excited and already had a lot of her action plan set up already and wanted to get started ASAP! After I presented, I asked them to beginning writing out a draft of their action plan, and they all started writing feverishly! One actually was so excited about sharing that she said she started it in class and was actually going to start her action plan NOW (Journal 6, November).

Research exists concerning the effectiveness of protocols in learning communities and when best to use them (e.g. Cochran-Smith & Lytle, 1996; Curry, 2008). With this knowledge, I noticed, as planner and facilitator, significant success in using both pre-established and personally created protocols. One example in particular was a protocol I created called "The Dating Game" (Appendix A) where members had to share a brief snap-shot of their inquiry and action plan to a partner. The partner was

tasked with listening and then answering a question based on what they heard. Then partners split up and found new partners, giving them additional insight from multiple rounds of sharing. I considered this protocol successful, as reflected in my journal:

Thought it went great! Did not have to encourage the members to present. As soon as time started, they all began talking and sharing back and forth. I asked a few afterwards if it went well and one female member in particular told me that she learned a lot that she would have never thought of (Journal 7, December).

One colleague did indicate that he felt that the protocols were too restrictive and did not let the free flow of conversation and new ideas emerge (End-of-year surveys). This is also addressed by Curry (2008) who noticed that the strict adherence to protocols "weakened [members] capacity to deeply and collectively push on critical and commonly shared matters of practice" (p. 767). Nevertheless, I believe that protocols certainly have a place among learning communities of international school teachers. With these teachers coming from many different backgrounds and with a constant turnover of teachers, the community bond between teachers is constantly changing. With protocols in place, it serves as a vehicle for sharing practices and for group members to share and critique each others' work regardless of their tenure at the school or their teaching background.

Lessons learned about protocols:

- Protocols provided order and organization to a new group-learning format. As members begin to establish rapport with each other, I need to be less reliant on protocols and more open to free-flowing organic conversations.
- Protocols that I created added a sense of customization to my specific participants and proved to work very well.

Facilitating through modeling and demonstration

It is common practice among educators to provide completed examples of a new assignment so students can have a clear picture of the final product (Gibbons, 2002; Koper, 2005). This is also a recommended practice for adult learning, based on a seminal piece by Joseph Novak (1984) called *Learning How to Learn*. A frequent occurrence in the data sets of both my own journals and the comments of my department colleagues was the need for me to provide completed examples of each stage of the inquiry-based PLC before we began that particular stage.

Though many members initially indicated that they were somewhat familiar with the PLC structure, they were less familiar with the inquiry process. It was obvious early on that they needed help creating action plans, collecting and analyzing data, and sharing this information with the group. In looking at my data, it seems that I almost always explained what the PLC members needed to do before we began the stage, but never actually showed completed examples. Yet, contrary to the collaborative construction of personal growth and knowledge that Pinnegar and Hamilton (2009) suggest, I missed the opportunity to reflect upon this to examine various explanations for why my colleagues needed examples. Throughout the PLC process, I thought the reasons for my colleagues' struggles through the cycle were that they did not understand the purpose of a particular protocol or PLC stage. But in reality, they did not know how to do it. In their end-of-year surveys, all six members, including myself, described how it would have been beneficial in the various stages of the inquiry cycle to have consulted completed examples. One member of the department, Chris, wrote in his response, "I need a binder/dossier/folder of an exemplar inquiry, from start to finish" (End-of-year survey). Another member, Becky, wrote, "whole pictures were needed.

Provide a completed example and go through step by step." (End-of-year survey). Many advocated for an entire sample PLC cycle at the beginning of the year to help them gain a better understanding of the entire process and the time commitment required (End-of-year survey).

My data indicated that the greatest need for modeling and demonstration was with the collection and analysis of data. During my explanation of these two processes there were little to no questions (Journal 9, February). Yet during the collaborative sharing session, where each member discussed what they collected and how they analyzed it, it was clear that many members were unfamiliar with what would be proper data to inform one's inquiry question (Journal 10, February). Many indicated in their end-of-year surveys that they were unclear of the data collection and analysis process. Although they admitted they were not familiar with the process, they did the best they could on their own and did not ask for assistance. Though we had been focusing on data collection and analysis for over two months, one department member, Tim, wrote on his end-of-year evaluation that he wished for "more regular checks of examples of what would be used/considered as data" (End-of-year survey). He was one of the members that did not collect appropriate data, yet I never checked up on him and by the time he shared his data, it was past the point of when he could have re-collected data. This was a major oversight on my part. Theresa also described this need for examples and guidance in her evaluation in which she said, "I need serious help with creating data categories that are actually useful" (End-of-year survey).

In considering these findings, the logical explanation is that as this was my first time facilitating an inquiry-based PLC, I did not have any previous examples to provide, especially ones that pertained to an international school setting. Yet I find this explanation to be an excuse that I am making about my performance as a facilitator. Having been through a number of facilitator trainings at my graduate university, I easily could have obtained some completed inquiry cycle examples. Examples and demonstrations enhance learning, and I should have created and provided more of these to my members throughout the inquiry cycle process.

Lessons learned about modeling:

- I should have provided models of each step in the inquiry process. International school teachers are likely to be unfamiliar with the inquiry process, and unlikely to seek help. These models would have provided the assistance they needed.
- Data analysis is always the most difficult step in inquiry (Dana & Yendol-Hoppey, 2008, 2009). I need to be prepared to offer additional assistance in this step.

Participating in the PLC

My role as inquiry-based PLC implementer was unique in that, unlike many definitions of the embedded researcher assuming the role of an observer (e.g. Denzin & Lincoln, 2011; Hatch, 2002), I also participated in the professional development initiative alongside my colleagues. My participation in the inquiry cycle afforded me both positive and negative aspects concerning my development as a practitioner and a professional development implementer. These aspects appeared in my data and created the subthemes of participating in my own personal inquiry cycle, and struggling with my participant role identity.

Participating in my own inquiry cycle

As scholars have lauded the benefits of an embedded researcher working on school improvement initiatives (e.g. Cochran-Smith & Lytle, 1999a; Darling-Hammond & Young, 2002; Darling-Hammond et.al, 2009), few studies exist in which the researcher

is also a full participant in the initiative. It could be assumed that if PLC implementers are also participating in the initiative themselves, they will have an even better understanding of the school context and the needs of their fellow members. The data indicated that throughout the year, I participated in every activity and protocol that my colleagues completed. This proved to be a crucial aspect to the success of the PLC structure and my rapport with my colleagues (Journal 5, October). The data also indicated that I struggled with the time commitment to the PLC that many of my colleagues may have also been experiencing (Journal 10, February).

In many PLC meetings, I first took the facilitator role to introduce the protocol, and then I switched to participant role to share my own data (Journal 3, October; Journal 12, March). By participating first in all of the protocols, not only was I acting as an example, I was making myself vulnerable and showing my colleagues that I, too, needed improvements in my teaching practice. I was hoping to convey that professionals of any career level can continue to grow and learn. I intended to indicate to them that no matter their teaching history, there is always improvement and growth that can happen as a professional. To demonstrate this, I personally would solicit my colleagues for their feedback into my own practice and thank them for all the advice and the direction that they provided. I personally experienced growth in my professional practice too. This is indicted from my data:

I personally learned a ton! I never thought that just from this I would have added so many things to my plan, just from hearing about their plans. They had great advice too. I see improvements happening all around to their inquiry plan. I shared with the group how much I learned and how thankful I was for their feedback (Journal 7, December).

By participating in this PLC initiative, it made me feel like I was part of the "team" and not an outsider. It made me feel like we were equals and all a part of the same group. This was key to my personal motivation and commitment to this initiative.

While my participant role had some positive outcomes evidenced in my data, it also provided some challenges. Though the inquiry cycle does not require a significant amount of time from the teacher each week, I found that I struggled to dedicate the time that I needed to appropriately conduct my inquiry cycle. The data indicates that on numerous occasions I did not have the time to conduct my own inquiry cycle objective sufficiently enough to where it could serve as an example to my colleagues (Journal 9, February). Though a negative, this time commitment issue also provided me insight into what my colleagues were likely experiencing. It made me realize first-hand that they also were very busy and committed people, and that I needed to plan and implement a PLC that was efficient with every aspect potentially contributing to their growth as professionals. I knew that I could not require too much inquiry work for them to complete prior to each meeting because many would not have the time to fully commit what was needed for the assignment. By actually experiencing what they were experiencing, it helped me to plan the inquiry structure and protocols to better fit their needs.

Lessons learned about personal participation:

- By conducting my own inquiry cycle along with my participants, I was able to establish rapport and trust with the members.
- My participation enhanced my role in planning the PLC as I experienced similar events and pressures as my fellow colleague participants.
- Through my experience as PLC participant, I was able to use the structure to improve my practice as both a practitioner and as a professional development implementer.

Struggling with my participant role identity

Dana and Yendol-Hoppey (2008) describe how the PLC coach should not convey the role of "expert" as it will bring added pressure to themselves as planner and facilitator and disrupt the rapport and power dynamics with colleagues. Throughout the entire PLC implementation process, it was difficult for me to negotiate between the various roles identities of planner, facilitator, and participant, and how this might affect the group dynamics of the PLC. Not only was I a novice professional development leader, I was also navigating through all the other challenges of a first year teacher at a new school. Yet it was expected of me by my administration to come in from the beginning and implement a PLC that was tailored to the people in my department. My data indicated that as the year progressed, it was difficult to be the new teacher and still plan things like I had been working with the group for years (Journal 4, October).

My colleagues knew I was conducting research on the PLC for my dissertation and that their comments and actions my be included in my dissertation product. They also knew that the PLC format was something I had strongly advocated for with our administrators. Therefore I was never certain whether my colleagues were being honest with me about their thoughts of the PLC and its progress, or whether they were just saying what they thought I wanted to hear. Their responses and behavior were difficult to decipher at times. For example, an excerpt from my journal states:

The order and sequence of everything seems to be going nicely. The social studies teachers, whether they are patronizing me or not, seem to be in to it and willing to do it (Journal 6, November).

Though I tried to force myself to accept everything as the complete truth, skepticism was always in my mind.

It was difficult for me to take the teacher leader role when I knew that my colleagues were experiencing the same stresses from extra-curricular commitments that I was experiencing. From an account taken from my journals, my colleague, Chris, came up to me after school one day and told me that he was really sorry he was behind with his inquiry-cycle due to coaching responsibilities (Journal 9, February). He was hoping to have data to share at the next meeting, but was not sure. In taking the participant role, I could totally relate to him. I too was stressed as a sports coach and was incredibly busy with my obligations to that. I too was a bit behind with my data collection schedule. Yet as the facilitator, I knew that I needed to have all members at the meetings ready to share their collected data together. Therefore, I spoke to him as the teacher leader and not as a fellow coach, and simply told him to "try as best as he could because it is important for the meetings" (Journal 9, February).

Another aspect of role identity conflict was simply around my roles as PLC planner and full-time high school teacher. This time-commitment was the most intense at the beginning of the second semester, with one journal entry passage stating:

I am going to wing it, but quite frankly, I wish that I would have sent them something more out on Monday to better prepare them for what we are going to do tomorrow. SO DIFFICULT PLANNING THIS DUE TO TIME COMMITMENT (Journal 10, February).

These time conflicts were due in large part to my competing yet complimentary roles as teacher, PLC implementer, athletic coach, and embedded researcher. In addition to these professional role conflicts, the international school teacher is also simultaneously dealing with becoming acclimated to local culture, settling in to a new domicile, learning the patterns of the local infrastructure, learning a new language, etc. Nevertheless, Dana and Yendol-Hoppey (2008) caution PLC leaders to, "be sure that

you match your expectations for the work to the amount of time you realistically can dedicate to the work" (p.17). I certainly needed to have a better understanding of the commitments that my various roles would require of me. Yet, this may be something that can only be learned through experience.

Holistically, there were a number of instances in my data where I would have to make a decision in one role that I knew would not be beneficial to my other role. An example from my journal is when I assume the role of the participant-teacher and realize that 1st quarter grades were due to administration the following day. Therefore, I decided to cut the following PLC meeting short, even though I knew that as facilitator, this was not beneficial to the overall progress of the PLC cycle (Journal 5, October). The data indicated that my personal struggle through these role identities continued throughout the year. Essentially, it was difficult for me to establish my sense of "self" as this "self" was required to assume numerous role identities.

Lessons learned about role identity:

- From the onset, I needed to consider the time I could dedicate to the implementation of the project as a new teacher in a new international school setting.
- I should have established clear role expectations with my school administration and the members in my PLC and explained in detail the various roles that we all would needed to assume during the entire PLC process.
- A list of goals that I wanted to accomplish throughout the year should have been made in each of these predetermined roles to help identify any conflicting goals.

Next Steps

The next step for the inquiry-based PLC structure at my school is that it will be implemented throughout the entire secondary school. The administration at my school based this decision on the positive feedback from my social studies colleagues. My

school asked me to co-facilitate a two-day PLC training with a US-based university faculty member to help all department chairs learn how to bring this inquiry-based PLC structure to their own departments. I will serve as a resource and provide support for the school-wide implementation during the year.

As the implementation of inquiry-based PLCs is still relatively new to the international school setting, my next step as practitioner-scholar will be to create a manual for professional development facilitators currently working in international schools. The self-study documented in this manuscript will certainly serve to inform the reader of the PLC implementation process, yet this study is only about one facilitator in one school setting. Therefore, significant research should be conducted on both the experiences of inquiry-based PLC facilitators and the PLC participants at other international schools. Finally, it is also important to understand the impact of these inquiry-based PLCs on the learning of students in international schools.

Conclusion

My learning process through this study was a result of the S-STTEP methodology that drove my navigation through the research question. The S-STTEP methodology contains a strong focus on creating knowledge in the moment. Being an embedded participant in the inquiry process with my peers helped me see the connections between facilitation, planning, and participating. By documenting these emerging interconnected roles and identifying their contributions to my overall professional growth, I was able to conceptualize what it required to be an embedded teacher leader of a new professional development initiative.

Teacher professional growth begins with educators determining their professional development needs, and formulating a plan to address those needs. Yet they must be

open to suggestions and willing to have that plan altered at any moment if it may prove to be better for them and their students. As Lunenberg and Samaras (2011) describe, in the self-study of one's practice, "participants [should] trust the process of research as discoveries and not necessarily final solutions and celebrate the research journey" (p. 848). I began the research process anticipating a growth in my position as a teacher leader, but my self-study research journey revealed growth in three interconnected roles: planner, facilitator, and participant. I now can continue my growth as a professional by examining each of these roles more closely.

By addressing the research question that framed this study, I was able to identify a promising collaborative structure for international schools that promotes international teacher growth and student improvement. In addition, I was able to conclude that professionals who implement this initiative will benefit professionally as the implementation process will challenge their own professional growth plan and help them reconceptualize their professional identity. This study may assist other teacher leaders in preparing, to the best of their abilities, for the learning process that will take place both for them and their participants in implementing an inquiry-based professional learning community in an international school.

CHAPTER 3 LEARNING COMMUNITY IMPLEMENTATION

Purpose of this Manual

The first private international schools were established over 50 years ago for the purpose of educating expatriate families in their native country's educational system. There are now over 7,000 international schools around the world educating over 3.5 million students (Hayden & Thompson, 2011; Jonietz & Harris, 1991). As this school model continues to increase throughout the world, the amount of teachers employed by international schools is now estimated to be over 300,000. But international school educators and scholars have noted major barriers with establishing collaboration models and effective professional development initiatives among international school faculty. These barriers include frequent turnover of international school teachers, the heterogeneous background of international school faculty, high self-confidence of international school teachers, and teachers' allegiance to their native teacher-training methods (Cambridge, 1998; Hayden & Thompson, 2011; Richards, 1998; Senge, 1992; Stoll & Fink, 1996). Richards (1998) states, "differences in teaching methodologies, experiences, perceptions, and contractual statuses all seem to undermined the unity and consistency that school administrators hope to achieve" (p. 182). Despite these barriers, international school leaders are turning to collaborative professional development models in order to strengthen instruction and curriculum in their schools and provide better educational opportunities for students.

Thus the purpose of this manual is to help you create an effective collaborative and sustainable professional development structure for your international school. This manual is based on a year of research on the implementation of an inquiry-based

professional learning community (PLC) in an international school in Europe. It was created as a guide and resource tool to help international school educators implement a similar model in their schools.

This guide will help you:

- Gain foundational knowledge about professional learning communities and how they can address relevant complexities and barriers inherent in international schools
- 2. Plan and implement your own inquiry-based PLC
- 3. Reflect and act on results to increase sustainability of the initiative

About the Author

Jason A. Schipper (jschipper@ufl.edu) is an international school educator and doctoral candidate whose research is focused on teacher collaboration models in international schools. Schipper has implemented and facilitated numerous inquiry-based PLC models in both domestic and international school settings.

What is an Inquiry-Based Professional Learning Community?

Professional learning communities or communities of learners have been shown to increase the professional growth of teachers and learning growth in students (Vescio, Ross, & Adams, 2008). McLaughlin and Talbert (2006) claim that successful PLCs serve to "build and manage knowledge, create shared language for practice and student outcomes, sustain aspects of school culture that are vital to continue, and create consistent norms of instructional practice" (p.5). PLCs are typically composed of teachers and staff at the school, sharing a common trait such as belonging to the same department or same grade. They are then responsible for enacting the same initiative. A consistent schedule of periodic meetings is established for the members of the PLC (Kilbane, 2009; Thessin & Star, 2011). Yet there is limited research available focusing

on the presence of these structures in international schools and on the effectiveness of PLCs in international teacher collaboration and student learning. Available research strongly indicates that there is a need for a sustained collaborative structure in international schools that promotes unity, consistency, and a focus on student learning that can be part of the overall school culture (Cambridge, 1998; Hayden & Thompson, 2011; Richards, 1998; Senge, 1992; Stoll & Fink, 1996).

This manual spotlights a professional learning community in which all participating members engage in their own individual inquiry cycles. This general cycle is shown in Figure 3-1, and was developed by the Southern Maine Partnership and the *National School Reform Faculty* (2012). The cycle's implied starting point asks the teacher to observe their own practice and formulate a question (inquiry) that they seek to investigate with the ultimate purpose of improving their practice and/or increasing their students' learning. They then follow a structured process of investigation, create action plans, and collect and analyze data focused on their inquiry. All of this is supplemented throughout the process with sharing and discussing among the learning community members who are also engaged in their own inquiry process. The participants are guided through this inquiry cycle by a PLC leader who conducts various protocols with the group for each stage of the inquiry cycle. The leader also facilitates sharing sessions in which participants share their own work and discuss each others' work in a safe and structured format.

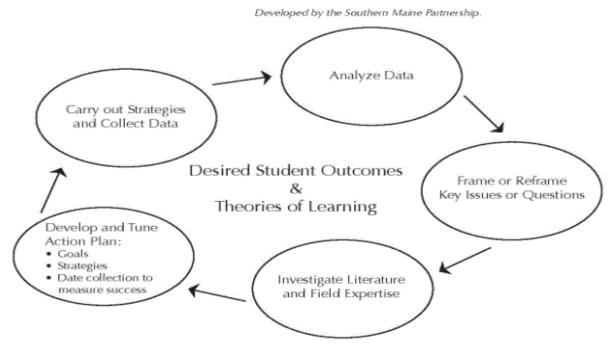


Figure 3-1. Overview of the inquiry cycle

Whether this form of action research is labeled as practitioner inquiry (Krell & Dana, 2012; Poekert, 2011) or teacher inquiry (Ermeling, 2010), at the core of this inquiry-based professional development strategy are teachers' systematic and intentional reflection of their own practice (Cochran-Smith & Lytle, 2009; Dana & Yendol-Hoppey, 2008, 2009). Historically, this teacher inquiry approach has its roots all the way back to John Dewey (1933) who encouraged teachers to "engage in reflective action that would transition [them] into inquiry-oriented practitioners" (Dana & Yendol-Hoppey, 2009, p.5). As inquiry-oriented practitioners taking part in this PLC, members take a critical look at their own practice and the practice of their peers through open and honest sharing of wonderings and inquiry action plans. Numerous scholars have highlighted the significant learning that occurs through the team aspect with sharing and discussion among colleagues and how that can improve the overall school culture (Curry, 2008; Dana & Yendol-Hoppey, 2008; DuFour, 2012).

Why Inquiry-Based PLCs are Appropriate for International Schools

The next step then is to consider why an inquiry-based PLC would be an ideal professional development initiative at international schools. We need to consider the main barriers to international school teacher collaboration and effective professional development. Table 3-1 provides better clarity on the connection between inquiry-based PLCs and the major issues affecting teacher professional development in international schools.

Table 3-1. The connection between inquiry-based PLCs and the major issues affecting teacher professional development in international schools

International School Challenge	How it is addressed by Inquiry-based PLCs
The short contract stay of teachers results in minimal impetus for professional development to be offered.	Inquiry-based PLCs can be conducted in less than a year, thus providing quality professional development opportunities to short contract stay teachers.
It is difficult to have groups of international school teachers, from such diverse backgrounds, collaborate effectively.	Inquiry-based PLCs are conducted with structures, activities, and protocols that encourage the sharing of one's practice in a safe and encouraging environment.
Due to their extensive background, international school teachers often believe they will not benefit from professional development initiatives.	Inquiry-based PLCs focus on a teacher's individual inquiry, thus providing any teacher, regardless of their background experience, an opportunity to improve their practice. The professional value in this is hard to debate.
Foreign hire teachers resist western- derived professional development initiatives.	Inquiry-based PLCs are not derived from any western form of educational practice. Its focus is on a teacher's individual practice which can be based on any educational system.

Linda Squire (2001) describes how most teachers at international schools only stay for 1-2 years and then move to another international school or return back to their

countries of origin. This short stay is likely due to the nature of international school teachers which Hayden and Thompson (2011) describe as "intending to combine a relatively portable career with a desire to travel the world, with the expectation of eventually returning home" (p.84). Therefore, it is very difficult for these short-stay teachers to "buy-in" to a professional development initiative when they will be leaving the school shortly. This is acknowledged by the school administration who often do not invest in professional development as they realize their staff will be changing significantly every year (Squire, 2001). Yet, inquiry-based PLCs are ideal for these short-stay teachers as the time frame of the inquiry cycle from beginning to completion is typically one academic year.

Also, the PLC participant is not joining a pre-existing school initiative or participating in a 3-5 year goal initiative for the school. These would be of little use to the departing international school teacher. Instead, this professional development initiative utilizes an approach that is based on the individual's own practice and own students. The teacher can implement and participate in the PLC regardless of their contract term commitment to the school. These teachers can conduct the cycle in one year at their current school, and then conduct this same initiative on their own at their new school the following year. For international teachers, it is a sustainable and transferrable initiative in this regard.

It is also important to consider the numerous local hires in international schools who received their teacher education training in non-western countries (Cambridge, 1998; Hayden & Thompson, 2011; Richards, 1998). Typically hired as teachers of the local language or history/culture, these local hires often resist the western form of

teaching and remain aligned to their country's educational approach. This resistance especially applies to professional development initiatives proven effective in American or British schools as these local hires have no experience or background knowledge in these educational systems. But with the inquiry-based PLC format, these local hire teachers can investigate their own practices regardless of the teaching style that they follow or have been trained in. The protocols and sharing aspect of the PLC group is not based on any one style of curriculum or teaching format. The potential is also there for these teachers to share their approach to teaching and learning so that other non-local hires can gain better insight into the local culture and education background of some of the students they may teach.

Research has shown that international school teachers typically have a higher self-confidence in their teaching abilities than most domestic teachers (Squire, 2001). This serves as a major barrier to effective professional development in international schools. Teachers that have remained at the schools for beyond five years often take the veteran role and believe that they do not need professional development as it is instead for the new, inexperienced teachers (Hayden & Thompson, 2011). But this barrier also is a factor with new hires. It has been my experience that new international school teachers feel that they were hired and brought to a foreign country because they are "expert" teachers and therefore often do not feel that they would benefit from any additional professional development. In this inquiry-based PLC initiative, it asks the teachers to investigate their own practices and improve their own practices in any way that they choose. Few could argue that this format would not directly benefit them as professionals or their students. In addition, the structured protocol format requires all

participants to take a critical look at their own practice. Therefore, all teachers are exposing their work and making themselves vulnerable to the group. All members, regardless of experience, are discussing an area of their practice that they need to improve on. In addition, by following the structure and protocols suggested in this manual, any participant can serve as facilitator for a meeting. This will appeal to all teachers, both veteran and new teachers, and will not combat teacher egos as it allows all members to take a leadership role among their peers.

Questions to Determine if an Inquiry-Based PLC is Right for Your School

Now that you have read about the purpose of inquiry-based PLCs and their potential place in international schools, it is important for you to take a critical look at your present international school context and environment to determine if this format would be suitable for your school. It is important for the reader to note that I am not claiming my experiences mentioned in this manual will be typical throughout international schools around the world, or that this manual is a "one-size-fits-all" for all international schools and teachers. But as limited research on this topic is available, it will certainly provide an informative basis for teacher leaders seeking to implement effective collaborative professional development in international schools. Therefore, seven sequential questions and their respective sub-questions are presented below. It is suggested that you consider the answers to all of the questions before your school's final decision on whether or not to proceed with implementation. These questions address the main components necessary for implementing a functioning inquiry-based PLC within an international school.

 What professional development and/or collaborative structures already exist at your school? As mentioned earlier, there is high teacher turnover in international schools and you yourself may be new to your international school. It is important to consider what collaborative structures and/or professional development initiatives are already in place at your school before you consider implementing a new initiative. Are there established learning communities? Do you have a department structure? Is your school already focusing on a school-wide initiative such as writing or reading strategies, problem-based learning, anti-bullying, etc.? What professional development has already been tried at your school and what were the results? As the phrase goes, there is no reason to "reinvent the wheel" so it is important to know what your school already has in place before you proceed. You may be able to mesh aspects of the inquiry-based PLC into initiatives that already exist within your school; conversely, there may not be any time or energy for an inquiry-based PLC due to pre-existing or competing initiatives.

- 2. What is/will be the extent of the administrations' support? Renowned school improvement scholar Michal Fullan (2007) describes how school administration, specifically principals, can serve as the linchpin for the success of professional development initiatives. School administrators have the ability to provide important resources that all successful professional development needs. Specifically these needs include time, financial support, and overall moral support. If the faculty, especially a new and diverse international school faculty, notices that the school administration is in support of the professional development initiative, then the faculty are more likely to actively participate (Fullan, 2007). The administration can also serve as an accountability method and ensure that all faculty are actively participating in the PLC. Therefore, it is important to present this inquiry-based PLC idea to your principal and other school administration to determine their level of interest and support. With their strong support, the possibility that this PLC structure is successful greatly increases. The previous sections of this chapter and specifically figures 3-1 and 3-2 can be of assistance to you when you present this idea to your administration.
- 3. What are your school's goals and intentions for establishing this inquiry-based PLC? Related to question 2, it is important to discuss with your administration and applicable faculty what their ultimate goals and intentions would be if they implement this inquiry-based PLC. Inquiry-based PLCs may not be appropriate for every international school. Before beginning this initiative, clearly state your goals and intended outcomes and be sure they align with the purposes of an inquiry-based PLC.
- 4. What evaluation plan will be created for your inquiry-based PLC? Once your school's goals and intentions for implementing this PLC are established, it is important to determine from the onset how these goals will be assessed to determine achievement of these goals. How will you collect data about the overall impact of this initiative on teachers and students? How can data be used to help you make changes to the model at your school? Though evaluation methods will be provided later in this chapter, it is important that your evaluation

methods match up directly with your school's goal for this inquiry-based PLC structure.

- 5. How will this PLC be sustained in upcoming years? Following the first year of implementing the inquiry-based PLC, how does your school intend to continue this initiative? If you or members of the administration will be leaving, who will take the role of lead implementer and continue to support this initiative? Will your new administration support this initiative? Will you continue to have the time and funding needed to carry out this initiative in the upcoming years? Is there a method in place where agendas, protocols, evaluation methods, and general helpful hints from your school's previous inquiry-based PLC initiatives can be stored and shared with new members? What role will returning members play in future inquiry-based PLC cycles? When inquiry-based PLC structures are continued for a number of years, they become solidified in the culture of the school. With this, turnover of teachers and administration will likely not disrupt the continued implementation of this initiative.
- 6. Who will serve as the PLC leaders? If you are reading this manual, then it is assumed that you have some sort of interest in leading the implementation of this inquiry-based PLC within your school. It will be important for you to serve in a leadership role as your prepare for this implementation by identifying goals, creating schedules, selecting possible protocols, introducing this initiative to your peers, etc. But Dana and Yendol-Hoppey (2008) emphasize the importance of the main PLC leader to distribute and delegate leadership roles. This helps to equal out power dynamics within the group as well as encouraging all members to take ownership in the initiative. Therefore, it is important for you to determine who will be able to lead meetings or other PLC groups at your school besides yourself. Do you have enough interest among the faculty leadership? Do you have experienced members interested in leading professional development? Do you have colleagues who are able to commit the time and resources necessary to lead a meeting or a PLC group? Do you have an organized method in which members can sign-up to lead meetings or groups?
- 7. Are YOU ready for this? What is your motivation for taking the lead role of implementing this initiative? Whether you are in this position because of your interest and commitment to teacher learning, whether your administration has assigned you this role, or if this is a part of a greater professional goal of yours, it is important for you to truly conceptualize your reason for being in this lead role. The lead implementer is not a difficult role, but it does require a degree of preparation before implementation, and then consistent follow-up throughout the year. Your reasoning for being in this position needs to result in enough motivation to carry you through this process throughout the year. Considering this, what are your other commitments both inside and outside of your school? Are you the advisor or coach to other after-school clubs? Are you teaching new subjects or taking on a new curriculum path? Are you new to the school or local area? Is there anything in your personal life that may require a significant amount of your time? Depending on how much you delegate responsibility, this lead

implementer position may require up to three hours of your time each week outside of the PLC meetings. Are you able to commit to that? All of these questions need to be considered before you begin implementation for you to appropriately gauge how much time you will be able to dedicate to this initiative.

It is important for you to take a critical assessment of your personality as well. An inquiry-based PLC leader, especially one who is implementing the initiative for the first time, needs to be flexible with decisions and agenda items. They need to be open to change and suggestions from their peers. They need to be perceptive individuals who are able to determine what may be the best for their peers concerning approaches to agenda items, protocols, sharing and discussing. As it is the first year of implementation, there will likely be some challenges, troubles, and criticisms from your peers. Do you have the personality that is able to handle all of this? Related, what is your current collegial position among your faculty? An effective inquiry-based PLC implementer needs to be respected by his or her peers and acknowledged as someone who is truly committed to the success of all students and faculty at the school.

Next, what are your future plans at the school? How long do you intend to stay at the school, and in doing so, continue to develop the inquiry-based PLC initiative? Though the first-year implementer does not need to remain the leader for the upcoming years, it is suggested that they are still at the school in some capacity to serve on a consultancy basis for those who take over the leadership roles in the coming years. So that this is not seen as something that will be a one-time event or a fad that will die out in the upcoming years, your fellow faculty need to know they are participating in an initiative that you as the lead implementer are committed to for years to come.

Lastly, I am fully aware that you likely have other "roles" besides the implementer of this initiative. You may be a teacher, an administrator, a professional development

coordinator at your school, or all three. I have written this manual placing the reader as a non-participating member of the PLC. This certainly does not have to be the case. You likely will think to yourself numerous times throughout reading this manual that some of the stages and steps may benefit you and your own personal practice as a teacher, administrator, etc. All professionals can benefit from examining their own practice. You certainly are encouraged to participate in this inquiry-based PLC by completing all of the stages and participating in the protocols. In an ideal world, you have participated in an inquiry-based PLC before and are applying that experience to your implementation. But as this may be the first time this initiative is implemented at your school, this may be your first experience with this professional learning format. Therefore I encourage you to take extensive consideration of the time that you are able to dedicate to your role as implementer and facilitator, and determine if being a participant is also a possibility. It is key to the sustainability of the PLC that it has a good foundation and the first year implementation is conducted as adequately as possible. Once you have done your part in implementing the PLC, it may be an excellent time for you to pass on the leadership role and then be a participant. You will really be able to conduct an awesome inquiry cycle with your previous leadership experience.

Initial Planning and Introduction to Faculty

If you are still reading this manual, that means you are committed to implementing this initiative at your international school. Fantastic! You are about to embark on an incredibly rewarding experience that will benefit you, your fellow international school colleagues, and your students. So let's roll up our sleeves and get to work on planning a good foundation for this initiative at your school.

Long-Term Planning

It is strongly suggested that this initiative start at the beginning of a school year, when teachers receive new students for the year and begin at the starting point in their curriculum. For most international schools, this is the fall semester in August or September. It is suggested that the full inquiry cycle is planned to be conducted without an extended break, such as summer break, in the midst of it. As the implementer, you have the opportunity to prepare for the initiative during the summer, or earlier if you intend to begin this initiative in the following academic year.

Though this manual will serve as a sufficient guide for someone implementing an inquiry-based learning community in an international school, it is also suggested that you build your own scholarly knowledge concerning inquiry cycles and professional development leadership before you begin any planning. Table 3-2 provides a detailed list of additional texts that may assist you in your preparation.

Short-Term Planning

As addressed previously, it is crucial to have a clearly defined outline of goals and intentions for the inquiry-based PLC before you begin implementation. This will likely require a meeting between you, members of the administration, and any other leadership team members at your school. This team should also revisit these goals throughout the year to determine if any changes are needed. It is strongly suggested that you as the lead implementer keep a journal of meeting proceedings and reflect on these journals frequently. Based on your reflections, you can adjust goals accordingly. But nevertheless, there needs to be a "road map" to follow before your inquiry-based PLC initiative begins.

Table 3-2. Additional resources for preparation

Title of Resource	Focus
The Reflective Educator's Guide to Professional Development: Coaching Inquiry-Oriented Learning Communities (Dana & Yendol-Hoppey, 2008)	Serves as a comprehensive guide with examples, vignettes, and sample protocols to help you coach peers through the inquiry process.
"Beyond certainty: Taking an inquiry stance on practice" (Cochran-Smith & Lytle, 2001) which can be found in the book <i>Teachers</i> <i>Caught in the Action: Professional</i> <i>Development that Matters</i>	A theoretical piece that helps to build a deeper knowledge of the role that inquiry can play in informing a teacher's practice.
Building School-based Teacher Learning Communities: Professional strategies to improve student achievement (McLaughlin & Talbert, 2006)	Informs your knowledge of the role that collaborative cultures can play in schools. It takes an in-depth look at a successful school collaboration initiative.
Action Learning: a guide for professional, management & educational development (McGill and Beaty, 2001)	Serves as a manual for novice professional development leaders with comprehensive descriptions and examples concerning action learning and the role of the facilitator.
Practitioner Inquiry Network (2014) https://inq.education.ufl.edu/	Developed by scholars at the University of Florida, this site provides overviews of the inquiry-based PLC process as well as tutorials for both coaches and participants.
National School Reform Faculty (2012) http://www.nsrfharmony.org/free-resources/protocols/a-z.	Database with numerous protocols and activities to be used by coaches and participants of professional learning communities.

These goals should be specifically based on the faculty and context of your international school. You should discuss with your administration and leadership team the overall culture of your school and tailor the goals accordingly. Do you have a

significantly young faculty? Is your faculty accustomed to professional development initiatives? How familiar are the teachers with the concepts of inquiry, action research, and research of one's own practice? Will your main focus for the first year be teacher collaboration? Improvement of personal practice? Increasing student achievement? In the first implementation of this initiative at my school, where I assumed the role of lead implementer, my principal indicated that our priority was to increase teacher collaboration. This provided me significant guidance in developing the goals for the year. You may discuss with your administration about infusing a school-wide goal into the PLC initiative. In this way, the goal will serve as the basis for all derived inquiries of the participants. You may consider using the "Back to the Future Protocol" (NSRF, 2012) or the "Group Agenda Planning" (NSRF, 2012) template available on the NSRF website. Whatever the goals are, record these goals and present them as a brief bulleted handout to participants at the first meeting so that they are fully aware of the purpose of the PLC before it begins.

The next step in planning is to create a tentative calendar of the inquiry cycle process. This is both for your benefit and your participants. It allows you to fit the inquiry cycle into the specific schedule of your school. It also serves a very important purpose in keeping you accountable as implementer in that you are following all of the cycle stages and leaving the appropriate amount of time for your participants to conduct each stage. Of course, this calendar needs to be tentative as school schedules and the needs of your participants throughout the cycle may require changes to the calendar. Nevertheless, a calendar also serves to increase buy-in by participants as they will see that the initiative has a set structure in which goals will be achieved throughout the year.

The timeline followed in this manual is for a year-long inquiry cycle. A sample calendar is provided in Appendix B for your reference. It is entirely possible for your group to conduct multiple inquiry cycles in one academic school year. This all will likely depend on the size of your group, experience and dedication of participants, and directive of your administration. With whatever timeframe you choose, certain stages require significant more time than others. As an example, if you are planning a year-long inquiry cycle, then inquiry planning and conceptualizing should be conducted in the first third of the year, data collection in the middle third, and data analysis and presentation of findings in the final third of the year.

A calendar item that needs to be planned during the last phase of the inquiry is an event in which participants can formally share their inquiry cycles and their resulting learning. Often termed an "Inquiry Showcase" this event can be a day-long, half-day, or after-school event. Participants can share their inquiry cycle process in various presentation formats. Dana and Yendol-Hoppey (2008) describe the benefits of sharing one's inquiry-cycle to other colleagues to include "clarifying, pushing, and extending thinking of teachers...illuminate critical insights into student learning....contribute to reforming the profession of teaching from the inside" (p. 138-9). More specific discussion of the inquiry showcase will be provided later in this chapter, but planning for this event needs to begin early.

In addition to planning the logistics of your meetings, there are some important planning aspects that will increase the success of your inquiry initiative related to creating a sense of accountability and shared leadership. You may need to plan for meetings in which the administration will be in attendance, or plan share-out sessions

where members share their progress. Also, to encourage shared leadership, have a sign-up sheet where members can sign-up to lead a protocol or discussion. Plan for a portion of every meeting to be a forum where members can reflect on the process so your group can make adjustments to timelines or protocols to improve group and individual learning. Related to this, it is important that you plan in flexibility throughout your inquiry-process schedule. This may mean that one meeting a month, or every third meeting is an open meeting in which unfinished agenda items can be addressed, meeting continuation of previous meeting sharing and discussions can be continued, or a previously cancelled meeting can be conducted.

Planning for the First Meeting

Following the logic of Wong and Wong (2001) in their famous text *The Effective Teacher: The first days of school,* the first inquiry-based PLC meeting of the cycle may be the most crucial to the success of the initiative. It is important for you as the implementer to provide all of the resources that your colleagues need to understand the purpose and scope of the initiative. At the same time do not overwhelm members so much that they disengage and are turned off to the idea from the onset. Do not assume that your participants have knowledge of PLCs or inquiry. Remember that international teachers come from many national contexts with varying experiences with professional collaboration. Therefore, it is important that in the first meeting you explain the concepts of learning community and teacher inquiry. Be brief but detailed in your explanations. Help members understand the larger goals and intentions of this initiative so they will understand how it fits in with school-wide goals. Provide all members a copy of the detailed inquiry cycle diagram (Figure 3-2) and briefly explain each part. Also distribute the calendar with your tentative year-long timeline for each inquiry stage.

Follow this by giving the members a sample protocol so that they can see how sharing of one's process and discussion will take place in an organized and structured process. It is also important to explain the notion of a "protocol" as simply a way of structuring dialogue to provide organization and efficiency. Provide a sample protocol or practice a simple protocol such as micro-labs (available at www.nsrfharmony.org) to discuss a short text so that participants will understand how protocols work. Continuously reassure members that you are all members of a community and all members will be investigating their own practice regardless of their national origin or teaching experience- essentially that the community will be a safe place in which members will expose their work to constructive criticism. Finally, encourage members to begin observing their own practice to determine inquiry topics around improving their practice and/or student learning. Provide as much instruction on observing one's practice as your meeting schedule allows. Some lead implementers may prefer to begin the first stage of the inquiry cycle at this first meeting, while others may use the first meeting as an introduction meeting and have with the second meeting serve as the start of the first inquiry cycle stage.

Other Planning Considerations:

- Invite administration to attend the first meeting: Having administrative support will increase buy-in of participants.
- Know your colleagues: Tailor your approach to their personalities and learning styles.
- Consider technology: use this to support the inquiry process, especially in the sharing of documents within the group.
- Plan for intentional mixing: Create inclusive dialogue opportunities between local hires and external hires.

• Plan to get periodic participant feedback on the inquiry process itself so you can make adjustments throughout the process.

Facilitating the Inquiry Stages

Following your introduction meeting, it is time to begin the inquiry cycle process.

The process can be best divided into five stages indicated by Figure 3-2. This section of

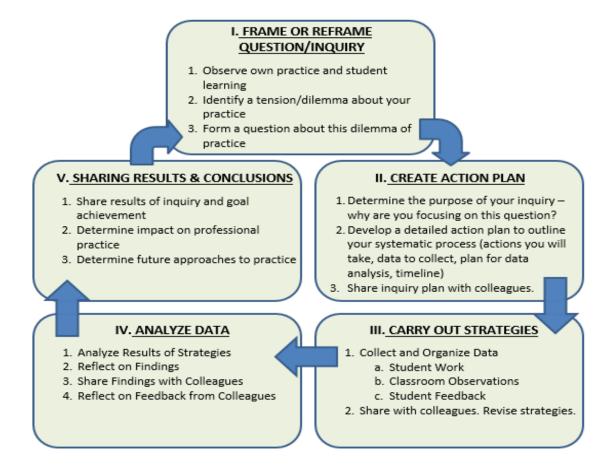


Figure 3-2. Detailed inquiry cycle for international schools¹

the chapter will take an in-depth look at each stage and discuss the purpose, timeframe, suggested approaches, and possible challenges within each stage. Suggested protocols for each stage are also provided in a chart found in Appendix C, and various sample templates are provided in the appendices of this manual. As a reminder, many

¹ Based on the *National School Reform Faculty* & *Southern Maine Partnership* 'Cycle of Inquiry' located at www.nsrfharmony.org.

of the protocols provided in this manual were created for American school contexts. I found that when implementing these inquiry stages at my international school, I needed to alter protocols and templates to best fit my participants. It is highly suggested that the international school implementer consider the participants within his or her inquiry-based PLC before utilizing the suggestions and protocols provided in this manual.

Stage 1: Formulating and Framing the Inquiry Question

Educators have an extremely busy daily schedule. They are responsible for the well-being and learning of their students, and are often tasked with other duties to complete throughout the day as well. As an educator, I am sure you have wolfed down your lunch during a five-minute break, or asked someone to watch your class because you did not have the chance to use the bathroom all day. Because of this schedule, teachers rarely take the time to step back, observe their own practice, and reflect on areas where improvements can be made. This, essentially, is what the inquiry cycle process encourages. It all begins with the teacher reflecting on their practice, creating a wondering or inquiry about a tension or dilemma in their practice and then carrying out a structured plan to address this need. As the entire inquiry process is based on addressing this inquiry question, it is important that PLC participants have the time, resources, and direction necessary to formulate a question that will require extensive investigation and have strong connections to improving their professional practice.

Suggested Procedure and Key Activities for Stage 1:

1. **Participants observe their own classrooms**: It is suggested that at least two weeks are spent having PLC members observing their own daily teaching practices and the work of their students. Participants should look for any issues, dilemmas, discrepancies, confusions, etc., that they and/or their students seem to consistently experience.

Implementation advice: Have all of your participants record their observations in a journal from the onset and have them collect all corresponding student and/or professional work related to their observations.

2. The participant reflects on the observations and supporting material: At the end of the two weeks (or whatever timeframe you decide), participants review their observations and work that they have collected and seek to identify an issue that can serve as a basis for their inquiry question.

Implementation advice: Some members may not be familiar with observing their own practices or knowing exactly what student work to collect. Therefore they will require guidance. This may be especially true for participants who have received their teacher training outside the United States. Numerous documents are available through www.nsrfharmony.org to assist members in observing their classrooms and generating a wondering. A sample protocol entitled "Reflective Guide" (NSRF, 2012) is provided in Appendix D, and has been used with great success in inquiry-based PLC cycles I have implemented.

3. **Members share their dilemmas with the other PLC members:** Once dilemmas are identified and members create initial wonderings, it is suggested that a PLC meeting is held in which members share their dilemmas and initial wonderings with their peers.

Implementation advice: To keep these sharing conversations focused and to provide structure for feedback, consider using the "Consultancy Protocol" (NSRF, 2012) (Appendix E). It is suggested that more than one meeting be conducted at the beginning of the inquiry cycle in which members share and refine their inquiry questions. Dana and Yendol-Silva (2003) state, "Rarely does any teacher researcher eloquently state his or her wondering immediately. It takes time, brainstorming, and actually 'playing' with the question. . ." (p. 47). Another activity that participants can conduct in formulating

their inquiry question is a "Wondering Litmus Test" (Dana & Yendol-Hoppey, 2008). This is provided in Appendix F.

Additional Implementation Tips for Stage 1:

- Your participants' question formulation is key. In implementing the inquiry-based PLC at my international school, I found it vital to provide a significant amount of time for my participants to develop a quality inquiry question. The biggest concern from my members was whether their inquiry was "good" or "correct." I assured them that as long as they heeded the feedback of their peers through the "Consultancy Protocol" (NSRF, 2012) and considered the questions of the "Wondering Litmus Test" (Dana & Yendol-Hoppey, 2008), they will have created a sufficient inquiry question. I also told them that the inquiry cycle is a process that takes time. If they found that they needed to alter their inquiry question as the process continued, this was acceptable.
- Be sure the question focuses on actions of the teacher and is not about fixing others. As a lead implementer, it is important that you ensure all members have generated an appropriate inquiry question that they are comfortable with. Dana and Yendol-Hoppey (2008) provide a list of sample inquiry questions (p. 55-57) that may be of value for your participants to consult. The questions are derived from all subjects and all K-12 grade levels. As this is the foundation of the inquiry process, a leader should not proceed until all members have an established inquiry question. Once this is accomplished, the community is able to proceed to the second stage and begin formulating action plans to address their inquiries.
- This stage is foundational to the inquiry cycle plan. Therefore, it is important that
 you as facilitator make sure all members participate in the protocols while also
 making sure that the time limitations are followed so that everyone has an equal
 chance to have their initial inquiries discussed during the PLC meetings.

Stage 2: Creating an Action Plan to Address the Inquiry

Almost as important as the inquiry question is the plan for how members will seek to answer this inquiry question. This serves the same purpose as detailed instructions when putting together a piece of furniture, or a sequence of directions on a road map when trying to reach a destination. The action plan is what the participant creates to identify a detailed, sequenced plan to address their inquiry question. The action plan contains a restatement of purpose, strategies to address the dilemma in the classroom, data collection methods, data analysis methods, and an overall timeframe.

Suggested Procedure and Key Activities for Stage 2:

1. Introduce the action plan: After inquiry questions have been established by your members, it is important that you introduce the action plan, and the purpose of the action plan in extensive detail.

Implementation advice: I elected to introduce the action plan stage to my participants through a PowerPoint presentation, but you may decide to introduce it to your participants through a handout or oral presentation.

2. Initial planning with I-MAP: This Individual Monthly Action Plan template helps teachers brainstorm structured approaches to their inquiry question (see Appendix G).

Implementation advice: It is then your discretion as facilitator to determine whether your PLC needs sharing protocols to discuss I-MAPs before you proceed to creating action plans. Suggested protocols provided by the *National School Reform Faculty* (2012) may be an altered "Consultancy Protocol," the "Future Protocol," the "Issaquah Protocol," the "Tuning Protocol," or an altered "Micro labs" protocol.

Templates for all of these are available at www.nsrfharmony.org.

3. **Detailed inquiry brief:** In this next step, participants take their initial brainstorming ideas and put them in the form of a formal action plan with details about the purpose, strategy for addressing the inquiry, data collection methods, and timeframe. Both a blank and completed Inquiry Brief Action Plan are provided in Appendix H.

Implementation advice: The action plan template is quite straight forward, but your members will need significant time to complete it. Again, it is your decision as implementer to determine how much sharing and discussion needs to be completed within your PLC as members are formulating their Inquiry Brief Action Plans. It is suggested that at least two meetings are dedicated to all members sharing their action plans and soliciting feedback from their peers.

4. Feedback from peers: After planning their actions for addressing the inquiries, it is important to get feedback from peers. This feedback will provide members with a final evaluation of their action plans before they proceed with putting it into practice.

Implementation advice: One strategy for doing this is a fast-paced sharing activity I created called "The Dating Game" (Appendix A) in which members take turns sharing their plan with a partner, and then they have to answer questions about their partner's action plan. This protocol was a great success as it allowed members to work one-on-one in the group and also practice sharing their action plan a number of times. But any number of the protocols mentioned above can be used, and, as stated earlier, it is your role as a leader to alter these protocols or create your own protocol that will better fit the needs of your members.

Additional Implementation Tips for Stage 2:

- As lead implementer, it is important for you to pay special attention to the strategies, data collection, and timeframe of your participants' action plans. If participants have to change data sources after beginning their inquiry, it can put them behind their peers and impact the timeline of your entire group. The most important thing to look for is whether the strategies, collection methods, and timeframes are feasible for your members to accomplish during the middle third of the school year.
- Pay close attention to what timeframe your PLC is on, and how you are progressing at this point in your cycle implementation. As all school calendars vary and the calendar that you created at the beginning of the year with your administrator was tentative, you likely had to rearrange some dates for the benefit of your PLC members. Yet, it is important that you are able to get your participants to the point where they are ready to begin implementing their action plans and collect data after the first third of the allotted cycle timeframe. This is especially important if your school has a Winter Break which may break up the action plan implementation process. Once you and your members are satisfied with their action plans, the strategies, and the proposed timeframes, it is time for members to begin implementation.

Stage 3: Implementing Action Plans and Collecting Data

Stage 3 is the stage that requires you as the lead implementer to be the most flexible as the stage's progress is almost solely dependent on participants' individual progress. But this also affords you some luxury of taking more of the "Coach" role and less of the "Leader" role. You can delegate various leadership roles to members in conducting subsequent update sharing meetings. You can also form sub-groups of members investigating similar inquiries. During meetings these members can meet and discuss their similar inquiries together. Ultimately, you and the group need to share responsibility for motivating all participants to persevere with their inquiry plans.

Suggested Procedure and Key Activities for Stage 3:

1. Periodically meet with members for updates on progress: The best approach to monitoring progress and also ensuring accountability is to hold periodic update meetings in which members share their progress, the results of their strategies, and their continued approach to data collection. These meetings can benefit all members as participants are able to see how others are dealing with their action plans. Members can also be made aware of the progress that others are making relative to their own, and any challenges other members are having that may be similar to their own.

Implementation advice: It needs to be repeated that your role in this stage, more than any other stage, is to serve as a learning community coach. You really need to be perceptive to individual and collective needs of your group at this stage to determine if the strategies being implemented and data being collected are sufficient. Protocols from NSRF (2012) that would be good to use for these meetings are the "Probing Questions Protocol," "The Final Word Protocol," "Consultancy Protocols," "Issaquah Protocol," "Micro Labs Protocol," and the "Describing Students' Work Protocol." All of these can be obtained from the NSRF (2012) website:

Additional Implementation Tips for Stage 3:

- My members struggled with identifying what student and/or professional work would be appropriate to collect for their action plan and analysis. I searched the NSRF (2012) website and located guides and templates entitled "Looking at Student Work." As a group, we went through this together and I made a point to emphasize that student scores are reflective of the assessment of student work, but are not ideal artifacts for the inquiry question. In order for the data analysis process to function adequately, all members needed actual tangible artifacts of student work or professional work to collect, share with the group, and eventually analyze. We then went around and brainstormed what ideal student or professional artifacts (data) would be for each person's inquiry question. After this meeting, those who were struggling with identifying appropriate data began to bring in and discuss sufficient data related to their inquiry.
- Consider suggesting to members that they all keep a diary of their implementation and data collection progress and provide their candid thoughts on the process. This will help them when they have to share their progress at update meetings and it may provide them insight into student and professional work when it is time for analysis. This may be very valuable to members of your PLC that are not native English speakers as they can record these journals in their native language, and then translate them when it is time to share with the group.
- Encourage members to keep their data organized throughout the Stage 3
 process, as this will help them immensely during the Stage 4 data analysis
 process.
- Encourage members to use the entire time allotted for Stage 3 to implement their strategies and collect data. Members will have a tendency, especially with this being a new initiative, to draw conclusions as soon as possible and determine that they have collected enough data to render judgments. If you do encounter this, encourage members to work at organizing their data before they begin to move on. Encourage them to consider adjusting their inquiry if data collection, and the subsequent solutions to the inquiry, were that easy to obtain in such a short time. Keeping all members accountable and making sure they all follow similar schedules for presentation of their progress at meetings will help to minimize this issue.

Stage 4: Analyze Data

This stage typically is the most difficult for participants yet proves to be the most valuable for informing their future practice. Most international school teachers, regardless of where their previous teaching experience and training took place, have

basic experience with examining student scores and drawing conclusions as to how these were connected to their professional practice. But the analysis required for this stage of the inquiry cycle is much deeper than just reviewing assessment scores. In considering the complexity of the suggested data to be collected in Stage 3, the data analysis needs to be a comprehensive and structured process so that the participant is extracting as much awareness of their inquiry strategy results as possible.

Suggested Procedure and Key Activities for Stage 4:

As you begin this stage with your participants, it is suggested that you follow the four steps of data analysis outlined by Dana and Yendol-Hoppey (2008). They are presented below.

1. **Description:** Members are encouraged to read through and consider all of their data without any objectives in mind. They simply need to take notes about what they are explicitly seeing in the data. This will essentially serve as a knowledge foundation of this data to orient them during deeper analysis in Stage 4.

Implementation advice: The "Data Analysis Protocol" (Dana & Yendol-Hoppey, 2008) is a great tool to use after members completed the first step of the data analysis process. This protocol asks members to share an overview of their data and the initial impressions they are getting from reading through their data. It provides probing questions for other members to ask and for the sharer to consider before they proceed to the next steps of the data analysis process. It also gives other members the opportunity to take more ownership in the group and get comfortable with the data analysis process as they are essential serving as data analysis advisors to the sharer. This analysis protocol is provided in Appendix I.

2. **Sense-making:** Members need to dive in a bit deeper and look through their data to identify trends that are emerging or peculiar instances that are occurring with their data.

Implementation advice: As mentioned in Stage 3, it will be valuable to participants to have their data organized before they begin analysis. The participant may want to organize data chronologically, by gender, by previous classroom performance, or organize the data focused around major events. The approach to data organization depends on the inquiry question and action plan of each participant. After themes, trends, abnormalities, etc., have been identified by the participant, it may be best to reorganize the data into emerging categories. At this point, the participant should be encouraged to select key examples of each theme, trend, pattern, etc. to share with colleagues for feedback during the PLC meetings.

3. **Interpretation:** The participant now needs to determine why the patterns, abnormalities, etc. emerged the way that they did. They can consider how these themes were influenced by teacher actions, and how much was connected to their students, outside factors, the curriculum, their own teaching style, etc.

Implementation advice: It is suggested that participants create some sort of visual for this step to organize, illustrate, and justify their interpretations with examples and vignettes of student or teacher data. After the visual is created and interpretations have been made by the participant, it is essential to consider how this information can inform professional practice. One strategy I used with success was a modified version of the "Sentence Completion Activity" (Dana & Yendol-Hoppey, 2008) which presents a structure to help participants state their findings in very succinct ways in order to share it with colleagues (Appendix J).

4. **Implications:** This is where the participant can be guided by such questions as: "What have you learned about yourself as a teacher? What have you learned about your students? What have you learned about your [international] school? What changes might you make to your practice in both the short- term and long-term? What new inquiries do you have?" (Dana & Yendol-Hoppey, 2008, p.120). This step helps participants identify potential actions that might come out of their research. They may proceed to change or transform their professional practice based on the research to benefit themselves and their students.

Implementation advice: As the PLC implementer, this last step will be the most rewarding as this is when participants will see everything coming together and will be able to identify the growth they experienced through the inquiry cycle. Therefore, do not force this last step and rush teachers to draw implications from their data before they have grasped the complexity and carried out all four steps of data analysis in their entirety.

Additional Implementation Tips for Stage 4:

- As this is likely the initial implementation of this inquiry cycle at your international school, it is to be assumed that your participants, especially those from a non-western teaching background, may not have experience in action research and complex data analysis. Therefore, it is essential that you model data analysis to your members before they begin the four steps of the analysis process. You may ask for a few participants to volunteer sample student data, or you may want to provide student data of your own for a few of the initial analysis demonstration activities. Numerous protocols to use as practice for analysis are available for this stage through NSRF (2012) and are indicated in the chart in Appendix C.
- For the last analysis step, explain to participants that they should create a visual
 way to present their findings to people unfamiliar with their research. Be sure to
 give participants a lot of freedom on how to display their findings, keeping in mind
 that members learn and think in different ways. This is especially true for
 international school teachers with a mix of professional backgrounds.

Stage 5: Sharing Inquiry Results and Conclusions

As you are nearing the end of the inquiry cycle process, you have likely already noticed the numerous benefits that sharing and discussing each other's practices, wonderings, and discoveries can have on one's professional growth. This will especially be true in a diverse group of international school teachers. Stage 5 is now the chance for members to create a summary of their entire inquiry cycle and the conclusions they have made through the process. This is essentially the culmination of the entire inquiry cycle process. Remember that this is likely a new experience for international school teachers, and they may have experienced stress and challenges taking part in this

initiative. Now is the opportunity for members to take a step back and examine the entire process and what they learned. The key to this stage is for the members to identify the results of their inquiry process and how these results will affect their future professional practice. They need to be able to articulate these results to others.

Considering the *Revised Bloom's Taxonomy of* Learning (Anderson et al., 2001), creating a product based on the entire inquiry cycle process indicates the highest level of learning for participants.

Suggested Procedure and Key Activities for Stage 5:

1. **Create an inquiry cycle summary:** To prepare members for the sharing of their experience and final presentation, members should create a brief summary of their experience with the inquiry cycle. This summary might be approximately two pages in length, describing the inquiry design, data collection and analysis, results, future changes to practice, and overall concluding thoughts.

Implementation advice: A step-by-step template with tutorial of the inquiry write-up process can be found at https://inq.education.ufl.edu/inq-write-up-tutorial/entitled "Executive Summary Write-up" (Practitioner Inquiry Network, 2014). Also, additional guidance for the inquiry write-up process can be found in chapter 6 of *The Reflective Educator's Guide to Classroom Research* (Dana & Yendol-Hoppey, 2009).

2. Transform summaries into oral and visual presentation products: It is helpful for participants to share their inquiries both visually (with evidence) and orally. The visual component should contain artifacts of student data and indicate a logical sequence of how the participant navigated through the inquiry cycle process and generated their conclusions. For the oral component, members can explain their entire navigation through the inquiry cycle process and utilize the visuals as support.

Implementation advice: Members should be given freedom to create unique products. Many may opt to create a PowerPoint or other digital presentation, a poster, a video presentation, etc. The freedom to create their presentation in their own way will

likely be embraced by the diversity of personalities and backgrounds of international school faculty.

3. **Present inquiry cycle summaries to colleagues:** Once the inquiry briefs are created, the next step is to present the summary presentation to colleagues in the PLC and the administration.

Implementation advice: The PLC groups should serve as consultants for each other as members are creating their presentations. "Trial Runs" of presentations should be conducted within the PLC groups prior to the showcase to help participants practice how to visually present and verbally express their inquiry cycle experience. With the approval of your members, invite administration to these practice runs and solicit the administration's feedback. Administrative support of the showcase is essential in gaining teacher buy-in for future cycles, as well as showing participating teachers that the extensive time and energy they invested is recognized and respected.

4. **School-wide inquiry showcase:** As mentioned early in this chapter, a school-wide event for all faculty should be arranged in which PLC members can display and share their inquiry cycle process presentations. This event is often termed a "showcase" as it serves as a forum to display the professional growth of the teacher which in turn can contribute to the professional growth of other teacher attendees. This showcase also serves to help establish the inquiry-based PLC as part of the overall school culture as it is a school-wide event.

Implementation advice: It is suggested that the inquiry showcase be held at least three weeks before the completion of the school year. This allows for some time in which you and members of the PLC can evaluate the entire initiative. This is especially important as this is likely the first time that this initiative has ever been completed at your international school. But plan this showcase early! Prior to the showcase, advertise throughout the school, remind faculty at preceding faculty meetings, arrange for decorations, refreshments, etc. As this inquiry-based PLC structure is new to the international school context, invite administration and faculty from neighboring

international schools to attend. It needs to be conveyed to members of the PLC and other faculty that this is a wonderful and celebratory occasion where teachers are teaching teachers and professional growth is taking place.

Additional Implementation Tips for Stage 5:

Dr. Darby Delane, former professor at the University of Florida and current middle-school teacher has organized numerous inquiry-based PLC showcases with both teacher candidates and practicing teachers. She eloquently describes the showcases' benefits:

Pulling together a formal sharing of inquiry through a celebratory conference or showcase takes a lot of work, but it cannot be skipped. Formally sharing with our community what we are learning through the inquiry process is as important as a musician's recital, an author's publication, or an artist's show in a gallery. But showcases provide much, much more for the individual practitioner: as is true through the writing process, the inquiry study, itself, crystallizes for the presenter in a showcase. The "story" becomes much more tangible, previously hidden insights suddenly appear through his or her story-telling experience, and the action steps that inquiry demands become clear. Finally, presenting the inquiry journeys to our colleagues defines our stance as both experts and ongoing learners at the very same time. In doing so, our very identities as educators and people are forever transformed (D.C. Delane, personal communication, August 17, 2014).

Indeed, the showcase is held not only to display the initiative the members conducted throughout the year, but it is a celebration of gained knowledge and professional growth of teachers.

Evaluation and Sustainability

With all the work that you and your participants have put in to this PLC throughout the year, it is important for you to be able to determine whether the original goals and objectives for the initiative were achieved. Granted, you likely witnessed a number of your members experiencing personal and professional growth during the

cycles, but it is also important to document participant feedback to help you and administrators decide how to proceed in future years.

Though the ultimate intention is that the inquiry-based PLC will become a standard part of the international school culture, the first two or three years of implementation are key to its continued longevity at the school. With the frequent turnover of international school teachers and administrators, it is important that all documents, notes, products, etc. be collected in a database that can be used by future facilitators and PLC members.

Recommended Approaches and Activities for Evaluation:

- For the inquiry-based PLC at my international school, I distributed a survey for all members to complete at the end of the year. This survey is included in Appendix K.
- At the same time that members are completing the surveys, it is important for you to read through the reflection notes that you took throughout the year. As you read through, ask yourself: "What worked well? What did members seem to struggle with? What patterns of learning and/or behavior were exhibited?" You can then consider your answers with the survey results of your members, and determine what aspects of the PLC should be continued, eliminated, or revised for the upcoming year.
- Whether you intend to be the facilitator in the upcoming year or are passing the role on to a colleague, it is important for you to create your own executive summary of the entire process for whomever facilitates the initiative in the next year.
- If there was more than one PLC facilitator at your international school, you may consider conducting the "Intervisitation Protocol" (NSRF, 2012) in which all facilitators share and reflect on their performance throughout the year. This protocol can be found at: www.nsrfharmony.org.
- Following your compilation of all survey results, reflection meetings with other facilitators (if applicable), and your creation of an executive summary, it is crucial that you meet with school administration. At this meeting, you should share all of your evaluation results, summaries, and overall reflection of the initiative. You all should consider whether the initiative achieved the goals that you established at the beginning of the year.

Recommended Approaches and Activities for Sustainability:

- You and your administration should collectively decide whether or not to continue
 the initiative the following year. If you decide to continue, you should determine
 what aspects should be further emphasized, eliminated, or altered for the
 following year.
- It is also a good idea to create a tentative calendar for the initiative for the
 upcoming year as the events are still fresh in your mind. Think about challenges
 your participants had and how timeline adjustments might be made to address
 those challenges.
- All documents that you have generated and collected throughout the inquiry cycle process should be stored electronically in a GoogleDoc, Moodle or Edmodo, or on your school's file server. These samples can serve as a guides or references for future implementers.
- Identify potential examples of various stages of the inquiry process to use as school-specific samples in the future. When I collected surveys from my international school members after our initial inquiry-based PLC implementation, the most frequent request members made was that they would have appreciated examples of the various stages as they were working through the process.
- Of course, the future facilitator should be encouraged to alter the initiative to best fit the members of the PLC. But if guides, summaries, and previous facilitator notes are provided, this will certainly assist the future facilitator in developing and conducting a quality international school inquiry-based professional learning community.

Conclusion

International school inquiry-based professional learning communities can serve as effective arenas for teachers from all different national backgrounds and experience levels to investigate their own practices and experience professional growth from their sharing and collaboration with peers. It was the intent of this manual to provide a brief but comprehensive set of resources and instructions to implement and facilitate an inquiry-based professional learning community at your international school. It is important for me to reiterate that there is no "one-size-fits-all" manual for inquiry-based professional learning communities in international schools. You may experience

challenges with implementing some of the stages and suggested protocols provided in this text. You may find that rearranging or adjusting some of the processes describe in this manual may be more suitable for your group.

There are also a number of elements to the PLC that may be necessary to the success of your group, yet are not included in this manual. For instance, with the likely high number of new teachers at your international school, it may be valuable to conduct a number of "team building" exercises to establish comfort and rapport among your members before you being to implement the initiative. This decision requires a good perception of the dynamics of your group as the school year begins.

Many successful inquiry-based PLCs also operate with members collectively reading a scholarly text before they begin the cycle or while they are navigating through the process. If you are interested in doing this with your members before the inquiry cycle process, I suggest "Beyond certainty: Taking an inquiry stance on practice" (2001) by Marilyn Cochran-Smith and Susan Lytle. If you desire a text for your members to read throughout the process, I suggest *The Reflective Educators Guide to Classroom Research* (2009) by Nancy Fichtman Dana and Diane Yendol-Hoppey. But be aware that as this is likely a new initiative at your school and many of your members are getting adjusted to the new international school environment, an additional reading task for them to complete may compromise the amount of time they can dedicate to completing the stages of the inquiry cycle.

Ultimately, the key to the success of your inquiry-based PLC is that you as an implementer are willing to dedicate the time and effort necessary to develop an effective PLC foundation for your international school. You have already shown your dedication

by reading this manual, now it is time to do it on your own. After you complete the first year of implementation, share your experiences with the international education community. Increase the presence of inquiry-based teacher communities in international education research. Conduct your own case-study research, write your own manuals and articles, and take all of these experiences with you and share them with all educators that you work with throughout your career. Inquiry-based PLCs contribute to the professional growth of teachers and increased knowledge of successful teaching practices. Let's celebrate this knowledge sharing by promoting inquiry-based PLCs in schools throughout the world.

CHAPTER 4 CONCLUSIONS AND IMPLICATIONS

This dissertation product contains an empirical study of an embedded teacher researcher's implementation of a professional collaboration initiative in an international school, and a subsequent guide created from this experience that could serve to better assist educational leaders in implementing similar initiatives in their international schools. The study described in this dissertation took place over a nine-month period at an international school where I was employed as a social studies teacher. It focuses on my experiences as a practitioner scholar in implementing an inquiry-based professional learning community within the social studies department. The research design is framed by the S-STTEP methodology (LaBoskey, 2004; Loughran, 2004; Pinnegar & Hamilton, 2009) that allowed me to conduct embedded research within the context of my own practice. In particular, LaBoskey (2004) and Dinkleman (2003) laud the use of self-study in educational research to help educators learn more about their professional practice. As the initial study was focused on my new role of practitioner scholar and my role as a novice professional development implementer, a self-study seemed the most logical approach to the study.

Data sources for the study included my personal journal reflections throughout the entire 9-month process, as well as formal and informal feedback from members of the social studies department. Through inductive thematic analysis of the data sources, I was able to determine that my role throughout the process transcended three interrelated roles of planner, facilitator, and participant. By identifying these various roles and my negotiation through them while implementing the initiative, I was able to gain a better understanding of the role of a practitioner scholar within an international

school context. Day (2002) highlighted two empirical studies of teacher leaders in local teaching contexts foreign to their native country who were tasked with implementing school reform initiatives. The studies concluded that these teachers created new identities or had to alter their teacher leader identities due to their new contexts. This is reflective of the identity experiences that I had both in a new professional role and in a new teacher leader role.

Robb (2000) conducted a study of professional learning communities that were introduced in a school system in Virginia to address issues of teacher collaboration. She reflected on the benefits of this initiative to the teachers and students and identified helpful strategies for teacher leaders interested in implementing this initiative in their school. Similar to Robb (2000), through my self-study I was also able to gain insight into best practices and strategies to effectively implement an inquiry-based PLC teacher collaboration structure that would be suitable to address concerns of teacher collaboration within international schools.

Hence, the manual that serves as Chapter 3 of this dissertation is the result of my implementation of this professional development initiative and was derived from my examination of our group's experiences with the inquiry-based professional learning community throughout the 9-month period. My data conveyed that it is essential for school leadership to consider a number of initial factors before implementing the initiative, including consideration of the specific needs of their staff, existing professional development structures, and the desired end goals of the professional learning communities. The data reflects the conclusions of a quantitative research study by

Birman, Desimone, Porter, and Garet (2000) who survey 1000 teachers from around the United States who had participated in a professional development initiative.

Due to my identified role of planner during the self-study that I conducted, a large portion of the manual is dedicated to descriptions, insights, and suggestions for a teacher leader who is planning this initiative in their international school. But, as Michael Fullan (2007) cautions, professional development often fails when too much time is spent on school reform planning and envisioning the final goals with limited time spent focusing on the process to reach those goals. He urges that instead of spending too much time "aiming" or planning, that instead, educators might want to consider acting quickly, and then re-aiming based on results. Thus, the examination of my facilitator role is just as important as the planner role.

In considering the facilitation role that I assumed during the study and my corresponding journal reflections, my manual aligns with the inquiry process described by Dana and Yendol-Hoppey (2008) but includes additional insight in how this facilitation may be altered for the international school setting. Specifically, international school facilitators may need to spend more time in protocols and take more time explaining teacher research concepts so that the diverse international school faculty may better understand the process and participate effectively. Numerous empirical studies (e.g. Borko, 2004; Darling-Hammond & McLaughlin, 1995; Garet, Porter, Desimone, Birman, & Yoon, 2001; Guskey, 2000) describe how knowing the needs of the teacher participants is essential to a successful professional development initiative.

My self-study indicated that my role as participant in the PLC was rewarding but extremely stressful when coupled with my roles of planner and facilitator. Studies by

Fink and Brayman (2006), Smylie and Denny (1990), and York-Barr and Duke (2004) all highlight the challenge of time management that teacher leaders experience. The scholars conclude that teacher leaders need to fully conceptualize time requirements of their endeavors before they begin them, and constantly evaluate the time commitments of their obligations so that they can make pertinent adjustments. Therefore, in the manual I encourage the implementer to assume the role of participant in the PLC, even while I recognize that taking on both the participant and facilitator role may be overwhelming for some novice facilitators. However, in my context, it was important for me to do so to gain credibility and to fully understand the process from the teacher view. Therefore, although I do not claim this combined implementer-participant role to be mandatory for the PLC to be successful, I do believe the combination of both roles may be valuable for teacher leaders during initial implementation.

Finally, as I was embedded in my context conducting this self-study, it became apparent in my planning of the initiative that evaluation and sustainability strategies need to be in place during the initial implementation of this initiative. These strategies are important to ensure that the initiative may continue at the school and be unaffected by the numerous challenges to teacher collaboration that are apparent in international schools. In considering my data and the study by Kilbane (2009) on sustaining professional learning communities, I determined that a database to contain all PLC documents needs to be established, previous examples of completed PLC cycles need to be made available, and a structured reflection of the initiative needs to be conducted by teacher leaders at the end of every processes.

Discussion

Inquiry-based PLCs serve as a professional learning approach that has potential value for any educational professional regardless of their cultural origin, their professional background, or their future aspirations. This is due in large part to the personal aspect of the learning approach that allows participants to investigate their own practice and share learning through a critical yet supportive collaborative format. Research has shown that teacher learning and professional growth can only take place when teachers feel comfortable sharing their own experiences, and thus can explore and critique the experiences of others (Cochran-Smith & Lytle, 1999b; Curry, 2008; Dana & Yendol-Hoppey, 2008). With the frequent turnover of international teachers and the diverse backgrounds that they represent, this is one of the most difficult yet crucial elements for an inquiry-based PLC implementer to establish in an international school. Observing the behaviors of group members early on and implementing protocols that promote open and honest discussion can quickly establish comfort and rapport among PLC members.

As a community of learners, all members need to be involved in meeting planning, agenda creation, and conducting meetings and follow-ups so that everyone is engaged as valued members of the community. According to Englert and Tarrant (1995), when authority is transferred from the PLC leader to the other members, the members will take ownership in the success of their own professional growth, and the success of the collaborative group. The role of implementer (and related roles of planner, facilitator, and participant) can be assumed by anyone in an educational position (i.e. librarian, administrator, curriculum coordinator, sports coach, or designated professional development coordinator for the school). This role does not have to be

taken on by only one individual throughout the PLC process. The use of pre-established protocols allows for the successful facilitation of meetings by novice facilitators with some support by those with more experience.

In observing the behaviors of the group members, it is important for the implementer to establish knowledge about the learning styles of members in the PLC and overall group dynamics. It is important for implementers to record observation notes during the meetings and then reflect on these notes with the next meeting facilitator in order to continuously refine meeting agendas and activities that are conducive to the learning and professional growth of all group members. Similar to how Dufour (2004) describes the professional learning community as an on-going process that requires the teacher to continuously reflect on his or her own learning as well as the learning of their students, it is important for the implementer to be aware of teachers' growth following every meeting. Implementers need to make sure that the same mistakes are not committed from meeting to meeting, and that the facilitators are constantly pushing the group's progress by appropriately providing protocols, structures, and materials that may be best for this continual process.

The administration, members of the PLC, and potential PLC implementers need to be explicitly honest about their goals for the PLC throughout the year. Administration and implementers need to assess how much time they are able to dedicate to this initiative and ensure that they plan goals and accountability measures accordingly. Following the completion of the PLC cycle, the structure and functioning of the group need to be evaluated by all members. This feedback needs to be analyzed and all members need to work together with the administration to reconsider and redesign the

PLC for the following year. Extensive examples also need to be collected from the previous year and considered for use in the upcoming years. Likely the first inquiry-based PLC structure that is created will need extensive redesign to continuously improve and customize the process for a particular school.

Finally, it will take time to develop one's personal style as a professional development facilitator, especially in an international school context, and in negotiating between any other scholar-practitioner roles that educators may have. With the continuously changing dynamics of the international school faculty, a professional development facilitator needs to be even more open to change, and more reflective of their own practice than what may be required in a domestic national-school setting.

Implications for Practice

This was the study of my own practice as a PLC implementer in my international school context. However, it is my intention to share my learning widely and highlight implications for other educators and practitioner scholars. Specifically, my study has implications for international school administrators, teacher leaders, and practitioner scholars.

International School Administrators

As the inquiry-based PLC model described in this dissertation served as a school improvement initiative, there are numerous implications for school leaders. The study was designed to examine the particulars of how collaboration was established in one international school. School leaders should think about their contexts carefully to determine if this type of collaborative structure would support their school. If so, the manual may be helpful as they take steps toward implementing something similar with the help of teacher leaders. It will be important to understand how these kinds of

structures impact teacher retention, which is a challenge for most international school leaders. Also, as most international schools are based on US curriculum formats, principals should think carefully about how to adapt US-based professional development structures for their contexts. Finally, the findings support the idea that principals should empower teacher leaders to try new ways of collaborating and provide strong support for teachers as they engage in collaboration.

International School Teacher Leaders

The findings of this study indicate that an inquiry-based professional learning community may help international school teachers who are attempting to collaborate to improve their practices. International school teachers may want to seek training in PLC facilitation or coaching inquiry in order to dive into the complicated processes described in this study. But even without rigorous training, teachers may be able to take small steps toward implementing collaborative structures like those described in this study. To assist them, international school teachers may benefit from examining free online resources to enhance their individual or collaborative examination of teacher practice.

Practitioner Scholars

This study documented the examination of my own facilitation and participation in an inquiry-based PLC. However, more research is needed to study other aspects related to how these collaborative structures work in international schools different from my own. Though many factors may remain the same for international schools around the world, more collaborative structures in international school contexts need to be studied to establish further conclusions. Additional research is needed, ideally conducted by practitioner scholars embedded in their contexts, to document the impact that participation in these PLC communities has on teacher practice and student

learning. Improvement of student learning and student achievement should be an underlying goal of all professional practice, and additional studies focusing on the connection between teacher inquiry and student learning need to be conducted. Finally, as this study focused on the implementation of an inquiry-based PLC over a 9-month period, practitioner scholars should study long term (multi-year) inquiry-based PLCs at international schools that persist over time. These studies may provide better clarity into the sustainability and longevity of these collaborative initiatives in international schools.

Conclusion

Based on the research provided in this study, an inquiry-based professional learning community seemed to work well in my international school context. It has potential for implementation by teacher leaders in similar contexts seeking teacher collaboration. The documented challenges and benefits of implementing this initiative provide implications for administrators, teachers, and practitioner scholars. In addition, the documented embedded self-study research process provides implications for researchers who pursue the examination of their own teacher practice. Ultimately, the research contained in this study provides further insight into the ever-growing educational context of international schools. It provides a basis for future research concerning the enhancement of teacher collaboration and student learning within the international school context.

APPENDIX A THE DATING GAME PROTOCOL

The Dating Game Protocol

Finalizing Your Inquiry Action Plan

Developed by Jason A. Schipper

Suggested Group Size: 6-8

Suggested Time: 30-40 Minutes Total

In this protocol you will briefly explain your inquiry to a partner, and then your partner will need to answer some questions based on what you shared to them. The protocol is intended to give the participant practice in succinctly explaining their entire inquiry and action plan. It will also convey to the participant whether they have addressed all elements of their inquiry action plan.

Steps

- 1.) Choose a partner (it does not matter who as you will switch partners throughout the protocol).
- 2.) Partner #1 begins by explaining their entire inquiry question, action plan, etc. to partner #2. Then partner #2 shares their entire inquiry question, action plan, etc. (3min each).
- 3.) A question is then posted on the board, and partner #2 will have to answer it based on what they heard during the presentation by partner #1. They then switch and partner #1 answers the question based on the presentation of partner #2 (2 min each).

Sample Questions:

- > Considering the timeframe that your partner described, is the inquiry plan achievable in that time frame?
- Are the data collection strategies aligned with the wondering and all other aspects of the inquiry plan? Are there any strategies that seem out of place?
- > Is your partner utilizing multiple forms of data collection to gain insights into the wondering?
- ➤ Has your partner considered the possibilities of possible adjustments to the inquiry plan and built in the flexibility necessary to make these adjustments? How?
- 4.) After each partner has answered the question based on the other partner's presentation, there is open discussion within the paring on what can be changed/altered/emphasized in each of his or her inquiry questions and action plans (2min).
- 5.) Everyone then chooses a new partner and the protocol starts back at Step 2 with a new question during Step 3.

APPENDIX B SAMPLE CALENDAR OF THE INQUIRY CYCLE PROCESS

Introduce the Inquiry-Based PLC Concept

SEPTEMBER (2hrs)

- Introduction and purpose
- Provide examples of previously conducted inquiry-based PLCs
- Discuss and formulate timeline of events for the school year
- Provide advice on how to begin the self-observation of practice

Observations, Brainstorm Ideas, Begin Creating Action Plan OCTOBER (2hrs)

- Begin observing classroom practice to identify issues, problems, opportunities
- Brainstorm ideas as to what may be their origins or causes, how they could be addressed- ultimately creating the wonderings/inquiry
- Using provided protocol outline, begin to formulate action plan to address inquiry in a structured way and systematically collect data

Share and Revise Action Plan for Critical Feedback

OCTOBER (2hrs)

- Participants share their action plan in the professional learning community eliciting feedback/suggestions
- Based on feedback, action plans are revised or adjusted

Final Preparations and Initial Implementation

NOVEMBER (2hrs)

- Any final preparations are made for implementation of action plan. This could include revising lesson plans, creating new activities, preparing a background knowledge base for students, etc.
- Read scholarly works that may pertain to the specific inquiry topic
- Begin to implement action plan strategies

Review Action Plan and Begin Data Collection

NOVEMBER (2hrs)

- Review action plan implementation strategies, activities, and data collection procedures
- Based on initial action plan implementation, revise any logistical issues
- Begin data collection concerning your addressing of the inquiry

Data Collection and Resources (Data collection should be finished by MARCH) DECEMBER, JANUARY, FEBRUARY (Meetings at discretion of implementer)

- Review of research cycles and progress
- Analysis of initial data collection
- Revision of research questions if necessary
- Critical Feedback on data collected thus far

Data Analysis/ Critical Feedback

MARCH/APRIL (6hrs)

- Data analysis protocol/exercises
- Data organization
- Review of research question
- Peer feedback session
- Review schedule and possible addition of meetings for more feedback/analysis and review of data collection if necessary

Inquiry Write-up Meeting and Additional Feedback Sessions

APRIL (2-4hrs)

- Review of data analysis and results
- Possibilities for inquiry summary and write-up
- Creation of plan for the future and whether specific inquiry needs more time, or a new inquiry cycle should begin

Inquiry Showcase

MAY/JUNE (1/2 day to day-long event)

- Summary presentation of inquiry cycles, action plans, data, and results presented to entire school faculty, administration, and community members
- Elicit feedback from all colleagues and participants concerning the entire cycle process

APPENDIX C SUGGESTED PROTOCOLS FOR THE INQUIRY CYCLE STAGES

Suggested Protocols for use with the International School Inquiry-Based Professional Learning Community

nquiry Action Plan and Collecting Data Future Applications	Protocols	s can be obtained for free fr	om The National School Ref	orm Faculty (2014) Website: www.	.nsrfharmony.org
 Reflective Guide Consultancy Issaquah Back to the Future Constructivist for Adult work Student Work Context Context Litmus Test* Probing Questions The Final Word Consultancy Consultancy Consultancy Consultancy Collaborative Assessment Conference Describing Student Work Examining Assessments The Slice Standards in Practice Success Analysis Text-based Seminar Probing Questions 	Stage 1: Formulate the Inquiry			Stage 4: Analyzing Data	
	 Consultancy Issaquah Constructivist for Adult work Student Work Context 	 I-MAP Consultancy Back to the Future Issaquah Tuning Micro Labs Creating an Action Plan Inquiry Brief* 	 Probing Questions The Final Word Consultancy Issaquah Micro Labs Looking at Student 	 Learning from Student Work (Various) Collaborative Assessment Conference Describing Student Work Examining Assessments The Slice Standards in Practice Success Analysis Text-based Seminar Probing Questions 	 Success Analysis Three Levels of Text Chalk Talk Creating Metaphors

APPENDIX D REFLECTIVE GUIDE PROTOCOL



Reflective Guide

Developed Christelle Estrada, adapted from the original by Gene Thompson-Grove.

In preparation for our meeting, please use this guide to:

- Identify a question about your practice.
- Select student work, or other work/data, that relates most directly to your question.
- 1. What questions do I have about my practice as an educator?
- 2. Which of these questions (from #1) most directly affects student learning? Why?
- 3. Of the questions generated in #2, which ONE question do I want to learn more about with the help of other colleagues? Why this question?
- 4. What data (student work, educator work, or other data) do I have—or can I obtain—that relates most directly to this question? How does this data relate to my question?

Please bring at least 10 copies of the work you have identified along with this completed cover sheet to the meeting.

At the meeting, you will meet with a colleague before your session to:

- Identify the kind of feedback you want to help you adapt your practice to improve student learning.
- Identify the protocol that most appropriately suits your needs.

Protocols are most powerful and effective when used within an ongoing professional learning community such as a Critical Friends Group® and facilitated by a skilled coach. To learn more about professional learning communities and seminars for new or experienced coaches, please visit the National School Reform Faculty website at www.nsrfharmony.org.

APPENDIX E CONSULTANCY PROTOCOL



Consultancy Protocol

The Consultancy Protocol was developed by Gene Thompson-Grove, Paula Evans and Faith Dunne as part of the Coalition of Essential Schools' National Re:Learning Faculty Program, and further adapted and revised as part of work of NSRF.

A Consultancy is a structured process for helping an individual or a team think more expansively about a particular, concrete dilemma.

Time

Approximately 50 minutes

Roles

Presenter (whose work is being discussed by the group)
Facilitator (who sometimes participates, depending on the size of the group)

- 1. The presenter gives an overview of the dilemma with which s/he is struggling, and frames a question for the Consultancy group to consider. The framing of this question, as well as the quality of the presenter's reflection on the dilemma being discussed, are key features of this protocol. If the presenter has brought student work, educator work, or other "artifacts," there is a pause here to silently examine the work/documents. The focus of the group's conversation is on the dilemma. (5-10 minutes)
- The Consultancy group asks clarifying questions of the presenter that is, questions that have brief, factual answers. (5 minutes)
- 3. The group asks probing questions of the presenter. These questions should be worded so that they help the presenter clarify and expand his/her thinking about the dilemma presented to the Consultancy group. The goal here is for the presenter to learn more about the question s/he framed or to do some analysis of the dilemma presented. The presenter may respond to the group's questions, but there is no discussion by the Consultancy group of the presenter's responses. At the end of the ten minutes, the facilitator asks the presenter to re-state his/her question for the group. (10 minutes)
- 4. The group talks with each other about the dilemma presented. (15 minutes)

Possible questions to frame the discussion:

What did we hear?

What didn't we hear that they think might be relevant?

What assumptions seem to be operating?

What questions does the dilemma raise for us?

What do we think about the dilemma?

What might we do or try if faced with a similar dilemma? What have we done in similar situations?

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Members of the group sometimes suggest actions the presenter might consider taking. Most often, however, they work to define the issues more thoroughly and objectively. The presenter doesn't speak during this discussion, but instead listens and takes notes.

- **5.** The presenter reflects on what s/he heard and on what s/he is now thinking, sharing with the group anything that particularly resonated for him or her during any part of the Consultancy. (5 minutes)
- The facilitator leads a brief conversation about the group's observation of the Consultancy process.

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APPENDIX F WONDERING LITMUS TEST

Wondering Litmus Test

- Is the wondering specific?
- Is the wondering focused on student learning or professional growth?
- Is the wondering a *real* question (a question whose answer is not known)?
- Is the wondering a question about which the teacher is passionate?
- Is the wondering a "how can I" wondering?
- Is the wondering free of judgmental language?
- Is the wondering focused on the teacher's own practice?
- Is the wondering a dichotomous (yes/no) question?
- Is the wondering clear and concise?
- Is the wondering doable?

SOURCE: Developed by Nancy Fichtman Dana and Diane Yendol-Hoppey (Dana & Yendol-Hoppey, 2008)

APPENDIX G INDIVIDUAL MONTHLY PLAN (I-MAP)



Individual Monthly Action Plan (I-MAP)

Developed by Debbie Bambino.

What implications does our collaborative work have for your practice between this meeting and the next? What change will you make in your work with students, their families or your colleagues?

Planned Change: (What will I do?) Why am I planning to do this? How will I initiate this change? What supports do I need to be How will I know if I've made What am I going to do? What steps will I take and when will I What do I hope will happen progress? successful? as a result of this change in my Who can help me and what do I What evidence will I review? How will I document my own growth? need from them? practice? take them? Improvements in student learning?

Possible supports, next steps to consider: peer visitation/observation, presenting work at an upcoming meeting, online conversation with other group member(s), reflective journal writing...

Protocols are most powerful and effective when used within an ongoing professional learning community such as a Critical Friends Group[®] and facilitated by a skilled coach. To learn more about professional learning communities and seminars for new or experienced coaches, please visit the National School Reform Faculty website at www.nsrfharmony.org.

APPENDIX H INQUIRY ACTION PLAN (TEMPLATE)

[International School]

Professional Learning Community
INQUIRY ACTION PLAN
PURPOSE:
INQUIRY:
METHODS/STRATEGIES/APPROACHES TO ADDRESS THE QUESTION:
SPECIFIC DATA COLLECTION PROCEDURES:
1.
2.
<u>-</u> .
3.
4.
TIMEFRAME FOR IMPLEMENTATION AND COLLECTION

Inquiry Action Plan (SAMPLE)

[International School] Professional Learning Community- Inquiry Group INQUIRY ACTION PLAN

PURPOSE:

"Voice is the writer coming through the words, the sense that a real person is speaking to us and cares about the message. When the writer is engaged personally with the topic, he/she imparts a personal tone and flavor to the piece that is unmistakably his/hers alone." (www.educationnorthwest.org) As 9th grade students are just beginning their teenage years- years in which they formulate their own identities and personal opinions on widespread issues/topics, it is important that this is a time where their individual voice is cultivated and developed. They may not get the opportunity in later AP/IB classes to express their voice, so now is a vital time to make sure the students have developed the skill of expressing voice in their writing.

The issue that I noticed in my classroom is that many of my students, especially the ESL students, were so used to a rote, surface-level written response that I suspect they may not have had any experience with expressing voice in their writing. When I tried to create writing prompts that explicitly required voice, students still struggled and produced generic, surface-level responses.

INQUIRY:

How can I establish authentic voice in my historical scenario writing assignments?

METHODS/STRATEGIES/APPROACHES TO ADDRESS QUESTION:

- A.) Once a week I will ask the students a free-write question that causes them to think critically and historically by putting themselves in a certain "role" but also asking them to write it as themselves. Ex:// If YOU were to take over a country, what practices would you allow them to keep and what practices would you outlaw? Why?
- B.) Per the suggestion of the PLC, after students write they will share part or all of their response with a partner and discuss what each other wrote.
- C.) Also per the suggestion of the PLC, I will have the students volunteer to share-out when they are finished with the pair discussion.
- D.) Based on my periodic analysis of the data and feedback from the PLC, I will add or alter the way I present the questions and have the students answer them, etc.. I will continue this analysis/feedback/alterations cycle.

SPECIFIC DATA COLLECTION PROCEDURES:

- 1. After the students do the writing and sharing process, I will collect the documents that day in class.
- 2. I will then do a preliminary analysis of the documents by reading through them and making notes at the impressions that I have about how successful they did in expressing their voice.

- 3. Based on these notes, I will write a short diary entry on why I thought they did what/how they did. I will keep adding to this diary each time and it will serve as part of my data collection.
- 4. I will also grade each free-write scenario that my students do each week using the 6+1 writing traits rubric that is specific for the VOICE trait. I will record these scores for each student in an Excel Spreadsheet and will use this as data to refer to when I make my decisions for improvement.

TIMEFRAME FOR IMPLEMENTATION AND COLLECTION

- 1.) Begin weekly 'free-writes' week of Dec. 2, 2013
- 2.) Every week make analysis notes, write diary, assess using 6+1 Traits
- **3.)** Make only minor adjustments until data is presented to PLCs (every 2 weeks) when then major changes could possibly made for the upcoming week's 'free-write' assignment.

APPENDIX I DATA ANALYSIS PROTOCOL

Data Analysis Protocol:

Helping Your Colleagues Make Sense of What They Learned

Suggested Group Size: 4

Suggested Time Frame: 25-30 MINUTES PER GROUP MEMBER

Step One: Presenter Shares His or Her Inquiry [four minutes]—Presenter briefly shares with group members the focus or purpose of the inquiry, what his or her wonderings were, how data were collected, and the initial sense that the presenter has made of his or her data. Completing the following sentences prior to discussion may help presenter organize his or her thoughts prior to sharing:

- The issue/dilemma/problem/interest that led me to my inquiry was . . .
- · Therefore, the purpose of my inquiry was to . . .
- My wonderings were . . .
- · I collected data by . . .
- So far, three discoveries I've made from reading through my data are . . .

Step Two: Group Members Ask Clarifying Questions [three minutes]—Group members ask questions that have factual answers to clarify their understanding of the inquiry, such as, "For how long did you collect data?" "How many students did you work with?"

Step Three: Group Members Ask Probing Questions [seven to ten minutes]—The group then asks probing questions of the presenter. These questions are worded so that they help the presenter clarify and expand his or her thinking about what he or she is learning from the data. During this ten-minute time frame, the presenter may respond to the group's questions, *but there is no discussion by the group of the presenter's responses.* Every member of the group should pose at least one question of the presenter. Some examples of probing questions might include:

- a. What are some ways you might organize your data? (See Figure 5.1)
- b. What might be some powerful ways to present your data? (See Figure 5.2)
- c. Do you have any data that doesn't seem to fit?
- d. Based on your data, what are you learning about yourself as a teacher?
- e. What is your data telling you about the students you teach?
- f. What are the implications of your findings for the content you teach?
- g. What have you learned about the larger context of schools and schooling?
- h. What are the implications of what you have learned for your teaching?
- i. What changes might you make in your own practice?
- j. What new wonderings do you have?

Step Four: Group Members Discuss the Data Analysis [six minutes]—The group talks with each other about the data analysis presented, discussing such questions as, "What did we hear?" "What didn't we hear that we think might be relevant?" "What assumptions seem to be operating?" "Does any data not seem to fit with the presenter's analysis?" "What might be some additional ways to look at the presenter's data?" During this discussion, members of the group work to deepen the data analysis. The presenter doesn't speak during this discussion, but instead listens and takes notes.

Step Five: Presenter Reflection [three minutes]—The presenter reflects on what he or she heard and what he or she is now thinking, sharing with the group anything that particularly resonated for him or her during any part of the group members' data analysis discussion.

Step Six: Reflection on the Process [two minutes]—Group shares thoughts about how the discussion worked for the group.

SOURCE: Developed by Nancy Fichtman Dana and Diane Yendol-Hoppey (Dana & Yendol-Hoppey, 2008)

APPENDIX J DATA INTERPRETATION PROTOCOL

[International School]

Inquiry-Based Professional Learning Community
Data Interpretation- Sentence Completion

2)		 	
3)			
	plan for me/my students for steedback and my reflect	der of the cycle, b	pased on my

SOURCE: Developed by Nancy Fichtman Dana and Diane Yendol-Hoppey (Dana & Yendol-Hoppey, 2008)

APPENDIX K SAMPLE QUESTIONS FOR END-OF-YEAR FEEDBACK

[International School] Inquiry-Based Professional Learning Community Sample Questions for End-of-Year Feedback

Name	
1.)	Do you believe that your professional development as a teacher (AKA your professional practice) improved because of the inquiry-based PLC structure? Why/Why not? Please feel free to describe examples.
2.) I	Do you believe that the achievement(s) of your students increased now or will in the future, due to the professional development inquiry-based PLC? Why/Why not? Please feel free to describe examples.
3.) I	Please provide feedback on any of the following PLC components, and describe any challenges and/or benefits you experienced:
-	Meeting times and frequency
-	Investigating and creating your inquiry question
-	Creation of research action plan
-	Implementing your action plan/activities
-	Collection of data
-	Analyzing of data
-	Sharing information about your own inquiry process

Providing feedback on others' inquiry process

4.) Please share suggestions you have for future PLC work that would provide the most benefit to the faculty and staff of [International School].

How can we better serve the needs of our staff from this model?

How can we better serve the needs of our staff from this model? What implementation changes would be necessary for possible use in other international schools?

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BIOGRAPHICAL SKETCH

Jason Schipper was born and raised in the wondrous city of Hudsonville, Michigan and is a distinguished graduate of Unity Christian High School. After high school, he moved to South Carolina to pursue a Bachelor of Arts degree in history from Coastal Carolina University, which he earned in 2005. He continued his education at Coastal Carolina University and earned his Masters of Arts degree in teaching in 2006. Following his receipt of this degree, he joined the staff at Carolina Forest High School where he taught social studies for three years. He then moved to Bangkok, Thailand where he taught high school history at Ruamrudee International School for two entertaining years.

After five years as a high school social studies teacher, he enrolled in the Doctor of Philosophy degree program in curriculum and instruction at The University of Florida to conduct research on social studies teacher education. His doctoral research then evolved to focus on international school contexts. He transferred into the Doctor of Education degree program to pursue international school research in which he could serve as an embedded practitioner scholar. In 2013, he joined the staff of the American Overseas School of Rome in Rome, Italy to serve as high school social studies teacher and department chair. Simultaneously, he conducted doctoral research at this school and completed his doctorate degree from The University of Florida in December, 2014.

Dr. Schipper intends to continue his research on teaching and student learning within the international school contexts, and expand his research focus to examine the practices of US-based teachers who have had international teaching experience.

Dr. Schipper's dissertation, *Establishing Inquiry-Based Professional Learning Communities in an International School*, was supervised by Dr. Alyson Adams.