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**JAPANESE LESSON STUDY**  
**SUSTAINING TEACHER LEARNING IN THE CLASSROOM CONTEXT**

A Dissertation in

Adult Education

by

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### **Abstract**

The purposes of this action research study were first to explore teacher perceptions of Japanese lesson study as a method of professional development, and second to take teachers through an action research process as they observed the implementation of a literacy lesson in the classroom. Situated Learning Theory, particularly related to teacher learning in the classroom setting, informed the theoretical framework. The study began with interviews with seven grade 5 English Language Arts teachers. Based on the data from the preliminary interviews, four themes emerged including: (a) influential prior educational experiences; (b) barriers to teacher professional learning; (c) effective professional development practices; and (d) concerns of Japanese lesson study.

Sources of data besides the initial interviews, from the Action Research phase included, field notes of data collected from eight learning sessions that were part of the Japanese Lesson Study process, participant journals, critical incident questionnaires. Transcripts of a final interview exploring teacher learning and its effects on their perceptions of professional development and JLS in general was a final source of data. Themes emerging from the Action Research portion of the study included: (a) astounded by JLS; (b) the power of team; (c) learning in context with a peer coaching emphasis; and (d) moving to increased comfort levels.

Further adding to the understanding of situated learning theory, the findings revealed the essential components of adult professional development such that teachers are influenced by the context in which they learn. This is important to consider as teacher-training sessions are often removed from the sites where they feel most comfortable. Teachers were able to overcome barriers to extended learning as a result of increased time and teacher empowerment.

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## **CHAPTER 1**

### **INTRODUCTION**

The purposes of this action research study were first to explore teacher perceptions of Japanese lesson study as a method of professional development, and second to take teachers through an action research process as they observed the implementation of a literacy lesson in the classroom. In order to address these purposes, this chapter includes a background to the study, including its purpose statement and guiding research questions, the theoretical framework, and an overview of the research methodology. Also included are definition of terms, assumptions, strengths, and limitations associated with the study, and the study's significance.

#### **Background of the Problem**

The demands placed on education during the 21<sup>st</sup> century have necessitated professional development sessions that educate teachers on effective methods of instruction that increase higher level thinking in the classroom (Desjean-Perrotta & Buehler, 2000). The release of the K-12 Common Core State Standards in 2010 has connected education globally as teachers can now work from the same standards document. In order to provide consistency in standards for core subjects, such as math and English, states began to recognize the need for common benchmarks across the country. The Common Core State Standards provide clear, understandable and consistent standards for all states, evidence-based rigorous content, and standards aligned with college and career readiness (Pennsylvania Department of Education, 2013). However, the Common Core Standards have increased the rigor demanded in the classroom, thus placing emphasis on effective instruction (Schmoker, 2012). The current economic crisis among school districts limits the abilities of school districts to bring in professional development organizations to educate their teachers on effective methods of instruction, thus necessitating a cost effective

method of professional development that addresses the needs of teachers and situates learning in the classroom (Heibert & Stigler, 2000). Nevertheless, it is clear that continuing education of teachers for their ongoing professional development is important to be able to meet the demands of changing times, including the Common Core Standards.

Japanese Lesson Study, utilized as a form of professional development, will allow teachers to take a closer look at the Common Core State Standards as they analyze and select specific literacy standards that pertain to the lesson which they will develop as a team. Lesson study allows teachers to bring standards to life in actual lessons through careful study of teacher instruction and student response (Fernandez, Cannon, Chokshi, 2003; Lewis & Hurd, 2011; Lewis & Perry, 2010; Yoshida, 1999). Lesson study is a “path for advancement within teaching that does not entail leaving the classroom” and therefore is a cost effective means of professional development that does not require teachers to attend training sessions outside the district (Lewis & Hurd, 2011, p.8)”

Educators must be prepared to teach effectively in the schools of the 21<sup>st</sup> century and be provided with continuing professional development support that enables them to be lifelong learners. Teacher education is a form of adult education, therefore professional developers need to be aware of what the research says about adult learning principles. Teachers need to be provided with environments and opportunities that help them develop habits of learning that will prepare them to address the changes that they face (Fullan, 2007). The Common Core State Standards initiative puts many rigorous and newly organized standards in the hands of teachers. As the new standards are considered, educational professional development is ripe for improvement. For the first time ever, schools across the United States are expected to use a common set of literacy standards to guide their instruction and educators and school leaders are

grappling with the implications. Numerous research studies have found that the teacher is the most important variable in student achievement (Brown, 2011; Louks-Housley et al, 2003; Fernandez, 2003). Thus, more than ever, it is necessary to set the course for stimulating professional development which enhances teacher learning and considers adult learning theories.

As someone who conducts professional development sessions for teachers, I realize the necessity to make the sessions practical and applicable to teachers' classroom practice. Adult learning practices suggest that learning is most sustainable when it is connected to problems in the practice of the learner (Knowles, 1980). At a recent new teacher training session, I was instructing new teachers on the use of metaphors as a way of extending and refining the thinking of their students. As part of the session, teachers created metaphors for staff development, such as "Professional development workshops are vitamins; you have to take them, but you don't always want to. They can be hard to swallow, but in the end they are beneficial." If this is true then staff developers need to look beyond the standard training sessions, where teachers receive knowledge that they may or may not be interested in, and try to find a way to engage teachers through their experiences and interests. Participants who at first may be reluctant to utilize sessions may change their viewpoints of staff development if they are linked to their own experiences and within the context of their classrooms. Learning that is rooted in the situation, such as authentic classroom instruction, may shape and improve teacher instruction (Browns, Collins, & Duguid, 1989).

### **Characteristics of Effective Methods of Professional Development**

For too many teachers, staff development is a demeaning, mind-numbing experience in which they passively sit and get information (Caulfield-Slaon & Ruzicka, 2005). Effective

methods of staff development give teachers opportunities to develop new understandings through personally meaningful learning experiences (Desjean-Perrotta & Buehler, 2000). However, characteristics of effective professional development sessions are not always considered by those developing teacher training sessions. Teacher professional development is clearly a form of adult education, and according to Stafani and Elton (2002), adults learn best if they are actively involved in their own learning and see it relative to their own needs. Knowles (1989) stresses that adults come to an educational activity with vast knowledge that should be recognized. Classrooms are embedded communities of discourse; they offer a window with a view of teaching and learning (Hicks, 1995). The world of a teacher exists in the classroom where they apply daily instructional approaches to the education of students, thus one would assume that beneficial learning for a teacher is situated in the context of the classroom environment. Taking this into consideration, professional development which is situated within the context of the classroom environment would greatly improve classroom instruction (Lave & Wagner, 1991). Grounding professional development in actual classroom practice is a highly powerful means of fostering effective teachers (Lieberman, 1996). Research has shown that, for professional development to be effective, several components of instruction should be considered: reflection on practice, problems arising in practice, subject matter content, and principles of adult learning (Attard, 2010; Birman & Yoon, 2001; Caulfield-Sloan & Puzicka, 2005; Gregson & Sturko, 2007; Kagan, 1992; Greene, 2005; Shortland, 2004).

Reflection on our instructional practices offers opportunities for learning (Honey, 1995; Kuit et al, 2001, Roscoe, 2002). Reflective practitioners are educators who are active learners, who know their values and beliefs, and who regularly set learning goals for themselves (Rideout & Koot, 2009; Kagan, 1992). Reflective practice is about self-awareness. Professional

development can promote teacher reflection (Attard, 2010; Cain, 2010; Chivers, 2003; Powers, Zippay & Butler, 2006). Chivers (2003) found in her study of teacher learning groups that utilizing reflective practice interviews in professional development created an atmosphere that was conducive to learning. In such scenarios, fellow professionals exchanged experiences and dialogued about professional learning. Such support systems not only provided a source of emotional support but created a forum for exchange of experiences and learning.

Many authors suggest that professional development learning activities should be based on the real needs and interests of school staff (Scanlon, Gallego, Duran, & Reyes, 2005; Stefani & Elton, 2002; & Barnett, 2004). Based on conceptual and empirical literature, the best professional development for teachers focuses on problems that arise from instructional techniques in order to encourage teachers to be involved in actual practice rather than reading about descriptions of practice. Staff development directly influences instructional practices and the performance of children in classrooms (Caulfield-Sloan & Ruzicka, 2005; Chivers 2003). Therefore it is important to get to the root of teacher needs for professional development and these needs must be established by teachers and administrators. These needs are often situated in the context of the classroom and centered on curriculum and tools that teachers engage with during day to day teaching.

Research suggests that professional development of teachers that focuses on subject matter content and how children learn it is an essential element for changing teacher practice (Garet, Porter, Desimone, Birman, & Yoon, 2001; Cohen & Hill, 2000). Joyce & Showers (2002), found that effective professional development programs focused on teachers' knowledge of the subject, on the curriculum, or on how students learn the subject, resulting in higher student achievement. The content of what teachers learn is very important. Professional learning

opportunities that are grounded in the curriculum and the Common Core State Standards, which provide teachers with a common understanding of what students are expected to learn, may influence changes in teacher practice.

Teacher professional development should be a part of teachers' continuum of life-long learning and career progression. While many in the field of adult education suggest that adults learn differently from children (Knowles, 1980 & Merriam, Cafferella, & Baumgartner, 2007), like children they still need to be motivated and inspired to learn. Staff development issues should arise out of the observations and discussions complimenting peer observations (Shortland, 2004). Gregson and Sturko (2007), in their study of teacher learning, found that when principles of adult learning inform and shape professional development experiences for teachers, educators are able to reflect on their practice, construct professional knowledge with their peers, and develop more collaborative relationships with colleagues. Several reflection methods utilized in the professional development of adults include: teacher journals, critical incident questionnaires, and the encouragement of critical conversations among adults (Brookfield, 1995).

Based on these findings then, it is clear that for professional development to be effective, it is advantageous that teachers be active reflective participants while studying the content of their curriculum and the problems created by their practice. Learning in the context of the classroom setting also appears to be advantageous in allowing adults to act in and among the tools found within the classroom learning environment. Professional development is the key to instructional improvement (Ball & Cohen, 1999, Lieberman & Wood, 2002; Smith & O'Day, 1990) and Japanese Lesson Study represents many of the features of high quality professional development found in education literature (Borasi & Fonzi, 2002; Darling-Hammond & McLaughlin, 1996; Garet et al., 2001). For example, it involves teachers in learning about



content and is sustained, collaborative, reflective, and practice based (Hiebert et al., 2002; Loucks-Horsley et al., 2003; Stigler & Hiebert, 1999).

While making an argument for professional development situated in the classroom, James Gee (1996) suggests that participating in a particular community's discourse, or the valued ways of doing and being, through guided participation among other teachers could result in meaningful discussion about the classroom setting and the teaching practices found in that classroom. The effectiveness of developing knowledge in context allows teachers to share their knowledge about instruction. Discourses are identity containers full of socially shared ways of acting, talking, and believing. Gee's (1996) examples show how a female middle academic would stand out in a motorcycle bar, as they may speak the language of that setting but not the discourse. Teachers share this same concept of discourse as participants in a community. Their conversations and actions would embody learning beliefs and values learned from working in the classroom setting. Based on this, meaningful professional development must take into consideration both theories of adult learning and models that have proved effective. Interactive staff development embedded in the context of the classroom, with open-ended dialogue among educators, may encourage the deeper reflection needed to make professional development successful. Japanese Lesson Study, performed for centuries among Japanese educators, could be the type of session that takes teacher education in the U.S. to new levels because it connects to both effective professional development and adheres to adult learning theories that give meaning to learning in context.

## **Japanese Lesson Study**

Of all aspects of professional development, sustaining change is perhaps the most neglected. Japanese Lesson Study builds continuous pathways for ongoing improvement of instruction (Lewis, Perry, & Hurd, 2004). It is a comprehensive innovation that can provide teachers with opportunities for practice-based professional development (Stigler & Hiebert, 1999). Lesson study has certain characteristics that set it apart from typical professional development sessions (Takahashi & Yoshida, 2004). First, lesson study provides opportunities to see teaching and learning as it takes place in the classroom. Teachers are able to develop a common understanding of what good instruction entails by looking at actual classroom practice. Secondly, lesson study keeps students at the heart of the teacher training. Teachers observe student and teacher responses and take extensive notes on the entire learning process. Another distinctive characteristic of lesson study is that it is teacher-led professional development. As teachers plan and observe lessons, they are actively involved in the process of instructional change and curriculum building (Takahashi & Yoshida, 2004; Lewis & Hurd, 2011).

Successful professional development must be seen as a process, not an event (Loucks-Horsley et al., 2003). Lesson study is just that, as it shifts teacher learning from a one-time sit and get session to learning as part of teachers ongoing professional life (Mundry, 2005). Lesson Study as a method of professional development has had a long-standing history in most Japanese elementary schools dating as far back as the 1900's (Fernandez, Cannon, & Chokski, 2003).

Many Japanese teachers participate, throughout their careers in a continuous in-service program built around the lesson-study group (Heibert & Stigler, 2000). Small groups of teachers meet regularly, once a week for several hours, to collaboratively plan, implement, evaluate, and revise lessons over the year with the aim of perfecting them. Collaboration is essential to this

process as teachers stay abreast of each other's progress by sharing and commenting on their respective lesson plans as they evolve (Fernandez, 2002). This gives teachers an opportunity to compare and connect what is being learned from the various study lessons conducted by the group. Lesson study would ask American teachers, for whom working in independent isolation is often a norm, to work collaboratively and open up their classes for observation and discussion with peers (Fernandez, 2002). As a practice, it would provide professional development, lifelong learning, more effective instruction and student mastery.

Lesson Study as a form of professional development incorporates many of the effective methods of professional development including: reflective practice, problem based learning, subject matter study, and adult learning principles. It adheres to adult learning principles, particularly those espoused by situated learning theory, which acknowledge that learning is rooted in the situation in which the person participates (Fenwick, 2000). Lesson study is an effective job-embedded model that allows teachers to reflect and collaborate on lessons all the while furthering their mastery of content knowledge and difficulties based on their actual classroom instruction. This is especially important today as school district leaders attempt to deepen teachers' understanding of the new Common Core Standards. Development of content knowledge is viewed as an essential element of professional development (Garet et al., 2001).

Teachers participating in Lesson Study are involved in meaningful discussion, planning and practice as active learners. Participatory training is found to be effective as it involves opportunities to link ideas introduced to the teaching context in which teachers work (Mundry, 2005). Lesson study connects each session to the next so as to foster coherence. It builds upon what teachers already know while developing sustained, ongoing professional communication with other teachers who are trying to change their teaching in similar ways. As teachers are

adults, it is essential to offer professional development, such as Japanese Lesson Study, that is mindful of the principles of adult learning philosophies. However, very few professional development sessions adhere to an adult education framework. Many presume that teachers like to sit and get information (Darling-Hammond & McLaughlin, 1995; Lieberman & Wood, 2002; Perry & Lewis, 2008). Despite the general acceptance of professional development as a necessity to improve teacher instruction, the literature on professional development argues that most of the programs are ineffective (Cohen & Hill, 1998; Guskey, 2002; Loucks-Horsley et al., 1998; Stigler & Hiebert, 1999; Ingvarson et al., 2004; Darling-Hammond et al., 2009). In order to promote teacher learning, literature suggests that professional development should involve teachers in active learning about content, be sustained, collaborative, and practice-based (Guskey, 2002; Hiebert et al., 2002; Loucks-Horsley et al., 2003; Perry & Lewis, 2008). Taking this into consideration, further study of the perceptions of teachers and effective professional development sessions that take place in the context of the classroom setting may be warranted.

There has been relatively little attention, however, within the fields of adult education or professional development literature, to teacher learning situated in the classroom environment among other adults. It is generally accepted that intensive, sustained, job-embedded professional development focused on the content of the subject that teachers teach is more likely to improve teacher knowledge, classroom instruction, and student achievement (Wayne, Yoon, Cronen & Garet, 2008; Yoon, 2007). Furthermore, researchers from older studies have noted the importance of professional development that was school based or integrated into the daily work of teachers (Hawley & Valli, 1998; Joyce & Showers, 2002). Learning, according to Lave and Wagner, (1991) is context dependent and situated within the context in which it occurs. Further examination of teacher learning situated in the classroom setting will add to the research on

professional development. To date, there have been a number of studies on Japanese Lesson Study as a form of professional development in order to explore its usefulness in improving teacher instruction in the area of mathematics (Lewis, 2002; Rock & Wilson, 2005; Doig & Groves, 2011). There is a need for research that examines the supporting conditions that enable lesson study to be successful at particular sites (Rock & Wilson, 2005). A sound theoretical framework to support the use of Japanese Lesson Study is Situated Learning Theory as it supports the implementation of professional learning in the classroom setting (Lave & Wagner, 1991). Teacher dialogue about instruction as it happens within the classroom could elevate teacher learning. Japanese Lesson Study supports this as it situates responsive learning in the context of the classroom. Literacy instruction in the classroom could be studied using the Japanese Lesson Study model to better understand Situated Learning Theory and how it relates to teacher perceptions of professional development and effective English Language Arts instruction.

Quality teaching has been identified as the most significant variable associated with student learning (Darling-Hammond et al., 2009; Rivkin, Hanushek, & Kain, 2005). Educators should be prepared to teach effectively in the schools of the 21<sup>st</sup> century and be provided with continuing professional development that enables them to be lifelong learners. Adolescents entering the adult world in the 21<sup>st</sup> century will read and write more than at any other time in human history. They will need advanced levels of literacy to perform their jobs, run their households, act as citizens, and conduct their personal lives (Moore, Bean, Birdyshaw, & Rycik, 1999). This urgency requires that schools provide professional development opportunities that assist teachers in developing and implementing the very best literacy instruction for students in schools. To date, no study has explored how to embed professional development of best literacy

practices, allowing teachers to apply what they are learning to real classroom settings amongst colleagues.

### **Purpose and Research Questions**

The purpose of this action research study is first to explore teacher perceptions of Japanese lesson study as a method of professional development, and secondly to take teachers through an action research process as they observe the implementation of a literacy lesson in the classroom. As action research seeks to address a problem found in practice, English Language Arts will be the focus of classroom lessons. The district in which I work, seeks to improve upon our communication arts block through the professional development of teachers. The point of this study will be specifically geared to the use of Japanese lesson study as a form of professional development for teachers that teach English Language Arts.

The specific research questions guiding this action research study of literacy educators include:

1. How do the teachers participating in this study make meaning of their Japanese lesson study experience?
2. What about the practice of Japanese lesson study in particular helps teachers to improve their literacy instruction skills?
3. How does this study inform the relationship between Japanese Lesson Study and Situated Learning Theory?

### **Overview of the Theoretical Framework**

The theoretical framework of this study was grounded in situated learning theory particularly as related to the professional development of teachers within the classroom setting. Discourse theory was addressed in order to add to the understanding of learning situated in the classroom context by providing further explanation of the culture and language found within the classroom environment. Situated learning theory gives meaning to learning in context. Adults no longer learn from experience, “they learn in it, as they act in situations” (Wilson, 1993, p.75; Davin, 2006). Situated learning theory, also called situated cognition in the literature, views learning as a recursive process that occurs through participation in the social environment where adults act in and with context and tools (Lave & Wenger, 1991). Discourse theory further explains the situatedness of learning by explaining how language use is derived from a perspective and is context dependent (Gee, 1989). Furthermore, meaning is socially-constructed within discourse communities. Children, like adults, learn to participate in a community’s discourse through guided participation that teaches them to navigate an environment, such as a classroom, using culturally given tools, such as text books (Gee, 1996). Individuals learn the ways of the surrounding culture or classroom through communities of practice (Lave & Wenger, 1991).

## **Situated Learning Theory**

Situated learning theory maintains that learning is rooted in the situation in which a person participates, “not in the head of that person as intellectual concepts produced by reflection” (Fenwick, 2000, p.253; Greeno, Smith, & Moore, 1992). Situated learning theory challenges the perception that learning is a cognitive process that takes place solely in the minds of individuals. It views learning as a collaborative process in which people engage with tools and the environment in which they will be used (Cobb & Bowers, 1999). Learners actively use tools so as to build an increasingly rich implicit understanding of the world in which the tools will be used (Brown, Collins, & Duguid, 1989). It is this authentic activity that shapes and hones the learner’s tools while educating them about the unspoken culture necessary for learning. Thus, it is within the social environment situated in a specific context that learning occurs. In other words, as Beres (2002) states, “knowledge is assumed to be a by-product of participation in and interactions between the individual and environmental elements such as people, equipment, atmosphere and tasks to be completed” (p. 25). Classrooms are embedded communities of discourse. Therefore further examination of the discourse, guided by discourse analysis theory, explains the process of teaching and learning (Stigler et al., 1992).

Knowledge and learning have to be understood as indistinguishably integrated with the setting in which they occur. Lesson Study can be utilized to maximize this assimilation of knowledge and learning in the classroom. Teacher learning in the classroom context can be understood through the use of adult learning theories such as situated learning theory. Situations, such as those observed during lesson study, are thought to co-produce knowledge through activity (Brown, Collins, & Duguid, 1989). Learning and cognition are therefore situated, as adults’ activity in a particular setting is central to the understanding of their learning. Wilson



(1993) points out that context is not merely an important element in thinking about human learning but is central to the understanding of adult cognition. Learning is a social event as it is occurs through discussions, discourse, and observations among other people (Cobb & Bowers, 1999). Adults' ability to think and learn is often structured by the availability of situationally provided "tools". Human thinking is structured by interaction with the setting in which they are in (Wilson, 1993). Japanese Lesson Study, a model of professional development situated in the context of the classroom, engages teachers with the tools and culture found in the classroom, resulting in rich knowledge about instruction.

Situated learning theory reasons that knowledge is socially constructed and learning occurs through participation within a community. These communities are referred to by Lave and Wenger (1991) as communities of practice or "a set of relations among persons, activity, and world over time and in relation with other tangential and overlapping communities of practice" (Lave & Wenger, 1991, p. 8). In other words, it is a process of social learning that occurs when people who have a common interest in some subject or problem collaborate over an extended period to share ideas (Wubbels, 2007). The idea that learning is socially constructed is central to communities of practice (Vygotsky, 1978). Long term professional development investigated by Chin, 1999 supported the establishment of communities of practice. Thus it would be beneficial for teacher educators to have a firm understanding of communities of practice in order to better prepare teachers (Stein, Smith, & Silver, 1999). The social learning that is part of communities of practice gives meaning to the collaboration that is a part of the Japanese Study Method. During Japanese Lesson Study teachers are provided an opportunity to collaborate over an extended period of time about the tools and culture of the classroom in order to gain a better understanding about instruction and how it benefits students.

This understanding, both of the tool and the world, continually changes as a result of their interaction. Knowledge building and acting are seamlessly integrated, learning being an uninterrupted, life-long process resulting from acting in situations (Brown, Collins, & Duguid, 1989). Conceptual tools reflect the collective wisdom of the culture in which they are used as well as the insights of individuals. Learning should involve activity, concept, and culture as the three are intertwined (Brown, Collins, & Duguid, 1989). Teaching methods often try to deliver abstract concepts as independent objects that can be explored in textbook exercises. This does not provide insight into either the culture or authentic activities of members of that culture that learners need. For example, interactive whiteboards are often placed in many classrooms. Frequently trainings for how to use these whiteboards are completed on-line, leaving many teachers in a panic, while they were knowledgeable about the whiteboards and had been educated on their use, but their learning was not situated in a classroom with students. Using Lesson Study, teachers could observe another teacher modeling the use of whiteboards in a student lesson, leaving teachers with an understanding of the concepts and language associated with the interactive whiteboards. After discussion and collaborations about the lesson, teachers could more comfortably and effectively implement whiteboards in the classroom setting with students, applying what they had learned. Thus, learning is not only context dependent but rooted in the situation which a person participates with his or her tools.

Another characteristic of Situated Learning Theory is the interaction with setting as knowledge is grounded in the actions of everyday situations. Effective teacher learning must incorporate gaining knowledge from within the setting in which the teacher functions. Fenwick (2003) states, “Learning is rooted in the situation in which the person participates, not in the head of the person as intellectual concepts produced by reflection” (p. 25). One way practitioners gain

access to meaningful and purposeful action is through authentic activity. Teaching as it happens in the context of the classroom in an authentic activity. Activity leads to representations that play an important role in learning. Representations are dependent upon context. For example, new instructional strategies that are explained at a conference may mean nothing until they are witnessed in an authentic setting. So teachers that want to learn about new instructional strategies may learn more by observing these strategies taking place in the classroom where they are most authentic. It is activity that shapes and hones tools used in instruction (Brown, Collins, & Duguid, 1989). Japanese Lesson Study, with its emphasis on teacher instruction, situates learning in the classroom setting among the tools and social environment that teachers encounter on a daily basis.

The social environment of the classroom deserves analysis as it provides an opportunity to examine teacher discourse and how it relates to student learning. The understanding of child and adult is necessary as it is engagement in activity that is often mediated by discourse, resulting in a child's situational understanding which is shaped so that he or she can be a full participant in the classroom context (Wertsch, 1984). For example, during a journal writing activity, teachers should structure the task based on situational understanding. If students are writing about their knowledge of silkworms, their writing will look different when compared to a story format (Hicks, 1995). The discourses used during writing instruction for science based subjects are framed by textual genres and discourse practices related to science (Hicks, 1995). Literacy instruction encompasses more than just the ability to read and write; it includes the understanding of academic discourses (Gee, 1989). Thus, classroom teachers need to be aware of the instruction used in their classrooms as children come with varying background knowledge,

which may or may not contain an understanding for current subject areas (Gee, 1999; Hicks, 1995; Wohlwend, 2009).

Discourses paint a picture of a person's identity as they reveal socially shared ways of acting, talking, and believing (Gee, 1989), that are connected with literacy education. In education, discourses affect both student and teacher. Thus when interacting with a community, one may try to take on the culturally assumed ways of acting and believing but not speak the discourse. Taking this process of discourse into consideration, it is important to note that each academic discourse employs ideologies as that make it a specific discourse (Lemke, 1990). Thus, learning to talk "literacy" may be in conflict with past learned practices. Teacher participants will bring forth their own learned practices of literacy discourse. Not only teachers but also children possess varying levels of discourses. It will be important to monitor teacher discourse in classrooms as they teach literacy, as academic discourses may be in conflict with some children's homes and community discourses (Hicks, 1995). Japanese Lesson Study offers the opportunity to take a closer look at discourse used by classroom teachers as they are instructing students.

The Lesson Study model explains learning within the framework of situated learning theory, which emphasizes providing experiences in authentic contexts. Situations, therefore, must have at least some important attributes of real-life problem solving, including an opportunity to define and solve problems and engage in collaborative activities (Merriam, Caffarella, & Baumgartner, 2007). The Japanese Lesson Study cycle considers goals for student learning and long-term development, while identifying pressing issues in student learning. Teachers examine research and curriculum related to problems identified in instruction. They collaboratively choose and plan a "research lesson" to study and advance instruction with respect

to this issue (Lewis & Hurd, 2011). While scrutinizing the “research lesson” explicit examination of the teacher discourse used during the lesson will shed light on literacy practices which improve teachers’ instruction.

Teacher educators who employ the benefits of situated learning and discourse theory, using the classroom as a learning environment, may change teacher perceptions of professional development and greatly enhance learning for all. Further research investigating teacher discourse and situated features of cognition as they relate to professional development of teachers will benefit the field of adult education.

### **Overview of the Design and Research Methodology**

This qualitative action research study consisted of seven fifth grade literacy educators that work in the Ephrata Intermediate School. As will be discussed further in Chapter Three, the overall design of this study made use of qualitative and action research methods; it was intended in its action component to understand the perceptions of professional development among literacy educator participants. This section will discuss the assumptions of qualitative and action research, and how these methods were applied to this study.

In qualitative research, there are multiple realities illuminated by the participants (Patton, 2002). It is assumed that knowledge is constructed through social realities, which are a set of meanings developed by the individuals who participate in the study (Merriam & Simpson, 2000). A major purpose of qualitative research is to discover the nature of those meanings or perceptions. According to Merriam and Simpson (2000), the overall purposes of qualitative research are to “achieve an understanding of how people make sense out of their lives, to

delineate the process (rather than the outcome or product) of meaning-making, and to describe how people interpret what they experience” (p.98).

Several authors have identified many prominent characteristics of qualitative research including: the use of the natural setting to observe the phenomena of interest, the use of descriptive data reporting, and the researcher acting as the primary instrument of data collection and analysis (Cook, 2001; Merriam & Simpson, 2002; Patton, 2002).

Qualitative and action research methodologies share a deep respect for the subjective experiences, perspectives, and views of people who traditionally have been the subjects of research (Atweh, Kemmis, & Weeks, 1998). This study employed a qualitative action research component. There are many facets of action research. It uses a spiral of action research cycles including the development of a plan to improve practice, action to implement the plan, observation of the effects of the action, and reflection on these effects for further planning (Herr & Anderson, 2005). These cycles of activities form an action research spiral in which each cycle increases the researcher’s knowledge of the problem and, hopefully, leads to a solution. Action research seeks to address problems found in practice; this study focused on the problem of promoting greater understanding of literacy instruction and teacher perceptions about effective methods of professional development.

Key approaches to action research, in particular classroom action research, includes qualitative, interpretive modes of inquiry and data collection by teachers, whereas teachers make judgments about how to improve their own practice (Kemmis & McTaggart, 1998). In this process, teachers are seen as the researcher and participate in useful educational research that connects directly to their classroom settings. This approach connects directly to the Japanese

method of Lesson Study utilized in this study, in which teachers sought to improve a problem found in their practice through a teacher-led professional development model. Teachers planned and observed a lesson. The observed lessons lead to continued conversations and shared learning by a group of teachers. Through reflective discussions instructional improvements were made and applied to the classroom setting. Just like action research, lesson study builds a collegial networking system and helps practitioners identify problems and seek solutions in order to improve their teaching practice. Therefore, this study was well suited for a qualitative action research design as action research seeks to study and improve one's educational practice while developing a shared knowledge base for one's profession. Qualitative action research design supports the professional development of practitioners by helping them become more competent in understanding and applying research findings directly to the classroom setting (Gall, Gall & Borg, 1999).

This action research study was conducted at the Ephrata Intermediate School in Ephrata, Pennsylvania. Through the cyclical action research phases of planning, acting, observing, and reflecting, participants participated in the Japanese Lesson Study process, during which their perceptions of professional development were explored. In addition to initial and final one-one interviews, the action research included eight group meetings in which the process of Japanese Lesson Study, the curriculum and the Common Core State Standards of their choice were studied. Also instituted was the planning phase of action research. The cyclical phases of acting, observing, and reflecting focused on the literacy classroom lessons developed and observed by the teachers.

Participant selection was based on the following criteria: first, they had to be instructors in the grade 5/6 Intermediate building in the Ephrata Area School District, secondly, they had to

be willing to participate in the lesson study process; finally, they had to be instructing in the areas of reading or writing.

This study began with an initial interview of participants to discover their perceptions of professional development. This was necessary as suggested by the Japanese Lesson Study model in order to gather their perceptions before the start of the planning phase. The planning phase of the study included several meetings beginning in the summer to discuss curriculum and to develop an understanding of the Lesson Study process. Teachers then acted on their curriculum goals, as they related to Common Core State Standards, by planning and observing one lesson during a summer professional development exercise. After reflecting on the initial lesson, a second lesson was designed and retaught in the same classroom on the same day. The data collection process consisted of the initial interview, of documentation during the action phase of the study through extensive notes, participant observation, documents, and of a final interview to gather feedback on the process and to document any changes in their perceptions and the effects of the process. The use of multiple forms of data collection ensured that results were more meaningful with greater validity for practice (Kuhne & Quigley, 1997). The data collection and analysis process are discussed in Chapter Three.

### **Significance of the Study**

This study is significant in a number of ways. It is important to remember that adolescents entering the adult world in the 21<sup>st</sup> Century will read and write more than at any other time in human history. They will need advanced levels of literacy to perform their jobs, run their households, act as citizens, and conduct their personal lives (Moore, Bean, Birdyshaw, & Rycik, 1999). Thus, it is essential that schools provide professional development



opportunities which assist teachers in developing and implementing the best literacy instruction for students. This study is also significant to the field of adult education as principles of adult learning should inform and shape professional development experiences for teachers (Gregson & Sturko, 2007). However, more research which applies adult learning theories to professional development of teachers is needed. This study explicitly used adult learning theory, more specifically, situated cognition, to design and develop literacy professional development sessions for teachers and is significant because it offers a specific model of literacy education and helps teachers to examine and adapt it in their practice. Furthermore, this study will offer insight to the larger U.S. context about the benefits and limitations of Japanese Lesson Study as a form of literacy education.

Japanese Lesson Study as a method of professional development has had a long-standing history in most Japanese elementary schools dating as far back as the 1900's (Fernandez, Cannon, & Chokski, 2003). This model of professional development assures that teacher learning is a process and not just a one- time event. No studies to date have investigated teacher perceptions of Japanese Lesson Study as a method of professional development in the area of literacy. Furthermore, in considering adult learning, the theory of Situated Learning will be the theoretical framework for this Japanese Lesson Study. The educational theory of discourse theory as discussed by James Gee addressed the academic discourse found within learning communities. This study examined the discourse surrounding literacy lessons in the classroom setting and also uncovered what teachers perceived to be effective literacy instruction. The gaps in the literature were addressed by providing a better understanding of teacher perceptions of professional development in literacy.

Using an inquiry approach to professional development requires teachers to identify an area of instructional interest, collect data to analyze it, and then make instructional changes based on the data (Darling-Hammond & McLaughlin, 1995; Lieberman, 1995). Teacher discourse centered on literacy was significant to understanding how students managed their literacy tools in the classroom setting. Analysis of student and teacher actions regarding literacy learning was significant to further understanding effective practices for literacy instruction. This kind of teacher work is analogous to the teacher work conceptualized by Japanese lesson study and action research. Using both Japanese Lesson Study and action research, problems found in the context of the literacy classroom were addressed as a form of professional development. This study was significant as new insights developed through combining adult learning theories to discover what constituted an effective professional development session. The outcomes of this study will serve as a future reference tools for teachers and instructional leaders seeking a professional development model that addresses situated learning theory and discourse theory to guide teacher professional growth and development.

Finally, this study represented personal significance to me as I worked with teachers in the area of literacy professional development. Applying the Japanese model of professional development was new to me, and it allowed me to act in a new role as an action researcher trying to effect change in the way that professional development is typically offered in my district. Previously, teachers have not had the opportunity to learn with a teacher group of this size. In the past, peer and literacy coaching were the only models used in the context of the classroom setting. Involving a community of learners of this size affords the opportunity of large scale building cultural changes in the area of literacy professional development.

### **Assumptions of the Study**

There are always particular sets of assumptions on the part of the researcher that guide any research study. The following assumptions were held by the author as I entered into this study:

1. Learning is not only an individual, cognitive process, but also a social process that is influenced by the context in which the learning takes place.
2. Learning is influenced by the culture we live in.
3. K-12 building cultures influence learning.
4. Professional development of teachers is necessary to promote life-long learning.
5. The teachers selected to participate in this sample wanted to contribute and participate in the goals and research of this study.
6. The knowledge that results from this study will influence both classroom instruction and student learning in literacy.

### **Limitations and Strengths of the Study**

Every study has some limitations as well as some strengths. Some of the potential limitations of this study included:

1. As a qualitative action research study, the results were not generalizable. It will be up to the reader to determine whether the study's results can be applied to his/her educational context and population.
2. My work with teacher participants in this study may have influenced their conduct during the study and the reporting of their perceptions.
3. This study was dependent upon teacher release time from their classrooms.

4. Japanese Lesson Study as conducted in Japan expects teachers to be critical of each other. Cultural practices present in the United States do not often include teachers becoming critical friends.

In spite of these limitations, the study was still strong as an action research study. Some of the potential strengths of this study include:

1. As the researcher and the person that offered literacy professional development in the setting of this study, the staff was already familiar with me as literacy developer. For this reason, it was possible that an environment of trust and respect had already been developed as compared to other research situations where the researcher and participants are unfamiliar with each other.
2. The research was conducted within the authentic context of the classroom setting, a setting that teachers were familiar with and which involved the tools that they utilized on a daily basis.
3. Utilizing an action research model addressed problems in the classroom setting. While the intent of action research is change, it is flexible to allow for changes while the research is in progress. This addressed ongoing inquiry into teacher participants' changing questions and needs, allowing them to reach literacy goals they had set for themselves.
4. While utilizing the Japanese Lesson Study model, teacher content knowledge was increased in the area of literacy; thus, the study served their interests.

### Definition of Terms

1. **Action Research:** Action research is a form of inductive, practical research that focuses on gaining a better understanding of a practice problem, or achieving a real change or improvement in practice context. It follows a cyclical process of planning, acting, observing, and reflecting (Kuhne & Quigley, 1997).
2. **Teacher Professional Development:** Teachers professional development refers to programs and activities that engage teachers in thinking about their own growth and development as well as solving problems in their practice. Teacher professional development should be a part of teachers' continuum of life-long learning and career progression.
3. **Situated Cognition:** Situated cognition is a learning theory which challenges the perception that learning is a cognitive process that takes place solely in the minds of individuals. Situated cognition views learning as a collaborative process in which people engage with tools and the environment in which they will be used (Brown, Collins, & Duguid, 1989).
4. **Tools:** Tools represent the collective wisdom of the culture in which they are used as well as the insights of others.
5. **Communities of Practice:** Communities of Practice are relations among persons and activity over time and in relation with other tangential and overlapping communities of practice (Lave and Wenger, 1991). In education, CoP are a way for teachers to interact with their colleagues as well as with those in authority over them.

6. **Social Constructivism:** Social constructivism recognizes that knowledge is constructed through social interaction and is a shared rather than an individual experience (Vygotsky, 1978).
7. **Discourse Theory:** Discourse analysis is basically the analysis of "language in context". The words we utter simultaneously reflect and are shaped and determined by the context within which we utter them and create the context. For example, elementary school teachers talk (and act) the way they do because they are in classrooms and they are teaching, but their classrooms count as classrooms and they as teachers teaching because they talk (and act) that way. The 'classroom' both pre=exists and shapes our discourse; continued discourse refined the classroom's shape. (Gee, 1989).
8. **Discourse:** Discourse ("capital D") refers to a community's discourse about the valued ways of doing and being through guided participation that teaches them to mediate the surrounding environment using culturally given tools (Gee, 1989).
9. **discourse:** *discourse* ("lower case d") refers to language-in-use. When discussing the combination of language with other social practices (behavior, values, ways of thinking, clothes, food, customs, perspectives) within a specific group (Gee, 1989).
10. **Japanese Lesson Study:** Lesson Study involves groups of teachers meeting regularly over a period of time to work on the design, implementation, testing, and improvement of one or several "research lessons" (Yoshida, 1999).
11. **Research Lessons:** Research lessons are actual classroom lessons, taught to one's students, that are (a) focused on a specific teacher-generated problem or goal of practice, (b) carefully planned, usually in collaboration with one or more colleagues

(c) observed by other teachers, (d) recorded for analysis and reflection, and (e) discussed by the lesson study group members, other colleagues, administrators, and/or invited experts (Lewis & Tsuchida, 1998).

12. **Common Core Standards:** The Common Core State Standards define the knowledge and skills students should have within their K-12 education careers so that they will graduate high school able to succeed in entry-level, credit-bearing academic college courses and in workforce training programs. The standards were developed in collaboration with teachers, school administrators, and experts to provide a clear and consistent framework to prepare our children for college and the workforce.
13. **Reflective Practitioners:** Reflective practitioners are educators who are active learners, who know their values and beliefs, and who regularly set learning goals for themselves (Rideout & Koot, 2009; Kagan, 1992).

## **CHAPTER TWO**

### **LITERATURE REVIEW**

The purposes of this action research study were first to explore teacher perceptions of Japanese lesson study as a method of professional development, and second to take teachers through an action research process as they observed the implementation of a literacy lesson in the classroom. This research addressed a gap in the literature on teacher professional development which is situated in the classroom setting among the tools and social environment where knowledge is constructed, adding to the understanding of effective methods of professional development that afford teachers the opportunity to learn *in situ*.

This literature review focuses on seven main areas of literature that relate to the purposes of this research. First, it begins with a discussion of the theoretical framework that is grounded in situated learning theory, which complements the concepts discussed in the second section regarding discourse theory, such that discourses are identity tool kits brimming with socially shared ways of acting, talking, and believing (Gee, 1990; Foucault, 1972). The third section provides an overview of educational reform influences. The fourth section reflects on traditional professional development. The fifth section focuses on the characteristics of effective methods of professional development. The sixth section will review literature on models of professional development with the final section paying particular attention to Japanese Lesson Study.

#### **Theoretical Framework: Situated Learning Theory**

This study is grounded in situated learning theory, particularly as related to the professional development of teachers within the classroom setting. The classroom setting, used as a context for professional development, has the potential for sustained professional development. Teacher professional development efforts are often criticized by educators for



their lack of continuity and ability to produce effective change in teacher practice and student learning (Calkins, 2012; Hargreaves & Fullan, 2012; Heibert & Stigler, 2000; Loucks-Horsley, Hewen, Love & Stiles, 1998; Sarason, 1983). High quality professional development described in education literature involves teachers in sustained, collaborative, practice-based learning (Heibert et al., 2002, Loucks-Horsley et al. 2003, Stigler & Hiebert, 1999). It is noted that students learn best when taught in the context in which their knowledge is to be applied (Heibert & Stigler, 2000). But this same principle has not been applied to adult learners. Teachers as learners, perform their work in a classroom however; this principle is ignored when designing training sessions for them (Bell, Maeng, & Binns, 2013, Sarason, 1983). Schools are natural settings for learning. Teacher professional development that takes place in the context of the school setting is an ideal place for them to collaborate, sharing what they learn in their classrooms and reflecting on instructional practices. Situated learning theory gives meaning to learning in context and views learning as a recursive process that occurs through participation in the social environment where adults act in and with context and tools (Lave & Wenger, 1991).

### **Situated Cognition**

The perspectives of situated cognition maintain that learning is rooted in the situation in which a person participates, “not in the head of that person as intellectual concepts produced by reflection” (Fenwick, 2000, p.253). In the situated view, experience becomes the activity and takes on a much more active relation to learning. Adults no longer learn from experience; “they learn in it, as they act in situations” (Wilson, 1993, p.75; Davin, 2006). Situated cognition reveals that knowing and learning are defined as “engaging in changing processes of human activity in a particular community” (Fenwick, 2000, p. 253). Knowledge, then, is not an ingredient to be ingested and then transferred to a new situation, but rather a part of the process

of involvement in the situation and interactions between the individual and environmental elements such as people, tools, and culture (Fenwick, 2000; Beres, 2002). Situated cognition purports that knowledge is socially constructed and learning occurs through participation within a community. Thus, it is within the social environment, situated in a specific context, that learning occurs. The terms situated cognition and situated learning theory are used interchangeably in the literature. The two theoretical orientations, cognitive and situated learning, both address key terms such as social practice, context, and situation (Cobb & Bowers, 1999). For the purposes of this research paper, the term situated learning theory will be used.

### **Situated Learning Theory**

Situated learning is a learning theory that challenges the perception that learning is a cognitive process that takes place solely in the minds of individuals. According to situated learning theory, learning cannot be realized or looked at separately from the context/situation in which it occurs (Bell, Maeng & Binns, 2013). It assumes that the understanding of a concept is constantly under construction; hence, knowledge must be learned in an authentic context with interactions between individuals which result in knowledge (Orgill, 2007). Furthermore, it views learning as a collaborative process in which people engage with tools and the environment in which they will be used. Learners actively use tools so as to build an increasingly rich implicit understanding of the world in which the tools will be used (Beck, McKeown, & Kucan, 2002; Brown, Collins, & Duguid, 1989). It is this authentic activity that shapes and hones the learner's tools while educating them about the unspoken culture necessary for learning. This view of knowledge has implications both for our understanding of learning and for the design of instruction (Beck et al., 2001; Bell et al., 2013).

In their study of learning environments, Brown, Collins, & Duguid (1989) offer a number of examples to support their claims that learning is bound by situation/context. One concrete example of situated learning used by the authors is based on vocabulary acquisition in children. They conclude how children learn vocabulary words not by dictionary definitions but rather in the context of ordinary communication. By listening, talking, and reading, 5,000 words are learned per year by the average seventeen year old; in contrast, learning words from a dictionary with abstract definitions and sentences taken out of typical contexts yields only 100-200 words per year. The authors expound upon this by emphasizing that experienced readers implicitly understand that words are situated and, because of this knowledge, will ask for the rest of the sentence or the context before committing themselves to an explanation of a word—a real world example that most have witnessed.

Further confirming the understanding of the theory for situated learning in relation to knowledge and language, Brown, Collins, & Duguid(1989) suggest that “all knowledge is... like language” (p.33). Thus explaining that a relationship exists between the knowledge in the mind of a person and the situation in which it is used. New situations and activities will continually evolve a concept and recast it a richer form. So a concept, like the meaning of a word, is always under construction and dependent upon the situations that manufacture the structure.

There are several assumptions that frame situated learning theory. It has been explained that the understandings that emerge and help a person to participate in a situation are connected with the particular community, tools, and activity of that situation (Lave & Wenger, 1991). Therefore, individuals learn the tools at hand through authentic activity and dialogue with a community (Fenwick, 2000; Brown et al., 1989). Knowledge and learning have to be understood as indistinguishably integrated with the setting in which they occur. Situations, such as those

observed, during teacher lesson study, might be thought to co-produce knowledge through authentic activity (Brown, Collins, & Duguid, 1989). Learning and cognition are therefore situated, as an adult activity in a particular setting is central to the understanding of their learning. Wilson (1993) points out that context is not just an important element in thinking about human learning but is central to the understanding of adult cognition. Learning is a social event as it occurs through discussions and observations among other people. An adult's ability to think and learn are often structured by the availability of situationally provided *tools*. Human thinking is structured by interaction with the setting in which they act (Wilson, 1993).

**Social environment – Communities of practice.** Situated learning proposes that learning involves a process of engagement in a community of practice (Lave & Wenger, 1991). Communities of practice are formed by people who share a concern or passion for something they do, involving members in joint activities and discussions as they build relationships that enable them to learn from each other (Lave & Wenger, 1991; Brown, Collins, & Duguid, 1989). Through community learners interpret, reflect, and form meaning. Community provides the setting for the social interaction needed to engage in dialogue with others to encounter diverse perspectives on any issue (Brown, 1994; Lave and Wenger, 1991). Community is the joining of practice with analysis and reflection in order to share implied understandings and create shared knowledge from the experiences that participants bring with them while partaking in a learning opportunity (Schell & Black, 1997).

Situated learning theory is based on rationale that knowledge is socially constructed and learning occurs through participation within a community. These communities are referred to by Lave and Wenger (1991) as communities of practice or “a set of relations among persons, activity, and world over time and in relation with other tangential and overlapping communities

of practice” (Lave & Wenger, 1991, p. 8). In other words, it is a process of social learning that occurs when people who have a common interest in some subject or problem collaborate over an extended period to share ideas (Wubbels, 2007). The idea that learning is socially constructed (Vygotsky, 1978) is central to communities of practice. Communities, according to Wenger, McDermott, and Snyder (2002), come to existence through an informal process; however, three elements are crucial in distinguishing a community of practice from other groups and communities, including the domain, the community, and the practice. Communities of practice have identities defined by a shared domain of interest. They form a community as members engage in joint activities and discussions. Members of a community of practice are practitioners, developing a shared repertoire of resources: experience, stories, and tools, in short a sustained practice. In other words, communities of practice are collective cultures that develop in specific contexts and settings, within and through which professional identities are created and mature.

Originally, Lave and Wenger (1991) said that learning in CoPs followed a “legitimate peripheral participation in communities of practice” (p.29). Legitimate peripheral participation can be understood as the process by which individuals become part of this community. Newcomers enter a community taking a place at the periphery as they come to understand and learn about the knowledge, skills, beliefs, and behaviors of the members of that community. Members of the community of practice participate in the learning as they move from a position of peripheral participation to more active participation within the center of activity. This active involvement includes participation in knowledge creation within a community (Wenger et al, 2002). This shift from peripheral participation to active participation can also be a bridge between established members of the CoP (Lave & Wenger, 1991). CoPs can be used in education as a way for teachers to interact with their colleagues as well as those in authority over

them in order to develop relationships and a common identity (Wenger et al., 2002; Wenger, 2006).

Researchers in education have suggested that, “these communities evolve over time, and they revolve around norms of openness, scholarly rigor, and collaborative construction of professional knowledge” (Lieberman & Mace, 2008, pp.227). In order to foster learning, the ability of people to learn *in situ*, should be fostered by learner access to practitioners at work (Orr, 1990; Brown & Duguid, 1991). Learning communities evolve through learner participation as the group through a social process, inspires individuals to come to understand and adopt the knowledge, skills, beliefs, and behaviors of the members of that community. Using teachers as an example, it is often within communities of practice that they share information about effective methods, and learn about procedures and practice to improve instruction. Sharing knowledge, constructed through Japanese Lesson Study, allows community members to deepen their content knowledge and share learning goals (Hiebert & Stigler, 2000).

Japanese Lesson study provides a path for improvement within teaching that does not entail leaving the classroom. Learning communities found among Japanese Lesson Study groups are grounded in two assumptions. First, it is assumed that knowledge is situated in the day-to-day lived experiences of teachers and best understood through reflection and collaboration with others who share the same experience and context for learning (Buysee, Sparkman, & Wesley, 2003). Second, it is assumed that actively engaging teachers in collaborative learning communities will increase their professional content knowledge. Utilizing schools as places where teachers learn is ideal as it provides a common unit of analysis: a research lesson, as well as a shared understanding for on-the-spot instruction improvement.

“Making meaning is thus a dialogic process involving persons-in-conversation, and learning is seen as the process by which individuals are introduced to a culture by more skilled members”(Driver et al., 2004, p. 7). Current research includes multiple studies which focus on building learning communities using video technology (Chesbro & Boxler, 2010, Jones & Preece, 2006, Desimone, 2009). These videos can perpetuate conversation between teachers. Long term professional development indicated by Chin, 1999 supported the establishment of communities of practice. Thus it would be beneficial for teacher educators to have a firm understanding of communities of practice in order to better prepare teachers (Stein, Smith, & Silver, 1999; Brown & Duguid, 1991). The mutual engagement present in a CoP allows participants to engage in a collective process designed to build a joint enterprise of a shared repertoire of knowledge and resources that would make a professional development model such as Lesson Study effective. Learning itself becomes a process of enculturation, wherein newcomers move from peripheral participation to full participation as they become socialized and adopt the identity of those within the community. Taking this process into consideration, particular concerns have been expressed in the literature in regard to issues of power and access, issues that tend to problematize the process of legitimate peripheral participation in communities of practice (Fenwick, 2000).

Critics have stressed that not all learning in communities is praiseworthy. People learning in communities often do so unsupervised, all the while reinforcing negative practices that the community is trying to remove (Fenwick, 2000). Furthermore, apprenticed learners may pick up undesirable habits of practice which limit what they can offer the learning community (Salomon & Perkins, 1998).

Also problematic is the question of positionality of people within a system. Power positions within groups are in constant flux; they change with each new discussion or activity. This general flux is noted by Lave and Wenger (1991) as movement from peripheral participation to full participation can be seen as problematic as it hints to a system of governance by which to gain full acceptance one strive for full participation by accepting the values of those in charge (Fenwick, 2000). In other words, as members of the periphery, learners are powerless and are only able to attain power by adopting the identity of those in power. In turn, the dominant discourse and ideologies becomes constant. In this, there is a concern for identity, with learning to talk, act and understand knowledge in ways that make sense to the community. This risk, although, recognized by Lave and Wenger (1991) should be considered as it relates to situated claims.

This perpetuation of cultural norms and ideologies is related to another risk of communities of practice, which involves the issue of admittance. More specifically, the process of legitimate peripheral participation arguably assumes that there exists an equal playing field among all peripheral members, and that as long as they adopt the cultural beliefs, attitudes, skills, and behaviors of full participants, in time they will become fully recognized participants. Similar to statements made by Niewolny and Wilson (2009) in regard to situated learning theories suggest that assumptions inherent in these frameworks leave much to be considered as issues of racism, sexism, other forms of discrimination, and institutionalized or systematic prejudices are not taken into account (Brookfield, 2005).

**Tool dependent.** Tools share several significant features with knowledge. Tools can be understood through their use. Their use often changes the user's view of the world as the user adopts the belief system of the environment in which they are used (Brown, Collins, & Duguid,



1989). People who actively use tools rather than just acquiring them build a better understanding of the tools themselves and of the world in which they use them. This concept of knowledge is illustrated through by Brown, Collins, and Duguid (1989) through their explanation of how people can acquire a tool but be unable to use it. The authors further explain that old-fashioned pocket knives can be used to remove stones from horse's hooves. People may be able to speak of this use; however, only those who have situationally experimented with the tool will be able to use it effectively. As a result, knowledge of the tool itself and the meaning associated with it, are content- specific and therefore, "fundamentally situated" (p.32). The tools learners use are integral to the entire learning process (Fenwick, 2003). The proponents of situated learning theory argue that learning and acting are indistinguishable, learning being a continuous process resulting from acting in situations while actively using tools such as technology, text books, language, and images (Fenwick, 2003; Lave & Wenger, 1988; Brown, Collins, & Duguid, 1989). The tools learners use within interactions, including language, recursively and differentially constitute learning and knowing (Niewolny & Wilson, 2009). The understanding, both of the tool and the world, continually changes as a result of their interaction. Knowledge building and acting are inseparable, learning being an uninterrupted, life-long process resulting from acting in situations among learning cultures (Fenwick, 2003; Brown, Collins, & Duguid, 1989).

Students are often asked to use the tools of a discipline without being able to adopt their cultures (Brown, Collins, & Duguid, 1989). To learn to use tools as practitioners use them, a student must enter that learning community and its culture (Bell et al., 2013). In order to understand conceptual tools, such as mathematical formulas, one must recognize the major assumptions of situated learning, that the understanding of a concept is constantly under construction and knowledge must therefore be achieved in an authentic context surrounded by

tools and interactions of individuals in that setting (Orgill, 2007). Tools reflect the collective wisdom of the culture in which they are used as well as the insights of individuals. Learning should involve activity, concept, and culture as the three are intertwined (Brown, Collins, & Duguid, 1989). Teaching methods often try to convey abstract concepts as independent objects that can be explored in textbook exercises. This does not provide insight into the culture or authentic activities of members of the concepts that learners need. For example, interactive whiteboards are often placed in many classrooms. Often trainings for how to use these whiteboards are completed on-line, panicking many teachers who were knowledgeable about the whiteboards but whose learning was not situated in a classroom with students. Thus, learning is not only context dependent but rooted in the situation which a person participates with his or her tools.

Situated learning theory explains how learning occurs within the JLS model. Lesson Study, used as a form of professional development, affords teachers the opportunity to learn in the context of the classroom setting with the tools which they use during classroom instruction (Doig & Groves, 2011; Fernandez, 2002). Grounding professional development in actual classroom practice is a powerful means of fostering effective teachers (Lieberman, 1996). Work on every study lesson begins with teachers coming together to meticulously plan a research lesson as a group. The actual product of this collaborative planning results in a tool for instruction, a written plan that describes in detail the design of the next lesson (Fernandez, 2002). Lesson Study connects classroom practice to broader school and community goals; creating a demand for improvement of practice through discussion of best practices (Doig & Groves, 2011). Furthermore, Lesson Study provides teachers opportunities to understand the culture, tools, and environments found in the classroom setting (Rock & Wilson, 2005).

The culture and use of the tool act together to determine the way practitioners see the world (Lave & Wenger, 1991). Students and teachers are too often asked to use tools of a discipline without being able to adopt its culture. To learn to use tools as practitioners use them, a student or teacher, must enter that community and its culture like an apprentice (Fullan, 2012). In relation to teachers, the culture of a school must be understood. The recognition of the classroom environment and the students within cannot be overlooked. Whatever the tool may be for a teacher, it is important that he or she practices the use of it within the classroom setting since students can have a profound influence on the success of tools. For example, while teachers are learning how to use the new interactive whiteboard tool, going to a workshop will not be enough. Teachers, like apprentices, must experiment with the tool in the setting in which it will be used (Brant, Farmer, & Buckmaster, 1993). Mastery of content knowledge is essential for good teaching. However, many teachers leave their classroom to learn new concepts or programs. Lesson Study brings this notion to the forefront as situated learning brings meaning to contextualized professional development

Lesson Study allows teachers to learn in the context of their everyday surroundings with tools and content that they utilize daily. It provides a practical setting for identifying problems and trying out instructional methods developed during the research lesson. Hence, Lesson Study is full of opportunities for teachers to deepen their subject matter knowledge as teachers jointly solve problems found in their instructional methods while reading and discussing standards, research articles, and teacher manuals all within the classroom setting (Lewis & Hurd, 2011). While Japanese Lesson Study is not often tied to situated learning, it is a perfect example of it.

**Interaction with setting.** Teaching is a cultural activity, based on methods widely practiced within a culture; therefore teachers do not frequently encounter unique and different

ways of teaching (Hiebert & Stigler, 2000). Although teachers are free to create their own lesson plans, they are bound by the United States' cultural script for teaching so teachers teach as they were taught (Elmore, Peterson, & McCarthy, 1996; Fullan, 2007; Hiebert & Stigler, 2000). Therefore, new teaching ideas have to be sought. Effective methods of teacher training will afford opportunities for teachers to learn in context (Borko & Putnam, 1988; Darling-Hammond & Sykes, 1999; Lave, 1988). Teachers perform their work in a classroom but rarely does training occur in this setting. Students learn best when taught in the context in which their knowledge is to be applied, but this principle has not been applied to teachers as learners.

The understanding of classroom activity and how it applies to teacher training and instructional improvements is essential to effective professional development. Authentic activity is important for teachers as learners as it is the only way practitioners can gain access to meaningful and purposeful action (Brown, Collins, & Duguid, 1989; Hiebert & Stigler, 2000). Activity leads to representations that play an important role in learning. Representations are dependent upon context (Lave & Wenger, 1988). For example, new instructional strategies that are explained at a conference may mean nothing until they are witnessed in an authentic setting. So teachers that want to learn about new instructional strategies may learn more by observing these strategies taking place in the classroom where they are most authentic. It is activity that shapes and hones tools used in instruction (Brown, Collins, & Duguid, 1989).

The importance of surroundings becomes apparent when trying to provide directions or read from a map. Courtney and Maben-Crouch (1996) found that learning transfers more easily when a natural learning environment is created. A natural learning environment engages learners in solving authentic, non-routine problems likely to be encountered in the classroom setting. Many people secure their interpretation by situating their reference. Thus, knowledge comes

coded by and connected to activity and environment in which it is developed (Brown, Collins, & Duguid, 1989).

Teacher educators that employ the benefits of situated learning, using the classroom as a learning environment, may change the perceptions of teachers and greatly enhance learning for all. Further research investigating situated features of cognition as it relates to professional development of teachers will benefit the field of adult education. The Lesson Study cycle considers goals for student learning and long-term development of teacher instructional goals, as well as gaps, while identifying pressing issues in student learning. Teachers examine research and curriculum related to problems identified in instruction and collaboratively choose and plan a *research lesson* to study and advance instruction with respect to the issues at hand in the classroom (Lewis & Hurd, 2011). Lesson Study takes into account the culture of the school by breaking down barriers in instruction while confronting teaching in isolation. Furthermore, deeper understanding of the ideologies, systems of values, beliefs, and social practices found in the culture of the school setting will shed light on meaningful professional development.

Constructivist learning theorists have argued that situative claims are misguided in their insistence that knowledge is context dependent (Anderson, Reder, & Simon, 1996). They insist that learners have shown that they are able to master knowledge in one context and apply this new knowledge to a different context. However educational scholars will point out that teacher learning is most successful when it takes place in the context of practice, or the school setting among the tools in which their knowledge is to be applied (Hargreaves & Fullan, 2012, O'Donnell & Tobbell, 2007; Hiebert & Stigler, 2000, Sarason, 1983). Therefore, it is essential to continue studying the benefits of situated learning in teacher professional development.

The collaboration that occurs in JLS has ripples throughout the school context, as teachers become more willing to open their classroom and applaud learning which is situated among teachers and students (Hiebert & Stigler, 2000). Isolation is the enemy of improvement. Japanese teachers see and discuss about ten research lessons a year compared to the U.S teacher who has very few opportunities (Yoshida, 1999).

JLS can be utilized for the assimilation of knowledge and learning in the classroom. JLS, as a form of professional development, constantly brings new situations and ideas to the context of the classroom setting resulting in richer knowledge about instruction. Situated learning theory emphasizes learning in the classroom among the culture and discourse of both teachers and students.

### **Discourse Theory**

Classrooms are embedded communities of discourse (Hicks, 1995; Wohlwend, 2009). Educators have begun to recognize that educational reforms require addressing traditional classroom discourse practices (Hicks, 1995; Stigler et al, 1992; Lonergan et al., 2012). Educational reform efforts that have made discourse a centerpiece include efforts from the academic disciplines of English Language Arts and mathematics and illustrate how research on discourse has played a key role in attempts at improving classroom teaching and learning (Hicks, 1995; Hiebert & Stigler, 2000; Wohlwend, 2009).

In the domain of English Language Arts instruction, Palincsar and Brown (1984) developed a set of discourse strategies for scaffolding students toward higher level comprehension. Reciprocal teaching was developed and explored as an instructional model that could be utilized by teachers for explicit modeling of dialogic routines, such as summarizing,

questioning, clarifying, and predicting, that are implemented after students' reading of a text. The students eventually become naturals at initiating these forms of discourse themselves.

Numerous mathematics educators have focused explicitly on discourse in work that has examined processes of teaching and learning (Hicks, 1995). Discourse practices in Japanese mathematics teaching have been explored as a means of re-examining mathematics education in the United States (Hiebert & Stigler, 2000). Collaborative teams of teachers and researchers have explored the forms of reasoning and community building that occurs when teachers and students engage in new forms of mathematical discourse (Meng & Sam, 2011). In order to add to the research on discourse, this study investigated teacher classroom discourse in the area of English Language Arts.

This study addressed a second framework that examined teacher discourse and how it pertained to effective instructional methods used in the context of the classroom setting. This framework, discourse theory, is discussed in the following section. Discourse and shared activity are found in many facets of life. Discourses are pictures, painted with socially shared ways of acting, talking, and believing (Gee, 1989), that are connected with literacy education. Gee further explains this notion with an example related to shared ways of knowing. If a middle class academic were to walk into a motorcycle bar, he or she may speak the language of that setting, but not the discourse. Therefore, the academic would be immediately recognized by his or her appearance, actions, and language as a nonmember of the social group that is identified with that setting (Gee, 1990). Discourse is used to describe the tool kit that participants in a community share (Gee, 1990, 1989). It is important to add that academic discourse also serves such ideologies; they are also discourse (Gee, 1989). Thus learning to talk math or reading involves more than just learning a set of linguistic forms; it also involves learning beliefs and

values (Lemke, 1990; Gee (1989, 1990). These academic discourses may be unfamiliar to children who have not experienced such discourse at home, thus it is important to have discussion about the discourse used by teachers during instruction in the classroom (Guskey, 2002; Hicks, 1995).

Discourse theory further explains the situatedness of learning by explaining how language use is derived from a perspective and is context dependent (Gee, 1989). In education, teachers come to professional development sessions with espoused platforms, already equipped with values and beliefs about instruction in the classroom. Therefore, professional development cannot be a one-size-fits-all opportunity (Guskey, 2002; Fullan, 2012). Teacher's background knowledge should be considered in designing their professional development sessions. Teacher learning initiatives can center on teachers carefully examining their practice (Fernandez et al., 2003). Many are convinced that embedding teachers' learning in their everyday work, situated with tools and discourse used for instruction, increases the likelihood that this learning will be meaningful (Rowley & Hart, 2000; Fernandez et al, 2003; Lieberman, 1996). Learning situated in the classroom with students will address learner awareness as teachers collaboratively discuss what unfolds during a lesson (Fernandez, 2002). Teachers can use their plethora of knowledge to address gaps in teacher instructional methods as it relates to discourse during the lesson.

The process of teaching and learning in relation to discourse would suggest that children learn academic discourses through repeated participation in meaningful social activity (Rogoff, 1990). As previously discussed, James Gee's terminology notes that children in different communities are encultured into different discourses that reflect language practice, values, and ways of acting and believing which are characteristic of their communities (Gee, 1989). Therefore, teachers need to be aware of their classroom discourse and instructional methods used



so as not to talk above students. Classroom teachers enhance knowledge and the learning process through local, situated, everyday interaction (Hicks, 1995). It is during these classroom discussions that children's conceptual understandings are constructed through talk (Hicks, 1995). Language, dialogue and shared understanding are all important components of the individual learner's process. Taking this into consideration for both teacher and student is essential.

Teachers need to be aware of the discourse they use during the literacy instruction as children's home and community discourses may be in conflict with teacher academic vocabulary (Hicks, 1995). Discourse is a mediator of children's learning in educational settings (Hicks, 1995). The *zone of proximal development*, as explained by Vygotsky (1978), is where the more capable adult initially structures the activity for the child by providing explicit direct instruction. At this early point in instruction, the child's situational understanding may be quite different from that of the adult (Vygotsky, 1978). Teacher instructional discourse plays an important part in a child's understanding of lesson components (Gee, 1989). It is through repeated joint participation in an activity during which the adult gradually encourages higher levels of learning that the understanding of the adult and child become more similar as discourse has been shared during the learning experience (Wertsch, 1984). The child's situational underpinnings are shaped, often mediated by discourse, so that he or she can be a full participant in the classroom setting or educational world.

The *zone of proximal development* further explains the importance of teacher discourse and the need for teachers to collaboratively study instructional discourse as part of a professional development session such as lesson study. For example, when instructing students on how to write an opinion piece, teachers may first instruct students on the components required in this mode of writing. A teacher will need to consider student background knowledge as the student

“zone of proximal development’ will vary. Some may require instruction on what arguments are while others may need to analyze an entire opinion piece. Nonetheless, it is important to note the classroom discourse as academic discourses are negotiated situationally within the classroom. Teacher professional development that considers the discourse used during English Language Arts lessons will be powerful as it will develop instructional methods so as to increase student achievement.

As discussed above, educators come with background knowledge which can shape learning in the classroom. Discourses of both students and teachers are important instructional elements that should be considered when studying the dynamics of a lesson. Situated learning theory addresses authentic learning where students are part of the learning equation. Discourse theory connects to situated learning theory as the discourse used in the classroom is part of the context in which students learn and where teachers are the instructors responsible for their learning. The setting where learning takes place needs to be analyzed as students may become disengaged without teacher awareness. Group critique of instruction, used in Japanese Lesson Study, brings awareness to both teacher discourse and effective instruction.

JLS, as a method of professional development, offers opportunities to analyze discourse used in the classroom setting. Teachers can provide feedback to their colleagues as they watch the “research lesson” unfold in the classroom. The discourse used in the lesson will be of importance as teachers watch how students respond to the teacher teaching the lesson (Fernandez, 2002; Fernandez et al., 2003). For example, Japanese who participate in lesson study, strongly emphasize the importance of gathering concrete data to explore lesson study research questions (Yoshima, 1999; Fernandez et al., 2003). Evidence can be scripted discourse used during the lesson. American teachers have a hard time providing concrete evidence to

support claims made during the lesson, as they often take on the role of another set of hands (Guskey, 2002; Hiebert & Stigler, 2000; Fernandez, 2002; Fernandez et al., 2003;). Professional developers that foster an understanding of the role that discourse plays in student learning will take teacher learning to new levels as they develop effective literacy lessons. Teacher discourse and the situated features of cognition as they relate to professional development of teachers could be the keys to effective staff development sessions pertaining to lesson study.

### **Education Reform**

This section provides an overview of educational reform influences which shed light on professional development of teachers, with the purpose of identifying models and characteristics of effective teacher professional development. Current political contexts in the United States have spurred incidents in education where schools are closed or taken over in an effort to reform failing schools (Beabout, 2012). However, adult learning theory that informs the professional development of teachers is often overlooked when designing learning sessions for teacher in order to improve weak schools. A school that can promote collaboration among teachers in solving the problems of practice requires specific cultural conditions that are reflective of adult learning (Beabout, 2012). When understood, these cultural traits, promote successful school change.

High-quality professional development is a central component in nearly every reform movement discussion in education. Any school reform effort is deeply connected to the learning culture of a school, the collaboration of teachers and school leaders (Calkins, 2012; Hargreaves & Fullan, 2012; King & Bouchard, 2011). Policymakers increasingly recognize that schools can be no better than the teachers who work within them (Guskey, 2002). Therefore, it is essential that professional development of teachers be of high quality. While professional development

programs vary widely in their content and format, most share a common purpose: to “modify the professional practices, beliefs, and understanding of school persons toward an articulated end” (Grif, 1983, p. 2). In most circumstances, that end is the improvement of student achievement. Professional development sessions are systematic efforts to bring about adjustment in the classroom practices of teachers, in their attitudes and views, and in the learning outcomes of students.

However, recent reforms spurred by No Child Left Behind legislation, which sought to improve teaching and learning in schools have all but failed. Despite hundreds of millions of dollars of new funding for reading instruction, reading scores in the United States have flat lined (Calkins, 2012). Fullan (1993), who draws on decades of research on school reform noted, “The main problem in public education is not resistance to change, but the presence of too many innovations mandated or adopted uncritically and superficially on an ad hoc, fragmented basis” (p.23). He later suggested that professional development found in schools today is merely low-cost meetings to implement laid-on agendas (Fullan, 2012). Reeves (2010) also found that many schools are flooded with a constant stream of new initiatives, few of which are implemented with rigor or sustainability over time. The lack of attention given to successful methods of professional development of teachers is problematic and deserves attention as the success of educational reform hinges on the effectiveness of teachers (Valerie, 2012; Garet, Porter, Desimone, Birman, & Suk Yoon, 2001).

Schools are no better than the teachers and administrators who work within them (Guskey, 2002). Teachers are among the most powerful influences on learning (Hattie, 2012). Furthermore, it has been recognized that professional development of teachers is essential to improvement in education; however, past trends point out the ineffectiveness of most programs

(Cohen & Hill, 2000; Fullan, 2012; Hattie, 2012). The majority of programs fail because they do not take into account what motivates teachers to engage in professional development and the process by which change in teachers typically occurs (Cohen & Hill, 2000; Hattie, 2012; Levin, 2008). Teachers attend professional development in order to expand their knowledge and skills in order to enhance their effectiveness with students (Guskey, 2000; Hattie, 2012). They also hope to gain specific, concrete, practical ideas that relate to the day-to-day operation of their classrooms (Guskey, 2000; Fullan, 2012). The heart of school improvement rests on improving daily teaching and learning practices in school (Levin, 2008; Hattie, 2012). Schools need sustained programs of improvement in which teams work together to solve the dilemmas in learning (Hattie, 2012; Fullan, 2012; Guskey, 2000). Hence the need to examine school culture and how it influences teacher growth.

### **School Culture as an Impediment to Reform**

In order to overcome barriers in the U.S. system of education which hinder situated learning among teachers, it will be necessary to examine professional practices outside the U.S. Educational change literature stresses the need for a school culture that embodies trust as a necessity for change (Bryk & Schneider, 2002). Changing instruction within classrooms requires collaboration and trust: collaboration which examines practice while allowing an open forum for dialogue and critique (Nathan, 2009), and trust in the professional abilities of teachers to make informed instructional recommendations (Beabout, 2012). Collaborators evolve into learning partners, equally invested in each other and in improving achievement (Schlechty, 2006). Most school settings do not afford time for teachers to collaborate and offer peer critiques. The American school culture needs to change in order to create an atmosphere which is situated

within the school setting and conducive to teacher learning (Fernandez, 2002; Fullan, 2007; Hargreaves & Fullan, 2012; Guskey, 2002; Heibert & Stigler, 1999) .

Learning situated in the classroom setting is essential as experienced teachers seldom become committed to a new instructional approach or innovation until they have seen it work in their classrooms with their students (Guskey, 2002). However, moving from success found in individual classrooms to collaboratively opening classrooms up for candid discussion and observation is a challenge for American teachers (Fernandez, 2002; Fernandez et al, 2003). American culture has a tendency to reinforce the value of the individual while downplaying the role of groups and collaboration (Montuori, 2005). There is a long history of teacher isolation in Western societies which limits the sharing of knowledge and true collaboration in solving the problems of practices. Literature has revealed that in Europe and Japan there is much less pronounced individualism but rather group efforts (Montuori, 2005). Japanese in particular, more specifically their teacher discourse and practices, generally focus on collaboration and group efforts (Tatsuno, 1990). Schools that see success are those that support the collaboration of teachers and provide conditions that sustain student achievement (Hargreaves, 2011).

**Meaningful school reform.** The National Common Core State Standards offer reform opportunities which could allow schools to make shifts in the structure of their professional learning options for teachers, while building a culture of high expectations and professional study. Encouraging teachers within a school to observe each other, to plan together, and to adopt shared teaching methods can dramatically improve teaching and learning in a school (Nye, Konstantopoulous, & Hedges, 2004). Success found in other countries may be important learning opportunities for leaders in the United States. High performing countries such as Finland, Singapore, and Japan may shed light on changes in professional development that may increase

teacher and student learning. For example, teachers in Finland spend less time in the classroom each week than teachers in any other developed country (Hargreaves & Fullan, 2012). They have time to collaborate as a group in professional study circles. In contrast, collaboration is not often facilitated in North American schools. Teachers are engaged in teaching during the vast majority of their daily working time in school, which leaves little time for professional development activities among colleagues (Hargreaves & Fullan, 2012).

If the school culture is not conducive to learning, teachers may not be encouraged to partake in professional learning activities (Guskey, 2002; Hargreaves & Fullan, 2012; Lonergan, Simmie, & Moles, 2012). In contrast, supportive, collaborative, learning communities inside schools have provided teachers with an organizational setting conducive to continuous learning (Lieberman, 1995). Further research on collaborative efforts among teachers within the school setting is essential to understanding knowledge-in-practice, resulting in a more situational view of knowledge, as teachers are integral to the experience of learning (Garrison, 2006; Knight, 2002). Professional development based on this belief would promote learning opportunities among other colleagues to improve instructional practices within the classroom setting.

**High quality teaching and learning as a foundation for reform.** To provide high quality teaching and learning, a culture of collaboration needs to be facilitated and supported (Servage, 2008; Barnett, 2004; Garet, Porter, Desimone, Birman, & Yoon, 2001 ). If collaborative cultures are left entirely to spontaneity and chance, a lot of collaborate effort will dissipate while providing no long lasting effects on instruction (Hargreaves & Fullen, 2012). In defining effective professional development, researchers have found that it should be sustained and content-focused thus resulting in a change in practice and increased student achievement (Blank, de las Alas & Smith, 2007; Darling-Hammond & McLaughlin, 1995). Many scholars

are now emphasizing job-embedded learning, context for learning, and collaborative teacher learning (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). These scholars have noted, “Teachers who engaged in a structured dialogue to solve problems of literacy learning ultimately researched and adopted new practices which influenced student learning (p. 13)” and “In the process of making their work public and critiquing others, teachers learn how to give and receive constructive feedback for students (p.15).”

In building a culture of excellence which includes high performance and ongoing professional study, thinking and reasoning cannot happen in a vacuum. It should be the result of excellent teachers opening the doors of their classroom so that the entire school can benefit from shared best practices. The sharing of practices will be essential in moving forward with the adoption of the CCSS. The Common Core State Standards represent the most sweeping reform of the K-12 curriculum that has ever occurred in this country (Calkins, Ehrenworth, & Lehman, 2012). No single document will have had more influence on what is taught in our schools (Calkins, Ehrenworth, & Lehman, 2012). Thus it will be essential to provide professional development that rests in improving daily teaching and learning practices in schools (Hargreaves & Fullan, 2012; Hattie, 2012).

Educational reform and specifically Common Core Standards will raise the bar for teachers and those responsible for training and developing teachers. It will require collaboration to share best practices in order to create a culture of educational excellence. Leaders in education will need to consider effective methods of professional development when designing faculty trainings, otherwise growth in education will remain stagnant.



### **Traditional Professional Development**

As discussed previously, staff development is critical to improved student learning; therefore, collaboration and dialogue among colleagues is essential (Hargreaves & Fullan, 2012; Hattie, 2012; Fernandez, 2002). Staff development sessions are ideal places to encourage life-long learning and promote district learning goals so that all teachers are on the same page. Unfortunately, the literature regarding current faculty development practices does not paint that picture. Arnold (1995), in a discussion of faculty development, noted that traditionally most staff development methods were based on the assumption that teachers have little to offer and resulted in little engagement with what teachers already know. This passive method of learning has been criticized for use with adult learners. Despite the time and effort, the outcomes of professional development are not always as anticipated leaving some teachers disappointed. In a large-scale study of secondary math teachers, much professional development appears to be ineffective (Ingvarson, Beavis, Bishop, Peck, and Elsworth (2004). Reporting on professional development trainings to deepen content knowledge, Banilower, Boyd, Pasley, and Weiss (2006), found that sessions were abandoned in order to deal with more pressing concerns for material management.

Typically, most teachers attend fragmented professional development sessions without sustained feedback or collaboration with colleagues (Guskey, 2002; Rock & Wilson, 2005). When teachers participate in traditional professional development their attendance does not ensure their learning. Further, what they learn may not be meaningfully applied in their classroom (Scanlon, Gallego, Duran, & Reyes, 2005). Traditional staff development sessions neither acknowledge teachers' interest and commitment to a new practice nor help them to make links to their beliefs about effective practice (Gersten, Baker, & Chard, 2000).

An interactive staff development that allows the teacher to be part of the planning, analysis, and refinement of instructional strategies has been found to be effective (Scanlon, Gallego, Duran, & Reyes, 2005). Teachers are motivated when they feel ownership about decisions that affect teachers themselves (Hattie, 2012). Professionals who feel they contribute to the development of other teachers by being part of a high performing team which is not about individual accountability but about powerful collective responsibility will increase the quality of the of the whole teaching profession in a building (Hargreaves & Fullan, 2012).

Teachers come to staff development with beliefs and knowledge about teaching. The relationship between the knowledge and opinions that teachers bring and what staff developers offer is critical to the acceptance of new instructional practices (Scanlon, Gallego, Duran, Reyes, 2005). Teachers most frequently employ practices they perceive as congruent with their current teaching philosophies and beliefs about effectiveness. Teachers' beliefs and commitments are the greatest influence on student achievement (Hattie, 2012). School learning will not improve markedly unless teachers are provided with the opportunity and support they need to advance their craft by increasing the effectiveness of the methods they use (Stigler & Hiebert, 2003). JLS, a method for staff development, focuses on the direct improvement in teaching in context (Fernandez et al., 2003; Fernandez, 2002; Stigler & Hiebert, 2003). Teachers who participate in lesson study see themselves as contributing to the development of knowledge about teaching as well as to their own professional development (Guskey, 2002; Stigler & Heibert, 2003).

Staff development directly influences classroom instruction (Caulfield ,2005). To encourage transfer of learning from the workshop setting to classroom practice, teachers may need classroom application assignments based on newly acquired information and continued professional dialogue. Literacy coaches, using their range of knowledge, experience, and skills

often support teachers (Stover, Kissel, Haag, & Shoniker, 2011). For example, embedded professional development may take place in the classroom setting, with a focus on teacher-centered learning through the use of differentiation and reflection between the teacher and literacy coach. Whether or not coaches are available effective professional development includes ongoing demonstration, practice, feedback, and reflection over time (Joyce & Showers, 2002; Mraz et al., 2009; Stover et al., 2011). For meaningful instructional changes to occur, teachers must have a voice in the process of their own learning (Stover et al, 2011). Successful professional development should allow for reflection, collaboration, and acknowledge the needs and interests of teachers (Anderson & Olson, 2006; Desimone, 2009; Taylor, Pearson, Peterson, & Rodriguez, 2005).

Traditional professional development is like coins found in an old coat worn during a trip to Europe. The coins are of no use in the United States as they are foreign currency. One would have to be in the right context for the currency to be spent. Similarly, professional development is of no use if teachers attend sessions only to return to their room and file documents in a cabinet to be found later. Just like the forgotten coins found in the pocket, the materials learned will soon be left to collect dust unless instructional elements learned are immediately practiced in the classroom setting.

### **Recognizing Teachers as Adult Learners**

Since this study focused on the perceptions of teachers who are adult learners, further explanation of adult education practices is essential. Knowles (1980) found that adults have a vast set of experiences that should be tapped into at all stages of the learning process, including planning and evaluation. Adult education practice involves trusting the learners and acknowledging their experiences and ideas which facilitate their growth when applied to newly

learned knowledge (Guglielmino, 1993). Keeping in mind that teachers are adults, staff development should follow these basic principles. Effective staff development programs should give adults opportunities to develop new understandings through personally meaningful learning experiences (Barnett, 2004). This learner centered vision of faculty development is grounded in progressive educational theory and can happen in many different settings.

According to Stefani and Elton (2002) adult learners learn best if they are actively involved in their own learning and see it relative to their own needs. For continuing development of professionals, these needs often arise out of their own practice and are found in their classroom settings, thus establishing a need for job-embedded learning (Desimone, 2009; Anderson, 2006; Joyce & Showers, 2002). Job-embedded coaching, which supports adults in the environment where they feel most comfortable, takes professional development sessions directly into the classroom, while increasing the rate of application of concepts learned in training sessions (Mraz, 2009; Stover et al, 2011). The application rates of concepts learned in trainings are low unless accompanied by practice and coaching from peers or by staff developers (Joyce & Showers 1988/2002).

Thus, understanding what makes professional development effective for adults is critical to understanding the success or failure of many educational reform efforts. Teachers experience a wide range of activities and interactions that may increase their content knowledge and instructional skills as well as contribute to their personal growth as teachers (Desimone, 2009). Further research in understanding what constitutes effective professional development for teacher learning is necessary (Desimone et al., 2002; Garet et al, 2001; Guskey, 2002). The features of professional development are what matter most when considering changes in knowledge and skills and classroom practice (Desimone et al, 2002; Garte et al, 2001). Recent

research offers a consensus regarding some of the characteristics of professional development that are crucial to increasing teaching knowledge and skills including reflection, practice based, content focus, and meaningful professional development for adult learners ( Attard, 2010; Barnett, 2004; Cain, 2010; Chiveres, 2003; Cohen & Hill, 2000; Desimone et al., 2002; Desjean-Perrota & Buehler, 2000; Egawa, 2009; Guskey, 2002; Guskey & Sparks, 2002; Loucks-Housle et al., 2003; Shortland, 2004).

### **Characteristics of Effective Methods of Professional Development**

It is essential to understand effective methods of professional development when designing teacher training sessions. Despite what is learned in research, school districts do not always consider effective methods when planning staff development days and teachers often continue their learning behind closed doors without collegial support.

As Egawa (2009) explains, reflecting on learning and instructional methods as well as peer collaboration may be the answer to teacher isolation. The combination of the two may help learners realize goals for their own teaching practice. Reflection is an important component of professional development. Teachers need time to make connections, to look with a critical eye at what is being experienced, and to build bridges between their own teaching experiences and newly learned material (Desjean-Perrota & Buehler, 2000). Teachers will not make changes in their instruction until they realize, through reflection, that something needs to be changed. Peer collaboration and observation can increase professional dialogue among teachers and increase transfer of training from staff development sessions to classroom practice hence improving teaching performance (Desrochers & Klein, 1990). Teacher learning can be increased, by being both the observer and the observed (Shortland,2004). Observations comprised of watching,

listening, and inferring lead to deeper learning and development of teaching practices because the observer watched and analyzed student and staff actions.

An analysis of the literature on teacher professional development suggests that there are four primary themes: reflective practice in professional development; problem based staff development; specific content focus; and meaningful professional development for adult learners.

### **Reflective Practice in Professional Development**

Reflective practitioners are educators who are active learners, who know their values and beliefs, and who regularly set learning goals for themselves. Reflective practice is about fostering self-awareness of teaching. Professional development can promote teacher reflection (Attard, 2010; Cain, 2010; Chivers, 2003; Powers, Zippay & Butler, 2006). Utilizing reflective practice interviews in professional development can create an atmosphere that is conducive to learning (Chivers, 2003). In such scenarios, fellow professionals exchange experiences and dialogue about professional learning. Such support systems not only provide a source of emotional support but create a forum for exchange of experiences and learning (Chivers, 2003).

The importance of reflection on practice was also noted by Cain (2010). He found that teachers were able to generate new knowledge when experience was subject to sustained reflection in action research approaches. In terms of teacher training and professional development, it is essential that teachers are reflective practitioners. Teachers need to be empowered with tools necessary to engage in critical reflection of practice. When teachers have the attitude that they control their teaching situations, they are motivated to be reflective. Throughout the study, it became evident that teachers' literacy beliefs and instructional practices

in the classroom were not aligned. So, this implied that alignment might be more likely to occur with collaboration and reflection on practices (Powers, Zippay, and Butler, 2006). Teachers engaging in professional development through self-study can share newly acquired knowledge with colleagues. Similarly, Attard (2010) noted this sharing of knowledge as desirable because collaboration is a way of enhancing reflective self-study. Reflective journal entries revealed that professional development would still be personal because it starts from reflective study, but it would then be shared with others and the sharing process would lead to further personal reflection. Collective dialogue among others will allow for time to address problems found in instruction.

Many models of professional development encourage professionals to reflect on aspects of their learning; however, most teachers are not trained to reflect on their practice or how much reflection is necessary to improve their instructional practices (Chivers, 2003). Many teachers feel pressured to conform to school philosophies or state mandates which overshadows the benefits of being a reflective practitioner (Powers, Zippay, & Butler, 2006). In order for reflection to be effective, time needs to be allotted for collaboration as dialogue among colleagues is a way of enhancing reflective self-study (Kraft, 2002; Minnet, 2003; Attard, 2007).

### **Problem Based Staff Development**

Professional development learning activities should be based on the real needs and interests of school staff (Guskey, 2002; Garret, Porter, Desimone, Birman, & Yoon, 2001). Learning opportunities for teachers occur every time a lesson is taught, an assessment is administered, a curriculum is reviewed, or a professional journal is discussed (Guskey, 2000). Occasions for teachers to engage in active learning through discussions about observations and

student work often lead to problem based learning which can be a powerful form of teacher learning (Banilower & Shimkus, 2004; Desimone, 2003/2009; Gartet et al., 2001 Hargreaves & Fullan, 2012).

Based on conceptual and empirical literature, one would assume that the best professional development for teachers focuses on classroom applications of ideas while encouraging teachers to be involved in actual practice rather than descriptions of practice learned through the reading of a book (Desjean-Perrotta & Buehler, 2000; Desimone, Porter, Garet, Yoon, Birman, 2002; Stein, Smith, & Silver, 1999; Cohen & Hill, 2000; Guskey & Sparks, 2002, Loucks-Horsley et al., 1998). As staff development directly influences instructional practices in most instances, it is essential that teacher training sessions take into consideration the problems which are a direct result of current instructional practices (Caulfield-Sloan and Puzicka, 2005). Furthermore, it is important to get to the root teacher needs for professional development as they directly correlate to the success of professional development sessions (Caulfield-Sloan & Ruzicka, 2005).

Stefani and Elton (2002) conclude that for continuing professional development of professionals, these needs in general arise out of their practice and the problems created by their practice. They found that success was achieved with problem based professional development when it stemmed from teacher needs. As is true in the study conducted by Barnett (2004) where teachers indicated that well organized meetings that are short and to the point with practical information which can be taken back to classrooms are some effective staff development practices. In order to keep session practical, professional developers should provide evaluations for their sessions. The necessity of summative and formative evaluations to provide feedback will allow presenters to make adjustments. Formative evaluation can provide feedback



necessary to ensure that sessions are based on teacher needs and meaningful for adult learners (Barnett, 2004).

### **Focus on Specific Content**

Research suggests that professional development that focuses on subject matter content and how children learn it may be an essential element for changing teacher practice (Desimone, 2009; Garet, Porter, Desimone, Birman, & Yoon, 2001; Cohen & Hill, 2000). Programs with content focused on teachers' knowledge of the subject, on the curriculum, or on how students learn the subject are noted as more successful and result in higher student achievement (Joyce & Showers, 2002). The content of what teachers learn is very important (Cohen & Hill, 2000). They found that professional development which focuses on specific curricula results in more reform-oriented practice than more general professional development. Research suggests that professional learning opportunities be grounded in the curriculum that students study as well as in an aligned system such as the Common Core State Standards.

Teacher instruction influences student learning; therefore, it is imperative that teachers continue to deepen their knowledge and skills throughout their careers. Teachers apply their professional development learning more often when the professional development programs they attend have direct links to the teachers' curriculum, they are afforded time to try out new ideas with colleagues, and there is ongoing support (Loucks-Housley et al, 2003).

Research has shown that teachers' subject matter knowledge has little effect on the quality of student outcomes (Hattie, 2012). Expert teachers and experienced teachers do not differ in the amount of knowledge that they have about curriculum or knowledge about teaching strategies, but expert teachers do differ in how they organize and use this content knowledge

(Hattie, 2012). Expert teachers possess knowledge that is more integrated, in that they combine the introduction of new subject knowledge with students' prior knowledge and they can relate current lesson content with other subject areas. Hence the need to further understand how adults best learn in professional development environments so as to further understand effective teaching methods as it relates to the tacit knowledge that adults already possess.

### **Meaningful Professional Development for Adult Learners**

Teacher professional development should be a milestone in teachers' continua of life-long learning and career progression. Adults learn differently from children; however, like children, they still need to be motivated and inspired to learn. Researchers found that when principles of adult learning inform and shape professional development experiences for teachers, educators are able to reflect on their practice, construct professional knowledge with their peers, and develop more collaborative relationships with colleagues (Gregson & Sturko, 2007). Staff development issues should arise out of the observations and discussions complimenting peer observations (Shortland, 2004). Teachers' learning and collaboration in specific learning environments often adheres to the six principles of adult learning: creating a climate of respect, encouraging active participation, building on experience, employing collaborative inquiry, learning for immediate application, and empowering through reflection (Darling-Hammond, 2000; Garet et al., 2001; Gregson and Sturko (2007; Guskey, 2002; Loucks-Horsley, 2000). These teachers valued the type of environment formed during the course offering as they were provided opportunities to share ideas and collaborate with peers. Class discussions encouraged further reflection, peer support, and knowledge construction among teachers. One of the most important outcomes of the course was the teachers' abilities to obtain useful, relevant information for their practice (Gregson & Sturko, 2007).

Collaboration among teachers was praised as it allowed them to take a step back from their individual teaching situations and take a broader view of each other's work during professional development study (Johnson and Altland (2004). Further explaining collaboration among teachers, Spencer and Logan (2003) utilized Research Lead Teachers (RLT) in order to encourage dialogue among colleagues. RLT supported selected teachers as they implemented steps in the Strategy Instruction Process. Teachers reported increased confidence in their ability to solve instructional problems in their classrooms as a result of the RLT model which applied modeling, coaching, data based feedback, and teacher study group participation. The data showed that traditional in-service without any follow-up was not effective staff development since none of the control group teachers consistently implemented the Strategy Instruction Process (Spencer & Logan, 2003). Teachers value each other as experts with knowledge and information to share.

When teachers view staff developers as collaborators, not authoritarian leaders, they are more willing to experiment with new approaches (Scanlon, Gallego, Duran and Reyes (2005). The interactive features of their staff development enabled teachers to learn the technical aspects of a new practice by engaging in instruction, reflecting and experimenting in collaboration, and being supported in fitting the new technique into their classroom routines. The effectiveness of the interactive staff development was evident in teachers' consistent implementation of their assigned practice (Scanlon, Gallego, Duran, & Reyes, 2005).

Research indicates that for professional development to be effective teachers must be active reflective participants while studying the content of their curriculum. For continuing professional development of teachers, sessions must arise out of their practice and the problems

created by their practice. Adult learning philosophies and effective models of professional development must be considered in order to develop meaningful professional development.

Too often teachers see the essential nature of their professional as autonomous (Hattie, 2012). For this reason each teacher teaches how they know best. They choose resources and methods that they think are best. They return to their classrooms only to do what they have already done many times. To combat this sense of autonomy, further study of a professional development model that encourages collaboration in the classroom setting is necessary. Studying in the context of the classroom will allow teachers to apply newly learned instructional strategies immediately. Furthermore, collaboration among colleagues in the context of the classroom setting will change teaching from a profession of autonomy to one of teamwork.

### **Models of Professional Development**

Often professional development offerings do not match what teachers need. Rather they are artfully marketed pedagogical fads or programs developed by commercial entities that promise to greatly improve instruction (Moats, 2004). With that said there are several models that have been found to be effective in the education of teachers: reading/literacy coaching, professional learning communities, and lesson study. The elements of job-embedded learning professional development are present in all three of these practices. Each model considers content expertise, active and problem based learning, and collaboration.

#### **Reading/Literacy Coaching**

Job-embedded learning is a highly effective and efficient way to foster professional development in a school (Garrison, 2006; Wei et al., 2009). One such job-embedded learning

opportunity is literacy coaching. Coaching can take different forms including, instructional, peer, mentor, literacy, or collegial coaching.

A reading coach is one who provides stable professional development, progress monitoring, and student data analysis to improved reading instruction. Coaches often have a data support role that is most useful in not only helping teachers interpret data but also helping them identify instructional strategies in response to data (Marsh, McCombs, & Martorell, 2010). Coaching activities also include modeling lessons and observing teachers. Evidence supports the argument that coaching can positively influence teacher practice and lead to increased student achievement (Stover, Kissel, Haag, & Shoniker, 2011). In a typical coaching model, literacy coaches and teachers engage in a cycle of demonstration, observation, and reflection (Mraz et al., 2009). Together, teachers and coaches demonstrate, observe, reflect, and consider how such teaching decisions affect student learning. Recently a differentiated model of coaching has provided teachers with a voice in the process of their learning. Differentiated support, based on teachers' individual needs, provides a form of professional development tailored to unique learning styles (Tomlinson & McTighe, 2006). The literacy coach supports the teacher by differentiating content being presented, modeling the process through which the information is conveyed and learned, and supporting teachers to take that learning and implement it within their own teaching.

Literacy coaching can be a vehicle for embedded professional development with ongoing support and encouragement. Teachers benefit from this cycle of demonstration, practice, and feedback as a way to enhance their own professional goals (Joyce & Showers, 2002; Mraz et al., 2009). A coach's primary job is to foster reflection so that teachers acknowledge the realities of their classroom practice and make decisions about instruction that promote student learning

(Anderson & Olsen, 2006; Dewey, 1933; Mraz et al., 2009; Stover, Kissel, Haag, & Shoniker, 2011; Toll, 2006). A coach can be a source of non-evaluative feedback during which teachers are provided with tools to encourage reflection and learning (Toll, 2006). The process of ongoing learning through interaction and reflective discourse provides opportunities for collaboration between the teacher and the coach (Stover et al., 2011). This professional development stance removes teachers from the isolation of their classrooms while establishing a means for critique of classroom instruction.

Literacy coaching considers foundational elements critical to improving classroom instruction. Coaching provides opportunities to discuss curriculum content, classroom reading and writing instruction, and to model effective lessons, all recognized by Schmoker (2012) as powerful elements of staff development. In order for coaching to be effective, researchers have suggested several guidelines that coaches should follow (L'Allier, Elish-Piper, and Bean (2010). It is essential that coaches have specialized content knowledge in literacy and working with adults. Collaborative relationships that are based on trust, confidentiality, and communication are essential for coaching (Owocki & Goodman, 2002; Stover et al., 2011; Toll, 2006). Coaches must be ready to modify and adjust their coaching on the spot as coaching must be both intentional and opportunistic. Finally, coaches must be literacy leaders in the school by setting goals and developing teachers.

Although all literacy coaching includes the same foundational elements, there is great variation in how coaches allocate their time (Deussen, 2007). In a study conducted by Deussen and colleagues, coaches on average spent only twenty-eight percent of their time working directly with teachers. Other activities that took up their time included analyzing data, working with students, attending meetings, and doing paperwork. A recent study (Bean, Draper, Hall,

Vandermolen, & Zigmond, 2010) found that in coaching there was less emphasis on changing teacher behaviors and more emphasis on making instruction more effective for particular students. Thus, the need for a professional development model that focuses on classroom instruction, collaboration, and the tools and instructional materials that teachers use on a daily basis.

### **Professional Learning Communities**

Fueled by the complexities of teaching and learning within a climate of increasing accountability, professional development has moved beyond supporting the acquisition of new knowledge and skills for teachers. A second model of professional development evolved as a way of supporting teachers to rethink their own practice. This model, known as a professional learning community (PLC), is an ongoing process in which educators work collaboratively in recurring cycles of shared inquiry and action research to achieve improved results for the students they serve (DeFour, DeFour, Eaker, & Many, 2006). Members of these collaborative teams work together to achieve common goals established by members. Professional learning communities structure their professional development efforts toward integrating teacher learning into communities of practice with the goal of meeting the educational needs of their students through collaboratively examining their day-to-day practice (Vescio, Ross, & Adams, 2010).

Professional development happens in many different contexts. For teachers, this often happens through a one-time session with the hope that they learned enough to apply it to their instruction the next day (Robb, 2000). Workshops often take place at local universities, intermediate units, or hotels. Educators realized that this type of development wasn't working and began to form professional learning communities (PLC). The professional learning

community, which is found in many schools, is a place where teachers continue their learning and perhaps improve instruction as part of their professional development.

The concept of a professional learning community is based on a premise from the business sector and modified to fit the community of education. The concept of a learning organization became that of a learning community that would seek to develop collaborative work cultures for teachers (Thompson, Gregg, & Niska, 2004). There is a growing amount of empirical literature that supports the concept of professional learning communities as a way to facilitate professional development for teachers (Dufour & Eaker, 1998/2004; Thompson et al., 2004; Servage, 2008).

There are three essential characteristics found among professional learning communities (Neman, 1996). First, group norms and shared values must be developed. Second, a clear and consistent focus on student learning must be stressed. Third, reflective dialogue that leads to conversations about curriculum, instruction, and student development is important.

Professional learning communities support many aspects of effective staff development, including collaboration, inquiry, and problem solving in authentic contexts of daily teaching practices (Servage, 2008). There has been success as a result of the PLC, but what happens when the teacher returns to his/her classroom and closes the door and is without the help peers? Dufour and Eaker (1998,2004) stress that professional learning communities transform schools into places that embrace ideas and assumptions that are radically different from those that have guided schools in the past. Studying best instructional practices among colleagues has shown to encourage teacher learning, but this dialogue in a collaborative setting may not be enough (Servage, 2008).



Most professional learning communities involve discussion of curriculum study, collaborative development of lessons, analysis of student data, and discussion of new teaching strategies (Servage, 2008). This type of discussion does not necessarily encourage critical reflection of instructional practices and the beliefs embedded in a teacher's instruction. A more open-ended dialogue may be necessary to encourage deeper reflection (Lasley, 1992). Teachers need to engage in critically reflective discourse about their instructional practices that will require a great amount of trust and respect among colleagues. A more interactive staff development embedded in the context of the classrooms may allow for thoughtful discussions among staff members.

### **Japanese Lesson Study**

Of all aspects of professional development, sustaining change is perhaps the most neglected. It is clear that successful professional development must be seen as a process, not an event (Loucks-Horsley et al., 2003). One approach that has been effective in bridging this gap is Japanese Lesson Study as it shifts teacher learning from one time sit and get session to facilitating learning as part of teachers' ongoing professional lives (Mundry, 2005). Japanese Lesson Study as a method of professional development has had a long-standing history in most Japanese elementary schools dating as far back as the 1900s but has only recently been noticed by educators in the United States (Fernandez, Cannon, & Chokski, 2003).

Lesson study is a translation of the Japanese words *jugyou* (instruction, lessons) and *kenkyuu* (research or study) (Yoshida, 1999). The term *jugyou kenkyuu* encompasses many instructional improvement strategies; the feature linking them all together is "observation of live classroom lessons by a group of teachers who collect data on teaching and learning and

collaboratively analyze it “(Lewis, Perry, Murata, 2006, p.3). These observed lessons lead to continued conversations and shared learning by a group of teachers, one of whom agrees to teach the lesson while all others take copious notes. These data are shared in a post-lesson colloquium where they are used to reflect on teaching instruction (Lewis & Hurd, 2011).

This section of the literature review provides insight on Japanese Lesson Study as a form of professional development. Currently, studies on Japanese Lesson Study are centered on mathematics and science curricula (Bjork, 2000; Fernandez, 2000; Fernandez et al., 2003; Heibert & Stigler, 2000; Germain-McCarthy, 2001; Meng & Sam, 2011; Murata & Takahashi, 2002). Implications from these studies could inform staff development for teachers in the area of English Language Arts as well as spotlight curriculum from the National Common Core Standards. This review begins with a discussion of conceptual literature which explains the Japanese Lesson Study procedure. This is necessary to understand fully the benefits of the Lesson Study process. Following discussion of conceptual literature insights, empirical studies’ methodologies and themes will be presented. Themes found in empirical literature present the benefits and challenges of lesson study implementation. Finally, conclusions are presented in regard to lesson study as a comprehensive professional development method.

Many Japanese teachers participate throughout their careers in a continuous in-service program built around the lesson-study group (Heibert & Stigler, 2000). Small groups of teachers meet regularly, once a week for several hours, to plan collaboratively, implement, evaluate, and revise lessons over the year with the aim of perfecting them. Collaboration is essential to this process as teachers stay abreast of each other’s progress by sharing and commenting on their respective lesson plans as these evolve (Fernandez, 2002). This gives teachers an opportunity to compare and connect what is being learned from the various study lessons conducted by the

group. Japanese Lesson study would ask American teachers, for whom working in independent isolation is often a norm, to work collaboratively and open up their classes for observation and discussion with peers (Fernandez, 2002) which will create collaborative environments and best practices.

Japanese Lesson study as a form of professional development incorporates a number of the effective methods of professional development discussed in the literature cited previously in the review. It is an effective job-embedded model that allows teachers to reflect and collaborate on lessons all the while furthering their mastery of content knowledge and curricular goals based on their actual classroom instruction. This is especially important today as school district leaders attempt to deepen teachers' understanding of the new Common Core State Standards. Development of content knowledge is viewed as an essential element of professional development (Garet et al., 2001). Teachers will also be involved in meaningful discussion, planning and practice as active learners. Participatory training is found to be effective as it involves opportunities to link ideas introduced to the teaching context in which teachers work (Mundry, 2005). Each session would be connected to the next so as to foster coherence. It will build upon what teachers already know and develop sustained, ongoing professional communication with other teachers who are trying to change their teaching in similar ways. As teachers are adults, it is essential to offer professional development, such as Japanese Lesson Study, that is mindful of the principles of adult learning philosophies and current research on professional development.

Student achievement is affected most directly by the quality of instruction found in the classroom (Fullan, 2007; Hattie, 2011; King & Bouchard, 2011). The influence of an individual teachers' knowledge and skills on student achievement is well recognized in literature on teacher

professional development (Darling-Hammond, 2010; Hargreaves & Fullan, 2012; King & Bouchard, 2011; Valerie, 2012). Therefore it is essential that improvement efforts in schools focus on professional development that is effective while focusing on teacher instruction (Darling-Hammond, 2010). Professional development such as Japanese Lesson Study situates learning in the classroom setting as teachers work in learning communities to analyze teacher instruction and student responses during the lesson.

Although Japanese Lesson Study has the potential for stimulating professional development, it has shortcomings as well. Because JLS comes from another country and culture, it may create challenges for successful Lesson Study in the U.S. educational context (Perry & Lewis, 2008). In the American education system, all children have equal opportunities to realize their potential and express creativity in a more individualistic way (Zhao, 2009). A big difference between the Japanese school system and the American school system is that Americans respect individuality while the Japanese lessen individuality by giving priority to group rules (Zhao, 2009, Iwao, 2000).

Teachers in the Japanese society also work with collaborative teams, rather than as individuals, during their professional development studies (Rock & Wilson, 2005). Therefore, there is unified effort to study classroom lessons and initiate positive change for instructional practice and student learning. Japanese Lesson Study in the U.S. lacks a strong research base to support it as an effective professional development method; however, Rock and Wilson (2005) inform us that it is “supported by a strong theoretical base and aligns with what scholars in teacher professional development are calling for in American educational reform” (p. 81).

Drawing on research of training, curriculum implementation, school improvement, and sustained, systematic staff development practices, educators have found that there are essential ingredients to effective teacher training sessions. High quality professional development expands teachers' knowledge, is centered on instructional practice, is job-embedded, and is reflective (Cohen & Hill, 2000; Guskey, 2002; Hargreaves & Fullan, 2012; Hattie, 2012; Joyce & Showers, 2002; Mraz, et al., 2009). Further examination of teacher perceptions of Lesson Study is necessary as it contains all the prominent elements of professional development.

### **Sustaining High Quality Professional Development through Lesson Study**

As stated previously, teacher professional development is driven by the need both to extend and renew teacher practice and content knowledge (Doig & Groves, 2011; Hargreaves & Fullan, 2012; Scanlon, Gallego, Duran, & Reyes, 2005; Desjean-Perrotta & Buehler, 2000). However, research suggests that, despite time and effort put into professional development for teachers, the outcomes are not always as teachers had hoped. Reporting on findings from a large scale study of secondary mathematics teachers, researchers found that much professional development is not effective (Ingvarson, Beavis, Bishop, Peck, and Elsworth (2004). Further, Darling-Hammond, Wei, Andre, Richardson, and Orphanos (2009) suggest that U.S. teachers do not engage in professional collaboration around curriculum content planning. After examining the findings from the Third International Mathematics and Science Study (TIMMS), Stigler and Hiebert (1999) concluded that American teaching has no system in place for getting better. A critical component of educational reform efforts should encourage critique of pedagogical practice (Fullan, 2007; Garet, Porter, Desimone, Birman, & Yoon, 2001; Darling-Hammond & McLaughlin, 1995).

Japanese Lesson Study, applied to English Language Arts, may be a way to reverse this. While studies primarily focus on mathematics, JLS has a capacity to affect instruction in the area of English Language Arts as well. This lack of attention given to the area of literacy opens the doors of opportunity for further study of how Japanese Lesson Study can be an effective form of professional development in the area of English Language Arts. JLS encourages teachers to develop their own learning communities, reflecting on teaching practices and content. This type of learning community will be a necessity as teachers attempt to embed the Common Core State Standards in their instruction. The new Common Core State Standards put in place by many states in 2010 warrant a necessity to begin to study instruction as it happens in the classroom setting while putting the new standards in practice. “Within a school, we need to collaborate to build a team working together to solve the dilemmas in learning, to collectively share and critique the nature and quality of evidence that shows our impact on student learning, and to cooperate in planning and critiquing lessons, learning intentions, and success criteria on a regular basis” (Hattie, 2012, p. 150). Taking this into consideration, this section provides an overview of essential characteristics of Lesson Study as they relate to planning and improving classroom instruction.

### **Essential Features of Lesson Study**

Lesson study is a comprehensive innovation that can provide teachers with opportunities for practice-based professional development (Stigler & Hiebert, 1999). Educators have credited lesson study with Japan’s effective mathematics and science teaching (Lewis, 2002; Yoshida, 1999). “Lesson study is not just about improving a single lesson. It’s about building pathways for ongoing improvement of instruction” (Lewis, Perry, & Hurd, 2004, p.18).

Lesson study has certain characteristics that set it apart from typical professional development sessions (Takahashi & Yoshida, 2004). First, lesson study provides opportunities to see teaching and learning as it takes place in the classroom. Teachers are able to develop a common understanding of what good instruction entails by looking at actual classroom practice. Secondly, lesson study keeps students at the heart of the teacher training. Teachers observe student and teacher responses and take extensive notes on the entire learning process.

Another distinctive characteristic of lesson study is that it is teacher-led professional development. Teachers plan and observe the research lesson, while they are actively involved in the process of instructional change and curriculum building (Takahashi & Yoshida, 2004; Lewis & Hurd, 2011). Most importantly, lesson study is a form of research that permits teachers to take the lead role as investigators of their own classroom practices as they become lifelong learners and researchers of teaching and learning in the classroom (Takahashi & Yoshida, 2004; Hiebert, Gallimore, & Stigler, 2002; Fernandez, Cannon, & Chokshi, 2003).

The live classroom lesson sets lesson study apart from other professional development sessions. This practice of observation in colleagues' classrooms for the purposes of professional learning is rare in the United States (Darling-Hammond, 1997). The goal of lesson study is not to just produce lessons to be copied but to produce knowledge about instruction upon which colleagues can build (Hiebert & Stigler, 2000). The steps in lesson study foster teacher learning and collegiality. The literature consistently describes Japanese Lesson Study cycle as consisting of the following 6 steps (Lewis & Hurd, 2011; Yoshida, 1999; Meng et al, 2011; Fernandez, 2002).

### Step 1: Collaboratively Planning the Lesson

Teachers collaborate to plan the lesson. They share their concerns, ideas, and teaching knowledge on how to design a good lesson. Teachers focus their instructional planning on both short-term and long-term goals for student learning. Textbooks, standards, research, resources, and observations of student work are considered. The end product is a lesson plan that describes the details of the teaching and learning process. The teaching and learning plan anticipates student thinking, guides data collection, provides a rationale for lesson design, and encourages questions and learning. This spans across 4-8 meetings.

### Step 2: Seeing the Lesson Plan in Action

A teacher from the lesson study group volunteers to teach the lesson in his or her classroom. Other teachers will act as observers during the lesson. Occasionally, an expert from an educational institution or administrative office is invited to observe the lesson.

### Step 3: Discussing the Lesson Plan

Teachers come together soon after the lesson is taught. It is preferred that this happens on the same day that the lesson was taught. This takes place over a one -hour meeting using a structured agenda and a designated facilitator and note taker. The teachers share what they have observed during the lesson using notes from their lesson planners. The teacher who taught the lesson begins the discussion by offering his/her reflections about the lesson. The other teachers then provide suggestions and reflections regarding the lesson.

### Step 4: Revising the Lesson Plan

Based on the teachers' observations, data collection, and reflections of the lesson, the teachers collaboratively revise the lesson. This may take over a 1 hour meeting block of time.



### Step 5: Teaching the Revised Lesson

The revised lesson is taught. This is often done by another teacher and in another classroom setting. As in the previous observed lesson, other teachers will again act as observers during the lesson.

### Step 6: Shared Reflections

The teachers come together for final reflections on their learning. Again teachers share their observations, comments, and suggestions. Following this, they collaboratively revise the lesson and summarize what they have learned during the process in a presentation or writing. This step may take 2 days.

### **Benefits of Lesson Study**

Lesson study gives teachers opportunity to make sense of educational ideas within their practice. It changes perspectives about teaching and learning, all the while allowing teachers to collaboratively support their colleagues (Takahashi & Yoshida, 2004). Japanese Lesson Study offers a complete package for professional development as it recognizes teachers as adult learners, supports collaboration, encourages reflection and problem based learning, and content area study. Finally, the Japanese Lesson Study model can be further explained through the lens of situated learning theory learning regarding the element of learning because teacher learning is placed directly in the classroom setting where teacher decision making on instruction takes places on a daily basis. Learning is situated among the tools used by teachers and learners, including the language and culture of the classroom (Niewolny & Wilson, 2009).

**Learning in the classroom.** Teachers cannot learn effective lesson study by simply reading about it. They must experience it firsthand by participating in it. The same is true when trying to develop instruction. If you want to improve teaching, the most effective place to do so

is in the context of a classroom lesson (Stigler & Hiebert, 1999). Learning situated in the classroom through the use of lesson study allows teachers to learn with colleagues in a setting they already feel comfortable in.

“By attending to teaching as it occurs, lesson study respects teaching’s complex and systematic nature, and so generates knowledge that is immediately usable” (Stigler & Hiebert, 1999, p.122). Improving teaching is not something that can be learned in refresher courses over the summer. It must be addressed at school, in classrooms throughout the school year. If schools are to become places where teachers learn, learning must take place in the context of the classroom with the students that who are impacted by the instruction.

Content knowledge is deepened as it is developed during lesson study and learned in an embedded context because the task of learning the content is intertwined with the authentic activities of teaching and can be immediately applied to the classroom (Chokshi & Fernandez, 2004). Research lessons offer teachers the opportunity to experience the Common Core State Standards while bringing them to life in the actual classroom.

**Effect on classroom instruction.** While developing the research lesson, teachers have to become experts in their curriculum. Lesson study begins by examining existing textbooks and standards (Yoshida, 1999; Lewis, 2004). Teachers engage in discussion about essential concepts that their students need to learn and consider what the students know and how they will respond to the planned lesson. As teachers participate in these activities, they naturally take an in-depth look at curriculum. Lesson study provides the opportunity for teachers to establish what knowledge is important, allowing them to discover gaps in their own knowledge, and acquiring necessary information to create an effective lesson (Lewis, 2002).

Research lessons improve classroom practice. They help teachers see things about their teaching that might otherwise have escaped them. It provides them with many viewpoints. Lesson study shifts the key for effective teaching from on-the-spot decision making during the lesson to careful analysis and planning before and after the lesson. Lesson study allows teachers to improve their planning skills over time (Stigler & Heibert, 1999).

Through the use of lesson study teachers focus on long-term goals rather than immediate skills that students need to learn that day (Lewis, 2002). Many schools develop mission statements for the year only to have teachers file them and forget them. Lesson study brings these goals to the foreground, which may unify a school.

**Teacher collaboration.** Lesson study can facilitate the building of a community of practice where teachers routinely share resources and ideas (Lewis & Perry, 2004). Teachers note the benefits of creating a learning environment among teachers in a school which deepens the capacity to learn from colleagues (Lewis, 2002). Teachers who continue their learning in isolation will lack the dialogue found among colleagues. Few U.S teachers have regular opportunities to dialogue with other teachers on the improvement of classroom instruction while the average Japanese teacher sees about 10 research lessons a year (Yoshida, 1999).

Learning communities can gain knowledge and become able to do and think things that the individuals of the community would find hard or impossible to achieve alone (Cossey & Tucher, 2005). The interpersonal connections built during lesson study enable collaboration well beyond the research lesson as teachers continue their discussions about student learning and lesson implementation.

Through Japanese Lesson Study teachers develop a shared language for analyzing classroom teaching and for teaching each other about instruction. Collaboration includes

continued interactions about effective instruction methods as well as observations of one another's classrooms. These activities facilitate teacher reflection on their practice and identify areas for improvement (Stigler & Hiebert, 1999).

**Reflection.** Lesson study is a process for creating deep and grounded reflection about the complex activities of teaching that can then be shared and discussed with other members of the education profession (Fernandez & Chokshi, 2002). During the observation of student learning in the research lesson, teachers have a chance to think more deeply about students than is possible during the routines of a normal day (Lewis, 2002). Teachers greatly improve their observational skills through these repeated observations.

Within Japanese schools, *hansei*, self-critical reflection, is emphasized (Yoshida, 1999; Lewis, 2011). Lesson study creates a culture borrowed from the Japanese which de-emphasizes external evaluations of teachers (Lewis, 2002). Rather, teachers reveal to each other the weaknesses found in the instruction of the lesson. Teachers also identify one's shortcomings and seek help from colleagues to facilitate improvement. The collaborative planning of research lessons results in criticism of the entire group rather than an individual.

**A shared curriculum.** The Common Core State Standards bring the opportunity for the first ever nationally shared curriculum. Now more than ever, teachers have the opportunity to learn from one another. Our national standards provide teachers with curriculum components for which they can create lessons. Because all teachers now have access to the same foundations, knowledge generated by one lesson study group is usable by everyone who teaches at the same grade level.

### **Challenges of Lesson Study in the United States**

Japanese Lesson Study has found success in the United States since 1999 when the Third International Mathematics and Science Study brought existing ethnographic accounts of lesson study to the public (Stigler & Hiebert, 1999). The adoption of lesson study in the United States has not occurred without criticism. Findings of several studies have revealed several challenges including the development of researcher lens (Fernandez, Cannon, Chokshi, 2003; Yoshida, 1999; Jacobs, Yoshida, & Stigler, 1997; Santagata, Zannoni, & Stigler, 2007), time constraints (Fernandez, 2002; Meng & Sam, 2011; Fernandez, Cannon, & Chokshi, 2003), and teaching behind closed doors (Hiebert, Gallimore, & Stigler, 2002; Stigler & Hiebert, 1999; Fernandez, 2002; Bjork, 2000; Little, 2003; Baecher, Rorimer, & Smith, 2012). In order for the U.S. to become successful in lesson study and for this valuable form of professional development not to go by the wayside, considerations of these challenges must be taken seriously.

#### **Adopting the Researcher Lens**

Japanese teachers emphasize four critical aspects of successful lesson study implementation: a meaningful and testable hypotheses, appropriate means for exploration of these hypotheses, utilizing evidence to judge the success of the research plan, and interest in generalizing research to applicable contexts (Fernandez et al, 2003; Jacobs et al, 1997; Lewis et al, 2005). Japanese teachers especially emphasized the necessity of gathering concrete data to explore lesson study research questions (Fernandez et al, 2003). The lesson plan should be used as a tool for articulating to everyone the data that should be collected during the lesson observation. In order to evaluate their work, teachers will keep detailed notes of the decisions made in planning meetings and how they relate to events that transpire during the lessons (Fernandez et al, 2003).

However, U.S. practitioners observing the lessons often attempt to become another set of hands during the lesson or attempt to team teach the lesson (Fernandez et al, 2003).

Furthermore, when discussing the research lesson, U.S. practitioners tend to focus on teacher instructional methods rather than on student learning in response to teacher instruction, take imprecise notes rather than thorough observational records, praise lesson components rather than offer constructive criticism, and engage in discussions that emphasize debate rather than listening and reflection (Fernandez et al, 2003; Jacobs et al, 1997).

Data collection and validity can be compromised if teachers are interfering with the lesson (Lewis et al, 2006; Fernandez et al, 2003). Japanese teachers talk about developing the teacher eye. Training teachers how to analyze the lesson and to look for what aspects of the lesson are causing the students to think are most important. U.S. teachers are designers of lessons and are not trained how to analyze lessons from a research stance (Fernandez et al, 2003; Santagata et al, 2007; Fernandez et al, 2001). It is essential to create reflective practitioners in the learning process of lesson study (Fernandez, 2002).

### **Time Constraints**

In lesson study, teachers need to set time aside for discussions and observations of live lessons as well as the planning of the research lessons. This is a great challenge on the already full plates of teachers (Meng & Sam, 2011; Fernandez et al, 2003; ) Fernandez et al. (2003) noted that teacher participants never found time to adequately discuss the lesson or produce written reports of their lesson study work. This is crucial to the research process. In addition, teacher lack of time interfered with teacher commitments to the entire lesson study process (Meng & Sam, 2011). Further complicating matters in the U.S. is the ability to find teacher coverage in order to observe and reflect on lessons being taught in a classroom with students

present (Fernandez, et al., 2003; Stigler & Hiebert, 2000). Schools have no well-defined structures for enabling teachers to learn from the everyday experience of teaching (Stigler & Hiebert, 2000). The cost for substitute teachers is high and teacher class sizes and schedules do not allow classroom teachers to provide coverage for each other.

### **Closed Doors and Cultural Barriers**

Since Japanese Lesson Study comes from another country and culture, this may create additional challenges for successful implementation in the United States educational context (Perry & Lewis, 2008; Rock & Wilson, 2005). Teachers in the United States are culturally trained to presume that teaching is done behind closed doors and that collaborations with others are not always necessary (Yoshida, 1999; Bjork, 2000). Teachers need to learn how to be critical friends and how to discuss lessons. Lesson study asks American teachers, for whom working in isolation is often the norm, to work collaboratively and to open up their classrooms for observation and critical discussions among peers (Fernandez, 2002; Rock & Wilson, 2005). In the Japanese culture, “identifying one’s shortcomings and gracefully accepting criticism seem to be ways of showing competence, not failure to be avoided (Lewis & Tsuchida, 1998, p.51).”

In order for lesson study to become a successful professional staff development model, teachers would need to change their view from teaching being a personal and private activity to that of teaching being a professional learning situation which is public and examined openly (Stigler, Gallimore & Hiebert, 2000). The most productive professional development sessions occur on-site in schools and in teachers’ own classrooms (Baecher et al, 2012).

In the United States there is extensive discussion about how to improve instruction in the classroom without actually observing it (Lewis & Hurd, 2011). The educational system present here is more individualistic when compared to Japan, where a collaborative approach is used

(Doig & Groves, 2011; Zhao, 2011). Teachers in Japan learn as a team through observation. However, some scholars suggest that individualism often facilitates innovation. Talent diversity breeds innovation and encourages innovators (Zhao, 2011). Different talents bring fresh perspectives to stagnant arenas. For example, Bill Gates of Microsoft and Steve Jobs of Apple Computers were revolutionaries of the IT industry in their own ways (Zhao, 2011). Perhaps there needs to be a combination of both individualism and collaborative sharing.

While many factors identified above suggest possible constraints to the implementation of Japanese Lesson Study in the United States classroom, the benefits outweigh the negatives. Lesson study can result in a “comprehensive system for teacher learning from practice and external knowledge sources “(Doig & Groves, 2011, p. 90). Both individualism and collaboration will be necessary when observing lessons in classrooms. Each teacher will bring forth his or her own creative outlooks on what effective instruction should look like.

In conclusion, the professional teacher is not someone who only copies what others have done, but instead, reflects on and improves on what others have done, working to comprehend the basis of these improvements, while improving their own instruction (Stigler & Hiebert, 1999). Japanese Lesson Study through analysis, collaboration, and reflection provides teachers with a proven program that develops teacher instructional skills while changing their perception of professional development.

Teachers are at the heart of instructional change. Japanese Lesson Study builds professional knowledge of teaching where all learning takes place- in the classroom setting. It places value on the teacher as an instructional leader. Lesson study creates change and dialogue in whole school settings enabling learning that is sustained and meaningful.



Japanese Lesson Study is not established without challenges. Many school settings in the United States are not set up for this type of professional development model. However, I chose this method of professional development for this study because it is a good tool for improving instruction. Lesson study will allow teachers to bring about change in their practice. A better understanding of how to make this type of professional development model work most effectively for our teachers in a variety of settings and contexts is needed (Rock & Wilson, 2005). Furthermore, studies are needed to document the direct effects of teachers engaged in Japanese Lesson Study on their students' learning (Rock & Wilson, 2005; Perry & Lewis, 2008).

## **CHAPTER THREE**

### **METHODOLOGY**

The primary purposes of this qualitative action research study were to first to explore teacher perceptions of Japanese lesson study as a method of professional development, and second, to take teachers through an action research process as they observed the implementation of a literacy lesson in the classroom.

Professional development sessions for teachers often take place outside the school context, never to be utilized in the classroom setting. This is a problem as teachers are not improving their instruction but instead are being educated about new programs. If we embed teachers' learning in their everyday work, and that of their colleagues, learning will be more meaningful (Lieberman, 1996). Lesson Study is a model of professional development that links learning in the classroom with professional study of instructional methods. Lesson Study is a comprehensive process for examining instructional practice that many Japanese teachers engage in and may be the model that changes teachers' perceptions of professional development (Fernandez, Cannon, & Chokshi, 2003).

The purpose of qualitative research is to make sense of a phenomenon and understand the meanings that people give to it (Merriam & Simpson, 2000). This study was created in response to a current problem existing in the Intermediate school where I worked, which consisted of grades five and six. Data showed that the PSSA scores of students who attended Ephrata Intermediate School were dropping. The administrative team in my district thought this problem was related to a missing link in classroom instruction. This study investigated this problem with professional development situated in their classrooms among colleagues, in order to allow teachers to examine their own instruction.

This study was a qualitative action research study. Qualitative and action research are often used in the field of adult education in order to find out adult perceptions of their world (Merriam & Simpson, 2000). This study filled a lack of attention given to situated learning as a characteristic of professional development in the k-12 education setting. By using qualitative and action research methods, I understood and interpreted how adults construct knowledge during their participation in Japanese Lesson Study, a form of professional development situated in the classroom setting. Furthermore, with the release of the National Common Core Standards, changes to teacher instruction are necessary. Literature about the standards is abundant, but studies related to educating teachers about these standards is lacking.

Given that this was a qualitative action research study, this chapter will begin with an overview of qualitative research in general, followed by a discussion of action research. The chapter continues with a discussion of my background as the researcher, the data collection procedures, the analysis methods used in the study, and the strategies that increased the dependability of the findings.

### **The Qualitative Research Paradigm**

The purpose of qualitative research is to make sense of a process and interpret the meanings that are given to it by participants. Marshall and Rossman (1999) provide further explanation of qualitative research when noting that it is “pragmatic, interpretive, and grounded in the lived experiences of people” (p.2). Qualitative researchers are interested in the meaning people have constructed, how they make sense of their world, and how people interpret their experience (Merriam and Simpson, 2000; Morse, 1994). This study focused on how teachers made sense of their professional development experiences. The purpose of this study was to gain an understanding of what the participants, grade five and six English Language Arts teachers,

perceived as effective professional development sessions and to understand how their instruction would be influenced by watching others teach in a classroom setting.

Additionally, it is important to note several characteristics and assumptions associated with qualitative research. First, qualitative research assumes that meaning is socially constructed by individuals through interaction with their world (Merriam, 2002). There are multiple constructions and interpretations of reality, determined by the perspective of the participant. As they seek to realize how people make sense of their experience, qualitative researchers are interested in understanding what those interpretations are at a point in time and in a certain context (Merriam, 2002). Teachers' experiences and interpretations change daily as the classroom setting is constantly changing. Teachers interpret realities based on student needs and their own needs, both based on a given moment in time. It is the role of the qualitative researcher to interpret participants' perspectives and understand how each teacher makes sense of his or her world.

Secondly, one of the most important goals of qualitative research is to shed light on a specific topic through analysis and synthesis of data collected during the study. As the phenomenon is examined in-depth, an understanding of how participants make meaning is realized. The aim of qualitative research is to gain insight into people's motivations, attitudes, and lifestyles (Pattan, 2000; Denzin & Lincoln, 2005; Merriam, 2002). This approach was suitable for this study because I was interested in what teachers perceive to be effective methods of professional development in the area of English Language Arts, specifically through the use of Japanese Lesson Study. Teacher staff development sessions are often based on student data, classroom products, instructional goals, and current educational mandates. Recognizing teacher perceptions of what constitutes effective professional development will allow insight into

teacher's attitudes and value systems. Moreover, qualitative research involves not only the analysis of interview and observational data but also the analysis of documents that will be related to the context of the study (Pattan, 2000). This study allowed teachers to analyze documents such as lesson plans in order to determine their effectiveness.

A third important tenet of qualitative research is that the researcher is the primary instrument of data collection and analysis as she becomes immersed in the study with participants (McMillan & Schumacher, 2001; Pattan, 2002). The researcher is responsible for conducting interviews, observations, and analysis of text. In order for the researcher to find deeper meanings while preserving context, she will have to face-to-face interaction with their subjects (Pattan, 2002; Coyne, 1997). Qualitative researchers engage directly in the process of data collection so as to better understand the participants' interpretations of their experiences (Merriam, 2002; Pattan, 2002). When selecting participants the researcher often recognizes demographic characteristics of those participating in the study. Participants in the study were selected carefully due to the fact that sample selection has a profound effect on the quality of the research as qualitative research makes use of smaller, purposeful sample of participants, rather than a large, randomized number of subjects found in quantitative research (Coyne, 1997). The process of conducting the research while dialoging with and interviewing the participants allowed me to uncover essential elements of effective staff development methods in English Language Arts related to the Common Core Standards.

There are many types of qualitative research, such as phenomenology, ethnography, and case study (Merriam, 2002). Qualitative and action research methodologies share an appreciation of the perspectives of people who traditionally have been the subjects of research (Atweh, Kemmis, & Weeks, 2004; Herr & Anderson, 2005). This particular study was a

qualitative action research study. The following section will explain action research as it relates to this study.

### **Qualitative Action Research**

Qualitative and action research methodologies share a need to understand experiences, perspectives, and views of people who are subjects of research (Atweh, Kemmis, & Weeks, 1998). Qualitative researchers seek to understand how people make sense of the environment in which they construct meaning. A qualitative action research design was chosen because of my inherent interest to gain an in-depth understanding of Lesson Study and the meaning teachers gained by utilizing it as a professional development method.

Action research is a form of self-reflective problem solving which enables practitioners to better understand and improve educational practices such as lesson development. Lesson Study involves all teachers present as they actively seek to improve instruction based on goals from curriculum (Lewis, 2011). These goals are centered on a question that might lend itself to action research among a group of teachers. Just as action research seeks to respond to practice problems through problem posing and problem solving, so too does Japanese Lesson Study. The four core processes of action research are planning or deciding how to deal with a problem, acting or implementing the plan, reflecting or analyzing outcomes and revising plans for another cycle of acting, and finally, observing or paying attention and recording the observations lend themselves to the cyclical nature of lesson study (Kuhne & Quigley, 1997; Fernandez, Cannon, & Chokshi, 2003).

In qualitative and action research, the researcher is the primary instrument of data collection and analysis (Patton, 2002). Therefore, I facilitated data collection, so as to uncover the essential elements of effective professional development. Kemmis and McTaggart (1988)

note that classroom action research, or teacher research, involves the use of qualitative modes of inquiry by teachers in order to better understand how to improve their own practices. Teachers as researchers design and apply educational research to their classrooms or instructional practice.

Teacher study situated in the classroom is essential. Action Research, as a methodology, lends itself to situated learning theory as it puts teachers in the context of their everyday learning environment among their tools and student population. Problems arise in the classroom; however, theory and research are often developed outside the classroom setting. It is necessary to look at instruction inside the classroom where the students are learning. Action research as a methodology allows teachers to study the mechanism by which lesson study results in instructional improvement.

### **Assumptions of Action Research**

Action research is a form of inductive, practical research that seeks a better understanding of a practice problem or improvement within practice context (Kuhne & Quigley, 1997). The origin of action research in education can be traced to Lewin (1951), who was influenced by Dewey and his desire to improve social conditions in contexts through action and reflection (Kemmis & McTaggart, 1988). Dewey also believed that by involving people in the collection and analysis of data effective action would result (Marsick, 2009). The theoretical foundations of action research are grounded in the importance that John Dewey gave to “human experience in the generation of knowledge” (Herr & Anderson, 2005 p. 18). Dewey’s emphasis on reflexive thinking combined with Lewin’s use of action research provided early perspectives on the landscape of action research (Kuhne & Quigley, 1997). Dewey took the professional experience of teachers and used it as a source of knowledge about teaching. This knowledge, when founded in action research, has potential to be applied to similar practice settings.

Action research encourages participants to control the research or act as participants in the design and methodology of the research (Herr & Anderson, 2005). It makes action central to the research concept and contrasts with traditional research, which tends to take a more distanced approach to research settings (Herr & Anderson, 2005). The concern for both action and research is evidenced through the need to improve practice (action) and create valid knowledge about practice (research).

Several authors characterize action research by its cyclical nature as it proceeds through four distinct processes: planning, acting, observing, and reflecting (Kemmis & McTaggart, 1998; Kuhne & Quigley, 1997; Herr & Anderson, 2005), and then repeating the cycle a number of times as one implements strategies in practice. The process begins by identifying the actual problem and deciding where and how to intervene. It is a systemic procedure of going through the plan, act, observe, reflect cycle repeatedly while integrating analysis, observation and data collection into the process.

Action research, with its emphasis on problem posing and problem solving, offers a practical tool for professional development of teachers (Kuhne & Quigley, 1997 ; Herr & Anderson, 2005). When researchers authentically position themselves as insiders doing action research, they move organizations through actions taken within the setting to the forefront (Herr & Anderson, 2005). This approach empowers teachers to take common problems, compare action research outcomes along the way, and ultimately develop a range of tested, replicated answers. The mass of data can suggest new approaches and possibly make a case for adapted ways to talk about common problems with staff (Kuhne & Quigley, 1997).



Action research studies tend to focus more on the process and therefore may present findings differently when compared to other qualitative methodologies. For example, the researcher's personal learning process may be noted. Action research leads to a deepened understanding of the question presented and results in more questions (Herr & Anderson, 2005). The researcher also wants to take into account the audience for the findings. Many action research dissertations contain video components, often used for future professional development (Herr & Anderson, 2005).

### **Background of Researcher**

In action research, the role of the researcher is to facilitate problem solving and provide direction to the participants of the research project (Merriam & Simpson, 1995). A central feature of the researcher's role, while conducting research, is accepting and respecting the participants' views as well as living in the dynamics of the participants (McNiff, Lomax, & Whitehead, 2003). My role in this qualitative action research study included facilitating the action research spiral during the lesson study process.

When presenting data in the write up, the researcher is writing the actual evolution of the research, documenting the decisions made. It is important to note who the researcher is to the process and how she impacted the research design (Herr & Anderson, 2005). If, for example, the researcher is the facilitator of a change process, part of the research documentation is the researcher's roles, actions, and decisions in order to note thoughts, feelings, and increased understanding that comes with the action research process (Herr & Anderson, 2005). The cycle of research will illuminate the issues being studied and new literature will be incorporated as part

of this growing understanding (Herr & Anderson, 2005). Data analysis should be pushed by the literature and be ongoing.

My interest in this lesson study process cannot be overlooked. As a past literacy coach in the district where the study was collected, it was my job to work with teachers in the area of English Language Arts. It was also my responsibility to ensure that teachers had an understanding of the Common Core State Standards. I had a vested interest in this action research process and had heavily researched the Japanese Lesson Study procedures to ensure that there was administrator buy in.

One could argue that because of my educational background being similar to the participants in so many ways, my interpretations of participants' experiences and overall data influenced the knowledge construction that took place during this study. This could be seen as a limitation, but I saw this as a benefit, as there was less of a chance for misinterpretation of the educational learning process in English Language Arts. The fact that I already had a relationship with the teachers who participated in the study was an asset as well. This allowed them to dialogue openly throughout the learning process.

The multiple perspectives present in Japanese Lesson Study were especially important to consider as there were many viewpoints offered during the data analysis and reflection components. It was important to recognize all perspectives in the learning community so as to not promote my own bias as a researcher. As an observer during a Japanese Lesson Study colloquium in New Jersey, I was able to witness varying teacher perspective on what made the Lesson Study successful. As the researcher conducting the study, it was important to recognize

all the viewpoints that teachers offered rather than to be swayed by my personal thoughts of what made the lesson effective and the effectiveness of Japanese Lesson Study in general.

As I worked in the district in which the study took place, I had to be careful not to promote my own interests. As an insider, I had to be careful not to put a particular spin on my data but rather utilize unbiased reflection during the entire study in order to see what the trained eye often misses. Given the significance of the researcher to the process of action research, it was important that I disclosed my beliefs about literacy instruction to the participants. Participants knew many of my existing beliefs about literacy as they would have attended past professional development sessions on literacy that I conducted. Another strength related to being an insider was my complete knowledge of literacy trainings conducted in the district over the past sixteen years. I knew where gaps existed in instruction and where teachers excelled. This was beneficial as we selected an area of focus for lesson study, as I was able to offer suggestions in order to get the process started quickly.

### **Participant Selection**

Beginning in May, fifth grade teachers were selected for the study through email. The six English Language Arts teachers as well as the reading specialist were contacted to see if they would participate in this study. Seven female teachers were eventually selected to participate in the study. The group comprised a total of 166 years of educational experience if you added up their total years of service in education. There was not a criteria for length of tenure in order to be a candidate for the study. However, they needed to be teachers in the Ephrata Area School District, instructors in the intermediate building, and have knowledge on the instruction of English Language Arts. Participants needed to be interested in participating in this study, able to

devote ample time, and willing to engage reflectively and collectively in the lesson study model. They were educated about Japanese lesson study in May through sessions held in the morning prior to school. Each participant was also provided with an article about Japanese Lesson Study as well as a video clip summarizing the Japanese Lesson Study experience. Lesson construction began in June with the initial lesson being taught in June. Being the researcher in this action research study, I facilitated these sessions.

**Table 1**

**Participant Selection**

Teachers	Years Teaching	Grades Taught	Education
Dina	23	4,5	Masters Equivalent
Donna	10	1,3,4,5,6	Masters+
Jennifer	29	2, 5, special education	Masters Equivalent
Martha	14	1,3,5	Masters Equivalent
Irma	29	2, 5, reading specialist	Masters+
Marla	20	3,4,5, gifted education	Masters+
Rhonda	41	3, reading specialist	Masters+

**The Action Research Process**

Qualitative research typically makes use of data collection such as interviews, observation data, document data, audio-visual data, and artifacts related to the setting (Creswell, 2007). This study made use of all of these forms of data collection throughout the action research cycle of planning, acting, observing, and reflecting. The following discussion applies the implementation phases of action research to my study.

**Planning**

The planning phase of the action research cycle begins with the researcher identifying the problem in practice and developing a plan of action to tackle the problem (Kuhne & Quigley, 1997). The problem identified in this action research was the need to improve upon language

arts instruction in the district in which I worked. Our Pennsylvania State Assessment data showed a drop in the scores of our fifth grade students when compared to past fourth grade data. Critical examination of past and present professional development sessions was necessary to address problems arising in educational practice. As a past literacy coach in the district, I was aware of teacher perceptions of professional development. Past professional development sessions had been disjointed and lacked consistency and sustainability. Loucks-Horsley, Stiles, and Hewson, (1996), have identified what effective professional learning looks like among professional development communities. Professional development programs provide teachers with opportunities to develop knowledge and skills while broadening their teaching approaches. I believed that Japanese Lesson Study demonstrated the necessary features of professional development and would facilitate instructional improvement in the Intermediate School. The use of lesson study was utilized to provide teachers with a focused study of their classroom instruction as a method of professional development.

The first phase of lesson study begins with goal setting and planning (Doig & Groves, 2011). As the literacy educator responsible for professional development, I instructed teachers on the steps found in Lesson Study beginning with the study of the Language Arts Curriculum as well as the literacy assessment results. Long-term learning goals in literacy were established during this phase. After investigating the curriculum, instructional material, and Common Core State Standards, the initial lesson was created by the group of teachers participating in the study. The detail and research that went into the preparation of the lesson plan for the initial lesson was extensive. It began with instructional goals which were set by the teacher participants. Teachers then planned the research lesson. According to Stigler & Hiebert (1999), such lessons include teachers reviewing a previous lesson, discussing methods for instruction and analysis of student

participation, and then creating the “research” lesson. This planning took place with teachers collaborating on the structure of the research lesson. We returned to this planning phase after the lesson had been taught and teachers had time to reflect on teacher instruction and student participation. The research lesson was tweaked during this reflective meeting. Following is a brief summary of the learning sessions so as to further explain the planning process.

**Lesson development learning sessions.** In action research studies, the design emerges. However, an initial plan was necessary. There were five sessions necessary to establish a long-term learning goal for the lesson study and the research lesson itself. The learning goal established for the students in this study was as such: The students will become lifelong readers and writers and will clarify and connect vocabulary for future use across the curriculum. The stages of the Japanese Lesson Study process were also explained during the five meeting sessions. These sessions, although structured, were dependent upon the suggestions of the participants as this was an action research study. Each meeting lasted approximately 1 hour.

The learning sessions included the following:

Session 1:

During session one participants were provided with an overview of Lesson Study and protocols were established. We began the session by watching a video from Developmental Studies Center titled, *Lesson Study: Voices from a Grade Two Team*. We then read sections of an article titled, *Going Deeper with Lesson Study*.

#### Session 2:

During session two, participants reflected on student end-of-the-year data. From this, they selected an area where they wanted to improved student results. Based on this data, teachers looked deeply at Common Core State Standards for English Language Arts. We created a curriculum chart that listed instructional areas needing improvement. We then searched the *Teaching Channel* for a video related to English Language Arts and the Common Core Standards that addressed one of the curricular areas under consideration.

#### Session 3:

During Session three, we reviewed Japanese Lesson Study protocols and established group roles. We looked at the lesson planning format and reporting guidelines. We then selected a common learning goal in the area of English Language Arts based on student needs as they pertained to current data.

#### Session 4:

We reviewed our expectations for the Lesson Study goal and then developed the initial lesson plan. Teachers were encouraged to think about teacher and student responses.

#### Session 5:

The initial lesson was taught while teachers observed the lesson as it unfolded in the classroom.

Finally a post discussion of the lesson took place and included the reflection part of the action research cycle. The sharing of the positive and negative aspects of the lesson took place. This was the beginning steps of the lesson revision portion of Lesson study. Through group collaboration and dialogue, a second lesson was developed and taught by a second teacher participant.

### **Acting**

During the second stage of this research, the teaching and observation of the initial lesson which was designed by all participants took place. Doig and Groves (2011) note that, “teaching the research lesson forms the core of Japanese Lesson Study, providing both the opportunity to test the lesson plan in the classroom and an opportunity for observation and reflection” (p.81). Teaching the initial lesson forms the core of Japanese Lesson Study, providing the opportunity to test the initial lesson through observation and reflection (Takahashi & Yoshida, 2004). During the lesson study process, one teacher volunteered to teach the research lesson while the rest of the team observed. Observers included teachers participating in the study. The teacher of this initial lesson took careful notes about what the students were doing, while the keen observers of the lesson noted the lesson in its entirety. The data collection methods of this phase are critical both to reflect on what is occurring and adapt the plan or collection methods as necessary (Kuhne & Quigley, 1997). Data during this phase was gathered from observations and teacher journal entries.



## **Observing**

The third step in action research is observing and recording (Kuhne & Quigley, 1997). This phase often involves both acting and observing as the participants typically engage in the activity while the researcher observes how the actions unfold (Kemmis & McTaggart, 1988). During Japanese Lesson Study, this is the observation phase of the lesson and is conducted with many observers in attendance. All observers are provided with a detailed copy of the lesson plan. Observation documents include copious notes made on the lesson plan itself, and videos and photographic records as needed (Yoshida, 1999). The lesson plans and notes are then inserted in teacher journals and collected as data. The main focus of the observation is student thinking and learning, with observers taking notes about students' discussion. Observers do not interact with either the students or the teacher during the lesson as the purpose is to watch the lesson unfold.

During this portion of the study, I acted as the research observer, watching the process of Lesson Study in its entirety and how teachers responded to the lesson. I documented whether or not the teachers took notes regarding the instruction and whether or not they were careful to avoid engaging with either students or teacher. Field notes served as a record of what was attended to during the course of observation.

## **Reflecting**

Many teachers are in the habit of reflecting on practice in isolation (Ball & Cohen, 1999; Little, 2003). Today, many scholars are convinced that classroom embedded learning, or learning in everyday work, increases the likelihood that learning will be meaningful (Lieberman, 1996; Fernandez et al., 2002). An increasing number of teacher learning initiatives focus on the effectiveness of teachers cautiously critiquing their practice, either directly or through classroom

artifacts (Fernandez, Cannon, & Chokshi, 2002; Rowley & Hart, 2000). For the purposes of this study, collegial dialogue was encouraged in order to reflect collaboratively on the issues of teaching. Reflecting on the learning process was crucial during the process of action research. Reflection as defined by Taylor (2000), can result in a deepened understanding of oneself and one's capacity to act in the world. Self-reflection in connection to instructional methods and classroom effectiveness can reveal how teachers' own beliefs shape their teaching practices (Kincheloe, 2003). Reflection is the last stage of the cycle and is essential before proceeding through the spiral again. Collection and analysis of data gathered thus far will be helpful in guiding participants through the cycle again.

Finally after the research lesson was completed, the teacher and all of the observers discussed it. The focus of the discussion was the learning that had taken place and the ways in which the lesson might be improved. The teacher was given the first opportunity to speak, to explain her intentions for the lesson, as well as her impressions of what was successful in the lesson. After this, other observers added their comments based on their detailed notes of the lesson. I facilitated the post-lesson discussion. Comments and discussion were based on the detailed notes from the lesson. The purpose of lesson study is not to perfect one lesson, but rather focus on developing teachers' ideas and perceptions of different approaches to instruction (Lewis, 2000). Doig and Groves (2011) note, "the research lesson makes participants and observers think quite profoundly about specific and general aspects of teaching" (p.86). During this stage data from the observation of the research lesson was analyzed. It is important to note that in action research, data analysis is occurring throughout the entire study so that adjustments can be made as needed, at each phase of the action research cycle. It is essential that the researcher remains flexible so plans can be revised to better address the needs of the

participants (Hopkins, 2002). This stage allowed me time to reflect on the process of lesson study as well as the final interviews.

### **Data Collection**

The primary data collection methods used in action research include field notes, document analysis, journals, questionnaires, interviews, and audio and video recordings (Kuhne & Quigley, 1997). It is important to decide on several ways to collect data in action research. This triangulation ensures more meaningful results and holds greater validity for practice than if you are only using a single method (Kuhne & Quigley, 1997).

Action research spirals so the premise of an evolving methodology should be noted (Herr & Anderson, 2005). As discussed above, the steps of the cycle included planning, acting, observing, and reflecting. Providing all the participants with full knowledge about the project is important so that they can have the option of keeping a reflective journal from the beginning (Kuhne & Quigley, 1997). It is recommended that all action researchers keep reflective journals to help compensate for memory lapses (Kuhne & Quigley, 1997). Each participant was provided with a journal so that they could journal about the lesson study process at each stage. Journaling was incorporated into this study, so that I could take notes during the action research process.

In this research study, data was collected from multiple sources including initial interviews, final interviews, lesson study sessions, and reflections on those sessions. The primary method for data collection was the semi-structured individual interviews of participating teachers. Observations were conducted throughout the study and documents were collected which helped to triangulate data. The teachers and I kept journals during the process as a tool for careful record keeping of procedures and learner perceptions to aid in reflection. Video

recordings were briefly utilized in order to capture the Lesson Study process. Videos were essential for tracing the learning of a group of teachers during the lesson study cycle in order to make visible some of the pathways by which teachers learned during lesson study ( Lewis, Perry, & Murata, 2006). Each of these means of data collection is discussed briefly below.

The study began in May with the completion of initial interviews. Following this, a study of curriculum in English Language Arts and data analysis were instituted. After identifying a research theme, a plan of study was developed and implemented. Teachers met four more times during the month of May to familiarize themselves with the Japanese Lesson Study process and to plan the research lesson. In June, the initial research lesson was delivered. Teachers observed this lesson and then discussed it within the study group. Revisions were made and the lesson cycle began again but with a different teacher teaching the revised lesson. Further reflections were made during discussions held among all teachers present. Finally a closing interview took place.

### **Individual Interviews**

Individual interviews with each participant were conducted prior to the start of the lesson study cycle in order to gain background information and encourage reflective thinking. This initial interview was a meaning-making experience and provided understanding of teacher experiences and the meaning that they made of these experiences (Seidman, 1998). I used a semi-structured approach with open-ended questions when conducting interviews. This allowed me to utilize specific questions in an exact format while allowing some flexibility for questioning in related areas (Pattan, 2002). Staff was encouraged to share their thoughts on past professional development sessions that they attended. Each interview last approximately one hour. Permission was requested from the participants to record the audio interviews for later

transcription. I recorded my own reflections at the conclusion of each interview. Questions can be found in Appendix E. Some sample questions that were used for guided prompts included:

1. What are the experiences in your life and trainings that have influenced the kind of teacher you are today?
2. Tell me about your last professional development experience. Were you able to utilize what you learned in the classroom context? Explain how. Did you find the training session practical? What did you find impractical?
3. How does context affect student learning?
4. How does context influence teacher learning?

These questions were meant to bring awareness to the assumptions and beliefs about teaching practices and professional development. The answers provided some background knowledge about instruction and how it influenced student learning, prior to the start of the lesson study model. The post interview focused on experiences of lesson study; and was based on questions that emerged in light of what went on during the lesson study sessions. The post interviews uncovered what participants felt were significant moments in their learning, and how they would utilize what they learned in their classroom practice (Merriam & Simpson, 2000). The post interview questions can be found in Appendix F. Examples of these questions included:

1. Tell me about the lesson study process. Did you find the training practical? What did you find impractical?
2. How did context affect student learning during the lesson study process?
3. How did context affect your learning during the lesson study process?

### **Field Notes, Journals, and Documents**

Critical reflection is inherent to both action research and Japanese lesson study (Kuhne & Quigley, 1997; Fernandez et.al, 2003). Therefore, each participant kept a journal for their reflections about the Japanese Lesson Study process. Journals, in the forms of logs or anecdotal records, can be used with several purposes in mind. They are used to capture reflection and for research purposes as a way to look inside the mind of the learner (Cranton, 2006). For the purposes of this study and as recommended by Cranton, each participant was instructed to divide each journal page in half vertically and use one side of the page for observations and descriptions and the other side for thoughts, feelings, related experiences, or images provoked by the description.

Furthermore a Critical Incident Questionnaire (CIQ) (Brookfield, 1995, 2006) was used at the end of each session. There were six questions, including: The time in the session that I was: a) most engaged as a learner; b) least engaged as a learner; c) most surprised; d) the most important thing I learned was; e) the thing that I will immediately apply to my teaching is; f) a metaphor for my learning or for the session is this. When analyzing the CIQ, it is advised that the researcher make notes of themes among the responses (Cranton,2006).

I also kept a journal to capture my reflections as well as my observations during the lesson study journey. It was important to reflect on the content knowledge discussed as well as on the Japanese Lesson Study process.

In addition to interviews and journals, documents were collected for inclusion in the data analysis. As acknowledged by Stake (2005), the importance of multiple perspectives in meaning-making is addressed by including documents as information-rich sources in data

interpretation. Various types of documents were completed by the participants with at least five documents collected for analysis. Collected documents included the English Language Arts lessons developed by the team of teacher participants, the journal reflection pages, and the CIQs. There were two English Language Arts lessons collected during the process including the initial lesson and the revised lesson.

Participants were asked to journal during the planning phases of Lesson Study as well as during their observation of the planned lesson in progress. They were asked to share two entries with the group. The CIQs were collected at the end of each planning session with up to four collected. The process of journaling gave participants an opportunity to reflect on lesson development, curriculum, and instruction through an open-ended format. Van Manen (1990) finds that journal writing encourages self-discovery.

### **Video Recordings**

Video recordings are valuable for getting an exact record of events, one that can reveal pauses, expressions, idioms, or body language (Kuhne & Quigley, 1997). Video makes it possible to provide teachers with a common set of experiences that they can draw on in order to develop a shared language for describing and discussing classroom practice (Santagata, Zannoni, Stigler, 2007). The power of digital video as a means of encouraging critical reflection has been documented by several scholars (Harford & MacRuairc, 2008; Rich & Hannafin, 2009; Rosaen et al., 2008). Video brings forth the complexities of the classroom, bridging the theory-practice divide (Baecher, Rorimer, Smith, 2012). It captures the authenticity of the classroom, offering detailed and rich data on the teaching and learning process (Baecher, Rorimer, Smith, 2012; Newhouse, Lane, Brown, 2007).

A video cameras was set up in the classroom during the implementation of the research lesson. As directed by teacher participants, the iPad camera was used to zero in on the teacher as she introduced the lesson. It was utilized to examine teacher use of activating strategies to capture student attention as well as the use of the whiteboards. The camera was also used to capture brief moments of the revised lesson in the classroom setting. The video allowed us to go back and look at selected portions of the lesson during the lesson study cycle. Video can provide teachers with concrete images of instructional practices and provide a context for developing the analysis skills required to critique lessons (Santagata, et. al, 2007). It can provide a platform for discussions as teachers develop a discourse for analyzing video while focusing on making sense of what occurs in the classroom. Video clips were useful during this study as a source of reflection during the creation of the second lesson. Students were not analyzed during the use of the video.

Although effective, it is important to realize that video is not a complete picture of reality as much of what is going on in the classroom is not visible on the video screen (Stigler, Gallimore, & Hiebert, 2000). Another possible problem with video is the students and teachers may not behave as usual with the camera present (Stigler et al, 2000). However, video analysis is an effective tool in the professional development of highly seasoned teachers looking for ways to improve their instructional practices (Ebsworth, Feknous, Loyet, & Zimmerman, 2004; Baecher et al., 2012). As a number of states are now adopting teacher evaluation models that include video based observations or learning tools, it is essential that teachers begin exploring classroom instruction through the use of peer collaboration and video (Baecher, et al. 2012). For the purposes of this study, video was only used as a tool for reflection and not to look at the lesson in its entirety.



## **Data Analysis**

Data analysis took place after the collection of data was complete. In qualitative research the process of data analysis is ongoing (Merriam, 2009), and begins with the initial interviews, in the first action research cycle. The final phase of data analysis occurs after all the data are collected. Studying the gathered data is the most important step in action research (Kuhne & Quigley, 1997). It is important to note that in action research, data analysis occurs throughout the cycles of study so that necessary adjustments can be instituted (Hopkins, 2002). Action research necessitates the evaluation of the entire learning process and documenting end results to compare them to initial perceptions or problems (Kuhne & Quigley, 1997). For the purposes of this qualitative action research study the process of analysis was based on the interviews, the CIQs, journals, and documents.

Employing a coding strategy is the most typical means to realize themes across participant data (Merriam, 2002; Herr & Anderson, 2008). In this case, the data were analyzed to understand teacher perceptions of Japanese Lesson Study as a model for professional development in literacy. It is important to recognize that in action research, data analysis is occurring throughout the learning process so that necessary adjustments can be made (Herr & Anderson, 2008). Therefore it is essential that the researcher remain flexible so that modifications can be made to address participant needs.

In this action research study, I reflected on the experience after each learning session by using the participants' journals. This reflection process provided insight into the perceptions of the teachers as they were learning from each other in a professional learning community. Data analysis during action research requires the researcher to evaluate the overall learning process

and create a documented comparison based on the results (Kuhne & Quigley, 1997). After reflection, teachers participating in the study were consulted in order to collect their thoughts during each session. After each session, teachers reflected in their journals. They completed a CIQ four times. The items of data were analyzed for next steps in the action research cycle. It was important to note changes in teacher perceptions during this leaning process. As themes developed, they were marked and identified numerically (Merriam, 2002). Then, some of the data was compared to generate possible categories and coded with as many possible categories that were appropriate. Second, categories were examined with relationship to the data in order to better understand the categories and their properties. Third, categories were reduced, and data was again considered relative to the overall framework, which developed through the data analysis. Finally, in the fourth stage, themes begin to emerge from the coded data that responded to the research questions posed in this study. Furthermore, documents collected during study were analyzed as they related to the development of literacy lessons. Documents can provide a rich source of information about the Lesson Study process as well as the values and beliefs of the participants in the study (Patton, 2002). The research lesson plan, student work, journal reflective writing, initial and final interviews, and the CIQs provided insightful information about how participants were feeling throughout the learning process and offered rich data collected during the action research process.

The initial and final interviews were analyzed and coded for common themes and categories as suggested by Merriam (2002). As themes emerged, they were marked and coded by color and number. The categories were then compared and examined with relationship to the data in order to better understand the categories and their properties. Interviews were analyzed to discover emergent ideas related to understanding concepts such as professional development,

literacy learning, and instruction. Finally discussions were held with a secondary evaluator, Dr. Taylor, in order to analyze themes as they related to research questions and purposes. For example, initial interviews revealed concerns about JLS raised by many participants regarding trust, specifically building trust with colleagues before revealing their instructional methods. Furthermore, during the final interviews it was discovered that an overwhelming numbers of teachers appreciated the aspect of feeling productive that resulted from the JLS experience. Themes that evolved repetitively among many participants were chosen to include as data to include in the study.

Video traced the learning of the group of teachers during the lesson study cycle in order to expose some of the pathways by which teachers may learn during the Japanese Lesson Study (Lewis, Perry, Murata, 2006). As part of the learning process, teachers watched and selected lesson components including the activation strategy and whiteboard usage. Discussion of these lesson components did not involve students but furthered teacher understanding and reflection of literacy instructional practices found in the context of the classroom. The planned lessons were videoed so that teachers would witness the engagement strategy in action. Teachers used this video to reflect on teacher instructional strategies. For example, after the initial lesson, participants watched the video of the teacher utilizing an activation strategy while they discussed the success of the first lesson. The video usage present in the study allowed for review of lesson study protocols and lesson components. It was not used to capture student interactions. The video allowed us to go back and examine parts of the lesson for further clarification. Field notes, collected in journals, can be reviewed along with the video to ensure reliability.

### **Verification/Trustworthiness**

When conducting qualitative research a researcher should consider several issues to ensure that the study is deemed trustworthy or good research. These issues include credibility, transferability, dependability, and confirmability. The concern for both action and research is evidenced through the need to improve practice (action) and create valid knowledge about practice (research). The discussion that follows attempts to verify several issues that are important to consider in regard to this study.

When presenting data in the write up, the researcher is writing the actual evolution of the research, documenting the decisions made. In order to promote credibility, it is important to note who the researcher is to the process and how that person impacted the research design (Herr & Anderson, 2005). If, for example, the researcher is the facilitator of a change process, the research documentation includes the researcher's roles, actions, and decisions in order to note thoughts, feelings, and increased understanding that comes with the action research process (Herr & Anderson, 2005). As the facilitator of this action research process, I created the design of the sessions offered during the Japanese Lesson Study experience. I was careful to allow the teachers freedom to design and critique the lessons created for this study after they had a thorough understanding of what JLS entailed. Data analysis should be pushed by the literature and be ongoing. The cycle of research will illuminate the issues being studied and new literature will be incorporated as part of this growing understanding (Herr & Anderson, 2005).

Triangulation is critical to ensure credibility by collecting various forms of data, including participant observation, documents, pre and post interviews, and journals. It is recommended that all action researchers keep reflective journals to help compensate for memory lapses (Khune & Quigley, 1997). For the purposes of this study, I kept a journal in order to record my

reflections and observations that took place during the JLS. Pre and post interviews as well as participant journals were analyzed to ensure triangulation.

Transferability refers to the degree to which the results can be generalized or transferred to other contexts or settings. Providing thick rich description enables others interested in the study to identify with the setting. It is the reader who determines whether or not the findings of a study can be applied to their particular field of interest. Interviews and study sessions provided information required for the component of transferability. As the researcher in this study, I found the information resulting from this study beneficial to both the field of adult education and teacher education. Herr and Anderson (2005) have defended action researchers as those having privileged access to the truth. This tacit knowledge that practitioners have supplies experiences that are part of the everyday life of organizations, resulting in practical knowledge sharing for those interested in the particular field of study. As the facilitator, I possessed tacit knowledge that provided me with beneficial insight on what teacher educators experience during teacher education sessions. This was helpful as I already had the background necessary to understand the literature that lead to an understanding of effective methods of professional development.

Dependability refers to a study that is reliable, thorough, high quality, transparent, accessible and is easily understood because of its procedures. It is concerned with the fairness and fidelity of the process used to examine data and interpretations. Dependability can be enhanced through triangulation (Lincoln & Guba, 1985). As triangulation is important when collecting and analyzing data, this study sought to utilize many forms of data such as field notes and journals, interviews, and documents used during the study. This triangulation helps to ensure more meaningful results and holds greater validity for practice than using only a single method (Kuhne & Quigley, 1997). Triangulation was beneficial as it allowed me access to multiple

forms of teacher perceptions through analysis of their journals, interviews, and observations during the sessions that I participated in with the participants.

Member checks can also be utilized to ensure dependability and credibility. This can be demonstrated in a study through interviews, lesson planning, and discussions with participants as the researcher can make efforts to restate and summarize information instantly in the form of questions to ensure correct observations and perceptions provided by the participants. As I interviewed the participants there were some questions as to the meaning of several questions. I had to ensure that they understood the question I was asking. There were times when I had to rephrase the question in order to ask it in a different way.

Confirmability is the degree to which the results can be confirmed or corroborated by others. Confirmability limits the researcher's bias in interpretation by applying strategies. During data analysis and interpretation, the researcher needs to consider all conclusions possible. Utilizing multiple types of data sources including interviews, journals, field notes, and observations provides triangulation, strengthening confirmability, rather than using only one method of data collection (Herr & Anderson, 2005). This study utilized initial and final interviews, participant and facilitator journals, and field notes to ensure triangulation was present during the study.

### **Strength and Limitations**

A strength of action research is the ability to use many of the techniques popular with qualitative researchers, such as triangulation of method and data sources and member checking. Many practitioners find traditional research less useful when compared with the narrative accounts which often come out of action research. The knowledge that results is often applied

directly to practice as action research addresses specific problems by involving practitioners in their actual practice settings (Kuhne & Quigley; Kincheloe, 2003, Herr & Anderson, 2005; Marsick, 2009).

A weakness of action research occurs when a researcher is studying a program that is his or her own as tendency for self-promotion may be too great (Herr & Anderson, 2005). Insiders, because they are believers in their particular practices, are often tempted to put a positive spin on their data. However, bias can be dealt with by acknowledging one's presence in the study and by building in self-reflection. A second problem, described by Herr and Anderson (2005), is experienced when an insider to the setting is also the researcher. Practitioners, because they are "native" to the setting, must work to see the "taken- for-granted" aspects of their environment from an outsider perspective.

### **Summary**

Action research has experienced widespread success, both as an "individual route to professional development and as a collaborative route to professional and institutional change" (Herr & Anderson, 2005, p. 17). While action research shares similarities with qualitative research, it is different in that action research participants are either in control of the research or are participants in the design and methodology of the research (Herr & Anderson, 2005). It makes action central to the research concept and contrasts with traditional research, which tends to take a more distanced approach to research settings (Herr & Anderson, 2005). The concern for both action and qualitative research is evidenced through the need to improve practice (action) and create valid knowledge about practice (research). For educators, the classroom is the ideal setting for action research. In selecting the classroom as the setting for this action research

process, I hoped to impart a perception that professional development does not have to happen off campus but, rather, directly inside one's own classroom among all the tools essential for learning.

Action research investigates and brings about change; as such, it seemed to be a perfect fit for the Japanese Lesson Study model of professional development. Teachers are key change agents in education and solve problems by studying themselves and the instruction found in their classrooms (Patton, 2002). Teachers who participate in lesson study report that learning with colleagues is effective and enjoyable (Lewis & Perry, 2010). Japanese Lesson study assumes that teachers need opportunities to work with colleagues to bring about change and carefully study student thinking. Action research and Japanese Lesson Study will meld together to tackle the problems in the classroom that often remain unnoticed and untouched in isolation behind closed doors.



## **CHAPTER FOUR**

### **INITIAL FINDINGS**

The purposes of this action research study were first to explore teacher perceptions of Japanese lesson study as a method of professional development, and second, to take teachers through an action research process as they observed the implementation of a literacy lesson in the classroom. Through an action research process, the study examined how teachers' perceptions evolved during the process as they worked jointly to create a literacy lesson and then implement this lesson in a classroom with students present. The process of the action research employed an interactive approach that consisted of the following four stages: planning, acting, observing, and reflecting.

This chapter is divided into three primary areas: the findings from initial interviews; the findings documenting the action research process; and the findings of the study as a whole based on the their reflections o the Action Research process. The first section focuses on the initial interviews that took place prior to the initiation of the action research study. The analyses of these interviews were used not only to understand the participants' backgrounds and how they constructed their perceptions, but also to draw on the data to plan the initial sessions. It was essential to establish background knowledge regarding teacher past educational experiences in order gain an understanding of their perceptions regarding effective professional development sessions as well as their considerations of a hybrid model of Japanese Lesson Study (JLS) utilized during the school year. The hybrid model of JLS included seven reading teachers that met weekly to create effective lessons that addressed the Common Core Standards for English Language Arts. These lessons were then delivered individually by each teacher in their classrooms, leaving out the observation component of JLS. Discussions were held after each

lesson was completed in order to reflect on the effectiveness of the lesson components as well as student success.

All of the interviews were conducted individually prior to the first learning session. The goal of the interview was to gain an understanding of the participants in terms of professional development and educational experiences, to gauge their understanding of the Common Core State Standards, and to explore their methods of instruction for English Language Arts. The research questions that guided the exploration of these goals included: (a) How do the teachers participating in this study make meaning of their Japanese lesson study experience? and (b) What about the practice of Japanese lesson study in particular helps teachers to improve their literacy instruction skills?; and (c) How does this study inform the relationship between Japanese Lesson Study and Situated Learning Theory? Based on the data from the preliminary interviews, several findings were revealed as indicated in Table 2.

**Table 2**

**Initial Interviews: Key Findings**

Influential Prior Educational Experiences <ul style="list-style-type: none"> <li>a. Past Teachers</li> <li>b. Family Ties</li> <li>c. Significant Professional Educational Experiences</li> </ul>
Barriers to Teacher Professional Learning <ul style="list-style-type: none"> <li>a. Time for Planning is Lacking</li> <li>b. Lack of Leadership</li> <li>c. Lack of Practice Based Opportunities</li> </ul>
Effective Professional Development Practices <ul style="list-style-type: none"> <li>a. Contextual Considerations for Enhanced Learning of Teachers</li> <li>b. Practice Based Sessions Lead to Next Day Application</li> <li>c. Promoting Peer Collaboration Enhances Teacher Learning</li> </ul>
Concerns of Japanese Lesson Study <ul style="list-style-type: none"> <li>a. Trust</li> <li>b. Building a Culture of Learning</li> <li>c. Recognizing Apprehension</li> </ul>

### **Influential Prior Educational Experiences**

The understanding of how teachers learn today is essential to those designing staff development experiences for educators. What they bring with them to the classroom setting ultimately influences the way they interpret and apply professional learning sessions. In order to further understand teachers as learners it was important to see how their past experiences influence them as educators. For the purposes of this study, it was necessary to understand what background knowledge and understandings participants were bringing with them to the learning sessions. All the educators that were interviewed were influenced by their prior educational experiences. These experiences tended to fall into three areas: past teachers, family, and educational experiences, which are discussed in-depth below. These initial findings were used to inform the Action Research part of the study.

#### **Past Teachers**

Teachers in this study were influenced by past educators as some were engaging and caring, however some were exposed to mean teachers that still linger in their memories today. No matter the type of educator, past teachers affect the type of educator that they want to be for children. Many teachers were influenced by past educators as recent as college but others as far back as elementary school. For example, Jennifer a 29 year veteran teacher in her second year of instructing grade 5, recalled teachers that she had as a kid, specifically those that made “education fun and rewarding”, and she noted “The teachers that I had as a kid have influenced the way I teach today.” Similarly Marla, a teacher with 20 years of teaching experience in the intermediate grades as well as gifted education, explained “The teachers that I had as a child,

still influence me today. I recall them being entertaining. I want to make education fun and rewarding.”

Past educational experiences commonly included insights on engaging teachers, specifically those who provided learning experiences that were hands-on. .” Further confirming this, Dina a teacher with 23 years of experience in grades four and five, recalled an influential teacher, “ I was influenced by a professor in college as he was hands-on and active and I knew after this class that I would someday teach like that.” Similarly Donna and Marla both recalled professors that encouraged active learning while inspiring a desire to learn. For example, Donna a teacher of multiple grades and ten years of experience noted, “Often my professors in college would state the benefit of what we were learning and then immerse us in an activity to further our understanding.” Further emphasizing the impact of past educators, Martha a teacher with 14 years of experience recalled,

When I was a junior I had a teacher and a handicap student that couldn’t answer questions correctly and I helped him. She pulled me aside and told me that I had special qualities. I should be a teacher. I bring out the best in people. This made me realize what I wanted to do with kids.

Irma, a grade 5 teacher and reading specialist, provided yet another example of an engaging professor:

In life, people along the way influence how you teach. I think back to my student teaching experience and how my cooperating teachers influenced me in a four/five classroom that was split. In training, the hands-on immersion was helpful.

In contrast, Martha and Dina expressed memories of teachers from the past that they did not want to be like. These teachers were generally mean and still caused them to reflect on the methods that they use in the classroom. For instance, Martha explained:

As a kid I had mean teachers and I watched my cousin cry and hate school because the teacher made her feel stupid. This made me want to be different when I grew up. I wanted to make a difference for kids.

Teachers are influenced by their own experiences, making them conscience of what is going on in the lives of their students. Therefore they are conscience of what is going on in their students' lives and what they are thinking, more so than the curriculum that is taught at school. For example, Dina stated:

My own experience as a student influenced me as a teacher today. As a student I didn't like school very much starting with the grade five time period. The teachers didn't care about their students, so I am conscience of what is going on in their lives and what they are thinking, and that this is more important than school.

Further confirming this notion, several expressed how teachers made them feel stupid and this made them want to make a difference for kids when they grew up. For instance, Rhonda, a reading specialist with 41 years of experience in education, recalled her first negative learning experience in grade 3:

I had a teacher that always put on my report card 'Rhonda needs to be more careful and less careless'. I had dyslexic tendencies. I was the kind of kid that tried to do everything right. To have a teacher do this was crushing. I realized I had my own challenges and

for this reason, I like to work with this type of child. I can provide them with tricks as this does not go away.

This is important to understand when preparing in-service sessions for teachers. Teachers will need to understand the importance of the learning sessions because what they really want to focus on are their students. Further shaping the perceptions of teachers was the impact of family.

### **Family Ties**

Many of the participants expressed that family influenced the kind of teacher that they are currently. Even watching parents interacting with children influenced approaches to instruction. For example, Donna commented that experiences in life shape you such that:

I am not a parent but I know when you are a parent it influences how you view things. Watching my friends parent has influenced me. You need to step out of your teacher shoes and look at things from a parent and kid perspective. The more I teach, the more experience I get, it totally affects how I deal with kids.

It appeared after speaking with the teachers that mothers that were teachers themselves often impacted the career choices of their daughters. For example, Marla explained “My mom was a teacher and I saw how rewarding being a teacher could be. This made me want to be a teacher.” Additionally, family in general also seemed to impart a desire to become a teacher. Jennifer provided insight into the effects of families with siblings, “ My large family background, 9 brothers and sisters, influenced my interest in becoming a teacher. I had to take care of them and engage them. This made me realize that I have always wanted to be a teacher.”

Although the teachers interviewed were influenced by past educational experiences stemming from family and classrooms experiences, there were significant professional educational learning and training experiences that shaped who they are in the classroom.

### **Significant Professional Educational Experiences**

Experiences in life influence the instruction found in classrooms, particularly educational development experiences, including trainings, workshops, and college courses. The teachers interviewed provided insight into significant trainings that made a difference for them educationally. These trainings were specific and they were noted for influencing them personally as teachers. Designers of educational learning sessions can learn from the perspectives of teachers and what they find essential for learning. For example, several teachers made note of college courses that were attended over the course of several week-ends. The courses were centered on a specific topic. Marla and Dina commented on the generalizability of the courses. They spanned many grade levels so that discussions were interesting. Specifically, Martha explained what was beneficial about week-end courses:

They are very practical and generalizable so that I can adapt it to what I am doing. The classes span a range of grade levels and you can take what you did and share your lesson that you created and then you get feedback based on what the students did from all the different perspectives. You can discuss the grade level above and below. You can then transform what you are doing and have a vision for where kids need to go.

Still other trainings were offered by the district for which they worked. An example of such offered by Donna included a training on ‘Covey’s 7 Habits’. She stressed that, “It taught me that what I do is a role model for kids and it encourages life- long habits which encourage the

kids to be successful.” Similarly, Rhonda still recalls a training that she attended during her third year of teaching.

The most important training that I attended was during my third year of teaching, working with body and space. It involved walking on a line to see if they could stay on it and activities explained why instruction that involved crossing the mid-line was essential. This was during the early 70s. This is the type of training I choose to attend if I can. I like to hear about ways to encourage kinesthetic learning as it relates to the brain.

The training made such an impact on her that she still uses what she learned. As you can see past educational experiences can influence and shape teachers as instructors in the classroom setting.

The previous section explained how teachers were influenced by their past educational experiences as well as family. The understanding of what teachers bring with them to educational sessions is essential. Gaining information about your audience prior to the development of sessions can affect the success and implementation of the material delivered. Also essential to teacher learning, is the understanding of barrier that prevent teacher professional learning.

### **Barriers to Teacher Professional Learning**

Despite the best intentions, there are constraints that prevent teacher learning. The understanding of these constraints will further inform this study as I seek to better understand teacher perceptions of effective methods of professional development. Often, teachers attend trainings within the school district as well as trainings off campus. Several items were consistently mentioned as interfering with learning by the teachers interviewed including time,



lack of leadership, and lack of practice based opportunities. The understanding of these interferences could inform the development of further professional development opportunities.

### **Time for Planning is Lacking**

Time is lacking not only for collaboration among teachers but for the planning of lessons as well. Time might be thought of as the lynchpin that connects teacher learning with classroom instruction. As stressed by Jennifer, “Leaving us with ideas and not enough time to put it together, the teachers drop the ball because something else comes up. It gets further down the list.” Further stressing this time issue were comments about meetings that were filled with ‘fluff and stuff’ that took up crucial time for ‘mindful planning’. Similarly, Dina noted that, “most in-service sessions just feed you information without work time. The biggest asset is a session that provides you with information but then allows you to utilize the information with work time.”

Not only did teachers speak about the lack of time for planning, but also time to keep up with changing expectations. Recently, the current Common Core State Standards came across in many conversations as demands are shifting for teachers. For example, Martha addressed this issue when she stated:

We need time to work as a team and develop lesson to address the standards. We need time to evaluate how effective the lesson was. You can tell us all about the standards but if you don’t give us time to plan and look at the standards and figure out the curriculum it is meaningless. Time for planning is essential but lacking.

Furthermore, Donna explained why time is essential to teaching learning:

Teachers need to be provided with work time. Teach them what it is, then give them time to work and collaborate. Way too often we have workshops with great ideas and then on our own we were supposed to figure out the rest. There isn't time to do this. You need time that day to implement what you learned.

Similarly, Irma expressed the need for collaboration in order to share ideas:

Collaboration is essential. Testing has taken over and test scores are the only thing that matters. PSSA scores are a priority so there is not as much time to create creative lessons. They used to give us 45 minutes a day to collaborate for lesson building but now it is related to data.

Teachers commented on the need for time to collaborate, share ideas, and observe others in their classroom settings. All of these educational initiatives require not only time but leadership as well.

### **Lack of Leadership**

Leadership takes many shapes in education. It is often thought of as being related to district administration, such as principals; however leadership can infest itself among teacher meeting groups or stem from educational jargons that require specific discourse among teacher leaders in order for understanding and implementation to occur. For example, Donna addressed this when she stated:

We all have experiences that influence us, some want to be told what to do but others want time to develop curriculum for the Common Core Standards and get rid of what isn't working. The leadership that is in place affects the direction that teachers take to

make instruction more effective. Some leaders can stifle learning when they do not empower teachers but rather dictate what needs to be done.

Also equally as valuable was honesty in an administrator. In order to learn and grow an administrator has to be honest so that a teacher can mature. For instance, Dina explained:

Some administrators just want to get the job done. Some are too nit-picky. Stacie and Josh were good as they always started with a positive. They never said you should do this, they offered suggestions by telling us things we should consider in a friendly way.

The importance of leadership affects the success of teacher learning. Empowering teachers and the consideration of educational topics is important. Offering too many choices for professional learning isn't always beneficial. For example, Marla expressed "The district offers many subjects for professional development, but they are all different and we never get to go deep with any one item."

Leadership among teacher learning teams was clearly a talking point for many of the teachers interviewed. When they reflected on their experiences with the JLS hybrid model, there comments reflected a mutual need for a leader to take control during the meetings. For example, Rhonda explained:

As they reflected on the hybrid version of Japanese Lesson Study that was implemented during the school year, many noted that they all interpreted the lesson to be implemented in the classroom differently. Even though each teacher attended the same meeting and received the same lesson, there were no directives offered as to expectations that were in

place. Each teacher did their own thing because there was not a teacher leader present among this group of teachers.

When leadership is lacking, districts often jump on bandwagons without a second thought. As discussed by Irma, Marla, and Jennifer districts often implement new district plans without thought. For instance, Jennifer expressed:

What I have found in my 29 years here is that we don't always stick with things to see if they work. We jump on a bandwagon and then we don't have the student data results that we want. District leadership offers many subjects for professional development, but they are all different and we never get to go deep with any one item.

Luckily JLS is not another bandwagon or program but rather a way to focus on shared goals for student learning and development. Further addressing implications for classroom instruction, practice based opportunities were noted as essential but lacking for professional learning.

### **Lack of Practice Based Opportunities**

Teachers often stress a need for trainings to be practice- based or relevant to the instructional needs found in their classrooms. For example, Marla explained, "We need to connect teaching to what we know about the classroom setting." Opportunities to see instruction in action among students was discussed by teachers as essential to improving their own practice. For instance, Donna stated, "We have not been able to get into other classrooms this year to see our colleagues and say hey I never thought of it in that context."

Learning in the context of the classroom setting where teachers learn and work daily is often overlooked as an essential practice for teacher learning. Although observing others in action is thought to increase learning potentials, this rarely happens in a school setting. According to Dina, “learning with students present is a real eye opener.”

There was concern among the teachers about the creation of integrated lessons. In order to address classroom instruction in this area, Marla stressed that, “teachers need to connect teaching to what they know about the classroom setting.” Martha also claimed, “if you don’t show it to me and let me play with it, it goes over my head. We need time to discuss and have hands-on opportunities. For this to happen, opportunities for practice based professional development will be essential.

In order to address the barriers to teacher learning, such as lack of time, leadership, and practice based learning, the understanding of effective methods for professional development is essential.

### **Effective Professional Development Practices**

Effective practices utilized during staff development sessions are crucial for teaching learning. The understanding of these practices will inform this study as further consideration of what makes teacher learning sessions effective will inform future educational sessions designed for teachers. According to the teachers interviewed, there are three areas to consider when designing professional development for educators such as; contextual considerations, practice based sessions, and peer collaboration.

## **Contextual Considerations for Enhanced Learning of Teachers**

The context and room arrangement for trainings influence teacher learning and should be considered by facilitators. The context might include the teachers present as well as how the topic is presented. Many teachers commented on the importance of being engaged rather than sitting and getting information. In relation to this, Martha commented:

Just sitting with a power point on the screen and being talked to doesn't work. I need to read something, learn it, see it, practice it, and then discuss it.

Similarly, Dina explained, "We need time to discuss and have hands-on opportunities. If you don't show it to me and let me play with it, it goes right over my head." In order to move beyond the sit and get sessions, presenters should consider what they are presenting. Teacher audience was brought up numerous times by teachers that were interviewed.

Considerations should be paid to how practical the sessions will appear to teacher groups. For instance, Irma confirms this notion of practicality as she states:

Sessions that are too broad, where they bring the whole district together, I often become unfocused. For example, they might bring a speaker in and it is too broad and it loses its effectiveness."

Similarly Donna stressed that:

Practical sessions happen when we have choice in what we attend. If you choose to do it, you will invest more in the opportunity than if you are being told you have to do it.

Group size also determines the success of a session. Summarizing on what many teachers commented on, Marla suggested:

If I am in a big auditorium I get distracted. If I am in a large group, I get too distracted.

If it is too much lecture, I get distracted. I would rather be in a small group. It has to be focused and of high interest.

Irma also commented on the importance of group size as stated, “The larger the group and setting the less effective it is.”

The context and the teacher group within a learning setting should be considered when designing sessions. Many participants talked about the presenters and teacher groups and how it can affect teacher buy in. Donna solidified this as she confirmed that:

Teachers are the worst students because we do everything that we don’t want our kids to do. If you are in a training with other positive people this is helpful rather than oh here is another worthless training that the district wants us to do. If you don’t see a benefit then you will begin the session with a bad attitude. Real teachers presenting makes a difference as they can give you practical items that you can use in your classroom.

Teacher opinions shape the success of professional development sessions. If they do not see the practicality of the training, interest is quickly lost.

### **Practice Based Sessions Lead to Next Day Application**

For teachers it is essential that content delivered at training sessions be connected to what is happening in their own classrooms. All of the teachers interviewed stressed that application was necessary, many stressed that trainings were impractical if they did not include things that you could apply directly to your classroom. For example, Irma noted “Teacher trainings are

impractical if they do not include things that you can apply directly to your classroom.” Jennifer further explained:

If you can bring one thing from a training and apply it to your classroom that is good.

Everyone gets overwhelmed when you return to your classroom and things get put aside.

The timeliness of implementation was essential to each teacher. Specifically teachers want trainings that allow you apply things to your classroom immediately as suggested by Irma, “Trainings that allow you to apply things to your classroom right away are most beneficial. It is fun to try something new and different right away. This is beneficial.” If trainings pertain to the content in the classroom, this is even more powerful. For example, Martha specifically noted that sessions need to be related to what we are teaching and therefore practice based. For instance:

I like to take things and apply them to my classroom. Professional development needs to be hands-on for teachers. The last professional development, we broke apart by subject area and divided the lesson responsibilities among each other. So we walked away with practical items to implement in the classroom.

Teacher time is precious, which would suggest why many participants that were interviewed stressed that they enjoyed sessions, which provided them with information on how to be more effective in the classroom. Further emphasizing this, Donna noted,

I like trainings where I can take away things. I can walk into my classroom the next day and implement something. We are all so stretched in planning in the school day. You need trainings that show you how to do things more effectively no here is another thing to do, another program. I don’t like walking away feeling like I have wasted my time.



Impractical sessions are a frustration among teachers. If they cannot relate to the content, teachers quickly lose interest. For example, Donna stated,

Impractical sessions are those that are put together to kill time and fill requirements. The hats are a great example. We had a woman come to present and it wasn't applicable and you lose the audience and there are side conversations going on. You need to make sure that the session is related to what we are teaching and practice based.

Considering important elements that capture what educators need is essential to designing a powerful professional development training. Collaboration among teachers also creates a learning environment that promotes teacher learning.

### **Promoting Peer Collaboration Enhances Teacher Learning**

Collaboration takes many forms. It can come in the shape of book study groups, peer conversations, and sharing forums. All teachers interviewed agreed that collaboration was a necessary component of a successful school. For example, Irma suggested:

Small groups of teachers collaborating in their own building and using the CCS and designing lessons that could be used immediately in the classroom is the best use of professional development time.

Even if trainings were slightly unfulfilling, if time was provided to engage with peers, teachers stressed that this lead to important learning. For example, Martha explained,

Usually trainings are repetitive but it is nice to share with other teachers and learn what they are doing and then tweak your own ideas to make them better. Sharing with other teachers is important.

Dialogue among teachers is essential as it satisfies the sounding board that many are looking for. All teacher participants suggested that this conversation built relationships as they could feed off of each other and bring forth learning communities. Gaining security in teaching can stem from discussions from others as noted by Rhonda,

The more opportunity you have to talk with peers the more you can bring it to your own situation. You can bounce ideas off of each other and see what is appropriate for your school and see what you have not thought of and what you are not doing and make it fit and make changes.

Working amongst teachers leads to organized learning. It can facilitate learning and encourage teamwork. When talking about effective methods of professional development, Martha shed light on this idea of collaboration when she explained, “working with that team of teachers and being mentored really shaped the way I became a reading teacher and the way I get students to think today.” Alliances among teachers can inspire learning and encourage new opportunities for discovery. However, in order to encourage these collaborative experiences there must be trust among teacher groups.

Giving considerations to teacher concerns about effective professional development sessions will only lead to enhanced learning and ultimately better performing classrooms as we strive to design sessions that inspire teachers and relate directly to the needs found in their own classrooms.

### **Concerns of Japanese Lesson Study**

Japanese Lesson Study is an approach to instructional improvement during which teachers collaborate to plan lessons and examine its impact on students. Although this may

sound simple, lesson study is a complex process during which teachers challenge and build one another's knowledge. Many educators are initially reluctant to have their teaching observed by colleagues as was portrayed during the initial interviews with the participants. There are other concerns that were addressed by teachers including culture and the ability to accept one's fear of observation.

## **Trust**

The biggest concern for the implementation of Japanese Lesson Study was the ability to have trust in colleagues as they observe you while you are teaching a lesson in a classroom full of children. Interestingly enough, several participants expressed concern that our group consisted entirely of women. Dina explained this in detail:

I think with women you have to be really careful because women take everything very personal. I am going to make sure that when I hear things that I hear them with a friendly context and now with an attack context. I want people to say what I could do differently without being afraid of hurting my feelings.

Similarly, Marla noted, "You have to trust the person. You have to build relationships with people first. Then discussion would be more open. You would be ready to hear criticism more."

Building relationships with the staff you work with was referenced by many participants as way to create bonds. It was agreed upon by everyone that in order to create trust, you have to build relationships first. This will lead to more open discussions. For example, Donna reflected, "You would be ready to hear criticism more." Although everyone expressed excitement about the implementation of lesson study, there was still apprehension because of past experiences.

For instance, Martha recalled past working environments, “In the past I would have said no way! It all boils down to trust and in prior work environments there wasn’t trust, I felt it was all competition, the challenge of who was the better teacher.”

Trust also involves the element of respect and having appreciation for each other. In order to take criticism you have to establish good relationships first. This idea was referenced consistently by everyone. Marla reinforced this notion as she explained what it was like to teach in front of teachers that she did not respect:

When I did my lesson in math, if I would have been teaching in front of people I trusted I would have valued their opinions more because I would respected and trusted what they were saying. When I did my lesson for math, I was new and I didn’t feel comfortable with the subject matter and there were too many negative people.

In order to establish trust in buildings it may be necessary to consider the atmosphere of your building.

### **Building a Culture for Learning**

Of the teachers that expressed that they would not mind being observed by their colleagues, it was expressed that they felt comfortable in their school buildings. They witnessed what others often do not, a culture that supports sharing and critique in order to promote growth. Teachers create the atmospheres in buildings. They define the type of culture; whether it is one of collaboration or personal reflection. However, of the teachers interviewed, some did not always find appropriate work environments in buildings in which they worked. For example, Donna had worked in a building where teachers did their own things, “they shut their doors and didn’t share for fear of criticism. In this building, many of us share everything.”

Some buildings have the best intentions and promote ‘coaching’ environments where teachers model teaching methods in the classroom for a teacher. Robin provided an example about such an environment:

Peer coaching has been around for a while, years and years, but has not been used effectively. Teachers do not know how to critique each other. It has not gotten off the ground successfully. It depends on the administration. The older teachers who have been teaching for a while may have a harder time with this. It is uncomfortable for certain people. You need the environment set up in a positive non-threatening way after building rapport.

As noted above, teachers are prepared and willing to teach in front of others. In order to overcome apprehensions a trusting culture should first be established in work environments.

### **Recognizing Apprehension**

Understanding teacher ownership of their lesson plans is crucial to recognizing the apprehension found among some teachers as they open their doors for others to visit. Teaching is often a profession conducted behind closed doors in isolation. So the ability to listen with an unguarded mentality is hard for some teachers. As discussed by several teachers, taking ownership for one's actions in the classroom often prevents them from hearing constructive criticism in a positive way. For example, Jennifer explained “The open door policy is always good but everyone’s egos do get burnt around the edges. We are doing the best we can but we can always get better.” Teachers expressed that they work so hard it is easy to ignore what others have to say. For instance, Dina provided an example of how teachers take ownership of what they do, “we think what we do is best and we have to make sure that we listen and be honest.”

Establishing ground rules for listening while understanding that no lesson is perfect will create a pathway for the recognition of uneasiness that each teacher discussed.

Each teacher expressed enthusiasm for lesson study because it focuses on the kids and not the teacher specifically. Being that each teacher interviewed taught reading, they discussed how different each is, as there are six completely different styles of reading instruction. They have worked on accommodating each personality and the varying lesson ideas that are put forth. For example Marla explained that:

We all do things different way and offer suggestions of how we might want to try something this way. You are not wrong. It is just a different style. Everyone respects each other so being critical isn't viewed as a threat. It lets us help each other become better.

The implementation of Japanese Lesson Study is not done without flaws but it is an in-depth way to improve instruction among teams of teachers in a school setting. As a method of professional development, JLS could address all the essential ingredients of a professional learning session. However, there are hurdles to overcome such as trust, building culture, time for implementation, as well as recognizing apprehensions.

## **IMPLEMENTATION OF JLS IN FACULTY DEVELOPMENT THE ACTION RESEARCH PROCESS**

This section focuses on the context where the teacher trainings took place as well teacher perceptions that were revealed as they began their learning journey with Japanese Lesson Study as a method of professional development. For the purpose of understanding the Action Research process and the story that unfolded, four phases were identified. There were eight training sessions that teachers participated in while partaking in the JLS process. The length of the sessions varied from 30 minutes to 2 hours. Phase one consisted of sessions one, two, and three. During this phase teachers studied the Common Core State Standards for English Language Arts, analyzed student data, and received an overview of the Japanese Lesson Study process. These sessions were shorter due to time constraints as teachers had to return to their classrooms to begin their instruction for the day. According to my field notes, there was a noted amount of excitement as they began the Japanese Lesson Study process. Teachers appeared to be paying attention as they listened and engaged with each other. Likewise, their journals reflect a story of excitement filled with a bit of trepidation as will be revealed during later sections. Phase two consisted of session four during which, teachers used what they learned in phase one to select a goal for student learning and plan the initial lesson. This goal was based on the Common Core State Standards and student data. This session was almost two hours in length and allowed for a lot of time to collaborate. Teachers naturally assigned themselves to roles during this crucial planning phase. The extended time to plan a lesson was appreciated and reflected crucial learning moments. This teamwork will be discussed further in the next section. Phase three consisted of sessions five, six, and seven including, the teaching of lesson one, revision of the lesson, and the teaching of this revised lesson. These phases represent the largest amount of time during the study. According to my field notes, teacher engagement represented discussion,

observation, and reflection. Learning took place in varying contexts including classrooms with students and continued dialogue around a table. Whiteboards were used to jot notes and Smart boards were used to project lesson planning ideas. The final phase, session eight, included reflections of the Lesson Study process. The reflection process included discussion among colleagues, writing in journals, and continued reflection using the Critical Incident Questionnaire. The data that revealed itself is important to the understanding of Japanese Lesson Study as a form of professional development and to realize the teachers' path of learning as it pertains to English Language Arts and Situated Learning Theory.

The development of these phases and related findings were based on data collected from final interviews, teacher and researcher journal, and Critical Incident Questionnaire (CIQ)s completed during phase one and phase four. The final interviews were conducted after the completion of the study to gain a full understanding of teacher perspectives of Japanese Lesson Study as a method of professional development. Journals were kept by each teacher and served as a place to take notes and reflect after the conclusion of each session.

Based on the data from the final interviews, journals, and CIQs, four overarching themes concerning the phases of this study emerged among the data presented in Table 3.

**Table 3**

**Themes from the Action Research Process**

Phase One: Astounded by Japanese Lesson Study
a. Teaching as a Science: Focusing on the Learner
b. Learning About Japanese Lesson Study
c. Excited but Overwhelmed
Phase Two: The Power of Team
a. Importance of Time for Collaboration
b. Teacher Experience
c. Feeling Productive
Phase Three: Learning in the Context with a Peer Coaching Emphasis
a. Learning in Context through Observation
b. Critical Friends



### **Phase One: Astounded by Japanese Lesson Study**

During phase one teachers gathered three times for 30 minute morning training sessions in a teacher's classroom. Directly after these sessions, teachers would have to be in their classrooms as students would be without supervision. As the sessions unfolded, they would pull desks together and gather in a circle with presentations projected on a Smart Board in the room. Teachers were often engaged but distracted with the knowledge that they would need to be in their rooms in 30 minutes ready to teach. It is also important to note that meetings cannot run over as teachers need to be in their classrooms by a certain time and contractually, teachers are only obligated to have one 30 minute meeting a week with their peers. Teachers were respectful during meetings but often engaged in side conversations about the "daily happenings". In order to understand the process of teacher learning, data has been divided into three categories: teaching as a science, learning about Japanese Lesson Study, and overwhelmed.

#### **Teaching as a Science: Focusing on the Learner**

Teachers participating in the study looked at teaching differently as a result of the training sessions provided during phase one. Overall, as a result of looking at the Critical Incident Questionnaires, teachers reported that the most important thing they learned was that lesson study would focus on observing student reactions not teacher presentations, specifically one teacher noted, "We will be looking at teaching as a science". As discussed in an article read by the teachers, lesson study sharpens the eyes so as to increase the ability to check for student understanding. According to field notes found in my journal, teachers were engaged in discussion about the lesson study process and reflecting on what is best for student learning. They were conversing about the opportunity to watch students. Teachers began to understand

that teaching is like a science because we are constantly learning and revising our lessons based on student understanding. For example, Rhonda stated in her journal “When lessons don’t go well we (teachers) learn the most. This builds pathways for future learning beyond a specific lesson.” Similarly, Donna noted that, “The key advancement to instruction is about observing kids and how to motivate them.” Further confirming the need to pay attention to how students react to a lesson, Jennifer wrote, “I need to slow down so that I can observe and listen to students.” Martha wrote about the powerful impact lesson study will have on the quality of instruction found in the classroom. For example, “Learning how to key in on what the students are doing is valuable.” Teaching as a science requires close examination of students so that instruction and lessons can be adjusted accordingly. Similarly, Irma expressed in her journal, “We will learn so much from observing and discussing the lessons.” This is an essential component of JLS as learning how to observe with keen eyes is part of teaching as a science.

In accordance with teaching as a science, teachers value consistency in order to develop their knowledge of curriculum. There are variables to consider such as Common Core State Standards and student performance that require teachers to analyze lessons and assessment data to ensure learning is taking root. In relation to teaching as a science, Martha expressed concern over not going deep enough with her own learning. For example, she stressed, “We need to be given the opportunity to stay consistent. We change major components each year and spend too much time refiguring instead of developing and expanding our own learning.” She further expressed in her journal, “often teachers learn new ideas but with each passing year a new initiative comes forth, which prevents teachers from learning like a scientist and making connections to what is happening directly in their classrooms.” Similarly Jennifer wrote in her journal, “Japanese Lesson Study will provide relevance to current educational directions, rather

than a new program or new initiatives.” Growing knowledge is essential to JLS and teaching as a science. Focusing on learners will allow teachers to prosper as educators.

### **Learning About Japanese Lesson Study**

As discussed earlier, phase one consisted of sessions one, two, and three. In sessions one and two, teachers analyzed data and focused on specific Common Core State Standards that pertained to recent data. During session three teachers received an overview of the Japanese Lesson Study process. These sessions will be the primary focus of discussion in this section. Specifically data reflected three sub-themes including lack of engagement, the lesson planning process, and reflection.

**Lack of Engagement** Engagement, an essential element of staff development, should be considered when designing learning sessions for teachers. As reflected in my notes, I did most of the talking during sessions one, two, and three, while the teachers appeared to be absorbing details like sponges. Teachers appeared reflective with nods of the head and rapid note taking. As if often evidenced in a lecture format, students can look reflective but their minds can be elsewhere; thus explaining the necessity for instruction beyond stand and deliver. I realized after this process that students often present themselves as active listeners but secretly feel disengaged. For example at the end of session two, Marla wrote, “lost and confused, a lot to do.” Further confirming the necessity to engage teacher learners in practice, a teacher wrote on her CIQ, “I was least engaged during session two when I followed a packet without having first read the article.” The learning of the process of Japanese lesson study, although essential, proved to be the least engaging for the teacher participants according to their CIQs. For example, a teacher wrote on her CIQ:

The time in the sessions that I was least engaged as a learner was session two. I am a producer so I was more attentive to the review of materials and roles and the discussion that finally led up to the creation of our initial lesson during session three.

Similarly confirming this Dina stated in her final interview, “The least interesting part was looking at the protocols and guidelines. I like getting my hands dirty and actually doing the lesson and talking with my colleagues.” According to my notes, teachers appeared attentive during this process, so it was interesting to read their comments regarding their lack of interest in the protocols for the JLS process. Some teachers are hands-on learners and do not seem to benefit from sit and get sessions.

The sections that follow will provide more in-depth understanding of teacher perceptions as they developed an understanding of the JLS process. Specifically, the data revealed themes revolving around the lesson planning and teacher reflection.

**The Lesson Planning Process** The learning of the process of Japanese lesson study, although challenging, proved to be exciting. Despite the general lack of engagement in phase one, there were two teachers that were interested, as evidenced by their CIQs, during the discussions in session two that led to the creation of the initial lesson. For example one teacher wrote on her CIQ, “I was most engaged during the discussions that led to the creation of the lesson.” Teachers enjoy openly discussing their ideas with others. Further confirming this were my notes as I noticed that teachers were engaged and focused during this stage, when they were engaging with each other around a table about lesson specifics.

After a thorough discussion of the process of JLS including the roles assigned to teachers and the progression including lesson development, teaching of the lesson, revision, re-teaching of the lesson, and reflection; the teachers began to discuss what this would look like in the

context of the classroom setting. According to my notes, their excitement was evident during session three as they became more vocal. This was a noted difference from sessions one and two where teachers sat and absorbed. At the end of session three, for example, Irma wrote in her notebook “I am so excited to be able to work with my colleagues on the development of this lesson study. We will learn so much from observing and discussing the lessons.” Each teacher wrote about the amount that goes into this process. Rhonda wrote in her journal about the well-developed, thorough lesson plan that would come as a result of the JLS community. She wrote in her journal:

During the process we looked at goals and best practices to teach a specific lesson that was a weak area for kids and we focused on vocabulary. I found this very practical. The well -developed, thorough lesson plan will be beneficial. It will lead to a specific, logical, and productive plan.

Similarly Jennifer noted how organized and systematic the process appeared and how relevant lesson study was to current educational initiatives. Specifically, she wrote:

Learning the lesson planning process was a great use of time. I am nervous about sticking to a plan but it is very organized and systematic. It is relevant to current educational directives.

Teachers overall crave a format that is practical or connected to past practices. For example Donna wrote in her journal, “As we established roles for teachers in the group, I realized that they are very similar to roles we give kids for literature circles. This eased my nerves.” Teachers also like being presented with a method that they can easily implement. As was discovered in Dina’s journal, “The lesson plan template is scripted. This could be useful as we write the plans.

Japanese Lesson Study requires a deep thorough reflective process prior to the creation of the lesson. The plans alone are not enough to ensure success, as much of the process is a result of careful reflection. This will be discussed in the section below.

**Reflection** Learning the procedures used during the JLS proved to be challenging and exciting. Teachers learned how to adequately reflect and perform the roles typically utilized by JLS participants. Teachers understood the purpose of the Japanese Lesson Study process; that is to reflect on instruction and student data in order to create effective lessons. For example, one teacher wrote on her CIQ, “Don’t reinvent the wheel, do reinvent your lessons!” This is an essential ingredient of the Japanese Lesson Study method; reflection that leads to modified lessons.

Because reflection is a necessary component of JLS and the action research process, we practiced this beginning with session one as each teacher ended the sessions by writing in journals provided for them. According to my field notes, many participants expressed how hard it was to reflect in a journal. Specifically Dina wrote in her journal, “Reflection is hard for me. I prefer conversations with peers.” Teachers who practice reflection generally reflect on lesson plans themselves, so they find it hard to reflect additionally in a journal. Further confirming this, Marla wrote in her journal, “We are not practiced in journal reflection.” Teachers often dialogue on the fly with a neighboring teacher. Time isn’t allotted for journal reflection. For example, as evidenced on a CIQ, “I was least engaged as a learner when filling in the journal.” Additionally another teacher wrote on a CIQ, “I enjoyed discussing what we saw, but found it hard to respond in writing.”

Responding in writing to reflect on instructional practices takes time and continued rehearsal. Many lesson plans utilized by teachers are pulled from past files. According to my

field notes, several teachers commented on the deep reflective planning required for JLS. They commented on the amount of time it would take to create such plans based on current data and goals. Teachers at the elementary level teach multiple subject areas and find it hard to put a lot of planning time into each subject area. Therefore, JLS may present some challenges as teachers are not used to this type of in-depth planning. For example Donna wrote, “The length of the written plan takes time, which we don’t always have during the school day. We don’t practice reflection before and after lessons.” Further commenting on reflection and planning, Martha wrote, “The JLS process is very beneficial. It will force me to be reflective when planning and to make lesson revisions immediately.” Most teachers are not practiced on how to utilize the reflective process to create effective lessons but realized the benefits.

The beginning phases of lesson study lead teachers down a path of excitement. However outward appearances can be deceiving as many wrote about feeling overwhelmed. As we moved to session three, teachers wrote about the JLS process as whole and worried about the impracticality of continuing this during the school year. I felt stressed during session three as we were under time constraints and I feared that we would come away with inconsistent goals for the lesson. The next section will explain the learning path of teachers as it relates to feeling overwhelmed.

### **Excited but Overwhelmed**

Learning a new process can bring forth a feeling of overwhelm. For teachers learning the JLS process caused some to feel excited and anxious; resulting from learning a new reflective lesson planning process and the thought of teaching on front of peers; a crucial component that teachers are not used to implementing.

Although several teachers reported on their CIQs that the journals were the least engaging part of the research process, they revealed several key issues that were not outwardly apparent among teachers. There were several journals that had “overwhelmed” written in the feeling side of their journal. Teachers were reflective in their journals even though many didn’t enjoy this part of the study. For example, Rhonda wrote, “A lot goes into this process- need to work through to improve comfort zone if I am the teacher.” Teachers expressed that there was a lot of information provided to them over these early sessions. Although the sessions were spaced out over several weeks Jennifer wrote, “a lot of information was given in a short amount of time.”

Planning with a team is not an easy task as each teacher can come with a plethora of ideas. This can lead to a feeling of overwhelm as only a few ideas can be utilized. The ability of a group to stay on topic can cause further stress. According to my field notes, I observed several teachers engaged in side conversations during sessions one and two. This aggravated some teachers. Jennifer confirmed this when she wrote, “I am nervous about the group staying on topic for the lesson planning process. Similarly Martha wrote, “There is a lot that goes into doing this and it is hard to imagine doing all these steps. It seems overwhelming.” As the facilitator, I sat back and observed teachers as they worked in the group setting with other teachers. One teacher in particular was very vocal and often tried to dominate the conversation at the table. In her journal she reflected on this topic when she stated, “I love planning together. It may be hard to have all 6 of us agree.” This was an interesting insight, as this very vocal teacher was never outwardly accepting of other teacher’s ideas. Further expressing this fear for lack of agreement, Dina wrote “I hope some of our strong personalities, myself included will be open to other’s viewpoints.” Similarly Marla wrote, “I hope that we can all agree to ideas.” Having



seven teachers collaborating together on a lesson takes practice as this is not something they are familiar with.

Teachers are used to working alone when planning for lessons. According to my field notes, it was really hard for them to come up with an initial goal that would become the focus of the first planned lesson. There was down time as teachers were rapidly firing ideas. It was apparent from the data that collaboration can lead to a feeling of overwhelm. It is not something that is practiced daily in the life of a teacher, so it can take some time to get used to. Assigning roles to teachers helped with the lesson planning process. For example, Martha wrote in her journal, “It seems overwhelming but the assigned roles focused us to be more systematic and productive in our planning.” Further adding stress, teachers liked the ideas presented for collaboration but were unsure how they could continue this process for planning during a normal school day outside the professional development day which had been allotted. For example Donna wrote in her journal:

The sample lesson plan is a bit overwhelming. I think it is a good idea. I love planning together. It may be hard to have all six of us agree. The length of the written plan takes time which we don’t always have during the school year.

Further confirming this feeling of overwhelm, many teachers shared through journals that they were worried that they would have to be the teacher. A crucial component in the JLS process is teaching the initial lesson, created by a group of teachers, in the context of the classroom setting with students present. A teacher is selected by her peers or volunteers to teach the lesson. While the teacher is instructing the lesson, his or her peers are present in the classroom, observing and reflecting on how the students respond to the lesson that they designed as a group. Teaching in front of peers is not an easy task, which is why many teachers wrote

about this in their journals. As teachers continued to reflect on the lesson study process, Dina wrote “There a lot of steps. I am a bit stressed that I will have to teach” and Irma also worried, “I am thinking about how difficult it is to teach in front of our colleagues.” There is a lot of fear among teachers that their way of teaching may not be the right way. This leads to teachers teaching behind closed doors and a feeling of overwhelm when time is allotted to allow teachers to teach in front of their peers.

Although we got off to a great start and teachers appeared excited to complete the lesson study process, their written reflections revealed that they were feeling overwhelmed and feared that the process was too involved. The pathways of learning do not come easily and this process is reflective of the fear that many teachers feel when they encounter something new.

### **Facilitator Reflections**

As a facilitator I realized the importance of making connections to current educational initiatives in order to get teacher buy in during phase one. Analyzing student data and the Common Core State Standards made it relevant to teachers. During the session I recognized that when preparing sessions for teachers andragogy needs to be at the forefront of planning. Teachers need to feel like sessions are productive and problem based. The teachers in this study appreciated the systematic process of JLS. This tendency toward efficiency needs to be noted as teacher time is precious. I was constantly made aware of this when teachers would monitor the clock because they are expected to be in their rooms in order to fulfill contractual obligations. Time is always a factor in staff development of teachers. Finding time to provide opportunities for collaboration is a concern that cannot be overlooked.

## **Phase Two: The Power of Team**

There are many layers to collaboration which affect teacher learning including: idea sharing, close study of curriculum, and breaking down the barriers of collaboration. The idea sharing which took place during JLS led to a deep study of curriculum, however for this to continue in the school setting, there were barriers to that needed to be addressed. Japanese Lesson Study encourages peers to work together, sharing their wealth of experience and thus requires time for collaboration. During this phase, the study team planned the initial lesson based on goals set by the group as a result of student data and the Common Core State Standards. This phase was characteristic of three themes including: the importance of time for collaboration, teacher experience, and productivity.

### **Importance of Time for Collaboration**

Collaboration seems to be essential for any school initiative, as without time for peers to interact; there is a missing dimension to teacher education and advancement. This element of teacher education will be further elaborated on in this section, as the data revealed that is was necessary for effective collaboration.

The collaborative teamwork present among peers appeared to be a part of JLS appreciated by participants. For example, Marla expressed, “The power of team is what makes JLS effective. There is no I in team.” Furthermore Irma expressed her excitement of the lesson planning, “Collaboration is essential and great collaborators create great lessons.” On a CIQ, a teacher wrote, “the most important thing I learned was how much better we are as a team and collaborate together.” Teachers enjoyed that practicality of the session as it allowed for focused lesson planning as a group rather than as individuals. Similarly Jennifer explained that collaboration was the best part of JLS, “Getting together with my peers and bouncing ideas off of

each other was actually the best part of JLS for me.” On a CIQ, a teacher reflected that the most important thing she learned was, “collaborative planning is more effective than one mind.”

Furthermore, Dina reflected on the ability to work together to perfect a lesson, “JLS allowed teachers time to be working together in order to work out all the kinks of lesson planning”

Collaboration was found to be essential for many purposes, one of them being the close study of reading instruction. For example Marla appreciated the time to plan an effective reading lesson:

Reading requires very close understanding of the sequencing for instruction. I enjoyed the collaboration that took place. The collaboration in choosing a lesson focus based on the Common Core State Standards and data and then choosing the lesson and deciding the best approach was excellent.

However, despite the benefits of collaboration, it does not always work. There are teams that do not mesh well together as expressed by some teachers. For example, Martha explained:

We collaborate well but not everyone does this in other buildings. I’ve worked in schools where collaboration was not done well and people walked of the room when they were mad. I think we have a comfort level in our building. We have collaborated before and so we developed the rapport with each other, and an understanding of how to be collaborative and how to accept others’ ideas. If people don’t have experience with collaboration I think JLS would be beneficial but I don’t think the results would be as huge.

There are other barriers to collaboration, such as working in a large group. Martha in her final interview explained:

When we were sitting around the table it was kind of crowded. I cannot think with too many discussions so I had to move to the other side of the room so that I could lay out all my materials and follow along with what we were doing. I could lay out the manuals and my laptop and then I could think better. When we were all seated around the table together I could not think so I had to isolate myself so that I could be a better participant. Then I was able to plan the lesson more effectively. It was also helpful when we put the lesson on the board; it was visually easier to understand each lesson part.

Similarly Donna explained the hardships of collaboration among many women:

I like collaboration but it was a little hard because we have six Communication Arts teachers in a room with all of our ideas. We all have a way that we think it should be done and then we all had to work together.

Collaboration, when successful, leads to deepened understanding of current educational initiatives. With collaboration, teachers bring with them an excitement for learning as they share their knowledge with each other.

### **Teacher Experience**

Teachers of all ages bring experiences with them that widen discussions. As evidenced during our time together, teachers appreciated that everyone added something to the lesson planning process; which resulted in a very effective lesson based on student response and engagement. As we planned the lesson teachers commented on the effective ideas offered by everyone as a result of the wealth of experience found in the room. For example, Rhonda explained, “We looked at what kids need to work on and we brought teachers’ different experiences and ideas together and collaborated to make a very effective lesson for kids.” Similarly on a CIQ a teacher reflected that the most important thing that was reaffirmed, “that

lesson planning together is helpful because we all have unique ideas and personal bag of tricks to benefit each other.” Experience leads to creative lessons. As explained by some teachers, it was necessary to look at the lesson ideas and choose what was best for kids. These ideas lead to an effective lesson with essential components. For example, Marla explained, “When you have so many experienced teachers coming together to plan that was very exciting. All teachers came with different ideas so we had to choose one idea that we felt was the best.” Similarly in her final interview Irma spoke about the important elements of sharing to create lessons that are new and exciting:

Each teacher came with their own teaching ideas of how you do things in the classroom but we pulled them all together and created a really meaningful lesson, a new lesson that took all of our thoughts and put it into practice.

Rhonda wrote about the discussions that took place resulting in lesson planning that took many turns as a result of collaborative efforts. She wrote, “Teachers clarified and clarified again and made changes as they listened to each other. The result was a lesson that had a little bit of everyone in it.

Teachers enjoyed the wealth of knowledge present at the table while planning the lesson. This collaborative approach allowed them to develop a lesson that they would not have created on their own. For example, Marla enjoyed:

What I liked was the lesson planning. I like looking at where the gaps were and what we needed to fine tune to make it better. It was great taking a wealth of knowledge and using it to make one effective lesson. We were getting many different ideas. We were looking at many different learning styles. This is something I don’t do on my own, so it’s great to hear other teachers’ ideas.

Similarly in her final interview Donna also expressed:

Teachers are big kids. We don't all learn the same way. We do not all operate the same way, so that was what was so special about the collaborative piece because we were all different learners. We each offer a piece of the lesson and that is how we hit all different learners in the classroom, in doing so we addressed all the different learners present in the classroom setting.

Further complimenting the wealth of experience found in the room, Donna wrote "It was interesting to combine all our ideas together. Our group willingly compromises. This isn't so in all groups I've worked with.

Collaborating with other teachers allowed everyone to utilize past experiences to develop a lesson that addressed the many learning styles present in one classroom. The teachers worked through the process and in the end, felt that they came away with a powerful first lesson. The amount of experience in the room benefitted not only the children but teachers as they were able to learn from each other.

### **Feeling Productive**

Teachers appreciate the opportunity to create lessons as a group in a productive atmosphere. This time together allows them to walk away with a lesson, which makes them feel productive. It also provides teacher practice in compromising which isn't often required when teachers teach in isolation. As they worked together to create a dynamic lesson, the teacher participants had to learn to give and take. In order to make a study session useful teachers often had to negotiate as they shared ideas. For example, Jennifer remarked during the final interview, "It was great that we all came to a consensus of what we were going to do with the lesson. I

work with very creative women and it was nice to have a final product at the end of the meeting.”

Similarly Dina enjoyed the opportunity to accomplish something that could benefit her later. Teachers often contribute to work sessions that do not connect to classroom practices or result in something practical that they can utilize immediately. She explained:

I felt we were very productive as we created a lesson that was effective. We were able to create documents that we will be able to use in our classrooms in the fall and it was a great opportunity for us to share with colleagues.

Teachers wrote that they learned more ideas through the lesson planning process. For example, Jennifer wrote, “This was a beneficial process. There were good ideas to quickly add to my bag of tricks.” Similarly Marla wrote:

The lesson is so detailed. It caused me to think about the learning process required of kids. I waste a lot of time on fluff activities rather than teaching that goes beyond surface level.

The power of knowledge sharing was further affirmed after reading the Critical Incident Questionnaires completed by the teachers as over half of them wrote that they were most engaged during session four as they planned the initial lesson. For example, they wrote “the most important thing that they learned was the benefits of planning together because they all contributed unique ideas.”

Teachers appreciated the roles that were created as this focused the planning session resulting in the ability to plan an effective lesson. Without such roles, teacher collaboration may not have been as productive. As evidenced by my field notes the time constraints placed upon us forced us to move quickly. When teacher roles were assigned they became more focused.



Teachers each had a job so that no one felt left out or lacking in the opportunity to offer their own insights. For example Rhonda explained:

Working in the group setting was great and from that group setting we divided jobs and each took control of different activities and we were able to accomplish the task in a short amount of time. It is important to establish roles for each teacher at the beginning before lesson study begins.

The lesson planning process experienced during phase two provided the teachers with the opportunity to jointly create an effective lesson that addressed the goals set by the group. This lesson planning was productive because the group offered their ideas without reservation, resulting in a lesson that reflected the wealth of knowledge present in the room. Knowledge contribution by participants resulted in a large reservoir of suggestions, representative of thinking that was beyond surface level.

### **Facilitator Reactions**

As the facilitator I appreciated the excitement among the teachers as they collaborated on lesson planning approaches. The experience in the room could not be overlooked as each teacher brought forth a wealth of ideas that led to the creation of a remarkable lesson. Once the teachers developed a system for productive collaboration, the progress among them was unlimited. They each offered suggestions as to how to accomplish student objectives as well as the implementation of Common Core State Standards for English Language Arts. The most important piece of this phase was that the teachers felt like they accomplished something. They felt efficient as they walked away with a lesson that supported district goals and student needs.

### **Phase Three: Learning in Context with a Peer Coaching Emphasis**

Phase Three consisted of sessions five, six, and seven including the teaching of the initial lesson, revision of the lesson, and teaching of the revised lesson. Action research is a cycle of activities resulting in reflective problem solving, which enables practitioners to better understand and solve pressing problems found in their practice (Herr & Anderson, 2005). At this point in the study, teachers observed one teacher teaching the collaboratively designed lesson. Following the initial lesson, teachers reflected on their experiences as a basis for further planning, subsequent action and on, through the next cycle of instruction.

Teachers transitioned through this process while learning in the context of the classroom with students presents. This was essential as the practitioners had a wealth of tacit knowledge that they would apply to their learning. During the initial and revised lessons, teachers sat around the perimeter of the classroom while the lesson took place. They each had the scripted lesson in their hands and took notes directly on the lesson plan. After the completion of the initial lesson, the teachers left the room and not only revised the lesson but learned how to be critical friends as well. This process proved to be challenging for some. The following section will explain what resulted as teachers learned in context through observation. Several themes resulted including: too many chiefs, learning from each other, and looking through a different lens.

#### **Learning in Context through Observation**

Learning in context among teachers is not a new practice but it an exercise that doesn't happen on a regular basis. Teachers are often provided with time to hear about initiatives but then are expected to implement them on their own. For this reason, there were some hurdles during our collaborative experiences beginning with too many chiefs. There were a lot of

teacher leaders present among the group, so at times the conversations became tense. According to my field notes, there were two teachers that took over during both the lesson planning and revision process. However as they progressed, the team pulled together and began bonding. I witnessed that some teachers are natural leaders and others are producers. Overall teachers felt the positive effects of learning from each other and appreciated the time allotted for this experience. When reflecting on my field notes, it became evident that planning time is crucial. Teachers cannot be rushed during the lesson planning process. The results of the time together were evident by the in-depth plan that was produced.

However during the instruction of the lesson, they had to learn how to look through a different lens while observing in the classroom. This was a new way of looking as the lens had changed for them as they learned to be a student watcher. The teachers chatted quietly before the lesson began and according to my field notes, they expressed their excitement for this part of the lesson study. They continued to have side discussions during the lesson about the progress of the lesson. The following headings will explain how teachers perceived sessions five, six, and seven and what they learned from the experience.

**Too Many Chiefs** Teachers value time to collaborate, however collaborating with seven opinionated and experienced teachers proved to be a challenging learning experience. As evidenced in my field notes, some teachers felt that their ideas were not heard, however they were able to agree on revisions and move to through the cycle of action research without hindrance with powerful collaborative moments. During the revision of the lesson, some teachers felt that it was hard to contribute their ideas. They felt overlooked at times, while others overpowered the conversation. For example, Donna wrote in her notebook:

It was hard to share- out ideas. There were lots of ideas offered but I am not sure that everyone had a chance to be heard. Trying to rewrite the lesson was challenging because of this. There were too many chiefs.

Similarly Jennifer wrote in her notebook:

There were so many ideas expressed and we lost control for a little while because of this.

It was hard to select what idea to incorporate into the lesson. We had a great menu of choices but too many voices to be heard. I appreciated when the facilitator took charge and offered guidance.

Further affirming this notion, Martha wrote on her CIQ, “Every participant has ideas to share, and they want to be heard!”

The length of time needed to revise a lesson was noted by Martha during the final interview. This was related to the number of chiefs present at the table. For example, Martha expressed:

After yesterday, I saw how in-depth we went with the lesson and as a teacher I don’t normally do this. The revision took a lot of time. I think this was due to the amount of opinions we had to account for during the revision process.

Irma was amazed at the amount of knowledge her colleagues brought to the table but found it difficult to select ideas from everyone present. As specified in her final interview, “When you have so many experienced teachers coming together, it is hard to choose one or two ideas that you feel are the best.”

Looking back on my field notes I commented on the amount of leaders and the varied thoughts offered by the group. I did not see this as a problem but rather an important part of the learning process. The amount of teacher input was valuable as they were learning from a wealth

of experience. It was interesting to see the teacher reactions as some were threatened by the amount of instructional ideas offered as it was viewed as too many people trying to take charge. However, the time to learn from each other was something everyone valued.

**Learning from Each Other** Teachers often express a desire to learn from each other through joint lesson planning and completing peer observations. Time constraints and schedule restrictions often prevent the opportunity for these practices to take place. The research revealed that teachers appreciated discussions about classroom specific topics, as well as time to observe peers in action, during the JLS process.

After looking over the CIQ sheets it was evident that teachers valued the ability to dialogue about classroom specific instructional methods that could be utilized for the lesson plan. We are often exposed to many ideas at conferences but they often do not pertain to what we are being asked to do in our own classrooms. For example, Donna noted on her CIQ:

The most important thing that was reaffirmed was that lesson planning together is helpful because we all have unique ideas to offer and a personal “bag of tricks” to benefit each other.

Further affirming this, Rhonda expressed on her CIQ “The cooperative planning produced more varied ideas than I expected.”

Teachers also learned a lot by observing each other and watching the collaborative lesson unfold in the classroom with students present. They valued time to watch peers as this reaffirmed what they do in the classroom. For example, Jennifer commented in her notebook:

I learned more watching the lesson unfold, when Marla and Dina actually taught. That context was the most powerful. As I was watching, I was thinking what I would have done or thought... I really want to use that idea. Sometimes it was encouraging to say,

oh yeah I do that stuff too, all the time. So the fact that I'm doing similar things as my colleagues makes me think I'm on the right page. Even hearing a phrase or strategy that they use with kids provided me with ideas. So that context was powerful for my own learning.

Similarly Martha expressed, "I enjoyed watching the other teachers teach and getting new ideas from them professionally so I can improve my teaching style." Teachers found it practical to learn so quickly from each other. It was a powerful way to learn from each other. For example, Rhonda wrote in her journal:

The most practical part of lesson study was getting into the classroom and seeing teachers teach. There are a lot of things I am coming away with to take to my classroom, especially the momentum of the teachers.

Further adding to this, Dina wrote in her journal:

What I found very beneficial was that I knew most of these ladies and we know each other on a personal level but we have no idea how we teach in the classroom. I think it gave them a perspective of what kind of teacher I am.

By observing teachers in the context of the classroom, teachers learned new teaching styles as well as new ways to respond to students. For example, Irma explained in the final interview:

To see teachers responding to student behavior and the engagement techniques, it really affected how the teacher paced the lesson. You have to read the kids and adjust quickly. It was nice to see how teachers think on their feet. Rhonda confirmed this during her final interview:

To see both teachers teach was fabulous. To see them interact with the kids and watch how they kept the kids engaged was quite a learning experience. To have the chance to view the lesson was powerful. As educators, we need to see that more and more.

Similarly Marla wrote in her journal, “I am appreciative that I was not one of the teachers but it was good to see the students present and how easily it can be to take a topic and expand on it with your students.”

Jennifer, a teacher new to the fifth grade level, expressed gratitude for being able to watch other teachers instruct students. In her final interview she explained:

I was relieved that I was not a teacher teaching the lesson. It was neat because although I am new to this grade, I have not seen a fifth-grade teacher complete a lesson. So it was informative for me, thinking and watching and seeing the different ideas that each teacher used. They were quick to think on their feet as they responded to get students engaged or draw them back to keep them on task.

Viewing other teachers was a powerful experience but the teachers also took a lot away from the revisions made to the lesson. For example Irma commented:

I enjoyed after observing teachers in action going back and revising the lesson and thinking about what we could do to make this better and actually using what we know, as sometimes when we teach a lesson and it was a bad lesson, we don't do anything with the lesson, we don't revise the lesson, we just discard it because we don't teach that skill for quite some time. So there's never any time for reflection. We sometimes forget the ideas we came up with to make the lesson better.

Teachers do not take the time to reflect on their lessons. JLS encourages reflection and this makes it an effective method of professional development among teachers. Similarly Donna

enjoyed creating the lessons and watching them unfold. She expressed during the final interviews, “I like actually creating the lessons and talking with my colleagues and I really enjoyed watching other people carry the lessons out.” Watching the lessons in action took some practice. Teachers reflected about this learning process in their journals and during their final interviews.

**Looking Through a Different Lens** Teachers practiced teaching as a science as they watched two lessons unfold. This is not something that happens often in the district where the study took place. According to my field notes, teachers were giddy with excitement at they entered the classroom to watch the lesson begin. They assumed positions in the classrooms that provided them with views of the teacher and students. It was clear from the teacher notebooks that they were watching both students and the instructor during the lesson. The data revealed interesting findings on how teachers felt about observing their colleagues. They also commented on how the students responded to the lesson and the instructional styles represented by the two lessons.

Observing teachers is a hard task for some because as teachers, they do not often have the opportunity to develop a trained eye to observe lessons critically. For example, Rhonda wrote about what she learned from other teachers but noted how hard it was for her to watch kids; “The hardest for me was not interacting with kids.” Teachers discussed this in their final interviews as well. For example, Martha explained:

I wish that I had moved around to see what was happening more in the classroom when the kids were learning, rather than sitting and thinking to myself in one spot during the entire lesson. I wish I would have walked around to see what the students were doing rather than having the same angle the entire time. It didn’t give me a fresh perspective.



Some teachers had a hard time sitting during the lesson. They are not used to being on the peripheral of lessons. For example, Marla explained during the final interview:

In the classroom it was hard for me to focus at times. When I was just sitting and watching it was hard for me to not interact with the kids and I didn't want to get up and walk around the rim because I did not want to interfere with Dina who was teaching the lesson. When I was walking around the classroom and looking at what the kids were writing and listening to conversations, it felt much more engaged. I needed to hear how the kids were responding to the lesson. So just sitting outside the perimeter of the lesson was not effective. I needed to be in the lesson and listening to conversations.

Similarly Donna reflected on the importance of having kids present, however she expressed how helpful it was to be able to sit and observe the lesson in action as she explained:

It was crucial to have kids there to see their response to the teacher. It was crucial for me to sit back and just watch. As a teacher, I don't ever sit back and watch. I'm always up and engaging with different students. That role was engaging for me. I think you definitely need kids present. It makes the lesson real. You can have the best lesson but the kids make or break the lesson. Having the kids present is essential. They are the target audience that you are trying to educate, so being able to watch how they learn is important. That is what makes JLS powerful.

Marla also expressed gratitude for the ability to watch kids. She wrote:

I enjoyed watching the other teacher teach and getting new ideas from them professionally so I can improve my teaching style. It was nice to see how kids were responding. It was nice sitting back and watching the lesson unfold. I enjoyed watching the kids' faces as they interacted with the lesson.

After reading the reflections in my journal, I realized how much teachers learned from this part of the process. They offered beneficial discussions as they reflected on the second lesson and dialogued about this lesson with positive comments about what they had learned. For example teachers would comment, “I never thought to do it that way.” Furthermore, teachers reflected on instruction and student learning in their journals. They reflected on the two different teaching styles that they were able to observe. For example, Rhonda commented during her final interview, “There were two different teaching styles but both teachers were engaged in the lesson. They were not just teaching reading skills but engaging with students.” Similarly Martha commented:

There are two different teaching styles. Dina is more slow-paced and motherly to students. Marla teaches with a fast pace while creating a learning community at the same time. Kids feel safe.

Teachers also commented on reading methods that were effective and those that need to be adapted. For example, Irma explained in her journal:

The revision gave the students the opportunity to think about the vocabulary before previewing the story. Instead of underlined words, Marla led the students to determine the key vocabulary in the sentence. I think this caused students to use context clues and to really think about the words and how they connect to build predictions.

Similarly Jennifer reflected on the lessons in her journal:

I liked the different styles of engagement used during the lessons. I liked how Marla used modeling for the definitions of the vocabulary words. I also liked the eye to eye and knee to knee strategy that she used with students. The movement of students during the lessons was beneficial as were the sticky notes.

Part of the responsibility of being a reflective teacher is the ability to offer your colleagues suggestions. This proved to be a hard task for some as teachers are not used to peer-critique.

### **Critical Friends**

Being a critical friend is part of the JLS experience. Although the emphasis is on the students and how they react to the lesson, the critical examination of the lesson is a necessary but difficult part of the experience. Part of the JLS and action research cycle is critical reflection of both the learning that took place as well as the understandings that unfolded in the classroom setting. Sharing insights is an essential component of the learning process and leads to productive learning habits in the learning practices of teachers. Teachers are often left to teach and learn in isolation so the reception of positive comments does not come naturally. During the composure of the lessons, it became essential that each person offered some sort of contribution, therefore establishing group ownership. This became essential as it alleviated hard feelings during the critique of the lesson. In this section data revealed the following themes; positive comments, group ownership, and hard to critique.

### **Positive Comments**

During the lesson reflection that took place after the instruction of the lesson, it was interesting to watch as the two teachers received positive comments about their teaching. It was if they had never been complimented before. Teachers were apt to provide positive comments about each teacher. This appeared to be a natural task. The teachers on the receiving end of the compliments appeared unsure as to what to do with such comments.

As teachers reflected in their journals, there were positive comments written about each teacher specifically. For example, Marla wrote, “The lesson went well. Dina was awesome.” Similarly Irma reflected in her journal:

I thought about how difficult it was to teach in front of our colleagues. Dina has such a comforting way of working with the students. She takes her time to make sure that all the kids understand the words. She kept all the students engaged.

Teachers don’t get to receive compliments about their teaching except from administrators that observe in their classrooms. However, teachers are the ones that benefit most from observing each other as it can lead to an observation that may change their instruction.

Although teachers are observed on a regular basis by administration, they are not used to being watched and critiqued by their peers. For example, Donna explained in her final interview:

I know it was harder for the teachers, having to take the constructive criticism and the praise. We are usually not thanked as teachers. We are not noted for all the stuff that we do. It is a thankless job. So it is a little hard to be on the receiving end of compliments.

Similarly Dina explained after she taught the first lesson, “It is very hard to take a compliment.” As evidenced by my field notes, she was flabbergasted at the amount of positive responses that she received, but teachers really appreciated the safe learning community that she created with the students. Others explained that they were surprised by the response from Dina. For example, Irma expressed, “It was interesting for me to see Dina and how much she hates compliments. Other teachers expressed very similar responses during their interviews. Marla also commented, “It is very hard to take a compliment.” One of the teachers that instructed

students commented on the CIQ, “I was most surprised about the compliments I received about things I don’t even think about.”

During the JLS explanation it was explained that during the lesson discussion, part of the protocol is to allow the instructor to first offer an explanation of how he or she felt the lesson presented itself to the students. The teachers that taught appreciated being able to reflect on the lesson first, as this provided them with an opportunity to clear any misconceptions. For example, Marla explained during her final interview:

We needed to offer a positive comment first and the instructor got to talk first. This helped me because then you know what is being done is valued because you start on a positive note. I especially like that we are all learning together and realized that nothing would be perfect. When I taught, I liked that I could speak first about that lesson because it created mutual respect and it set the tone for the discussion.

The fact that each teacher had a part in the creation of the lesson added to the group ownership of the lesson, as it was essential for each teacher to feel connected to what was happening in the context of the classroom. It resulted in a team -building atmosphere that resulted in an accurate critique of the lesson.

### **Group Ownership**

The group ownership of the lesson resulted in padded security for the teacher instructing the lesson, as she did not feel as much pressure for the success of the lesson. The lesson was not created by an individual, but rather a group of teachers, each offering their insight on what would make an effective language arts lesson. Therefore when each teacher offered feedback about the lesson; the group welcomed it.

The group ownership provided a buffer for those that offered their opinions because the critique was not aimed at any one person but the group as a whole. For example, Dina expressed during her final interview:

As far as critical friends, I felt fine. I kind of think we all found the best thing about the lesson because we each contributed something to it. We all found something that was really important to us that we were able to offer feedback about.

This was an essential component about the critique. Each teacher had something that they were passionate about. However, it was hard when revisions were made. This was a group of females, so I think teachers were extra cautious at times so as to not hurt feelings. For example, Marla explained:

I think we were all very much aware of feelings. We are all good friends so I think I didn't feel too bad being critical friends. It was interesting that during the lesson revision that we all came to the same realization on what needed to be tweaked. We created this lesson as a team and that was evident when suggestions were made.

This team of reading teachers worked together well and valued what the entire team had to say. They each had a part in the critique and revision of the lesson. For example, Irma explained in her final interview, "We all had a hand in the elements of the lesson. It was easier when the final product came out because it wasn't just Mrs. Smith's idea, it was everyone's' idea. However, even though each person had ownership of the lesson, it was still hard for the group to critique each other.

### **Hard to Critique**

The team of teachers found it hard to offer critical advice about the lesson. Instead, as explained above, they offered much more positive comments about each lesson. Teachers may

not feel comfortable assuming a leadership role in this area because it feels like an administrative task. They have not been trained to observe and offer advice to other teachers.

Teachers offered suggestions but were more than willing to compromise on what they were recommending. According to my notes there was always agreement with what each teacher said. For example, I observed many teacher recommendations for the revision of the lesson but there was always a positive spin on the advice. Teachers offered advice in a gentle way. However, it appeared hard to offer specific advice about what would make a difference for them instructionally in the classroom. For example, Rhonda explained during her final interview:

I think we have to go further on the critical part. We talked about the positives, which I think is absolutely necessary, but if I were up there I would want to be critiqued. Just watching the two ladies caused me to think, if I was up there someone should say to me, “get going up there and improve your pace!” We talked about the lesson and we improved the lesson which was the purpose, but I think we also need to be more critical and provide hints on what would improve our delivery.

Similarly Jennifer expressed:

It was really hard to critique each teacher. I know that I didn’t want to teach, even though I know all the teachers well. I did not want to be the teacher that was the center of attention. It was really hard to be a critical friend. If we did this all the time, it would get easier and easier to say things that you think. I think that we all know each other so well and appreciate each other as teachers, that it was hard to be critical.

It appeared that relationships could interfere with the ability to critique, as evidenced by teacher comments in their notebooks. Dina reflected on how hard it was to offer solid critique

about the lesson. For example, she wrote, “It was hard to find a negative about the lesson because we worked so hard during the revision.” Further confirming this notion, Donna explained during her final interview:

It was hard to find something negative about each teacher so I found a lot of positive in each lesson. I think we are all friends and colleagues with pretty strong backbones. If we did tweak something a little bit, it was not offensive to anyone. The friendships that were there were good and helpful. There was hardly anything that I could find or think of as negative.

This friendship among teachers resulted in a comfort level that was necessary to inspire collaboration; however this presented itself as a challenge when offering critical feedback. Critical feedback is a necessary component of JLS but one that takes practice and increased comfort levels.

### **Facilitator Reactions**

Phase three proved to be the busiest of all the phases. Teachers were on task but they each had a lot to say with regard to what the revised lesson should look like. At times there were too many leaders trying to dominate the conversation. Therefore, teachers had a hard time narrowing down what would make the best revision. In the end, they came to a consensus without conflict. They had already built a rapport with one another, so there were no apparent power struggles. Observing lessons was both inspiring and crucial, as teachers had no prior training in how to observe lessons with a critical eye. This is something that I noted as a need for future lesson studies. Administrators are usually placed in classrooms for observation purposes but teachers would benefit from continued opportunities in their colleagues classrooms. It was most surprising that the teachers who taught the lessons had a hard time accepting positive



comments. I left with the impression that teachers work so hard but walk away feeling unappreciated for all their dedication.

### **Phase Four Final Reflections: A Deeper Understanding**

Reflection is a large part of the success of Action Research and Japanese Lesson Study. Each teacher took the time to reflect in journals but also appreciated the time to openly reflect as a group. This continuous learning cycle resulted in increased comfort levels for the process of JLS as well as Common Core State Standards, reading instructional methods, and engagement strategies. The finding resulting from the analysis of teacher reflections expressed through teacher final interviews, CIQs, and journals are presented in Table 4.

**Table 4**

#### **Findings Based on Final Reflections: Phase Four – A Deeper Understanding**

Increased Comfort Levels
a. Common Core State Standards
b. Reading Instructional Methods
c. Engaging Learners
Overcoming Barriers to Extended Learning
a. Time
b. Teacher Empowerment
c. Solutions for Continued Study

### **Increased Comfort Levels**

As we progressed through the cycles of Japanese Lesson Study, you could see teachers moving from the feeling of overwhelm to that of excitement. The final phase of the study resulted in increased comfort levels among all participants. They expressed comfort in Japanese Lesson Study as a method of professional development and also in the Common Core State Standards, reading instructional strategies, and engaging learners. As evidenced in my notes, they were hopeful that this type of professional development could continue.

The creation of the lesson as a group resulted in a deeper understanding of the Common Core State Standards, reading instructional methods, and engagement strategies. Each of these areas will be discussed further below.

### **Common Core State Standards**

The release of the Common Core State Standards has provided the states with a set of standards that suggest teachers look at instruction vertically. This has provided school districts with an opportunity for vertical planning as the standards are presented in a staircase fashion with one grade level progressing to the next. JLS asks teachers to look at the grade level below and the grade level above when planning the initial lesson. The CCSS were easily applied to this process. As the teachers examined and implemented the CCSS for ELA, they made some discoveries that they hope to implement in their classrooms. As the lessons unfolded, teachers found the essential ingredients for integration and more opportunities for writing instruction.

When the teachers began this process, they examined the data for their grade level in English Language Arts. They found a deficit in vocabulary understanding. Vocabulary is an important part of reading, writing, and content instruction so this influenced the initial lesson they created. The most important part of the JLS is providing the teachers time to collaborate as a group in order to create a beneficial lesson. In order to understand the CCSS, time is essential as the standards require deep reading. JLS helped teachers to move to a zone of comfort in regard to their instruction of the CCSS.

Teachers described this comfort zone during the final interviews. For example, Donna explained:

I developed a universal comfort for the standards. The time provided allowed me to learn how to take the standards more in-depth and go deeper with the kids. Now we have the

opportunity to look at different ways to reach kids and go deeper with our instruction.

The lesson that we created could fit in any particular area that we teach because it is based on vocabulary. We created a universal lesson that integrates reading and writing.

Teachers valued the time provided to create lessons together that addressed the standards.

The collaboration lead to a better understanding of best practices for the implementation of the CCSS. For example, Rhonda explained:

Japanese Lesson Study allowed time for getting together and verbalizing how to create lessons, looking at the Common Core State Standards, putting actual numbers down for the standards, and placing numbers on the lesson, and seeing that what we have been doing really was addressing the CCSS.

The study of the CCSS has allowed teachers to focus their instruction and move away from manuals that often result in manufactured lessons. As a group, the teachers were able to create lessons that informed children. For example, Marla explained:

The CCSS made my instruction more direct. It is sort of like an umbrella. You have a point that is the overarching theme and the posts are all the items that you need to address. I think I will be more focused on what I am supposed to teach students instead of being all over the map.

Teachers realized that the CCSS emphasized integration rather than teaching many subjects in isolation. Many of the teachers were doing this, but for some the JLS process reassured them that they were doing it correctly. The ability to watch others teach furthered their understanding of the standards. For example, Dina explained:

CCSS makes the connection between reading and writing and that is powerful and important. We have to stop thinking of them as separate subjects but rather reading and

writing together. I want to hold them accountable for both of them. Integration is essential.

Similarly Irma explained during the final interview:

We are already integrating reading and writing together rather than thinking of them as a separate entity. We are revising assessments, especially our writing assessments, so that they tie into what kids have been reading about. JLS helped to see that integrating makes more sense for kids. We just need to wrap our heads around how it will look during the school day. It goes back to the old way to do things.

The teachers found benefits in seeing the CCSS in a lesson that they created. As they observed the lessons many light bulbs went off. When reflecting about the revised lessons, the teachers overwhelmingly appreciated seeing the lesson for themselves rather than only reading about the standards. Similarly Martha explained:

JLS that we used made me aware of the necessity to integrate reading and writing.

Combining them into one thing for students is a more genuine process that is a lifestyle and not just a reading skill or a writing skill. This allowed us to address vocabulary in an authentic manner so that is a lifelong skill that they will use often and not just in isolation.

Teachers reflected about the learning process in their journals. They all valued the time to observe other teachers and the CCSS in action. They wrote about their learning process that resulted after viewing two lessons. For example, Jennifer wrote:

After viewing these lessons and discussing the CCSS, I realize that when we journal write next year, that it is not enough to just get them to respond to the passage using emotion. You have to get them to cite evidence. You really need to go back in the story

and pull excerpts out and decide how and why the author created the passage and get support for that.

The time to see teachers in action resulted in a deeper understanding of the CCSS. The time to plan lessons together caused teachers to reflect on their instructional methods used to address the CCSS in the classroom.

### **Reading Instructional Strategies**

As I began the interview process with the set of six reading teachers and the reading specialist, I asked what reading instructional strategies they found most useful in their classrooms. During the initial interviews, many of them provided a list of engagement strategies rather than specific reading strategies that were used in the classroom. This was a stumbling block for them as many of them teach from an anthology based reading program not requiring them to understand reading instructional strategies. Providing teachers time to analyze the CCSS for ELA allowed them to consider these standards through deep study. JLS provided them with the opportunity to see reading lessons in action. This process resulted in a deeper reflection of reading instructional strategies during the final interviews.

Teachers came away with reading instructional methods that they will implement in their classrooms. Through close examination of the lesson during lesson study, teachers reflected about the approaches used to equip students with vocabulary strategies. For example, Jennifer wrote:

I like the use of modeling to provide examples for each vocabulary word. I like that each word was taught using multiple examples, so students were equipped with background knowledge before they made predictions.

Similarly Donna wrote in her notebook, “Acting out the words was essential as it made them more real to kids, thus increasing the likelihood that they would use them again.” Further explaining the importance of using story vocabulary in the prediction, Irma wrote:

The revision gave the students the opportunity to think about the vocabulary before previewing the story. Instead of underlined words, Martha led the students to determine the key vocabulary in the sentence. I think this caused the students to use context clues to really think about the words and how they connect to build predictions.

Further explaining this during her final interview, Irma commented:

The lesson centered on vocabulary, so the most effective reading method was when they were using context clues to try to determine the meaning of the word and being led through that and what words in the sentence could help them understand what the vocabulary word was.

Teachers appreciated that words were in context and found this to be effective for students. It was interesting to see how closely the journals coincided with what was said during the final interviews. Confirming this, Marla explained:

When we were doing the vocabulary all the words were in context for the kids so they were really able to use the sentence clues that they had. When we did the picture walk they were really using words and phrases that they came across. So they were really applying lots of skills that their previous teachers had provided them. So the tools that the kids used really affected their learning; the modeling and books, and teachers needed to set them up for success knowing that they can’t figure out words like acceptable and undulating unless you give them background knowledge ahead of time.

Student success is dependent upon layers of instruction. The foundation that they receive from previous teachers supplies tools for future reading success. It is important to recognize what each student brings to a reading lesson. The tools gained from the past will supply students with strategies to unlock reading passages. However, it is up to the teacher to further this success. Some reading teachers find it necessary to demonstrate what they are thinking in order to teach students metacognitive strategies. For example, Donna explained:

I think the most effective part of reading instruction was talking about the vocabulary in context so it wasn't just here read this sentence; what do you think the word means and then fill in a worksheet. During this lesson, the word was supplied and the teacher asked students what they knew about the word, and then kids got out of their seats to act out the word. I think that was really important. I think when you are teaching kids how to read and think, it is necessary to talk with them and explain what you think. Using think aloud strategies is essential. I think that is the most powerful thing because they can sometimes figure out what the answer should be but they do not know why it is the answer. They don't know how they got the answer.

Similarly Irma wrote:

It was such a great day! Seeing the lesson taught twice in one day really helped to see the variety of ways one reading skill can be taught. Each teacher had her own style, but each was effective.

The success of the reading lesson was also dependent upon the engagement strategies that were utilized to grab student attention during the lesson. During the meetings to plan the lesson, teachers decided that they would focus on this area through the use of video. During the

explanation of the engagement strategies, teachers were videotaped. This was only used as a reflection instrument so that teachers could view how the engagement strategy was explained.

### **Engaging Learners**

Engaging learners is crucial to the success of any lesson. The best laid plans are often failures because the learner is not engaged. For this reason, teachers reflected on the use of engagement strategies in their journals. The teachers were videoed as they explained the strategies to students. They found this to be valuable as they felt that past lessons failed due to insufficient directions.

For example, Rhonda wrote in her journal:

I was amazed at the fast pace at which the lesson explanation was delivered by Marla. This kept the students engaged. The video reaffirmed this for me. As I watched Marla in action, I noticed the same thing. Her directions for the activity were very clear. I think this lead to the success of the engagement strategy.

Similarly in her journal Donna reflected:

The video served to clarify what I had in writing. I like how Dina explained the directions for the engagement activity in a non-threatening way. She was able to build a learning community where risk was not feared.

Dina reflected in her journal, “I learned some great alternative strategies to change it up.” Dina was the teacher that taught the initial lesson and she still came away with ideas to improve her own instruction. Overall, they wished that they could observe each other more often, especially as they continue to learn about the CCSS.



Other teachers confirmed this stress free learning community during the final interview. This was something that we had read about in books, which stressed building a community of learners that were not afraid to take risks. Martha further explained this:

She created the community of learners and made them feel comfortable. It made them want to participate. The carousel was the most powerful because it was neat listening to the kids as they went around from poster to poster saying, I don't know if I have the right answer. The teacher made this easy when she said that you don't have to hang it up if you are unsure. This caused students to reflect as they walked from poster to poster, they read the other answers already posted on sticky notes and then decided if they wanted to add their own. They were learning by walking around and having discussions with other kids. They were synthesizing the information. They were altering their answers after discussions. The learning was self-directed.

Similarly Donna wrote about the use of the carousel as an effective engagement strategy. She also explained:

The carousel was the most effective instructional method. I like when students get out of their seats because after 15 minutes your brain goes to sleep. The students need to be out of their seats involved and doing different things and working with each other so it is not the same thing. Engagement makes learning more exciting for them to keep them engaged and focused.

Teachers also discussed that learning strategies need to hold students accountable. It is essential that students are engaged but as a teacher you are held accountable for what students learn. Therefore it is necessary to have something in place so that students are able to prove that they have learned. For example, Dina noted:

I like holding each other accountable on the Post-it notes. Each child had to write something about their vocabulary word and rather than holding one or two children accountable for sharing, everyone was held accountable.

Similarly Martha reflected:

Watching the kids and having them get up and put what they learning on Post-it notes and onto chart paper was the most effective method of instruction. Kids learn by doing and being involved so reading to them is not effective. Using what they learned and making a match engages the learner and holds them accountable.

The arrangement of the seating was discussed by almost all the teachers interviewed. During the initial lesson, students could sit wherever they wanted and this was found to affect the level of engagement in the room. During the revision process, teachers decided to mix the groups for the second lesson. This allowed teachers to make sure that friends were separated and that tables were arranged so that there were mixed abilities present at each configuration. The teachers felt that this led to better conversations.

For example, Rhonda wrote;

The seating was evident. I could see the difference between the first lesson and the second lesson. In the first lesson, we let kids choose where they could sit and in the second lesson, we chose seats for them. This changed the dynamics of the classroom. Sitting with their friends and peers and same ability level influenced the dynamics of the group. The second time we mixed them up a little bit and more children participated. The child who always talks in a lesson wasn't the one talking. Everyone participated.

Similarly Marla commented during the final interview:

When we changed the seating and when the kids were boy and girl and different abilities, this is how we would have it in a classroom. The first lesson they got to choose where they could sit. I like that there was a lot of space between the tables during the second lesson because Martha could move around while she was teaching. She was active and engaging as a teacher. I thought that was really positive and the kids had room to crawl around and experience vocabulary words. The kids could do the motions and the directions that she provided. Furthermore, I like the way they moved around. They worked individually with Post-it notes but then they discussed the words and went as gangs to the charts. You could see the interaction with specific groups. You could see the discussion.

The room arrangement influenced student learning. The room is a crucial element in instruction that can't be overlooked. As evidenced by teachers' reflections, the way the tables were spaced and the placement of the kids caused the lesson to take a new direction, one with more involvement from all the students.

Although the discussion about JLS was positive, there are obstacles to overcome if this method of professional development is to continue throughout the school year.

### **Overcoming Barriers to Extended Learning**

Part of final reflections revolved around continued use of JLS. The teachers were fearful that it would discontinue if there was not adequate support in place. They worried about administrative acceptance of this process for professional learning as well as time constraints that prevent such a practice from happening. As they moved from a feeling of overwhelm to that of acceptance, there was a large amount of reflection about how to make this happen. This

discussion is continued throughout this section as themes such as time, teacher empowerment, and solutions for continued study are examined.

## **Time**

Time for professional learning is often sacrificed at schools due to efforts to increase instructional time in order to meet all the requirements of the standards and state testing targets. For this reason pressure to cover curriculum supersedes continued learning for teachers during the school day. Schools have cut back on planning time allotted for teachers with most permitting 45 minutes each day. This has caused collaborative study among teachers to lessen.

When discussing barriers to professional development many teachers said time was the biggest obstacle. For example, Martha commented during her final interview:

I would feel frustrated during the school year because there are so many things to do and I would not be as engaged. However, I wouldn't want to remove any pieces of Lesson Study because it was so powerful. Martha found the Japanese Lesson Study method to be an effective way to engage in discussion with colleagues in order to continue learning about content and effective methods of instruction. In her journal she continued to reflect on this when she wrote:

I love it, however I am concerned that we will not be able to continue all of this next year and we should. We would need a leader to orchestrate the process because teachers do not have the time to do that.

Similarly, Marla commented:

When I went home, I was wondering how we would do this within the school year during normal school days. We hardly have any time to collaborate with others. We don't have time to come in and see others teaching lessons. I like that the kids are engaged in the

Lesson Study process. It made it more meaningful. If I can't have that team atmosphere and time with my team to have them come in and watch me and say; you need to work on this as a new teacher, I think it will be a huge disservice to us.

Time for adequate planning isn't always considered by school leaders, as many school leaders have been removed from the classroom for awhile and forget the amount that goes into preparation for successful lessons. For example, Irma explains how time is essential for creating a great lesson:

Time was a factor when considering barriers for implementation of JLS. Creating a quality lesson that emphasized CCSS and engagement strategies requires time. This isn't always available in normal school situations and circumstances don't allow for adequate planning. To view teachers teaching is powerful, it is just not possible to do this during the school year on a normal basis.

Similarly Jennifer stressed the importance of creating solid lessons but noted that this could not be done in a hurry. Rushing to create lessons only results in less than effective results. For example she explained:

There are barriers to this method including time and the timeframe for creating lessons in a hurry. It is not practical to create lessons in a hurry. There isn't time during the school day.

Teachers often comment on the time restrictions placed on them that prevent the creation of meaningful integrated lessons. Such lessons address more than content area, therefore requiring teachers to become experts in many different areas. Providing time for teachers to engage in Lesson Study may alleviate some of this concern and will allow teachers to see

instruction taking place in the classroom setting, leaving them with instructional ideas for future lesson planning.

The availability of time to see other teachers instruct isn't always possible in a typical school day. However, in order to reduce teacher anxieties of peer observation and feedback, it is essential to find solutions that allow for this practice to continue, resulting in increased comfort levels among teaching staff.

### **Teacher Empowerment**

Teachers found the JLS professional development model to be encouraging as they were able to walk away with lessons and ideas that could lead to a more effective classroom. Overall, teachers felt more comfortable with each other because of this process. The time allotted to dialogue with their peers affected teachers because it made them realize that teaching requires a team. This collaborative effort in creating lessons and watching the delivery of them also caused teachers to feel more comfortable with teachers present in their classroom.

After looking at the data it was apparent that teachers felt empowered because of this process. For example, on the CIQ a teacher wrote:

The most important thing that I learned through the Japanese Lesson Study process was that I work with amazing women. Together we can encourage each other and learn from each other to improve our teaching.

Similarly Marla reflected during her final interview:

This was the best training that I think I've ever been to. We collaborated with our peers. We came up with a lesson. We revised the lesson to make the lesson better. It was everything that a teacher needs to do.

At the completion, teachers reflected on their experience. There was an overwhelming feeling of excitement. For example, Marla commented during her final interview:

This was the best professional development ever. Yesterday's training was the best training that I think I have ever been to. We collaborated with peers. We came up with a lesson. We revised the lesson to make the lesson better. It was everything that a teacher needs to do.

Teachers began the JLS process feeling overwhelmed but as we cycled through the elements teachers realized the importance of this type of training. For example Dina explained the importance of professional development that is sustained and not just a once and done event. She commented:

Japanese Lesson Study has to be done often enough so that it becomes our comfort zone.

As teachers it is important to feel comfortable with your peers in your classroom.

Japanese Lesson Study offers the opportunity to do this.

Teachers continued to recognize the importance of collaboration. For example, one teacher wrote on her CIQ, "The thing that I will immediately apply to my teaching is collaborating more with peers and reflecting on my lessons and making changes right away." They became more comfortable with reflection as they began to realize that it leads to valuable changes in instruction. Lesson Plans are written to reflect one moment in teaching. However, students can put many kinks in expected outcomes for plans.

Teachers began to recognize the benefits of teaching in front of colleagues. Reflecting on lesson plans is only one component of Japanese Lesson study. The ability to watch peers in action among students is another piece of the learning process. For many teachers, this is the hardest obstacle to overcome, as they are not comfortable teaching in front of others. Teaching

can be an isolated profession. Reflecting on the importance of watching teachers in action, one teacher commented on their CIQ, “I began to feel most comfortable with the idea of peer observation. Observing teaching styles made me realize that I want to work on pacing my delivery better. I need to get faster!” Similarly Marla commented:

The only thing I didn’t like was that I had to teach in front of people, but then I realized that teaching in front of my colleagues felt okay because I trust my colleagues. I wasn’t afraid to teach in front of them but it seemed awkward because it was the second time through and we only had a few tweaks. I realized while I was teaching that repeating the areas that remained the same felt awkward.

It became clear that as teachers moved through the lesson study cycle their emotions changed from feeling overwhelmed to increased comfort. They recognized the value in Japanese Lesson Study and felt compelled to find ways for it to continue.

### **Solutions for Continued Study**

As discussed above, finding adequate time to implement JLS is essential. In order for the process to be effective and carried out in a meaningful research based fashion, it is essential to have goals and timelines created for the school year. The participants interviewed suggested several solutions for district leaders to consider for implementation of JLS in their school districts.

When considering the effects of time on professional study Rhonda commented:

We would have to overcome this, but finding time to do Lesson Study during the school day is essential. A time would have to be allotted to do this and the opportunity to get in and see the lessons and to observe the lessons requires a lot of planning, making it a challenge.



It appeared that many teachers were willing to seek solutions to this challenge, with some suggesting allotting a time during the school day specifically for JLS collaboration. Many school districts have half day in-services built into their school year calendar. This would be prime opportunity for the implementation of JLS. For example, Dina suggested:

I would like to see half day in-services, where we get to sit down and develop lessons together and you're not worried about time constraints and what's happening that day. I would like to see my peers teaching. If I don't get to see everyone that is okay, but I like to see the lessons taught. It would be great to bring kids back in on half days for an hour so that we can put the lesson into practice. Then we could observe them in action. What I definitely learned is that it doesn't have to be your students for the lesson to work. It can be any students. This is what I learned this morning when I taught to a group of random kids that were not mine.

Similarly Marla suggested that JLS could be continued during the school day. During her final interview she suggested, "We may need to get subs to make this work during the school day. This would have to be established in the budget. If this isn't possible, teachers could merge their classroom together." Martha also reflected on how this could happen during the school day when she commented:

If we implemented this during the school day, I would use reading meetings before students came to school. We could brainstorm and come up with lessons. We would need administrative support to get into teachers classrooms to observe each other. I would suggest planning it one morning and then implement the lesson study the next day. It is crucial to analyze and debrief because that was where I learned so much. Debriefing is crucial.

Reading meetings at this district take place two times a month with the building reading specialist and grade level peers. These meetings are part of the contractual agreement established by the school district.

Teachers also expressed interest in using videotaping to capture lessons. Using video would require a commitment from teachers. They would have to feel comfortable sharing videos of themselves with other staff members. Not all teachers would want to participate in the video aspect, but they may enjoy the critique and creation of the lessons that are videotaped. For example, Martha stated:

Video would be nice if we videotaped our lessons but I would not like to be on the video personally. I did try this with another district where we videoed our lessons and then we talked about it and then we revised lessons based on collaborative feedback from the group. However, when we used this method in the other district, no one saw the video other than the teacher vide taping the lesson.

Similarly Jennifer commented on the positive aspects of video. She spoke of small vignettes during her final interview as she explained:

Getting teachers to collaborate and videotape perhaps through the use of iPads, doing snippets with kids so that we can share, would be valuable. We can't get into classrooms to see each other teacher, but we can videotape our lessons and bring them back to grade level reading meetings to share with our colleagues. We could share with other students in other classrooms so that students see what other kids are doing and how they are learning.

Also considering the benefits of video, Rhonda commented:

Looking at the budgets for districts and how much time it takes to plan lessons is something we need to overcome. I think it's much easier when you work as a team, having different people do that and then videotape themselves and then bring the videos back and watch one lesson and tweak it and then go back and teach it again.

There are many ways to overcome the challenges brought forth by the structure and schedules of schools. It takes a group of flexible and empowered teachers to make initiatives happen. Teachers are hit with educational trainings each year, but only the sustainable staff developments will make lasting changes. JLS could be that as was evidenced by the participants of this study. They felt that this form of professional development was beneficial and worth the effort to make plans for overcoming the barriers that prevent it from happening.

### **Facilitator Reactions**

Teachers were overwhelmingly empowered by this JLS experience. As the facilitator I was excited to see the participants walk away from this experience feeling more comfortable in the areas that we were attempting to address such as CCSS for ELA. Increasing comfort levels among teachers is a constant battle because without teacher training and buy in district initiatives will fail. There are still barriers to overcome in order to make JLS a common place among school districts including time. Teachers were very willing to brainstorm ways to make this form of professional development continue. This was inspiring because if you have teachers helping to design future training sessions this will generate interest among other staff members.

### **Summary**

In sum, this chapter described the findings of this study beginning with the initial interviews that took place prior to the implementation of Japanese Lesson Study. After the results of the initial interviews were shared, the remaining sections highlighted the process of the

action research cycle and told the story revealed by the participants. Final interviews, CIQs, and teacher notebooks helped to understand the action research process. Each cycle had a story to tell beginning with the first phase where participants became oriented to the Japanese Lesson Study process. Proceeding from here, phase two consisted of the planning of the first study lesson. The participants then moved to phase three which entailed the teaching of the first lesson, revision of this lesson, and the instruction of the second lesson. From here participants reflected on the entire cycle as they came full circle again to the start of the Japanese Lesson Study process. It was at this point in time when participants fully recognized all that they had learned and appreciated about the process.

## **CHAPTER FIVE**

### **DISCUSSION AND CONCLUSION**

The intent of this action research study was first to explore teacher perceptions of Japanese Lesson Study as a method of professional development, and second, to take teachers through an action research process as they observed the implementation of a literacy lesson in the classroom. The results of this study were presented in the previous chapter. The research was posited on the following research questions: (a) How do the teachers participating in this study make meaning of their Japanese Lesson Study experience? (b) What about the practice of Japanese Lesson Study in particular helps teachers to improve their literacy instruction? (c) How does this study inform the relationship between Japanese Lesson Study and Situated Learning Theory?

The findings discussed in the preceding chapter were organized and presented in four distinct phases: Astounded by Japanese Lesson Study, The Power of Team, Learning in Context with a Peer Coaching Emphasis, and Moving to Increased Comfort Levels. Phase one presented findings that primarily focused on teacher perspectives as they learned about the Japanese Lesson Study process. The second phase explained findings on the layers of collaboration that led to productive planning of literacy lessons. The third phase presented key findings on the teacher learning that took place in the classroom setting as it related to Japanese Lesson Study. The findings of the fourth phase provided insight on the continuous learning cycle resulting in increased comfort levels for the process of JLS as well as Common Core State Standards, reading instructional methods, and engagement strategies. Three categories including Japanese Lesson Study, Literacy Instruction and JLS, and the Relationship Between JLS and Situated Learning Theory will serve as the foundation of discussing the relevant findings of this study.

The current chapter is organized into three sections. The first section discusses the relevant findings. The second section discusses the implications for the practice of teacher staff development. Finally, the third section offers suggestions for conducting future research and provides a summary of the chapter.

The data collected from pre and post interviews, teacher journals, CIQs, and field notes during this action research study provided a wealth of relevant findings about teacher perceptions of JLS and its relationship to Situated Learning Theory and literacy instruction. These findings are organized into three main categories that address the specific research questions guiding this action research study of literacy educators including:

1. How do the teachers participating in this study make meaning of their Japanese lesson study experience?
2. What about the practice of Japanese lesson study in particular helps teachers to improve their literacy instruction skills?
3. How does this study inform the relationship between Japanese Lesson Study and Situated Learning Theory?

The first category focuses on Japanese Lesson Study and highlights the experiences of the teacher participants such as teacher reaction, collaboration, and facilitator challenges. The second category addresses the findings pertaining to literacy instruction revealed through the JLS experience beginning with teacher observations, lessons that engage, and putting rigor in lessons. The third and final category discusses the relationship between JLS and Situated Learning Theory.

## **Japanese Lesson Study**

Lesson study has certain characteristics that set it apart from traditional professional development sessions (Takahashi & Yoshida, 2004). Lesson study provides opportunities to see teaching and learning as it takes place in the classroom while providing teacher time to reflect on instructional practices. Teachers are able to collaborate in order to develop a common understanding of what good instruction entails. Within this category of findings, the discussion will center on teacher reaction, collaboration, and facilitator reaction.

### **Teacher Reaction**

During this study teachers realized that change is a process, not an event. By the end of the study, they appreciated much of what was involved in the implementation of JLS. As discussed in the previous chapter, teacher reaction to JLS, which represented a new method of professional development, was mostly positive, but not without complaints. The participants in this study responded positively to learning in an environment that allowed for collaboration and time for in-depth study of literacy data and instruction in order to develop lessons for students. The process of implementing JLS, however, was captured metaphorically by one teacher as “drowning in a sea of chocolate with a life vest.” As implied by this metaphor, teachers recognize that utilizing JLS methods is not without challenges but worth the effort. JLS presented challenges they had not encountered previously in more traditional professional development settings. Teachers expressed feeling overwhelmed, stressed, and frustrated. Many of these emotions were attributed to the new expectations placed upon them and ambiguity about what they should be doing. Traditional staff development sessions neither acknowledge teachers’ interest and commitment to a new practice nor help them to make links to their beliefs

about effective practice (Gersten, Baker, & Chard, 2000). Further, it does not account how emotionally engaging and stressful it can be for teachers when they are forced to attend staff development sessions unrelated to their specific classroom needs (Guskey, 2002; Hargreaves & Fullan, 2012; Lonergan, Simmie, & Moles, 2012). JLS, as a method of professional development, places higher expectations on teachers, resulting in a feeling of discomfort. Over time, however, their initial discomfort was mitigated as they recognized the many benefits of JLS and understood the roles that they would assume in the process. During each session, teachers grew in their confidence of the process of Lesson Study. Based on this conclusion, it would be beneficial for JLS planning to include upfront exposure regarding the benefits of future curricular developments. For example, after looking at reading data, several suggested curricular goals could be suggested in order to eliminate teacher anxiety. Modifications could also include the assignment of roles before the start of the lesson study process.

In addition, teachers in this study had to learn how to be critical friends. This presented new feelings of discomfort as they were not used to being in this type of relationship with fellow educators. Teachers generally work in their classrooms, isolated from other teachers, most often with little regard for what is happening next door. Therefore, the idea of providing feedback for one another seems quite challenging. This reticent towards individual critique presented problems when discussing and providing feedback on the lessons. They did not want to offend the teacher instructing the lessons, so it appeared that they were less than willing to be completely honest with each other. In order to alleviate some of this teacher resistance for critique, schools could practice JLS on a more regular basis with grade level or department teams. Over time and with continued practice teachers would be more practiced and skilled at offering critique. Using video taped lessons could also afford teachers with practice watching



teaching in action. This would develop their eyes in order to become keen observers. Their journals also reflected many more positive comments about the two teachers that instructed the lessons. It appeared that teachers would have benefited from instruction on how to provide constructive criticism to their peers. This group was so cooperative that discussions were able to take place without conflict. Despite the teacher's role in JLS to take somewhat of an evaluative stance, participant comments were mostly positive and geared toward contextual changes to the lesson. Their role is to observe and assess the process of student learning. Teachers, often more experienced and posed to provide specific feedback to improve lessons, are not provided this opportunity.

The introduction of JLS necessitated that teachers re-conceptualize their approach to professional development. Doing so required them to not only adjust their own thoughts of professional development, but also redefine their roles in the learning process. Teachers became an active part of their own professional development while learning in the context of the classroom setting. This adjustment period is reflected, in part, by the metaphorical comment of "drowning in a sea of chocolate." In light of the second half of the metaphor "with a life vest," this phrase could be understood to mean "overwhelming, but supportive". Teachers are not accustomed to supporting each other during a professional development experience. They are often provided with information to apply to their classrooms at a later time. Preparing teachers to understand that they are establishing their learning goals for the professional development experience would be beneficial. Also teachers need to realize that JLS requires organization and self-study for the method to be a productive knowledge building session.

While teachers described the process of JLS as challenging at the beginning, their opinions changed as we moved through sessions. Teachers began to voice positive comments.

The use of practical and context based material empowered teachers to push forward as they knew the end result would be something that they could use in the future. As they observed lessons, their excitement was evident as they witnessed the product of their labors. During the final interviews the majority of them voiced that this was the best professional development they had ever been through. When asked why, they said it was practical and related to what was happening in the context of their own classrooms. Those that did not say it was the best, expressed praise for the ability to watch their peers in action. Some voiced that it allowed them to express their thoughts on critical lesson components that made the instruction more effective. They decided that feedback, although not always critical, still provided the group with insight on how to best deliver an effective literacy lesson. Traditional professional development sessions do not always leave you with something to return and apply immediately to the classroom context. Teachers experienced a sense of satisfaction from their efforts and the results that were witnessed as students attempted the activities in the classroom.

### **Collaboration**

The teachers that participated in JLS appreciated the meaningful discussion, planning, and practice involved in the process. They valued collaboration as a way of enhancing reflective self-study. Teachers kept reflective journal entries but mostly enjoyed the dialogue that is necessitated in the planning process of JLS. The journals revealed that the professional development aspect of JLS would still be personal because it starts from reflective study, but it would then be shared with others and the sharing process would lead to further personal reflection. Teachers appreciated that collective dialogue among others allowed for time to address problems found in instruction.

The analysis of the literature on teacher professional development suggests reflective practice and problem based staff development as effective components. Professional development can promote teacher reflection and collaboration is a way of enhancing reflective self-study (Attard, 2010; Cain, 2010; Chivers, 2003; Powers, Zippay & Butler, 2006). The teachers appreciated the time to collaborate on effective lesson components. As revealed in a metaphor composed by a teacher, “a team of women can empower and mold the future.” As implied by this metaphor, teachers felt the power of a team as they dialogued with one another. They appreciated the opportunity to encourage and learn from each other in order to improve their teaching.

Learning opportunities for teachers occur every time a lesson is taught (Guskey, 2000). In JLS, this learning occurs as teachers collaborate and watch lessons in the context of the classroom. Occasions for teachers to engage in active learning through discussions about observations and student work often lead to problem based learning which can be a powerful form of teacher learning (Banilower & Shimkus, 2004; Desimone, 2003/2009; Gartet et al., 2001; Hargreaves & Fullan, 2012). This active learning was evident and appreciated as teachers watched lessons and then collaborated on the steps for improving the lesson. Through interaction with and building on the insights of others, teachers grew in their understanding of effective components of literacy lessons.

Both individualism and collaboration was necessary when observing lessons in classrooms. Each teacher brought forth his or her own creative outlooks on what effective instruction should look like. This was evident by teacher attitudes while collaborating. At times there were simultaneous conversations happening with many teachers attempting to assume a leadership role. Some teachers had a hard time relinquishing their ideas as evidenced by their

reactions to those that did. They commented about this in journals but also outwardly expressed their discomfort by leaving the room during portions of the planning sessions. These emotions and nonverbal demonstrations were obvious but did not allow it to interfere with production of the lessons. As teachers continued during the planning process each participant eventually found a way to support the lesson development. Teachers fell into their own roles during the collaborative process, with each fitting their own niche. In the end, the atmosphere was productive and positive.

When implementing JLS facilitators should consider the implications of group dynamics. The team of teachers involved should understand the guidelines for JLS process. The group has to be willing to work together. Adult learners are often motivated by choice (Knowles, Holton, & Swanson, 2005) and as previously discussed, choice during JLS is based on compromise made though group dynamics. This can be troublesome for some teachers who feel strongly about what topics are meaningful professional development. When choosing the goals for JLS it is important to consider areas that connect directly to student assessment data and teacher needs so that collaboration is productive.

### **Facilitator Challenges**

The JLS literature identifies some of the challenges educators face when implementing JLS as a method of teacher professional development including: development of researcher lens (Fernandez, Cannon, Chokshi, 2003; Yoshida, 1999; Jacobs, Yoshida, & Stigler, 1997; Santagata, Zannoni, & Stigler, 2007), time constraints (Fernandez, 2002; Meng & Sam, 2011; Fernandez, Cannon, & Chokshi, 2003), typical teaching behind closed doors (Hiebert, Gallimore, & Stigler, 2002; Stigler & Hiebert, 1999; Fernandez, 2002; Bjork, 2000; Little, 2003; Baecher,

Rorimer, & Smith, 2012), and the cultural shifts that need to happen when situating Japanese Lesson Study in the United State (Chokshi, S. & Fernandez, C., 2004; Fernandez, C., Cannon, J. and Chokshi, S., 2003; Stigler, J.W. & Hiebert, J., 1999; Yoshida, M. ,1999). In taking these challenges into consideration, I discussed them with teacher participants. They were aware of what could be problematic for continued implementation of JLS in the future as well as what obstacles were in front of them.

The first concern was the development of teachers as researchers. This was a new practice and reading about it would not provide them with the practice necessary to develop a keen eye for effective literacy instruction. In order to see through a research lens, teachers needed training in how to observe the practice of literacy instruction. Most of the teachers who were part of this study did not have experience with teacher observations. Only two of the teachers did have experience because they were reading specialists and therefore had been somewhat familiar with what to look for in the classroom in regard to effective literacy instruction. We tried to overcome this for the other teachers by closely scripting what the first lesson would look like and then leaving them space to write about student reactions. The lesson observation document was instrumental in focusing teachers' eyes on the student as they were instructed to script student reactions to the lesson. This was primarily the focus of discussion after the first lesson was taught. Teachers shared what they saw taking place in the classroom and provided their interpretations of what they perceived to be effective instruction and what needed to be changed based on student interactions. By doing so, they refined the skills necessary to critique lesson components. They hypothesized what would lead to a more effective lesson and made changes based on the group suggestions. They also used student assessments and their own field observations to inform their decisions. For example, student

seating was changed based on what was observed by the teachers. The teachers were more comfortable looking through the lens of a researcher when the second lesson was taught. I felt they were even more efficient the second time around as I witnessed them becoming more observant.

A second concern was the element of time especially when considering the process required of JLS. Time constraints, which are consistent the literature, could not be avoided, as planning for and observing lessons required large chunks of time (Yoshida, 1999; Fernandez, Cannon, & Chokshi, 2003; Lewis & Hurd, 2011). We were dependent upon student schedules as well. Teachers often confessed that they felt rushed. As the facilitator, I was responsible for keeping teachers on task, something that is not always easy to do. I found myself stifling side conversations to maintain focus on the work in front of us. I felt pressure to move quickly while I had their attention. I continued to encourage participation from participants and was pleasantly surprised by their level of engagement. A relevant problem with JLS, teacher participants need to find time to adequately discuss the lesson or produce written reports of their lesson study work (Fernandez et al. (2003). I felt that they supplied well thought out ideas that led to the creation of two powerful literacy lessons that differentiated instruction for the students present in the classroom. I found that I could not move too quickly or I would confuse some of them. I was thankful that I allotted plenty of time for each session. Although we were constantly pressed for time to complete each task, teachers maintained a positive attitude because what we were doing would benefit children and provide them with something to take with them, a future literacy lesson.

A third concern related to the common practice of teaching in isolation. In order for lesson study to become a successful professional staff development model, teachers need to

move from the belief that teaching is a personal and private activity to that of teaching being a professional learning situation which is public and examined openly (Stigler, Gallimore & Hiebert, 2000). I had to continually remind myself that teachers are not used to teaching in front of each other. There was great concern for who would be teaching the lessons that were developed by the group. In order to overcome this fear, I had to reassure them that the lesson was created by the group and not a reflection of one individual. Teachers were sensitive to feelings of the teachers that instructed the lessons. They offered feedback but in doing so, remained positive about the teacher. I was surprised to find that some teachers wrote in their journals about the need to be more critical of the lessons. I also thought that being able to provide critical feedback was essential for building solid literacy lessons. With the implementation of the Common Core State Standards lingering, I also felt pressure to provide teachers with a platform that would lead to growth in literacy scores. I felt JLS could be the vehicle that would change the face of professional development for these teachers, leading to a positive change in literacy instruction.

Finally attempting to implement a professional development approach that is typically utilized in another county affects the implementation approach. Teachers in the United States are exposed to the norm of teaching behind closed doors. In Japan there is a shared belief that , if the individual works tirelessly for the group, the group will reciprocate with everything it has (Tucker, 2011). Textbooks in Japan are lean so that entire textbooks are taught and focus is paid on the instruction used to deliver the core components of the books. Therefore Japanese teachers put a great deal of thought into how each lesson will unfold, in order to maximize student engagement. Mistakes are expected and children are taught that mistakes lead to deeper understanding of material. Therefore teachers in Japan are brought up recognizing that mistakes

are natural and critique leads to increased understanding and betterment. Teachers in Japan hold each other accountable and expect the most from each other. This causes some stress when trying to implement JLS in the United States as teachers are not used to this thorough process and therefore have a hard time providing their peers with constructive criticism.

A strength not mentioned in the literature relates to the learning that I was able to gain as a facilitator. I was able to sit in the background and observe what made teachers excited about this method of professional development. I witnessed what made JLS effective when compared to other methods of professional development. Due to the fact that I was able to watch the process unfold from the beginning to the end, I was able to see the participants grow as professionals as they strengthened their content knowledge, their ability to analyze data and connect it to the Common Core State Standards, and their ability to develop strong lessons.

In summary, the JLS process evolved over the sessions and led to a productive and satisfying form of professional development. Although teachers felt empowered and appreciated the practical side of JLS that led to the planning of effective literacy lessons; there were limitations including the feeling of discomfort experienced by teachers. These feelings often surfaced while teachers collaborated on the critical lesson components of JLS. At times there were too many leaders and not enough workers. Teachers had to surrender some power that they have when they are teaching in an isolated classroom. Collaboration, a crucial component of JLS, only works when teachers share in the decision- making. This was not always easy but alleviated somewhat when teachers placed themselves in roles in order to facilitate the planning process. Placing themselves in roles may not have been the best option as witnessed when they formed partnerships that may not have been conducive to the process. They may have benefited the JLS process more in other roles that they did not consider because they were filled with other



participants. The next section explores the second category of findings that emerged from the study: literacy instruction.

### **Japanese Lesson Study and Literacy Instruction**

The onset of the Common Core State Standards for Pennsylvania has put more pressure on teachers to consider effective methods of reading instruction. There have been professional development models used to assist teachers in understanding effective literacy practices. One of these models is the use of a literacy coach to assist in teacher development. In a typical coaching model, literacy coaches and teachers engage in a cycle of demonstration, observation, and reflection (Mraz et al., 2009). Together, teachers and coaches demonstrate, observe, reflect, and consider how such teaching decisions affect student learning. Literacy coaching can be a vehicle for embedded professional development with ongoing support and encouragement. A second model of professional development evolved as a way of supporting teachers to rethink their own practice. This model, known as a professional learning community (PLC), is an ongoing process in which educators work collaboratively in recurring cycles of shared inquiry and action research to achieve improved results for the students they serve (DeFour, DeFour, Eaker, & Many, 2006). These models although effective missed key chances for growth in literacy instruction needed for teacher improvement. Japanese Lesson Study provides sustained professional development efforts that address these missed opportunities for teacher learning. These opportunities, as they pertain to literacy instruction, will be discussed below. The discussion is organized under the following headings: teacher observations, lessons that engage, and putting rigor in lessons.

## Teacher Observations

As one study participant stated, “The most practical part of lesson study was getting into the classroom and seeing teachers teach.” Teachers acknowledged that they appreciated learning from other teachers so they could learn new ideas in order to improve their own literacy instruction. Student achievement is affected most directly by the quality of instruction found in the classroom (Fullan, 2007; Hattie, 2011; King & Bouchard, 2011). Therefore, it is essential that improvement efforts in schools focus on professional development that is effective while focusing on teacher instruction (Darling-Hammond, 2010). Professional development such as Japanese Lesson Study situates learning in the classroom setting as teachers work in learning communities to analyze teacher instruction and student responses during the lesson. The new Common Core State Standards put in place by many states in 2010 warranted a necessity to begin the study of literacy instruction as it happens in the classroom setting while putting the new standards in practice. Teachers in this study appreciated that JLS provided opportunities to see teaching and learning as it took place in the classroom. One teacher commented that she was most engaged as she watched other teachers teaching. She was interested in how they presented similar material in different ways. Teachers were able to develop a common understanding of what good instruction entailed by looking at actual classroom practice. Secondly, JLS kept students at the heart of the teacher observations as they witnessed their reactions to their planned lesson. Teachers observed student and teacher responses and took extensive notes on the entire learning process.

The live classroom lesson sets lesson study apart from other professional development sessions. Teachers valued this practice of observation in colleagues’ classrooms for the purposes of professional learning. This was evidenced by their discussions. The observation of the

lessons helped them to recognize effective literacy practices while reaffirming for some that they are effective literacy teachers. Some teachers were heard commenting, “I do that” or “I can use that in my classroom”.

Some would argue that to improve teaching, the most effective place to do so is in the context of a classroom lesson (Stigler & Hiebert, 1999). The teacher learning situated in the classroom through the use of lesson study allowed teachers to learn with colleagues in a setting they already felt comfortable in. As they observed their colleagues at work, they discussed how they would change their own literacy instruction to make it more effective. However, there were problems with teachers’ observing other teachers. The teachers who instructed the lessons in front of their peers were showcased and may not have taught the way they typically teach in the classroom. The lesson being preplanned by many adults also may have caused the teacher to unnecessarily follow the scripted lesson so as to please the team. This isn’t the norm during a typical day as teachers often sporadically change lessons when they think on their feet. The students may have not reacted as they typically would during the school day. Having adults in the classroom that are not typically present, can cause students to over perform in order to please those present. Although the lessons that were taught provided another perspective of what a teachers’ classroom would look like, this poses a challenge because you can never truly produce an authentic classroom setting with extra adults in the classroom. Students as well as the teacher will work to put out the best possible lesson. The next section addresses student engagement in lessons.

## **Lessons that Engage**

Lesson study gives teachers opportunity to make sense of educational ideas within their practice. It changes perspectives about teaching and learning, all the while allowing teachers to collaboratively support their colleagues (Takahashi & Yoshida, 2004). This notion of changing perspectives was witnessed during this JLS. Teacher participants realized that research lessons, developed during JLS, improved classroom practice. They helped teachers see things about their teaching that might otherwise have escaped them. It provided them with many viewpoints. It was evident that teachers were learning new ideas through discussion and sharing. The resulting literacy lessons were engaging for students even though the initial lesson lacked the ability to develop background knowledge among students prior to the reading of the passage. The ability to observe teaching practices that were unsuccessful is part of the JLS process. Although the lesson may not have been as successful as planned, the teachers learned more as they were able to watch practices not going well. This was engaging and reassuring for the teachers as they thought about how to improve the lesson and felt more secure in their own teaching practice while realizing that it is not a perfect process.

JLS is a learning process that does not happen without failures. The first lesson being observed had some pitfalls that were quickly remedied after group discussions. In an attempt to engage students the initial lesson seating was not predetermined. This was a detriment to the lesson as it resulted in less student engagement. It was impressive that teachers had an instant solution for this problem. The seating arrangement was modified during the discussion after the initial lesson, resulting in increased conversations among students. The second pitfall of the initial lesson was in the carousel poster activity. In an attempt to engage students, teachers placed posters around the room that required students to post definitions to vocabulary words.

Teachers recognized that students needed additional instruction of the vocabulary words prior to posting their answers on the charts. Further discussion among teachers after the initial lesson led to the revision of this activity. The utilization of context clues during the second lesson helped to solve this problem for some of the students. The institution of a buddy system increased student engagement and discussion as well. The discussions that followed the initial and second lesson were highly effective and educationally stimulating. It was clear that teachers were soaking up every word. They were taking notes on their lesson plans as they thought of ways to modify the lesson. Without this post lesson discussion, teachers would not have created the new lessons. It was evident that JLS allowed them to hear the ideas of many which triggered new thinking by everyone present in the room.

The second teacher took the suggested revisions and added her own twist on the lesson when students were not responding to some of the lesson modification. She implemented a form of modeling during the lesson that got students involved in pantomiming the definitions for each vocabulary word. Teachers were very excited about this portion of the lesson. One teacher emphasized that, “kids learn by doing so just reading to them is not effective.” This was a crucial part of the JLS experience as teachers witnessed further revisions of the lesson that did not include the groups’ decision. It is essential that the teacher instructing the lesson have the final say for what instruction will look like while he or she is putting the lesson to the test. This is something not discussed in the literature on JLS. The teachers instructing in front of their peers need to have the final authority as to how the lesson unfolds while the students are participating in the lesson. If the lesson is not engaging or meaningful for the students then the teacher teaching the lesson needs to make a change in the lesson plans. This is truly learning in context as the students can put twists in the learning environment that cannot be planned for.

JLS proved to be an effective method for getting teachers to examine instruction in the setting of the classroom in order to create literacy lessons that were engaging for students. The next section discusses teacher knowledge as a vehicle for increasing rigor in lessons.

### **Putting Rigor in Lessons**

The influence of an individual teacher's knowledge and skills on student achievement is well recognized in literature on teacher professional development (Darling-Hammond, 2010; Hargreaves & Fullan, 2012; King & Bouchard, 2011; Valerie, 2012). JLS has a capacity to affect instruction in the area of English Language Arts. The goal of lesson study is not to just produce lessons to be copied but to produce knowledge about instruction upon which colleagues can build (Hiebert & Stigler, 2000).

The research lessons that were observed during this study offered teachers the opportunity to experience the Common Core State Standards in the actual classroom. The teachers became experts, through JLS, in their English Language Arts curriculum as they studied the CCSS and developed lessons to specifically address student data. The teachers were thorough in their dissection of the standards as they referenced them on their lesson plans. The result was a lesson that not only addressed specific curriculum requirements but the needs of the students present in the classroom as well. As teachers participated in these activities, they naturally took an in-depth look at curriculum. Lesson study provided the opportunity for teachers to establish what knowledge is important, allowing them to discover gaps in their own knowledge. Teachers were confident in their discussions about literacy as they referenced the CCSS and reflected back to past learning that had taken place during the earlier sessions. To assist, we watched several CCSS videos during the initial session in order to establish a frame of

reference for our thinking. Teachers appreciated the videos and articles but were also overwhelmed because they were learning about the components of JLS at the same time. Fortunately, as evidenced by their lesson planning efforts, they were able to recall some information as they referenced it during their conversations about effective literacy lessons.

Japanese Lesson Study, utilized as a form of professional development allowed teachers to take a closer look at the Common Core State Standards as they analyzed and selected particular literacy standards that pertained to the lesson that they developed together. Providing teachers with professional development that addresses literacy instructional elements leads to the design of effective lessons; allowing teachers to build effective lessons while working as team. However, although the CCSS were analyzed they only provided guidance for the standards that should be addressed by grade five English Language Arts teachers. District curriculum requirements forced teachers to take a certain direction with their lessons. Teachers had to work from an anthology and teach the reading comprehension skills found among the themes. The anthology that is required for reading instruction caused teachers to focus more on story coverage rather than effective reading instructional methods. It put parameters on what story could be selected and the rigor that could be added to lessons; as certain skills in each theme have to be addressed in order to cover the anthology content. Learning and utilizing effective reading practices is not emphasized. Future JLS sessions may be more beneficial in increasing teacher knowledge of effective literacy instructional practices if they involve in-depth analysis of literacy alone prior to connecting the lesson to a school district selected anthology.

### **The Relationship between JLS and Situated Learning Theory**

Situated learning theory explains how learning occurs within the JLS model. In the situated view, experience becomes the activity and takes on a much more active relation to

learning. Adults no longer learn from experience; “they learn in it, as they act in situations” (Wilson, 1993, p.75; Davin, 2006). JLS takes the experience that teachers bring to the study and applies it the lesson planning process as teachers observe and learn in the context of the classroom. Teachers have no choice but to be active learners as they assume roles that are instrumental in the facilitation of the JLS process. Lesson Study, used as a form of professional development, affords teachers the opportunity to learn in the context of the classroom setting with the tools that they use during classroom instruction (Doig & Groves, 2011; Fernandez, 2002). Schools are not typically designed to be professional communities of inquiry due to tightly aligned schedules and practices of tradition that have not changed over the years. They are often collections of individuals working under frequently difficult conditions, essentially alone. Situated Learning Theory explains why it is necessary for educational establishments to change this common practice. Knowledge acquisition, a desired outcome of teacher training sessions, is part of the process of involvement in a situation and interactions between the individual and environmental elements such as people, tools, and culture (Fenwick, 2000; Beres, 2002). Situated learning theory purports that knowledge is socially constructed and learning occurs through participation within a community in the context they encounter daily. The participants in this study valued watching their colleagues teach as teachers develop their own habits they fall back on each year. Being able to watch authentic instruction helped them to realize that there are other ways to teach. The dialogue that resulted from this learning opportunity was crucial as it caused teachers to reflect on their own practice. This study showed that teachers found JLS to an effective method of professional development informed by the theory of SLT. This section will discuss two specific findings from this study that inform the relationship between JLS and SLT. One of these findings is that teachers learn in an



environment that they feel comfortable in; among the tools that they use on a daily basis. The other finding is that conversations among teachers build relationships that enable them to learn from each other.

The consideration of both learning environment and activity is essential when planning effective sessions for educators. Teachers need close to fifty hours of professional development in any given area to improve their skills and their students' learning (Darling-Hammond, 2009). However most professional development takes place outside the classroom setting. Classrooms, where teachers work daily, are practical places to make this happen. Grounding professional development in actual classroom practice is a powerful means of fostering effective teachers (Lieberman, 1996). At the end of the Japanese Lesson Study process teachers realized the importance of feeling comfortable with peers in their classrooms. The teachers as a whole appreciated the opportunity to watch a lesson transpire in the classroom and then provide suggestions for improvement. Teachers realized that they are capable of changing educational practices in order to boost student achievement. The embedded professional learning promoted positive feelings among teachers. They were in their element as they used their classroom materials, data, and curriculum to inform their practice.

According to situated learning theory (SLT), learning is best understood in relationship to the context/situation in which it occurs (Bell, Maeng & Binns, 2013). SLT explains how the culture and use of the tool act together to determine the way practitioners see the world (Lave & Wenger, 1991). To learn to use tools, practitioners in this case teachers, must enter their community and its culture like an apprentice (Fullan, 2012). Teachers, like apprentices, must experiment with tools in the setting in which they will be used. JLS allows teachers to practice their trade in the classroom setting. Teachers in this study valued learning among all their

resources. They appreciated the end result of planning together to complete a research lesson plan. The actual product of this collaborative planning provided a tool for instruction; a written plan that described in detail the design of the lesson. They commented that this lesson could be used next year with minor tweaks based on their classroom populations. JLS and SLT brought meaning to contextualized professional development as teachers were able to learn where they felt most comfortable.

Placing learning in the context of the classroom resulted in a more authentic learning experience. First, students were present and created a natural environment for learning. They are the unspoken culture of the classroom necessary for learning. As tools are essential for genuine learning, students are necessary in creating learning situations where teachers can actually practice their trade. Second, learning in the classroom allowed teachers to use tools and materials essential to planning and facilitating a lesson. The understandings that emerged as a result of this helped the teachers participate in a situation that was connected with their particular classroom community (Lave & Wenger, 1991).

The second link between SLT and JLS related to the discourse used by the teachers throughout the process of planning for the lesson and reflections that led to revisions. Situated learning and Japanese Lesson Study propose that learning involves a process of engagement in a community of practice (Lave & Wenger, 1991; Yoshida, 1999). Communities of practice are formed by people who share a concern or passion for something they do, involving members in joint activities and discussions as they build relationships that enable them to learn from each other (Lave & Wenger, 1991; Brown, Collins, & Duguid, 1989). Teachers in this study established a community of practice that related to their instructional needs. They became the embedded support that led to new learning and shared responsibility necessary to foster

improved instruction. Their conversations led to content knowledge change as they dialogued about CCSS and curricular aspects related to their lesson plans. The professional community resulted in a collaborative culture where each teacher felt ownership and responsibility for the lessons created. JLS helped to empower the teachers as they wanted to affect lasting change in their classroom environments. This empowerment revealed in the CoP is overlooked in SLT. The teachers in the study were empowered because they felt ownership over the course of their professional development, especially when it related to the needs of the students. They also realized the choice involved in JLS when they were able to select literacy areas that could be improved by increased rigor. Whereas, situated learning theory seeks to explain learning in the context, CoP encourage teachers to dialogue to better their practice thus inspiring those involved via collaboration. Communities of practice are formed by people who share a common concern or passion for something they do, involving members in joint activities and discussions as they build relationships that enable them to learn from each other (Lave & Wenger, 1991; Brown, Collins, & Duguid, 1989). Relationships are overlooked in SLT as interactions are not examined as they relate to how people build associations with one another. Relationships lead to collaborative problem solving that would not take place alone. SLT recognizes learning done on the peripheral without an emphasis on learning taking place because of the interaction that results from peer associations which then lead to a relationship. Although, SLT recognizes learning done from a peripheral view; this fringe learning presents itself differently in JLS. Teachers are learning on the outskirts of the classroom when they are observing lessons but they are part of this learning because they helped to create the lesson through a collaborative group. This is part of the empowerment as teachers are part of the designing process the entire time and able to connect it to their personal learning needs.

Communities of practice as a construct explains how JLS can bring outliers from the margin to the center, establishing a common understanding about the nature of their work. This common understanding results in dialogue that is meaningful to participants. Conversations rest on essential assumptions regarding the nature of professionalism in teaching including the importance of ongoing teacher learning and the mechanisms that promote it. Also essential to a community of practice, the knowledge, skills, beliefs, and behaviors of the members of that community promote the development of a social culture. This culture is essential in establishing a feeling of comfort among participants and thus a community of learners. The environment created for teacher learners is just as important as those that are created for young children in a classroom. Among teacher learning groups there are many different personalities, interests, and beliefs. It is essential that teachers are made to feel comfortable so that their learning process is not stifled. One teacher commented:

The most special part of collaboration is that we are all different teachers. We each offered a piece of the lesson and that is how we hit all the different learners in the classroom and learned from each other as well.

Empowerment is something that is overlooked by most facilitators of teacher learning sessions. The literature on CoP does not account for teacher empowerment and how people can change as a result of feeling inspired. The learning community established by the teacher participants evolved with each session and I was able to watch teachers grow both in knowledge and excitement because of their participation in JLS. This was significant as both the teachers and I began to question our knowledge base as it related to English Language Arts and classroom instruction. As the facilitator of the CoP, I could not prepare for teacher reactions. This placed me on the peripheral as I learned from and with them. This caused me to leave my comfort zone

at times. This process of joint collaboration was a transition for many and required many of the participants to change their beliefs and leave their comfort zone. Teachers became more comfortable sharing their ideas as time evolved. They began to share effective practices used within their own classrooms. This does not always happen as discussed by one teacher:

I am often hesitant to share what happens in my classroom because I don't know how others will feel about my work. I worry that they will think it is silly or not educationally sound. As we continued to work with each other, my feelings changed and I began to feel comfortable sharing. This was not possible in other buildings that I have worked in.

Teachers in this study were prime examples of instructional leaders as evidenced by their conversations with each other. They talked about the necessity for continued learning among each other because teaching is hard it and it is better to learn as a group.

The notion of community is essential to both SLT and JLS. Situated learning theory is based on rationale that knowledge is socially constructed and learning occurs through participation within a community. This connects directly to JLS, which assumes that learning is done through a continuous cycle of collaborative discussions. Sharing knowledge, constructed through Japanese Lesson Study, allows community members to deepen their content knowledge and share learning goals all the while establishing relationships (Hiebert & Stigler, 2000). Members of a CoP are practitioners, developing a shared repertoire of resources: experience, stories, and tools, in short a sustained practice. JLS connects this group in the context of the classroom while empowering those involved as they are provided time to collaborate resulting in increased comfort levels. This comfort level is not addressed in the literature of SLT but

happens naturally as teachers learn in the habitat where they experience daily learning encounters.

### **Final Reflections**

This process has allowed me to witness firsthand as the facilitator the important aspects of professional development that cannot be overlooked when addressing adults. Specifically when presenting a topic to adults it is important to first establish a necessity for the initiative. Adults appreciate feeling productive and efficient, so any session needs to be both valued and relevant to current district goals. Adults need to feel productive so it is necessary for them to walk away from a session with something tangible that they can use a later time. Furthermore, in order to develop a collaborative atmosphere among adults trust needs to be established. Without trust you will lose the foundation of what most successful professional sessions are built upon. This doctoral process has changed my outlook on adult learning and confirmed what I have always believed; that teachers need to feel empowered in order to accomplish anything in a school district.

### **Implications for Practice**

The findings of this study offer several implications for practice. First the implications for teacher continuous learning will be discussed, followed by a discussion of implications for professional development.

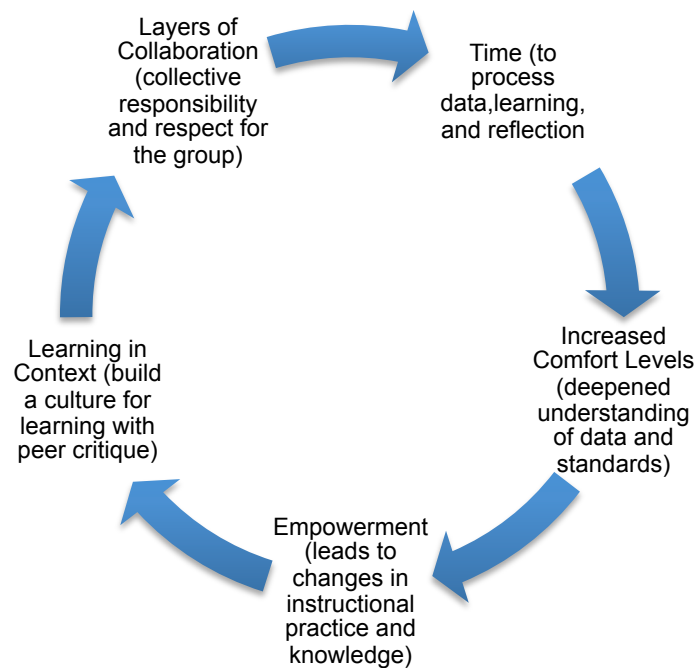
One of the most significant implications from this study stems from the necessity to change the way we offer professional development for teachers. This was evident from the teacher interviews as they reflected on their experience with JLS. Teachers were overwhelmingly in favor of professional development that moved away from the typical sit and

get sessions and instead emphasized a need to connect learning to their practice. A cycle of continuous learning if utilized could inform the development of teacher learning sessions by offering suggestions for the work within a learning community. A learning community could be structured so as to sustain learning over time while empowering teachers as they learn in the context of their classrooms. The Pennsylvania Teacher Effectiveness System for teachers asks that teachers have opportunities to collaborate with and observe each other; such as those found in JLS. Situated Learning Theory informs this notion of support for communities of collaborators who partake in richer conversations through teamwork. This study contributes to a body of evidence upon which staff developers may use to develop their professional learning community structures in order to better understand how to weave Common Core State Standards, educator performance standards, and standards for professional learning into a cycle of continuous learning to increase the effectiveness of teacher and student learning.

Professional learning, according to this study, began with a balance of power through the establishment of roles. This was essential to the process of teacher empowerment. The designation of roles assigned teachers in areas of work that they felt most comfortable performing. As a group, teachers were empowered by the time allotted to them to develop lessons as part of their own professional development plans. The process was teacher led and driven by their needs. Teacher comfort levels increased when their voices were heard, as they were able to contribute what they felt was most essential. This led to a support system that encouraged teacher learning through the utilization of student data, curriculum, and evaluation of teacher lesson planning. Peers learned in context as they critiqued teacher and student performance. This process of learning lead to deepened understanding of effective lessons where teachers were allotted time for practice that caused shifts in their knowledge. There were layers

in this collaboration including the development of trust and respect that led to a collective responsibility. In the end, teachers valued this cycle of learning resulting in time for continuous learning. I will refer to this Cycle of Continuous Improvement in Figure 1.

**Figure 1**



This study yields another implication for consideration regarding the professional development of teachers. Teachers in this study perceived professional development to be effective if it involved conversation with other educators. Specifically, they valued having these conversations if they centered on lessons that they had the opportunity to observe. Teachers feel comfortable in the classroom setting and value continued learning that takes place in this environment with discussions on how to improve instruction in order to boost student achievement. Looking at instruction through the lens of a researcher encouraged teachers to watch specific student



reactions. This led to deepened reflection on how to best instruct learners and on the types of lessons that yielded the most results. Teachers felt motivated to create better lessons as a result of this continued dialogue and shared leadership.

It is interesting to note that teachers were initially apprehensive to the JLS process as they were fearful of learning that involved peer observation. It was through continued discussion and reflection among colleagues, that they soon developed an appreciation for the learning process that resulted from study centered in the classroom setting. Moving away from traditional professional development allowed teachers to take ownership of their own learning based on their classroom needs. Plans for the development of future professional development sessions should consider SLT and what it tells us about adult learning. According to SLT, adults learn best in the context where they practice their trade. The classroom setting, with students present, creates an authentic environment for teacher instruction.

Japanese Lesson study is a vehicle for teachers to engage in close examination of their classroom practices and reflect meaningfully on the degree to which students are achieving success (Sewart & Brendefur 2005; Brownell, Gersten, Dimino, Jayanthi, Kim, & Santoro, 2010; Robinson, & Benedict, 2012). It enables teachers to develop collaborative goals for instruction based on curricular and student needs. For this reason, it increases teachers' abilities to differentiate instruction based on their students' academic abilities and interests. The collaborative planning process of JLS described above provides a sustained professional development method that is often lacking among more traditional methods. In order to implement JLS successfully, the support of administration is essential. There needs to be a belief that collaborative learning is essential when establishing timelines for success. It is essential that teachers be able to observe learning in the context of the classroom setting. This requires

support from other teachers, administration, and often the building reading specialist. Secondly, it is essential that the team formed for JLS recognize the trials and tribulations that may result from the process. Teams need to understand that collaboration and knowledge building are essential to orchestration of the JLS model. Team effort is essential and without it, success will not be found in the JLS model.

### **Suggestions for Future Research**

This study adds to the body of knowledge for both teacher learning and adult education. It answers questions surrounding situated learning and literacy instruction. As a research methodology, action research provided a forum wherein the experiences of the facilitator and teachers were a focal point of the research. The cyclical nature of action research and JLS is demonstrated and described throughout chapter four and highlights the phases with action research (planning, action, observation, and reflection) as identified by (Kemmis and McTaggart, 1998; Patton, 2002). For example, teachers analyzed data and planned lessons, taught the lessons while their peers observed, and then reflected on the lesson process. Throughout this study, teachers assumed roles and lead the majority of the decision making process.

Future studies could focus on video in order to document the entire learning process. For example, video was used in this study only during the demonstration of engagement strategies during the lesson. The teacher was the only person on the video. It would benefit all learners if a 360 degree camera was used to capture both students and teachers. This would also contribute to the understanding of learning situated in the classroom setting as teachers are not always able to observe lessons in person but could instead observe lessons via a video. The JLS process utilized in this study served as a professional development model for contracted teachers.

However, further research on the JLS process involving new and training teachers would benefit future studies as well. Additionally a video component could also serve to assist new teachers as they study teacher instruction situated in the classroom setting. This method could also be utilized by new and training teachers if they went through the JLS process with a cohort. They would benefit from the creation of lessons and peer observations that unfold through video.

Furthermore, the involvement of administrators in the JLS process could serve as a learning experience in two ways; first it would allow them to walk through the process of data analysis and lesson creation along-side teachers and secondly it would provide them an opportunity to observe lessons not only for administrative purposes but for their learning purpose as well. Administrators are often in their positions for years and they can lose sight of what it is like to be a classroom teacher. Involving them in the learning process would be beneficial to stay current in what exactly is necessary to create a successful lesson.

### **Summary**

This chapter provided a discussion of the study's relevant findings. The findings were organized in three categories; Japanese Lesson Study, literacy instruction and JLS, and the relationship between JLS and SLT. Relevant findings related to JLS included teacher reactions to JLS, collaboration connected to current classroom topics, and how the facilitator reacted to the use of JLS. Furthermore, JLS which centered on literacy instruction revealed information regarding teacher observations, lessons that engaged and increased rigor in the classroom. Finally, the significance of the relationship between JLS and SLT revealed contextual learning implications as well as conversations resulting from communities of practice; both of which lead to the promotion of good instruction in the classroom. Relevant findings related to JLS

emphasized that teachers valued professional development beyond the typical sit and get sessions. The process of JLS was not without frustration as teachers learned to be critical friends and collaborate without overpowering. The process was marked with steady progress as teachers learned to think like scientists in order to develop and analyze literacy lessons. In developing JLS, teachers created and observed literacy lessons with a critical eye; this process highlighted the importance of using an authentic situation for learning such as the classroom setting. This chapter also highlighted the findings on how JLS and SLT are related. Teachers found that learning situated in the classroom setting was beneficial because they were in an environment where they felt comfortable with the tools and students that influence the success or failure of literacy lessons. This chapter then went on to explain implications for practice including a cycle of continuous improvement that would encourage teacher continued learning with a community of their peers. Suggestions for future research were related to the use of video for teacher education, specifically new hires and those in training.

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## Appendix A

### Critical Incident Questionnaire (CIQ)

**The time in the session that I was:**

- a) most engaged as a learner
- b) least engaged as a learner
- c) most surprised
- d) The most important thing that I learned was
- e) The thing that I will immediately apply to my teaching is
- f) A metaphor for my learning for the session is this

## Appendix B

## JLS Planning Form

## English Language Arts Lesson

Grade:

Instructor:

## I: Background Information

A. Goal of the Lesson Study Group (Think about gaps and learners)

B. Narrative Overview of Background Information (background and lesson context)

## II: Unit Information

A. Name of Unit:

B. Goal(s) of Unit:

C. Common Core Standards Addressed (Grade level above and below):

D. Instructional Sequence

## III: Lesson Information

A. Name of the Study Lesson:

B. Goal(s) of the Study Lesson:

C. Process of the Study Lesson:

Steps of the Lesson: Learning Activities and Key Questions	Student Activities/Expected Student Responses	Teacher's Response to Student Reactions/Things to Remember	Goals and Method(s) of Evaluation	Notes

D. Evaluation: How will you determine the success of the lesson overall.

## Appendix C

### Lesson Study: Suggestions for Group Goal Selection

1. Think about your students. What qualities do you want to develop in your students?
2. What gaps do you see between the goals and how children are actually performing at your school?
3. Discuss the gaps. As a group, select a gap that you want to address and improve upon using Japanese Lesson Study. List the gap you have selected.
4. Write a group goal that addresses the gap you have selected. How will you address this goal? How does it address the PA Core Standards?

## Appendix D

### Lesson Study Protocol

#### **Observing the Lesson**

- The observers should not interfere with the natural process of the lesson. Observers can circulate around the room. This may provide them with different views of learning.
- Observers should note their observations on the lesson plan itself. This planner will be used for their feedback after the lesson.
- Observers should not talk amongst each other. They can assign themselves to certain groups of students or observe the class as a whole.

#### **Lesson Feedback**

- Immediately following the lesson observers should organize their notes.
- A group member will need to act as the facilitator to keep the discussion organized. A teacher should be assigned as the note taker. It is recommended to have someone else revise the lesson during the discussion based on feedback from the group.

#### **Feedback Suggestions**

- The facilitator should remind the group to use the notes from their lesson plans and focus on the goal that was selected.
- The teacher who taught the lesson should be provided with the first opportunity to express his/her reactions to the lesson.
- The other group member should then offer their comments (what worked, what did not work, what could be changed).
- When group members share their feedback it is important to begin with a positive comment and then offer suggestions.

## Appendix E

### Pre Interview Questions

1. What are the experiences in your life and trainings that have influenced the kind of teacher you are today?
2. Tell me about your last professional development experience. Were you able to utilize what you learned in the classroom context? Explain how. Did you find the training session practical? What did you find impractical?
3. How does context affect student learning?
4. How does context influence teacher learning?
5. How do you feel about learning in the context of the classroom setting with your students present?
6. How do you feel about other teachers being “critical friends”?
7. What is the most effective method of reading instruction?
8. How does teacher discourse influence student learning?
9. Tell me about instructional methods used in your classroom.
10. How will the Common Core Standards for English Language Arts influence what you currently teach in the classroom?
11. When thinking about the CCS for ELA, which standard do you feel most comfortable teaching? Which standard do you feel you need assistance with?
12. If you could design a professional development session that addressed the Common Core Standards for ELA, what would it look like?



## Appendix F

### Post Interview Questions

1. Tell me about the lesson study process. Did you find the training practical? What did you find impractical?
2. How did context affect student learning during the lesson study process?
3. How did context affect your learning during the lesson study process?
4. How did you feel about learning in the context of the classroom setting with students present?
5. How did you feel about being a “critical friend”?
6. What was the most effective method of reading instruction utilized during the lesson study process?
7. How did teacher discourse influence student learning?
8. What instructional method did you find most effective during the implementation of the lessons?
9. When thinking about the CCS for ELA, how are you currently feeling about the implementation of them after this lesson study process?
10. How would you implement lesson study during the school year?

**VITA**  
**Crystal Corle Loose**

**Education and Certifications**

**Doctoral Degree, 2014**

Pennsylvania State University, Harrisburg, PA

**Principal Certification, 2002**

Pennsylvania State University, Harrisburg, PA

**Master of Education, Reading & Language Arts**

**Reading Specialist Certification, 2000**

**Elementary Education Certification, 1995**

Millersville University, Millersville, PA

**Bachelor of Arts in Communication, 1994**

University of Pittsburgh, Pittsburgh, PA

**Professional Experience**

**Cocalico School District, Denver, PA**

Present

**Assistant Principal/Elementary Title I Reading Coordinator**

- Supervisor of K-5 teachers
- Elementary Reading Supervisor
- Coordinator of Title I Reading Program
- Facilitator of Elementary Parent Programs
- Facilitator of Pre-K Parent Programs
- Curriculum Developer
- Staff Developer

**Ephrata Area School District**

**2011-2013**

**Coordinator of Learning Development**

**Ephrata Area School District**

**2002-2010**

**Literacy Coach/Instructional Facilitator**

**Grade 2 Teacher**

**2000-2001**

**Kindergarten Teacher**

**1996-2000**

**Reading Recovery Teacher**