# Practice-Based Professional Development in Education

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# Foreword

Dr. Crystal Loose knows learners. She has been educating children and adults for over twenty-five years in a variety of capacities. She possesses a contagious passion for creating connections between home, school, and community for the benefit of children and families. Dr. Loose has been working toward that end for the entirety of her career in education.

Having served as an educator and administrator in K-12 public school systems, Dr. Loose understands thoroughly the daily challenges teachers and families face as they navigate the complex nature of child development. As mentioned in the introduction, teachers address a multitude of simultaneous demands from the moment they step into their classrooms until the moment they leave each day, and quite often, far beyond the contractual work day.

Knowing the curriculum, understanding children and learners, planning lessons that engage all types of learners and needs, and managing behaviors is no small feat. Add the clerical tasks, the administrative demands, and the need to stay abreast of trends in education, and there describes the weight of teaching that causes even the most talented and dedicated teachers to take pause.

Professional development must be relevant, timely, and truly embedded into the culture and routine practices of a school system in order to be effective for the long-term. Dr. Loose is an expert at working with educators and community members to bring out the best in classroom instruction to maximize the learning for students, our future. This book will inspire teachers at every stage of their lifelong journey of learning and teaching.

*Kelly K. Cartwright*
*Conestoga Valley School District, USA*
*September 2019*

**Kelly K. Cartwright** *earned a Doctor of Education in school administration from Widener University in 2008, and holds a Master of Science in school administration from Western Maryland College (1997) and a Bachelor of Science in elementary education from Ohio University (1989). Cartwright has taught second, third, fifth and sixth grades and served as dean of students at South Eastern Middle School in York County. Cartwright was assistant principal at Emory Markle Intermediate School in the South Western School District, also in York County. Kelly has served in three roles in the Conestoga Valley School District Lancaster County since 2001: Brownstown Elementary principal, director of elementary education, and assistant to the superintendent for elementary education. Passionate about early intervention, customer service, community partnerships, project management and writing, her most prized projects to date include a $4.3 million literacy grant, $2.1 million in Pre-Kindergarten grants, and full day kindergarten for all children in her current district. A native of Davenport, Iowa, Cartwright lives in Lancaster, PA with her husband and daughter.*

# Preface

Professional learning is an essential ingredient of education. It comes in many shapes and sizes and has the power to impact the culture of a school. There are many methods utilized for the education of teachers. Sessions for teachers often take place over summer vacation, with many provided during school district kick-off segments. For many, the start of the school year brings assorted feelings. The unknown adventure that awaits in the classroom causes some to stress. For others, this is a time for a renewed beginning. Designers of professional learning for teachers have the power to empower and educate learners, and set the tone for the entire school year.

If done effectively, adult education involves trusting the learner: acknowledging and using the learners' experiences and ideas, inviting him or her to participate meaningfully in the learning process, and facilitating their growth as learners. This approach to learning creates commitment and establishes relevance for learning. Trust develops from treating teachers as processionals who can plan and implement their own learning in a way that accomplishes goals established by the district.

Classrooms today are notably engulfed in initiatives such as project- based learning, hands-on learning in Makerspaces, coding, gaming, technology inspired lessons, and additional items that all require new learning and training for the teacher. We have to prepare teachers to create classrooms that prepare students to enter a world that seeks employees excelling at collaboration, communication, critical thinking, and creativity. Teachers need to be afforded opportunities to learn from each other, within communities of practice, that allow leaders to share their knowledge and expertise of effective classroom practices. Models for professional learning can be situated within the classrooms among students, in order to learn in the context where education takes place.

The time is ripe for experimentation in staff development for teachers. This book will provide leaders and teachers with suggestions for the exercise

of professional learning opportunities. Current models are examined for their effectiveness and suggestions for learning are addressed. For a professional learning experience to bear fruit, educators need to take learning and directly apply it to an authentic environment, among peers that live it on a daily basis.

Chapter 1 will provide readers with a thorough examination of professional development methods, leaving the reader to reflect on their own experiences. This section discusses the importance of teacher training that is collaborative and applicable to classroom practice. Teachers recognize the importance of professional development, but prefer to attend sessions that can easily be applied to practice. Barriers to professional learning are considered with several items consistently mentioned as interfering with learning by the teachers that participated in interviews including time, lack of leadership, and lack of practice- based opportunities. Unfocused and fragmented professional development that is not aligned to the vision of the district is often ineffective. Rather, well planned staff development begins with the end in mind and anticipates what teachers bring to session. It is aligned to the needs of the school and designed to address specific student and teacher needs. Recognizing barriers to professional learning, removes constraints that prevent teacher learning.

Teacher interviews, from an action research study, will inform some of the chapters. I believe that the professional development offered to teachers should be informed by teachers that work in classrooms on a daily basis. We know from research that when teachers collaborate on teaching practices, and are provided with time to practice new methods, that classroom dynamics flourish. It is from this collaboration, that I was able to glean essential information from teachers. Adult learning theory will be woven throughout each chapter, particularly as it pertains to professional development design. We know that with adequate vision and continuous support, teacher learning will soar and students will reap the benefits.

Following the introduction is the opportunity to examine characteristics of effective methods of professional development, and then learning models. Chapter 1 discusses successful elements of professional learning practices. Teacher interviews inform this chapter, as they share their own experiences. 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. For meaningful instructional changes to occur, teachers must have a voice in the process of their own learning. Successful professional development should allow for reflection, collaboration, and acknowledge the

needs and interests of teachers. Furthermore, adult education practices need to be considered when designing professional learning sessions.

Chapter 2 examines how adult learning theory can be utilized to influence teacher growth. It will expose the reader to adult learning theory, with particular emphasis on situated learning and discourse theory. Adult learning theory should inform the design of professional development sessions, with particular attention devoted to context and collaborative settings. Professional learning of teachers within the classroom is influenced by situated learning theory and has the potential for sustained professional development. Situated learning proposes that learning involves a process of engagement in a community of practice. 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. The concept of community of practice is further discussed as it pertains to teacher professional learning groups. 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; it needs to be cognizant of current trends in education.

Previous sections in this book have revealed effective qualities of professional learning sessions, and how adult learning theories inform the design of teacher professional development. Reform is a constant in education and should influence how we examine professional development efforts, particularly those that directly impact teachers and their efforts in the classroom setting. Additionally, it is necessary to examine models that are used in a majority of our school systems. Reflecting on these models can help us determine what is best for teachers at their current state of learning. Chapter 3 examines four models used for the staff development of teachers including: instructional coaching, professional learning communities, peer coaching, and Japanese Lesson Study. Each method can be effective, but an argument is made for the use of Japanese Lesson Study, as it utilizes adult learning principles and emphasizes situated learning.

By examining where they are on a cycle of improvement, teachers can shift instruction in their classrooms. Teaching, after analysis, can shift from "teaching as telling" to "teaching for understanding." Effective methods of professional development can support this learning shift. A close examination of Japanese Lesson Study as a method of professional learning will reveal ways to overcome barriers to teacher learning. This examination in Chapter 4 first explains the essential features of Japanese Lesson Study and then

examines the advantages of using JLS as a model of professional learning. It asks the reader to consider if their own model is sustainable and connected to classroom practice. This section further explains the challenges of using JLS in the culture of the United States.

Chapters 5 and 6 provide the reader with insights from an action research study set among a team of teachers in the context of the classroom setting. The action research process is examined and explained in Chapter 5. While, connections are made between JLS and adult learning theory in Chapter 6. The results discussed in the chapters reveal teacher perceptions of professional learning and specifically Japanese Lesson Study. These sections will further inform leaders as they development their own system of professional learning for teachers. For the purpose of understanding the action research process and the story that unfolded, three phases were identified including: (a) astounded by Japanese Lesson Study; (b) the layers of teamwork; (c) learning in context with a peer coaching emphasis. Each of these phases will be addressed in detail in the upcoming sections.

Chapter 7 reveals teacher learning that results from reflection. Phase four of the action research study informs this section as it shares how teachers overcome barriers such as time, teacher empowerment constraints, and collaboration efforts. These areas are often overlooked when designing professional learning in schools. Solutions are also presented in the form of teacher narratives. This chapter will inform practitioners as they develop learning session for teachers.

Finally, the last sections of the book will provide suggestions for future professional learning opportunities. In Chapter 8, readers are provided direction for future learning endeavors that inform teacher practice. Leaders are offered suggestions for professional development including the understanding of layers present in collaboration, such as the development of trust and respect that leads to a collective responsibility. Teachers valued this cycle of learning resulting in time for continuous learning. This cycle referred to as the Cycle of Continuous Improvement, will be elaborated on as it pertains to professional development. Additionally, social media as a form of professional learning, is examined. Suggestions for self-directed investigation and application are provided.

Chapter 9 examines social media as a form of professional development. It sheds light on social media platforms that support collaboration and reflection among educators. The International Society for Teachers in Education (ISTE) continues to stress the importance of teachers possessing skills and behaviors of digital age professionals. This is necessary as educators become co-learners

with their students and colleagues around the world. Social networks, such as Twitter and Google+ communities, provide opportunities to move up the SAMR Model. The SAMR Model or Substitution Augmentation Modification Redefinition developed by Dr. Ruben Puentedura, offers a method of seeing how computer technology might impact teaching and learning, as well as professional learning for teachers.

This book is primed to impact designers of professional learning sessions. Careful thought was used to connect suggestions for staff development to current learning practices. Teacher input through an action research study, informed the majority of this book and will provide readers with thoughtful suggestions for reflection. Social media is influential in many modalities today and could have an impact on how we ask teachers to learn. For this reason, two chapters are designated to this type of self-directed learning. At the end of each chapter, there are reflection questions that can be utilized as practitioners examine their own practices. This book will inspire conversations among groups, as they continue their learning journey.

# Introduction

Teacher professional development has never been more important in education. With the changing landscape of classrooms, ever- present technology innovations, and constantly changing curriculum, teacher training is necessary to remain ahead of the demands. The classrooms of the past were remarkably neat and orderly with desks in rows and chalkboards in the front of the room. Today, you will find flexible seating, design challenges for innovative room settings, and computer workstations or coffee shop workspaces. Additionally, the teacher desk is gone and now replaced with a workstation and a laptop. Technology is at the hub of the classroom, allowing teachers to check student work, project augmented reality field trips, and engage students as they lay on beanbags. Curriculum is evolving to keep a steady pace with technology. Textbooks may exist digitally or in the hands of students, and teachers are not only asked to use the content, but to engage students through iPads and laptops as they read the text assigned to them. Being a teacher means that you are not only an expert in content areas, but able to manage a classroom, mediate disagreements, and excite students about being present in the classroom. It is essential, now more than ever, that teachers are ignited and fueled to lead the energizing classrooms for their students by attending professional learning sessions that provide them with ample opportunity to learn and apply content.

The purpose of this book is to assist designers of teacher learning sessions. It is informed by an action research study during which teacher participants reflected on what they consider to be essential ingredients in professional development sessions. Out of this particular study, arose the Cycle of Continuous Improvement which proposes a sustained method of learning for teachers. Additionally, the role of social media is considered for self-directed learning intentions. The book is structed to first expose readers to elements of professional learning practices, with emphasis on adult learning theory in Chapters 2 and 3. Models currently used in the majority of school systems are examined in Chapter 4, with emphasis placed on Japanese Lesson Study

in Chapter 5. Methodologies utilized during the action research study and the results are discussed In chapter 6 and 7. Chapters 8 and 9 elaborate on future learning opportunities that will inform teacher learning practices. The end of each chapter provides reflective questions to engage a group of readers or individuals as they consider learning methodologies.

In order to support readers that want to study one chapter at a time, a short overview of each chapter is provided below. Each chapter can support a reflective study session to engage leaders as they develop teacher training opportunities that empower and ignite learners. The chapters will also inform researchers and teachers as they consider new and existing approaches to learning.

Chapter 2 discusses successful elements of professional learning practices. Teacher interviews inform this chapter, as they share their own experiences. 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. For meaningful instructional changes to occur, teachers must have a voice in the process of their own learning. Successful professional development should allow for reflection, collaboration, and acknowledge the needs and interests of teachers. Furthermore, adult education practices need to be considered when designing professional learning sessions.

Chapter 3 will expose the reader to adult learning theory, with particular emphasis on situated learning and discourse theory. Adult learning theory should inform the design of professional development sessions, with particular attention devoted to context and collaborative settings. Professional learning of teachers within the classroom is influenced by situated learning theory and has the potential for sustained professional development. Situated learning proposes that learning involves a process of engagement in a community of practice. The concept of community of practice is further discussed as it pertains to teacher professional learning groups. 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.

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used in majority of our school systems. Chapter 4 will ask readers to reflect on these models to determine what is best for teachers at their current state of learning.

Chapter 5 first explains the essential features of Japanese Lesson Study and then examines the advantages of using JLS as a model of professional learning. It asks the readers to consider if their own model is sustainable and connected to classroom practice. This section also explains the challenges of using JLS in the culture of the United States.

Chapter 6 provides the reader with insights from an action research study. The results reveal teacher perceptions of professional learning and specifically Japanese Lesson Study. A connection is made between JLS and adult learning theory. This section will further inform leaders as they develop their own system of professional learning for teachers. For the purpose of understanding the action research process and the story that unfolded, three phases were identified including: (a) astounded by Japanese Lesson Study; (b) the layers of teamwork; (c) learning in context with a peer coaching emphasis.

Chapter 7 reveals teacher learning that results from reflection. Phase four of the action research study informs this section as it shares how teachers overcome barriers such as time, teacher empowerment constraints, and collaboration efforts. These areas are often overlooked when designing professional learning in schools. Solutions are also presented in the form of teacher narratives. This chapter will inform practitioners as they develop learning sessions for teachers.

Chapter 8 provides direction for future learning endeavors that inform teacher practice. It provides leaders with suggestions for teachers' professional development including the understanding of layers present in collaboration, such as the development of trust and respect that leads to a collective responsibility. Teachers valued this cycle of learning resulting in time for continuous learning. This cycle referred to as the Cycle of Continuous Improvement, will be elaborated on as it pertains to professional development. Additionally, social media as a form of professional learning, is examined. Suggestions for self-directed investigation and application are also provided.

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Substitution Augmentation Modification Redefinition Model developed by Dr. Ruben Puentedura. The SAMR Model offers a method of seeing how computer technology might impact teaching and learning, as well as professional learning for teachers.

To further develop the understanding of the contents of the book, the essential ingredients for professional learning sessions are highlighted below including; culture, recognizing teacher apprehension, sustaining change, and active learning.

## BUILDING A CULTURE FOR LEARNING

Teachers, as learners, need to be inspired to learn and feel valued as educators. In order to reach the learners in their diverse classrooms, they need to feel empowered and supported. We ask our students to become deep learners in the classroom, while we attend to their plethora of interests and unique learning styles. School leaders need to consider this as they develop professional learning sessions for teachers. If we continue to do things as they have always been done, without reflecting on teacher needs or the culture of the learning environments, opportunities will be missed. From a business perspective, this is called the "knowing-doing gap" (Kelly & Kelly, 2015). This happens when tradition gets in the way of innovation. Leaders possess the information, but fear change and rather than turn insight into effective action, they continue to do what was always done in the past. This may mean that professional learning schedules remain constant, as they take shape as morning meetings or sit and get sessions, where participants are on the receiving end of information. Learning in a workshop arrangement or through Professional Learning Communities is another method frequently used to educate teachers. This type of learning may not result in changes in the classroom setting if there is not time and support allotted for application. Whereas, if we allow teachers to lead and design professional learning sessions that are directly connected to their own classrooms this could result in immediate changes in instruction and student learning.

Teachers that feel comfortable in their school buildings are often the ones to lead new initiatives and experiment with instructional approaches in the classroom settings. They recognize what others often do not, a culture that supports sharing and critique will promote growth. Teachers create the atmospheres in buildings. They define the type of culture; whether it is one of collaboration or personal reflection. However, some teachers do not always

find appropriate work environments in the buildings, in which they work. For example, Donna, one of a grade 5 instructors, had previously worked in a building where teachers did their own things, "they shut their doors and didn't share for fear of criticism."

Some buildings have the best intentions and promote 'coaching' environments where teachers model teaching methods in the classroom for a teacher. Robin, a reading specialist, 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 veteran 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 to build rapport.*

Establishing a culture of respect necessitates empowering teachers so they are self-directed to guide their own learning, rather than relying on others to engage them. Engaging teachers means getting them excited about their content, and curriculum. It means giving them knowledge and skills to pursue their passions. In *Innovators Mindset*, George Couros (2015) suggests that learning is social and personal. This is evident in school settings; when teachers are given time to work with their peers to improve their own instruction. John Dewey (1933), an exceptional scholar, tells us that, we do not learn from experience; we learn when we reflect on the experience. Teachers can learn from their own classrooms by reflecting on the success and failure of their lessons with their colleagues. If professional learning sessions provide teachers time to reflect on their own practice, this will encourage teacher growth and directly impact their students.

## 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 it 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.

As someone who conducts professional development sessions for teachers, I realize the necessity to make the sessions practical and applicable to teachers' classroom practice. 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. Teacher professional development that is rooted in the situation, such as authentic classroom instruction, may shape and improve teacher instruction (Fisher et.al., 2018). Teachers need time to collaborate, but this collaboration has to be guided and effective. Often, teachers are asked to analyze data or a part of the test that students are not performing well. However, this does not look at the classroom setting where the instruction takes place. In order to improve instructional practices and student performance, we should look where students are learning (Gallagher, et.al., 2017).

## CHARACTERISTICS OF EFFECTIVE METHODS OF PROFESSIONAL DEVELOPMENT

Teachers' professional development seems to have been given less attention due to lack of desire to leave classroom demands behind. 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).

If we want to invigorate our teachers and continue moving students forward in this competitive society and changing world, we need to consider what we know about learning experiences in schools to meet the needs of learners today. This means examining a variety of professional learning venues that support teachers and invites them to be part of the process. If we do not have teachers at the forefront of planning for new initiatives and programs, we miss out on the greatest cog in educational change. Teachers' practices are shaped by what takes place in their learning environments, and the conversations they share with one another in the hallways and staff rooms. We can take advantage of authentic and relevant learning, by placing emphasis on professional learning that is situated in the classroom setting. This practice, if informed by situated learning theory, can inspire learning in a community of trust, where they are most familiar and comfortable.

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).

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 FOR SUSTAINED CHANGE

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). In this way teachers own the knowledge and feel ownership of the information for sustainable development of classroom practices.

Teachers' professional development is a continuum of day-to-day practice and should not begin from one point and end to the other; it's a continuous process. As Vanassche et.al., (2016) noted that, successful professional development must be seen as a process, not an event. 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 that 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 today's classrooms. This may include student voice, choice, time for reflection, problem solving, passion projects, self-assessment, feedback, global learning, and higher -level questioning, to name a few.

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 (Guskey, 2002; 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). Further investigation of active learning processes that connect to classroom practice is warranted.

## TEACHERS AS ACTIVE LEARNERS

Teachers recognize the importance of professional development, and especially sessions that can easily be applied to practice. Barriers to professional learning such as time, lack of leadership, and lack of practice- based opportunities cause frustration among staff and impact the culture of a school. Unfocused and fragmented professional development that is not aligned to the vision of the district can result in ineffective application to practice. Rather, well -planned staff development begins with the end in mind and anticipates what teachers bring to session. It is aligned to the needs of the school and designed to address specific student and teacher needs. Creating sessions with an understanding of past practices and future goals, while recognizing barriers, removes constraints that prevent teacher learning.

Professional development is often well received when teachers that work in classroom on daily basis inform it. We know from research that when teachers collaborate on teaching practices, and are provided with time to practice new methods, that classroom dynamics flourish (Boudett, 2005). Adults learn best when they care about the outcome, feel invested, and see a clear purpose for learning. When this is coupled with collaborative environments and informed by adult learning theory, a shift in school culture can ensue. We know that with adequate vision and continuous support, teacher learning will soar, and students will reap the benefits.

Teachers come to staff development with opinions and knowledge about teaching. The relationship between the knowledge and opinions that teachers bring and what staff developers do with this knowledge is critical to the acceptance of new learning practices. For meaningful instructional changes to occur, teachers should have input in the cycle of learning. Successful professional development should allow for reflection, collaboration, and acknowledge the needs and interests of teachers. It should also be mindful of effective conversations among teachers during staff development sessions that encourage group work (Greenberg, 2015). Furthermore, adult education practices need to be considered when designing professional learning sessions. Situated learning theory may provide an effective structure for preparing teachers to integrate new learning suggestions in the classroom setting.

Growth in organizations happen when teachers recognize a need, communicate this need, and feel supported to uncover ways to make improvements (Wiseman, 2011). Adult learning theory can be utilized to influence teacher growth, in particular, situated learning and discourse theory. Adult learning theory should inform the design of professional development

sessions, with particular attention devoted to context and collaborative efforts. Professional learning of teachers within the classroom has the potential for sustained professional development. Establishing environments that support collaboration can evoke the foundation for a community of practice. 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, form communities of practice. By examining where they are on a cycle of improvement, teachers can shift instruction in their classrooms. Teaching, after analysis, can shift from "teaching as telling" to "teaching for understanding." Effective methods of professional development can support this learning shift. A close examination of Japanese Lesson Study as a method of professional learning will reveal ways to shift from typical professional learning and create environments that invite reflective discussion about current teacher practice. As Gordon (2018) states, "Behind every great team is a strong culture; great leadership; and passionate committed people" (p. 29). The leaders of the team can be teachers that with support will create lasting results for students in the classroom setting.

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# Chapter 1
# Effective Methods of Professional Development


## ABSTRACT

*This chapter discusses successful elements of professional learning practices. Teacher interviews inform this chapter, as they share their own experiences. 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 are critical to the acceptance of new instructional practices. For meaningful instructional changes to occur, teachers must have a voice in the process of their own learning. Successful professional development should allow for reflection, collaboration, and acknowledge the needs and interests of teachers. Furthermore, adult education practices need to be considered when designing professional learning sessions.*


## TRADITIONAL PROFESSIONAL DEVELOPMENT

*Behind every great team is a strong culture; great leadership; and passionate, committed people.*

-Jon Gordon

As discussed previously, staff development is critical to improved student learning; therefore, collaboration and dialogue among colleagues is essential (Hargreaves & Fullan, 2012; Hattie, 2012). Staff development sessions are ideal places to encourage life-long learning and promote district- learning

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goals so that all teachers are on the same page. Unfortunately, the literature regarding current faculty development practices does not paint that picture. In a discussion of faculty development, Heller et. al. (2012) 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.

In traditional professional development, when teachers attend workshops, seminars, and professional forums, sharing of training is essential to those teachers who did not attend the development session from the same school. However, typically, most teachers attend fragmented professional development sessions without sustained feedback or collaboration with colleagues (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). This may imply that knowledge is learnt when shared; therefore, when professional development knowledge or training is shared upon arrival both the participated teachers and the colleagues whom knowledge is shared are likely to put into practice as they observe and collaborate with one another. Traditional staff development sessions therefore, neither acknowledge teachers' interest and commitment to a new practice nor help them to make links to their beliefs about effective practice (Santagata & Yeh, 2016). This makes it difficult to achieve effective teachers' professional development for sustainable student learning.

Effective teachers' professional development needs to be interactive, collaborative, and creative among themselves. 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 whole teaching profession in a building (Hargreaves & Fullan, 2012). Therefore, learning is sharing and interacting with one another to achieve life-long learning culture.

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 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). Japanese Lesson Study (JLS), a method for staff development, focuses on the direct improvement in teaching in context (Doig & Groves, 2011; 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 (Caulfield et. al., 2005). This builds ownership of created knowledge and self-confidence on the professional development.

Teachers' proficiency has a direct relationship with positive student outcomes. Staff development directly influences classroom instruction. 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 novice 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 (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). This would bring actual teachers' practice in their own classrooms.

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 book reveals 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 (Springer, 2019). 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 (Fischer et.al., 2018). This learner- centered vision of faculty development is grounded in progressive educational theory and can happen in many different settings.

Adult learners learn best if the gained knowledge is immediately used and applied to their daily routine situations and immediate problems. According to Vanassche & Kelchtermans (2016) 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). 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 (Vanassche & Kelchtermans, 2016). Otherwise, everything will be forgotten and teachers will go back to routine instructional habits and the classroom culture remains unchanged.

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 (Guskey & Sparks, 2002). The features of professional development are what matter most when considering changes in knowledge and skills and classroom practice (Desimone, 2009). 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, 2013; Cain & Milovic, 2010; Egawa, 2009; Guskey & Sparks, 2002; Loucks-Housle et al., 2003; Orlando, 2014; Plair, 2008; Shortland, 2004). These scholars encourage practitioners to reflect on characteristics of effective methods of professional development.

## 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.

Although there are various methods for teachers' professional development around the globe, many of them are not confirmed as effectively applicable to all situations. 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 (Fischer et. al., 2018). 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 (Luke & Rogers, 2015). 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, 2013; Cain, 2010). Utilizing reflective practice interviews in professional development can create an atmosphere that is conducive to learning (Luke & Rogers, 2015). In such scenarios, fellow professionals exchange experiences and dialogue about professional learning. Such support systems not only provide a source of emotional support but also create a forum for exchange of experiences and learning (Luke & Rogers, 2015). The learning from own experience builds a strong knowledge foundation.

There is a strong relationship between reflection and practice in classroom teaching learning situations. As Cain & Milovic (2010) noted the importance of reflection on practice, that teachers are able to generate new knowledge where there is 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 (2013) 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 (Luke & Rogers, 2015). 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 refection to be effective, time needs to be allotted for collaboration, as dialogue among colleagues is a way of enhancing reflective self-study (Attard, 2013). Embedding reflective learning among communities of problem-based learning groups will further enhance learning situated in within the classroom setting.

## Problem Based Staff Development

Professional development learning activities should be based on the real needs and interests of school staff (Vanassche & Keichtermans, 2016). 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 & Sparks, 2002). 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, 2009; 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 (Desimone, Porter, Garet, Yoon, Birman, 2002; Guskey & Sparks, 2002). 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).

Jamil & Hamre (2018) 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 sessions 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 to future learning opportunities. Formative evaluation can provide feedback necessary to ensure that sessions are based on teacher needs and meaningful for adult learners.

## 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). 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 (Fisher et. al., 2018). The content of what teachers learn is very important (Roth et. al., 2011). 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 (Santagata & Yeh, 2016).

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.

## EFFECTIVE PROFESSIONAL DEVELOPMENT PRACTICES

Effective practices utilized during staff development sessions are crucial for teaching learning. The understanding of these practices will inform this book, as further consideration of what makes teacher -learning sessions effective can advise 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 and include the whole district together, one of the participants claimed; 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 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 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. 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 powerful professional development training. Teachers need to see how it connects to the district vision and what they are doing in their own classrooms. 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 led 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 bound that many are looking for. The entire teacher participant group suggested that conversation among peers 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 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.

## Power of Team

Consideration of teacher concerns about effective professional development sessions will lead to enhanced learning and ultimately better performing classrooms. Additionally, leaders should strive to design sessions that inspire teachers and relate directly to the needs found in their own classrooms. The power of a team can be found among all the characteristics of effectively lead professional learning sessions. Generalizing from sports teams, those that have influential coaches and dedicated athletes are usually the most successful. In education, being on teams that engage in ongoing, job-embedded professional learning cycles can see shifts in their practice. Teachers value time to reflect on their practice and the art of teaching. A colleague of mine

often says, "Teamwork makes the DREAM work". But, how do we know when teams are effective. When considering outside agencies, there are several key factors among highly effective teams. Michael Schneider (2017), in his article summarizing findings from Google researchers that studied 180 teams for over two years, found that most successful teams have five traits:

- Psychological Safety- An environment where risk-taking is encouraged, and employees feel safe to voice their opinions.
- Structure- High- performing teams have clear goals and well -defined roles within the group.
- Dependability- Team members meet expectations and get things done in a timely manner.
- Meaning- The work is personally meaningful to each member.
- Impact- The group believes that their work will impact the greater good.

Gordon (2018) works among some of the most amazing teams including, the National Champion Clemson Football team, the Los Angeles Dodgers, Google, and Apple. He shares what highly effective teams share in his book, *The Power of a Positive Team.* A positive team according to his work:

- Creates a positive culture
- Works together toward a shared vision
- Works together with optimism, positivity, and belief
- Transforms and removes negativity
- Communicates and connects
- Commits and cares

Teams with a positive outlook have a competitive edge in business, sports, school, and life. They communicate and encourage each other, and build relationships that allow them to encounter and overcome obstacles. Highly functioning teams develop goals and achieve them through commitment and purpose.

One of the most powerful components of staff development among a professional learning community is the time spent reflecting individually and then with colleagues about learning. Collaboration and collegiality will encourage professional growth. To ensure quality support, effective teams need to consider evidence of student learning, reflective discussion about teaching practice, instructional planning, and team leadership. Collaborative planning is one of the most promising structures to enable systemic improvements in

teaching and learning in a school system. To utilize the structure well, leaders need to consider the characteristics of effective teams. Superficial collaborative planning will not impact student achievement. Several suggestions include:

- Using a combination of summative and formative assessments, and student work to understand student learning strengths and gaps.
- Shift from making excuses for learning gaps to deep, collective inquiry and shared responsibility for enabling students to master content.
- Encourage educators to start with a standard, competency, or learning target to develop differentiated lesson plans for students.
- Designate a coach or teacher leader to foster discussion that is analytic, reflective, an results-driven.
- Establish collegial team norms to encourage productive cultures that include giving and receiving feedback.

Teams need to develop an understanding of what it takes to be highly productive in order to see results. In *The Chronicle of Higher Education*, Mangan (2012) reports on some recent thinking on what it takes to be successful. This includes passion and resilience. If teachers do not believe in themselves, they will not be effective team players. Self-Regulation, also essential, means focusing on key goals that may center on the district vision. It is easy to feel tempted to improve in many different areas, but this is not realistic. Setting a clear specific goal for the year provides focus and realistic expectations.

## CHAPTER 1 REFLECTION QUESTIONS

1. How are adult learning principles utilized when designing professional learning in your organization?
2. Reflective practitioners are educators who are active learners. What does this mean in relation to your own professional learning practices?
3. Learning opportunities for teachers occur every time a lesson is taught. How can this translate to a professional learning practice?
4. What do you consider to be effective professional development practices?
5. How do you encourage success among your teams?

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# Chapter 2
# Teachers Are Adult Learners


## ABSTRACT

*This chapter will expose the reader to adult learning theory, with particular emphasis on situated learning and discourse theory. Adult learning theory should inform the design of professional development sessions, with particular attention devoted to context and collaborative settings. Professional learning of teachers within the classroom is influenced by situated learning theory and has the potential for sustained professional development. Situated learning proposes that learning involves a process of engagement in a community of practice. 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, form communities of practice. The concept of community of practice is further discussed as it pertains to teacher professional learning groups. 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.*


## SITUATED LEARNING THEORY AND PROFESSIONAL DEVELOPMENT

*Adults come to learning with a foundation of experience that can be a resource for learning.*

-Knowles

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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). Additionally, workshops often lack continuity and result in a one-time session without an ability to produce effective change in teacher practice and student learning (Calkins, 2012; Hargreaves & Fullan, 2012; Heibert & Stigler, 2000). Professional learning of teachers within the classroom setting may result in satisfying results if it is influenced by situated learning theory. The classroom setting, used as a context for professional development, has the potential for sustained professional development.

High quality professional development described in education literature involves teachers in sustained, collaborative, and practice- based learning (Heibert et al., 2002, Loucks-Horsley et al. 2003). 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 life-long learners, perform their work in a classroom however; this principle is ignored when designing training sessions for them (Bell, Maeng, & Binns, 2013). 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). Schools are natural settings for learning.

## 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; Besar, 2018;). 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; Kakavelakis & Edwards, 2012; Darvin, 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 (Kakavelakis & Edwards, 2012; 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 research. Cognitive and situated learning both address key terms such as social practice, context, and situation to form the orientations (Besar, 2018). Within this chapter, 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). 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 (Bell et al., 2013). The social constructive learning is tantamount in situational learning; one cannot work in isolation of the other.

In their study of learning environments, Brown, Colins, and 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 that 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, and Duguid (1989) suggest "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 as 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, and central to the development 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). This is an important part of professional learning for teachers, as many have stated how essential it is to be able to apply new learning to their classroom setting immediately following training. Otherwise, newly learned material is filed away and eventually discarded.

## Social Environments are Communities of Practice (CoPs)

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 (Sankowska, 2015; 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 (He et. al., 2014).

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) define these communities 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 Snyer (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, sustained practices. 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, 2006). This would lead to the common understanding of the professional practice and development.

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" (Liberman & 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 (Sankowska & Soderlund, 2015). 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, as a form of professional development, 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 (Pyrko et. al., 2016). 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., 1994, p. 7). Current research includes multiple studies which focus on building learning communities using video technology (Chesbro & Boxler, 2010; Desimone, 2009). These videos can perpetuate conversation between teachers. Long term professional development indicated by Jiang, 2017 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 (Jiang, 2017; 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 (Jiang, 2017).

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 strives 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).

In order to diminish issues such as power and continued influence by those that lead groups down a path where change is nonexistent, leaders need to be aware of cultural influencers that reside within a building. It is essential that designers of staff development recognize needs of teachers and then develop a plan that will have the most impact on students. Furthermore, it is essential to know your audience before planning a session. Teacher knowledge, prior learning experiences, and resources utilized in the classroom setting are of particular importance, as they will impact teacher participation in the workshop.

## 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. Brown, Collins, and Duguid (1989) illustrated this concept of knowledge through their explanation of how people can acquire a tool but be unable to use it. The authors further explain that old-fashioned pocketknives 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, 2003Lave & 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., 2012). 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). Grounding professional development in actual classroom practice is a powerful means of fostering effective teachers (Sun, 2013). 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 (Desimone, 2011).

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 (Hargreaves & 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 (Desimone, 2011). 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.

## Setting Interaction

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, & McCarthyey, 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, 1996; 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). Just as reading a map is most helpful when there is some familiarity with the surroundings, so too is the application of newly learned materials to the classroom setting. Being in the classroom setting during professional learning sessions, among an authentic context, makes it easier to understand and apply new learning.

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, as a method of professional learning, 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 (Pitsoe & Maila, 2012). 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). Therefore, it is essential to continue studying the benefits of situated learning in teacher professional development.

The collaboration that occurs in Japanese Lesson Study (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 (Wohlwend, 2009). Educators have begun to recognize that educational reforms require addressing traditional classroom discourse practices (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 (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 (Santagata & Yeh, 2016). 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 understanding of effective professional learning, an understanding of teacher classroom discourse should be considered.

Classroom discourse is influential on student learning, therefore it is necessary to examine teacher discourse and how it pertains 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, his or her academic appearance in actions, and language as a nonmember of the social group that is identified with that setting the academic would be immediately recognized (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, 1999). 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.

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 (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 (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. 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. 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. It is during these classroom discussions that children's conceptual understandings are constructed through talk. 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. Discourse is a mediator of children's learning in educational settings. 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 (Rowe, 2000). 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 students "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 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 (Hiebert & Stigler, 2000; 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 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.

## CHAPTER 2 QUESTIONS

1. Do you professional learning sessions promote sustained teacher learning?
2. Do you create a Community of Practice that supports reflection on classroom practices?
3. Do you apply adult learning theory to the design of your professional learning sessions?

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# Chapter 3
# Models of Professional Development


## ABSTRACT

*Previous sections in this book have revealed effective qualities of professional learning sessions and how adult learning theories inform the design of teacher professional development. Reform is constant in education and should influence how to examine professional development efforts, particularly those that directly impact teachers and their efforts in the classroom setting. Additionally, it is necessary to examine models that are used in majority of our school systems. Reflecting on these models can help us determine what is best for teachers at their current state of learning. This chapter explores models of professional development.*


## EDUCATION REFORM

*The best ideas and finely tuned lesson plans are only as good as the impact they have.*

- Katie Martin

This section provides an overview of educational reform influencers which shed light on professional development of teachers, with the purpose of identifying models and characteristics of effective teacher professional development. Political contexts in the United States have spurred incidents in education where schools were closed or taken over in an effort to reform

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failing schools (Beabout, 2012). However, professional development of teachers is not a suggested method to improve weak schools. A school that can promote collaboration among teachers in solving the problems of practice requires specific cultural conditions (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. 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, past reform efforts spurred by 'No Child Left Behind' legislation, which sought to improve teaching and learning in schools have all but failed. Previous emphasis on testing has changed school culture and classroom dynamics. 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 in 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 future education efforts hinge on the effectiveness of teachers (Valerie, 2012).

Schools are no better than the teachers and administrators who work within them (Fischer et.al, 2018). 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 (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 (Hattie, 2012; Levin, 2008). Teachers attend professional development in order to expand their knowledge and skills in order to enhance their effectiveness with students (Hattie, 2012). They also hope to gain specific, concrete, practical ideas that relate to the day-to-day operation of their classrooms (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). Therefore, there is the need to examine school culture and how it influences teachers' 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 that 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 that is situated within the school setting and conducive to teacher learning (Hargreaves & Fullan, 2012; 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. However, moving from success found in individual classrooms to collaboratively opening classrooms up for candid discussion and observation is a challenge for American teachers (Lara-Alecio et. al., 2012). American culture has a tendency to reinforce the value of the individual, while downplaying the role of groups and collaboration (Royce, 2010; 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 (Perry & Lewis, 2009; Montuori,2005). Japanese in particular, more specifically their teacher discourse and practices, generally focus on collaboration and group efforts (Groves & Doig, 2010; Tatsuno, 1990). Schools that see success are those that support the collaboration of teachers and provide conditions that sustain student achievement (Hargreaves & Connor, 2018).

## 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 could 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 (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 (Lara-Alecio, 2012; Garrison, 2006). 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). 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 & Fullan, 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 (Darling-Hammond et. al, 2009; Blank, de las Alas & Smith, 2007). Many scholars are now emphasizing job-embedded learning, context for learning, and collaborative teacher learning (Darling-Hammond et. al., 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 that 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. Furthermore, examining models of professional development to determine what would work best in current school culture culture, is essential for teacher empowerment. Selecting the format that not only connects to what teachers need in their classrooms, but also sheds light on current practices and content, will transform learning environments.

## 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 (Gregson and Sturko, 2007; 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' ability 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 that 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 profession as autonomous (Hattie, 2012). For this reason, each teacher teaches how he or she knows 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 professional development models 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. Learning communities become the backbone of professional learning efforts. 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. Each model described below emphasizes a domain for learning that includes a type of learning community that connects to practice. It can be argued that all professional learning takes place among a community of practice, however; professional learning that

is most influential on teacher learning, should connect directly to classroom practice and be sustained over a period of time.

## 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: instructional 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.

### Instructional Coaching

Job-embedded learning is a highly effective and efficient way to foster professional development in a school (Wei et al., 2009; Garrison, 2006). One such job-embedded learning opportunity is instructional coaching. Coaching can take different forms including, instructional, peer, mentor, literacy, or collegial coaching.

Charner and Medrich (2017) recognized instructional coaching initiative, established in Pennsylvania as a successful model worth emulating. It was noted that 90% of the teachers in the schools that implemented instructional coaching took advantage of the opportunity and shared that it improved their pedagogy (Charner & Medrich, 2017). Ehsanipour and Zaccarelli's (2017) research of 50 schools across five states gave credence to the instructional coaching model. When applied to technology initiatives, the research showed that by the end of the first year, 90% of the teachers stated that they were now confident in utilizing technology. The areas that were shared as being most valuable were collaboration, creativity, communication, and critical thinking (Ehsanipour & Zaccarelli, 2017). This research finding supported the P21 Partnership for 21st Century Learning (2016) framework, which had the four Cs as most important for preparing students to be college and career ready. Bakhshaei, Hardy, Franciso, Noakes, and Fusco's (2018) findings identified a positive impact of coaching on pedagogy and learning. Additionally, Stanhope

and Corn's (2014) research established that teachers perceived coaches in the classroom setting to be impactful in assisting with technology implementation if it connected to current instructional practices.

An instructional coach is one who provides stable professional development, progress monitoring, and student data analysis to improved reading, mathematical, and technology 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, instructional 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 teaching decisions affect student learning. A differentiated model of coaching provides 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.

Instructional 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 (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 (Stover, Kissel, Haag, & Shoniker, 2011; Mraz et al., 2009; Anderson & Olsen, 2006; Dewey, 1933; 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.

Instructional 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 (Stover et al., 2011; Toll, 2006; Owocki & Goodman, 2002). Coaches must be ready to modify and adjust their coaching on the spot, as coaching must be intentional, dynamic, and opportunistic. Finally, coaches must be instructional leaders in the school by setting goals and developing teachers. The credibility of the teacher in the leadership position determines his or her ability to make an impact on colleagues. The title that comes with the position does not automatically indicate success. For coaching efforts to be successful, teachers in this position, need to be recognized as leaders and experts in their academic area.

Clearly defined role descriptions are necessary for successful implementation of the coaching model. Role descriptions provide the teacher leaders with clearly defined expectations. It also sets the tone for staff so they know what to expect from the teacher leader. A clear job description prevents the coach from feeling fragmented, providing them a clear plan on how to spend their day. Communication of this plan is necessary to set boundaries that clearly explain when the coach is available for classroom support. District support and direction is also necessary to make the coaching role successful. The coach needs to be made aware of the vision for professional learning. They should be part of the planning process in order to make the most impact in the classroom setting where application of the vision takes place.

If the coaching model is to be successful, district vision should promote the model as part of the professional learning process. All too often, instructional coaches do not understand their place in the puzzle and efforts to make an impact in the classroom setting can feel disjointed. While teacher leaders can be the vehicles that promotes and sustains collaborative environments, it is essential that district and school leaders value and promote such a culture. District direction and support is crucial to the success of coaching. Training is a necessary ingredient of success and should be part of the implementation of the coaching model. Training and support group meetings provide needed emotional support for teachers in such roles. Training components should include detailed information and hands-on experiences with the curriculum

to be implemented, information on adult education, as well as effective staff development techniques.

Although all literacy coaching includes the same foundational elements, there is great variation in how coaches allocate their time (Bean et. al, 2010 & Deussen et. al, 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 by 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. Additionally, Mangin and Dunsmore (2015) did warn of the importance to ensure that the coaching goals aligned with the building level goals previously mentioned as integral to success. 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. It is essential that professional learning connects directly to classroom practice and the vision cast for the building and school district.

## Peer Coaching

Peer observation, a common practice today, is often used as a method of professional learning to satisfy teacher- learning goals connected to their practice. Peer observation offers job-embedded, ongoing professional development through feedback, reflection, and observation. When there is an emphasis on internal capacity, the leadership of professional development efforts should come from the faculty itself, and a large part of professional learning should take place in the classroom setting where teachers are engaged in authentic teaching (Reeves, 2009).

Peer observations provide learning opportunities that can mesh well with district initiatives and lead to trusted peer feedback. Teachers select peers to work with, embedding an element of trust into the learning process. In order to implement this method, teachers need to be intentional about scheduling observations and have the support of the leadership in order to get release time from teaching duties. Feedback is a necessary part of instructional improvement often gained from peer coaching. In fact, teachers' improvement can be predicted by the extent of their interactions with colleagues more expert in teaching and by the extent to which instructional advice is sought

after from peers (Greenberg, 2015). Training in feedback is an important, and often lost, part of peer coaching. Teachers that do not place value in feedback or who lack the training in best practices to give feedback may not reap the benefits often gained from peer observations. Teachers that are observed should be encouraged to communicate essential items that they would like to improve upon. Districts often create checklists to assist teachers with this process. Forms are also created to guide observations. However, feedback from checklist and forms may not be enough to impact instruction. Teaching cannot be equated to ratings, lists, and boxed formats. Rather, a deep understanding of effective teaching practices should become part of the learning culture (Danielson, 2016).

A shift to discussion about learning can make an impact on classroom practices. Professional learning according to Danielson should include active intellectual engagement, trust, challenge, and teacher collaboration (Danielson, 2016). A system that encourages professional learning and peer support mechanisms will create a culture of learning. Using a form of peer coaching will not only empower teachers, but nurture environments that include reflection on practice. Any form of learning entails vulnerability, but a culture that centers around teacher learning and support can not only empower teachers, but challenge them to engage in a career-long process of learning. Teaching is a complex profession that necessitates continuous support and learning of new techniques that can come from peer coaching. Most teachers overwhelmingly report that they learn more from their colleagues than from an "expert" in a workshop (Danielson, 2016; Cohen, 2017). More often than not, classroom improvement comes from working with colleagues in trusted environments that embody a culture of inquiry.

After instituting peer observation, teachers feel supported and empowered (Beck, 2015). Conversations about instructional practices lead to problem solving and improved lesson planning. Teachers move from teaching in isolation, to an environment of shared practices among a group of professionals. Additionally, peer feedback allows them to become more reflective of classroom practices and gain new ideas that they can integrate in their classrooms. Learning in context within authentic environments further enhances the power of peer coaching.

Research on the situated nature of learning provides further support for peer coaching because it informs learning that is related to classroom practice. According to McLellan's perspective on situated learning theory, learning cannot be achieved or looked at separately from the context in which it occurs (McLellan, 1996). A decontextualized approach to instruction is unlikely to

yield success because knowledge is informed as an individual interacts within his or her environment (context) to achieve a goal (Orgill, 2007).

Peer coaching is essential to situated learning, as the coach provides scaffolded learning opportunities and guides the teacher to a place of understanding and competence. This collaboration adds to the social construction of knowledge. Within a classroom, students are present and part of the learning process. Additionally, a coach and teacher can actively discuss the lesson directly after an observation. This method not only has the capacity to impact teacher confidence, but also integrates more creative teaching approaches, as collaboration leads to knowledge generation.

Although peer coaching has the power to impact classroom instruction, it often involves a limited number of teachers. Classroom instruction is often enhanced, but teacher time and schedules can prohibit building learning initiatives that encompass the entire building. Furthermore, it is hard to sustain peer coaching even on a monthly basis. In order to support collaboration among groups of teachers, professional learning should consider other methods that allow for a larger impact over a sustained period of time. One such method includes professional learning communities.

## 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 third 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 by 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 learned 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 (Servage, 2008; Dufour et. al., 2006).

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. An enormous issue forgotten by many that implement the PLC model, is that leading adults in an educational setting is a whole lot different than teaching children in a classroom. There are power dynamics to consider in- group settings that often undermine group meetings. Additionally, methods should be considered for how to take the new information gleaned from the learning community and apply it to the classroom setting.

Professional learning communities support many aspects of effective staff development, which may include but not limited to 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 of peers? Dufour and Reeves (2016) 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. PLC practices can improve schools through practices that do not involve supervision, but rather create a culture in which teams of teachers are helping one another get better. 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).

Unfortunately, educators often rename their traditional faculty meetings or morning department meetings as PLC meetings (DuFour & Reeves, 2016). This often involves a book study that results in no action or includes collaborative time on topics that have no impact on classroom instruction. For a PLC to make an impact on teacher learning and student success, meetings need to include characteristics of a true learning community that include four questions that staff members are continuously asking themselves (DuFour & Reeves, 2016):

- What do we want students to learn and do?
- How will we know if students have learned it?
- How will we know if students have not learned it?
- How will we provide enriched learning opportunities for students that have already mastered the content?

Although these questions allow us to consider student progress and exercises that extend learning, it does not get to the root of classroom instruction. The questions described above will instead construct a focus on assessments, data analysis, and interventions, but time during the meeting should also be allotted to discuss pedagogy and the sharing of best practices connected to district vision for student success.

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 current instructional practices and the beliefs embedded in a teacher's instruction. A more open-ended dialogue may be necessary to encourage deeper reflection (Desimone, 2009). 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 classroom 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 a one- time sit and get session to facilitating learning as part of teachers' ongoing professional lives (Meng & Sam, 2011; Mundry, 2005; Murata & Takahanshi, 2002). 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).

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 et. al., 2003). 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 et. al., 2003) 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. 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 and support technology integration in the classroom setting. 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 centered around the content of lesson demonstration. 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 (Hattie, 2011; King & Bouchard, 2011; Fullan, 2007). The influence of individual teachers' knowledge and skills on student achievement is well recognized in literature on teacher professional development (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 (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.

## CHAPTER 3 REFLECTION QUESTIONS

1. What model of professional learning is utilized in your school setting?
2. Does it allow for sustained professional learning?
3. Why have you selected your method for professional learning?
4. Is your method of professional learning sustainable during the school year?

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# Chapter 4
# Sustaining High Quality Professional Learning: Japanese Lesson Study


## ABSTRACT

*This chapter first explains the essential features of Japanese Lesson Study and then examines the advantages of using JLS as a model of professional learning. It asks the readers to consider if their own model is sustainable and connected to classroom practice. This chapter also explains the challenges of using JLS in the culture of the United States.*


## INTRODUCTION

*Teachers' beliefs and commitments are the greatest influence on student achievement.*

-John Hattie

As stated previously, teacher professional development is driven by the need both to extend and renew teacher practice and content knowledge (Hargreaves & Fullan, 2012; Doig & Groves, 2011; Scanlon et.al., 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, found that much professional

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development is not effective (Ingvarson, Beavis, Bishop, Peck, & 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 sustained critique of pedagogical practice (Fullan, 2007; Garet, Porter, Desimone, Birman, & Yoon, 2001; Darling-Hammond & McLaughlin, 1996). "Lesson Study", a model for professional learning, has been used for over a century in Japan (Makinae, 2010). This method has been examined for global applications in teacher education and training models.

## GLOBAL APPLICATIONS OF LESSON STUDY

Lesson study became a form of professional learning in Japan in the early 20th century (Sithamparam, 2015). The process evolved from a method to create collaborative lessons to a formal process with a goal of continuing education through lifelong learning (Akita & Sakamoto, 2015). It was not until 1999, with the release of Stigler and Heibert's, *The Teaching Gap,* that the practice began to spread globally (Fujii, 2014). From 2000-2006 the lesson study process spread to nations including Indonesia, United States, England, Philippines, Australia, Sweden, and several African Nations (Groves & Doig, 2014). Although lesson study has spread across the globe, it has not been without difficulties. Some challenges include cultural and educational value differences (Fujii, 2014). The culture of Japanese educators supports collaboration and this is not found in all nations where independence is often the norm in educational settings (Takahashi & Mcdougal, 2016). Despite the challenges of lesson study, as a form of professional learning, it has the capacity to create collaborative learning environments.

## SUSTAINING HIGH QUALITY PROFESSIONAL DEVELOPMENT THROUGH LESSON STUDY

Japanese Lesson Study, as a method of professional development, may be a way to encourage sustained professional learning for teachers. While studies primarily focus on mathematics, JLS has a capacity to affect instruction in all content areas. JLS encourage teachers to develop their own learning communities, reflecting on teaching practices and content. This type of learning community is a necessary component today, as the teaching profession has become more demanding. The 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. Additionally, districts have begun to infuse technology into the classroom, placing more demands on teachers to engage students though the use of technology. Classroom instruction has adapted to address changes to curriculum that is more rigorous and structured around 21st Century learning skills such as communication, collaboration, creativity, and critical thinking.

Furthermore, as classrooms adopt one-to-one technology initiatives, teachers struggle with how to best utilize devices in their learning environments. Findings from Simmons and Martin, (2016), Harris, AL-Bataineh, and Al-Bataineh's (2016) reveal that a successful one-to-one technology implementation should include a vision that was understood by all teachers. The vision needed to emphasize recognizing and meeting the teachers' implementation needs (Gurfidan & Koc, 2016). This recognition and support in the classroom setting, creates the type of productive learning environment where everyone feels supported (Evers et al., 2016). The outcome of the supportive learning environment is a high level of morale and buy-in resulting in positive teacher and student outcomes (Gurfidan & Koc, 2016). The quality of district and building-level leadership efficacy and capacity to meet the teachers' needs, dictates the success of a one-to-one technology implementation (Law, Niederhauser, Christensen, & Shear, 2016; Levin & Schrum, 2012; Topper & Lancaster, 2013). This district level support of professional learning efforts is described by Hattie (2012), "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 chapter 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 place over a one- 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 cost-effective 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 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. It also allows teachers to model and critique technology usage with the classroom setting.

## 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 (Lewis & Hurd, 2004; Yoshida, 1999). Teachers engage in discussion about essential concepts that their students need to learn, while considering 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 (Hurd& Lewis, 2004). Teachers note the benefits of creating a learning environment among teachers in a school that 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).

Teaching has become more complex and collaboration has never been more essential. 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. Furthermore, teachers are invested in the outcome.

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 (Santagata, Zannoni, & Stigler, 2007; Fernandez, Cannon, Chokshi, 2003; Yodshida, 1999; Jacobs, Yoshida, & Stigler, 1997), time constraints (Meng & Sam, 2011; Fernandez, Cannon, & Chokshi, 2003;Fernandez, 2002), and teaching behind closed doors (Baecher, Rorimer, & Smith, 2012; Bjork, 2000;Little, 2003; Hiebert, Gallimore, & Stigler, 2002; Fernandez, 2002; Stigler & Heibert, 1999). 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; Jacabs et al, 1997; Lewis et al, 2006). 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, teachers 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 (Bjork, 2000; Yoshida, 1999). 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 (Rock & Wilson, 2005; Fernandez, 2002). 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). As previous literature has revealed, 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, this method of professional development is a good tool for improving instruction and further necessitates analysis for effective professional learning. 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 4 REFLECTION QUESTIONS

1. Where are you now in your professional learning cycle? Does your school culture and climate support an environment of learning?

2. What process are you using for sustained learning that directly connects to the classroom setting?
3. How do you incorporate teacher reflection in the learning process?
4. Evaluate your process for learning. Do classroom teachers view teaching as a personal and private activity or teaching as being a professional learning situation, which is public and examined openly?

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# Chapter 5
# Teacher Perceptions of Japanese Lesson Study


## ABSTRACT

*This chapter provides the reader with insights from an action research study. The qualitative research process is explained including data collection methods, data analysis, and the action research process. The results reveal teacher perceptions of professional learning and specifically Japanese Lesson Study. For the purpose of understanding the action research process and the story that unfolded, three phases were identified: (1) astounded by Japanese Lesson Study, (2) the power of team, (3) learning in context with a peer coaching emphasis. Phases 1 and 2 will be addressed in detail in the upcoming sections.*


## INTRODUCTION

*Japanese Lesson Study builds pathways for future learning beyond a specific lesson.*

-Marcie Lloyd

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.

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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). 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.

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 (Denzin & Lincoln, 2005). 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.

## Assumptions of Action Research

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 & Hurd, 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 (Fernandez et.al., 2003).

## PARTICIPANT SELECTION

Fifth grade teachers at an intermediate school in Pennsylvania, USA were selected for the study through email. 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 instructors in a particular building with 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.

## 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.

## 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).

## 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.

## Reflecting

Many teachers are in the habit of reflecting on practice in isolation. Today, many scholars are convinced that classroom embedded learning, or learning in everyday work, increases the likelihood that learning will be meaningful (Karagiorgi, et. al., 2018; Lieberman, 1996). An increasing number of teachers learning initiatives focus on the effectiveness of teachers cautiously critiquing their practice, either directly or through classroom artifacts (Fernandez, et.al., 2002). Self-reflection in connection to instructional methods and classroom effectiveness can reveal how teachers' own beliefs shape their teaching practices (Kincheloe, 2003). 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.

# 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 then 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 (Khune & Quigley, 1997). It is recommended that all action researchers keep reflective journals to help compensate for memory lapses (Khune & 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 et.al., 2006). Each of these means of data collection is discussed briefly below.

## 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 (Cain, 2011). 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. 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). 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 (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, 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.

## 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 et.al., 2007). The power of digital video as a means of encouraging critical reflection has been documented by several scholars (Rich & Hannafin, 2009). 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).

A video camera was stationed 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 (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 (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 (Bleicher, 2014). 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. Themes that evolved repetitively among many participants were chosen to include as data.

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.

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, 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.

## Teacher Perceptions

Teacher insight on effective professional development practices cannot be overlooked. For this reason, an action research process was utilized to better understand ingredients that teachers find most satisfying in professional development. It also allows us to sample the practice of Japanese Lesson Study as a method of sustained learning. This chapter was informed by teacher interviews and their perceptions of training practices. It 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. This section will inform leaders as they development their own system of professional learning for teachers. 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 lesson study process. According to my field notes, there was a noted amount of excitement as they began the Japanese Lesson Study process. 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. Teachers naturally assigned themselves to roles

during this crucial planning phase. 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 display 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 refection using the Critical Incident Questionnaire. This information will be further discussed in Chapter 7. The data that revealed itself is important to the understanding of Japanese Lesson Study as a form of processional 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 including: (a) astounded by Japanese Lesson Study; (b) the layers of teamwork; (c) learning in context with a peer coaching emphasis; and (d) moving to increased comfort levels. Phases one and two will be addressed in detail in the upcoming sections, with phases three and four being emphasized in Chapter 7.

## 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 with 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

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 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 teacher 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 lesson.*

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.*

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.

## 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.

## CHAPTER 5 QUESTIONS

1. As a teacher researcher, how can the action research process be used to investigate effective classroom practice?
2. How can the action research process be used as a method for professional learning?
3. How do you design learning sessions to inform your own professional learning process?
4. What can you glean from the power of a team in relation to professional development?
5. Do you value learning in context?

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# Chapter 6
# Instructional Change Through Collaboration and Peer Coaching


## ABSTRACT

*This chapter explains the connection made between Japanese Lesson Study (JLS) and adult learning theory. For the purpose of further understanding the action research process and how it connects to teacher learning, Phase 3, learning in context with a peer coaching emphasis, will be discussed. This chapter will inform leaders as they develop their own system of professional learning for teachers.*


## INTRODUCTION

*If your actions inspire others to dream more, learn more, do more and become more, you are a leader.*

-John Quincy Adams

Time for professional learning is often sacrificed in school settings 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

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permitting 45 minutes each day. This has caused collaborative study among teachers to lessen.

When discussing barriers to professional development, teachers often say that time is the biggest obstacle. A peer coaching strategy could alleviate lost time and place more emphasis on instructional techniques that provoke learning among students. Phase three in this action research study will shed light on peer coaching among a group of teachers.

## 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). Critical reflection is inherent to both action research and Japanese Lesson Study. A Critical Incident Questionnaire (CIQ) is used to find out what and how participants are learning (Phelan, 2012). It focuses on critical moments or actions in a class, as judged by the learners. 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 continued through the next cycle of instruction.

Teachers transitioned through this process while learning in the context of the classroom with students present. 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 is 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.

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 several 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 through the cycle of action research without hindrance and 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!*

Martha noted the length of time needed to revise a lesson during our final interview conversation. 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 number 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; collectively, they were learning from a wealth of experience. It was interesting to see the teacher reactions when some were threatened by the amount of instructional ideas offered. The sharing of ideas 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 the completion of 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 novel ideas at conferences, but they 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. 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. The 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 know most of these ladies 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 teaching the lesson, 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. I am new to this grade level and 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. However, the teachers also gained valuable instructional ideas from the revisions made to the lesson. For example, Irma commented:

*I enjoyed after observing teachers in action and going back and revising the lesson. Thinking about what we could do to make this better and actually using what we know is crucial. 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.*

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. I really enjoyed watching other people carry the lessons out.*

Being able to watch others teachers in action informs them of instructional practices. Additionally, 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 while 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 as they entered the classroom to watch the lesson begin. They assumed positions in the classroom 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. 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 present 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. You can have the best lesson, but the kids make or break the lesson. 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.*

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 regarding 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 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 and alleviating 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. Deb was awesome.*

Similarly, Irma reflected in her journal:

*I thought about how difficult it was to teach in front of our colleagues. Deb 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 do not often 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 a comment that may change their instruction. Colleagues, that are in a trusting relationship, can offer one another beneficial suggestions, because they teach the same subject.

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 community of learning 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 first allow the instructor to explain 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 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. It was essential for each teacher to feel connected to what was happening in the context of the classroom in order to create 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. An individual did not create the lesson, 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. 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 well together 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 many 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. 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.*

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.

## 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 (Luke & Rogers, 2015). 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 (Hargreaves & Fullan, 2012; Lonergan et.al., 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 reticence 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 reluctance 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 skilled at offering critique. Using video -taped lessons could also afford teachers with practice watching teaching in action. This would develop lens for observation 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. The teacher's role in JLS changes to somewhat of an evaluative stance. 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 when 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. 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 who 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. 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 (Cain, 2011; Attard, 2010). 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. 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 (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 were necessary when observing lessons in classrooms. Each teacher brought forth his or her own creative outlook 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 others. 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 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 finding 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 (Karagiorgi, 2012) 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 developments. 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 challenges educators face when implementing JLS as a method of teacher professional development including: development of researcher lens (Santagata et.al, 2007), time constraints (Meng & Sam, 2011), and typical teaching behind closed doors (Baecher et. al., 2012). 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.

## Teachers as Researchers

The first concern was the development of teachers as researchers. This was a new approach 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 on 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 training teachers to observe the students, 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.

## Time

A second concern was the element of time especially when considering the process required of JLS. Time constraints, cited in the literature, could not be avoided, as planning for and observing lessons required large chunks of time (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 lack time to adequately discuss the lesson or produce written reports of their lesson study work Fernandez et al. (2003). Teachers 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.

## Teaching in Isolation

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 whom 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 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. JLS could be the vehicle that would change the face of professional development for these teachers, leading to a positive change in literacy instruction.

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 power found when they are teaching in an isolated classroom. Collaboration, a crucial component of JLS, only works when teachers share in the decision- making. The next section explores the relationship between JSL and situated learning theory.

## THE RELATIONSHIP BETWEEN JLS AND SITUATED LEARNING THEORY

Situated learning theory (SLT) 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). 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). 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 (Korthagen, 2010). SLT 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 that they repeatedly utilize year after 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 action research 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.

## Learning Environments

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, 2010). 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 (Baecher et.al., 2012). 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 SLT, learning is best understood in relation to the context/situation in which it occurs (Bell et. al., 2012). 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 (Hargreaves & 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 contextualize 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).

## Communities of Practice and Teacher Empowerment

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. SLT and JLS propose that learning involves a process of engagement in a community of practice (Yoshida, 1999; 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 (Vanassche & Kelchtermans, 2016). 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, SLT seeks to explain learning in the context, CoP encourage teachers to dialogue to better their practice thus inspiring those involved via collaboration. CoP 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 (Vanassche & Kelchtermans, 2016). Although, SLT recognizes learning done from a peripheral view; this fringe learning presents itself differently in JLS. Teachers are learning on the outskirt of the classroom when they are observing lessons but they are part of this learning because they helped to create the lesson. 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.

CoP as a construct, explain 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 CoP, 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 in not stifled.

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.*

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. SLT 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 JLS, allows community members to deepen their content knowledge and share learning goals, all the while establishing relationships (Luke & Rogers, 2015). 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.

## CHAPTER 6 QUESTIONS

1. How can situated learning theory inform your design of professional development sessions?
2. How can conversations among teachers build relationships that enable them to learn from each other?
3. If you use peer coaching, are your teachers trained on how to be critical friends?

4. How to you shift a school culture to include time for the teacher to act as a researcher?
5. Empowerment is something that is overlooked by most facilitators of teacher learning sessions. How do you account for this valuable piece of teaching learning?

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# Chapter 7
# Overcoming Barriers to Teacher Learning:
## Effective Professional Learning Practices


## ABSTRACT

*This chapter reveals teacher learning that results from reflection. Effective reading strategies are discussed as they pertain to the lesson. Phase 4 of the action research study informs this chapter as it shares how teachers overcome barriers such as time, teacher empowerment constraints, and collaboration efforts. These areas are often overlooked when designing professional learning in schools. Solutions are also presented in the form of teacher narratives. This chapter will inform practitioners as they develop learning sessions for teachers.*


## PHASE FOUR FINAL REFLECTIONS: MOVING TO INCREASED COMFORT LEVELS

*Do not go where the path may lead. Go instead where there is no path and leave a trail.*

-Ralph Waldo Emerson

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

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cycle resulted in increased comfort levels for the process of JLS as well as Common Core State Standards (CCSS), reading instructional methods, and engagement strategies. This section will inform practitioners as they develop their own professional development sessions.

## 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. As evidenced in my notes, they were hopeful that this type of professional development could continue.

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.*

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 skill can be taught. Each teacher had her own style, but each was effective. It was great to see the interaction between us as a team. I feel incredibly lucky to work with such dedicated, caring teachers.*

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 (CCSS)

The release of the CCSS 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 understanding of best practices for the implementation of the CCSS, led to a better collaboration. 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 subject 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.*

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.*

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 vocabulary 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 able to use the sentence clues that they had. When we did the picture walk they were using words and phrases that they came across. So, they were applying lots of skills that their previous teachers had provided them. The tools that the kids used 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 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.*

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

The engagement of 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 Marla delivered the lesson explanation. 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 led 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.*

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 informative when listening to the kids as they went around from poster to poster saying, I don't know if I have the right answer. 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 answerers 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.*

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 learned 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.*

Almost all the teachers interviewed discussed the arrangement of the seating. 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 impact of seating arrangement 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 groups 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 cannot 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 were 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 colleagues 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.*

School leaders do not always consider time for adequate planning, as many school leaders have been removed from the classroom for considerable amounts of time 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 instructing students 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.*

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. 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 recording 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.

## SUMMARY

In sum, this chapter described the findings of this study related to the benefits of reflection on practice. Reflection on learning is a neglected practice among teachers and within professional learning environments (Jamil & Hamre, 2018). Teachers that participated in this study provided thoughtful input on what they found beneficial in professional learning design including elements of time and collaborative study. Professional learning within schools is often impacted by time constraints, as school systems are tied to schedules that revolve around student learning efforts (Lowden, 2005). However, if designers of professional learning sessions develop a sustained system of learning that considers teacher learning in the context of their classroom setting among students, time constraints could be minimized. Empowerment of teachers is evident if they have input in the design of professional development and time to collaborate with peers on lesson content and design (Thiers, 2016). Focused collaboration leads to a culture in which teams of teachers are helping one another get better (Vanassche & Kelchtermans, 2016). Teacher empower is a factor that needs to be considered as schools battle with teacher burnout and try to develop a positive culture among the school settings.

## CHAPTER 7 REFLECTION QUESTIONS

1. How are professional development decisions made?
2. What professional development delivery models are begin utilized?
3. How do you embed teacher reflection into professional learning?
4. Does your school system allow teachers to participate in the planning of professional learning?
5. Do your teachers feel empowered? If you are able to answer this question, how do you know?
6. Do you have a schedule in place that creates a system of sustained learning for teachers?

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# Chapter 8
# Future Research and Directions for Professional Learning


## ABSTRACT

*This chapter provides direction for future learning endeavors that inform teacher practice. It provides leaders with suggestions for professional development including the understanding of layers present in collaboration, such as the development of trust and respect that leads to a collective responsibility. Teachers valued this cycle of learning resulting in time for continuous learning. This cycle, referred to as the Cycle of Continuous Improvement, will be elaborated on as it pertains to professional development. Additionally, social media as a form of professional learning is examined. Suggestions for self-directed investigation and application are provided.*


## IMPLICATIONS FOR PRACTICE

*Isolation if the enemy of improvement.*

-Tony Wagner

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 future professional development.

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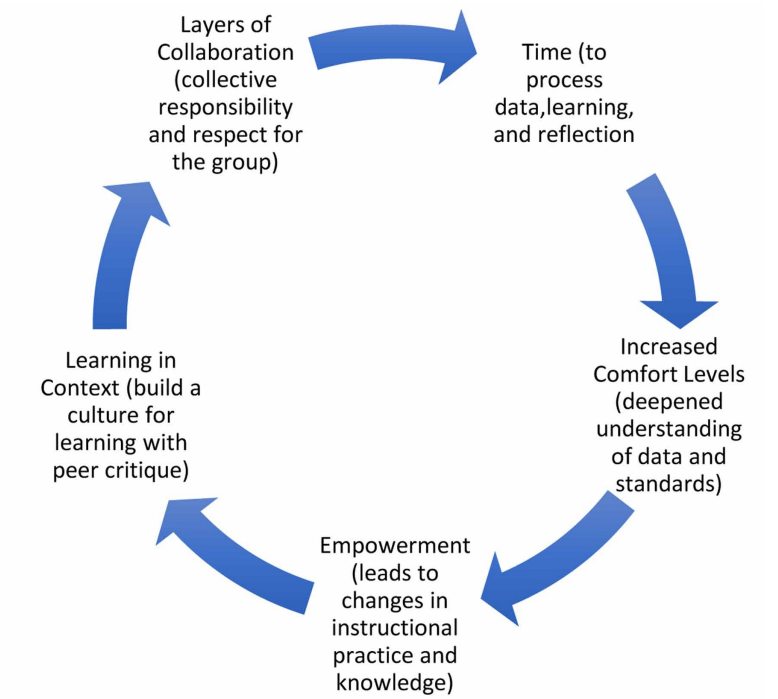
One of the most significant implications from this study stems from the necessity to change the way we offer professional development for teachers. This was evident from the teacher interviews as they reflected on their experience with JLS. Teachers were overwhelmingly in favor of professional development 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. The action research study described in previous chapters, 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 to 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.

This study yields another implication for consideration regarding the professional development of teachers. Teachers in this study perceived

*Figure 1. Cycle of continuous improvement*




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 (Brownell et.al., 2010). 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 possibly the building instructional coach. 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.

## INSIGHTS FROM ADULT LEARNING THEORY

Teachers should be an integral part of the design process of professional development. As school organizations become more complex it is essential for teachers to share their classroom environments with their peers. What works in one classroom setting, may have the same impact on another group of students. Just as crucial is a thorough examination of students and their performance on multiple forms of assessments. This will help to determine instructional techniques that have a direct impact on student learning. Creating environments that allow teachers to work together to develop and model lessons will enable schools to boost culture and climate in buildings, as teachers embrace learning through a team approach.

Key factors in adult learning should to be considered when designing professional learning initiatives. Adult learning is most effective when:

- Learning is self-directed and connected to goals that the adult is motivated to achieve
- Learning happens through problem solving
- Learning draws on experiences of adults to make meaning
- Critical reflection is used as a means for changing behaviors
- Learning is done in a social context where individuals can make collective meaning
- Adults recognize relevance and immediate applicability

(Merriam, Caffarella, & Baumgartner, 2007)

Taking this into consideration, shifting the district-wide culture to one of continuous learning and improvement is necessary. Leaders need to ensure that the conditions for effective professional learning are in place. These include, but are not limited to: timely and relevant data examination, curricular planning and tools, meeting protocols and resources, structures such as protected time for collaboration, allotted time for peer observation and lesson planning, and knowledge management to communicate and replicate teacher innovation across the district. Effective organizational change is fostered by top management, but driven by innovation closest to the customer/client, or in the case of schools, the student.

## Self-Directed Learning

Knowles's (1980) work on adult education asserts that adults should be given opportunities for self-directed learning in the workplace. He describes their vast stores of experiences as valuable resources for learning, planning, and evaluation. Most noted is that adults spend a considerable amount of time in learning related to a specific problem or challenge they may face, learning that is immediately applicable. In essence, then, good adult learning practice involves trusting the learner and acknowledging and using learners' experiences and ideas. Inviting teachers to participate in the process through self-directed learning may ensure that knowledge is immediately applied to the classroom setting.

Teachers value trust and time to analyze their classroom results and then devise a plan to make improvements and adjustments to their instruction. This should lead to future collaboration with peers. Teacher empowerment should be at the forefront of staff development within school settings, as this ultimately impacts students. For years, professional development has been formalized, as teachers are told what the topics will be, when to report, and

how long to stay. What if we took a new approach to learning and allowed room for teacher choice and self-directed learning. Instructional models for professional learning can incorporate self-directed learning (SDL) features. Recent studies of SDL reveal the value of online learning possibilities for learners (Roberson, 2003). Through online learning platforms such as Twitter, Instagram, and Facebook, learners can share resources and contribute to feedback and reflective conversations. With proper protocols this could result in a more positive culture and climate in our schools (see *Figure 2*). I propose that steps should be taken to provide teachers guidance as they collaboratively work to satisfy their self-directed learning pathways. The steps are listed in sequential order in Figure 2.

*Figure 2. Steps for self-directed professional learning*

| Self-Directed Professional Learning |
|---|
| Teachers take primary initiative for planning, carrying out their own learning experiences. |
| Leaders set a climate for self-directed learning by establishing protocols. |
| Teacher teams diagnose learning needs in their classroom setting. |
| Learning goals are formulated based on classroom needs. |
| Necessary resources are identified. |
| A learning strategy/goal is selected and implemented. Choose one because it is hard to implement more than on goal at a time. |
| Evaluate learning outcomes with a team. This is most effective when there is peer feedback and reflection is part of the process. |

We need to recognize that there are different levels to self-directed learning. Teachers may go through stages of learning depending on their comfort levels, years of teaching, or content being learned. Grow (1994) discusses this in relation to a situational leadership model and describes four distinct stages of learners:

**Stage 1:** *Dependent learner*: Learners of low self-direction who need an authority figure (principal or mentor) to tell them what to do

**Stage 2:** *Interested learner*: Learners of moderate self-direction who are motivated and confident but largely unfamiliar with the subject matter to be learned

**Stage 3:** *Involved learner*: Learners of intermediate self-direction who have both the skill and the basic knowledge and view themselves as being both ready and able to explore a specific subject area with a good guide

**Stage 4:** *Self-directed learner*: Learners of high self-direction who are both willing and able to plan, execute, and evaluate their own learning with or without the help of an expert

Good leaders will devise professional learning plans based on their understanding of the stages. Additionally, they can individualize learning by allowing for teacher choice. This would allow for room to be self-directed, while offering choice in learning options based on district goals, vision, and initiatives.

## Teacher Choice

Staff development programs based on teacher choice invites them to participate meaningfully in the learning process. As a former administrator and literacy coach, I have witnessed a strong positive relationship between self-directed learning and high levels of performance on the job. Teacher creativity requires time for investigation and choice in learning. Immediate application is essential for renewed and vested interest in classroom practices. A desire to learn, resulting from choice, is part of being self-motivated. Teacher empowerment can be a result of choice in professional learning, especially if it is linked to classroom practice.

Personalized learning has been identified as a beneficial instructional management tool for students. This can also be applied to teacher learning. However, for this to be effective designers of professional learning need to be aware of what is transpiring in the classroom setting pertaining to student needs and teacher innovation. Providing learning opportunities for teachers that connect directly to what students are learning will result in growth for all parties. In the past, I have developed personal learning projects for students following the guidelines found in Figure 3:

These guidelines could be applied to teacher learning and create an atmosphere that meets teachers where they are at in their classroom setting. Additionally, it recognizes their desires to make learning meaningful as a process and not a sit and get session.

*Figure 3. Personal learning task*

| |
|---|
| Goal Setting: What do you want to learn? How will it improve your practice? How will you know when you have achieved your goal? |
| Resources: What resources will you need to be successful? Are there books or journals that you need to read? Do you need to network with an expert in the field? |
| Documentation: Document new learning each week. This may be in a blog, journal, or on social media. This is necessary for reflective purposes. It is easy to forget the learning that is transpiring on a day-to-day basis when you are involved in many other tasks. It also helps to see the results of your learning and the impact they are having in your setting. |
| Network: Share your learning with peers. This could be on social media or within your department. This is an important step that leads to transfer of learning. It is through networking opportunities that our learning is transferred. |

## Social Media

As classrooms become more complex and innovative, teachers take an active role in self-directed learning. Authority and responsibility for innovation and results has shifted to teams, thus requiring a different style of leadership. This leadership paradigm is more oriented toward continuous learning and improvement. Schools are typically organized hierarchically, but what if we allowed teachers to become more self-directed in their learning. A team through the utilization of social media could share this effort.

Sharing practices is hard to accomplish in the typical school settings. Teachers work around schedules that position them in their classrooms for lengthy periods of time, taking away the ability to share with each other. Additionally, planning time is precious and requires uninterrupted periods of time dedicated to examining student work and content being taught. Teachers, without the ability to see what is happening in other classrooms, often revert to what they know from past experience, or how they were taught. This is especially evident in novice teacher practices, but can still happen among veteran teachers that have taught side by side for years, resulting in a disconnect between how we talk about teaching and learning and what actually happens in classrooms. This impact on learning is written about by Katie Martin (2018) when she emphasized the importance of seeing new and better models of desired learning environments in order to deepen one's understanding of how to organize instructional time and effective teaching

methods. Seeing other teachers teach opens the door to a new environment that may not have been considered without such an opportunity.

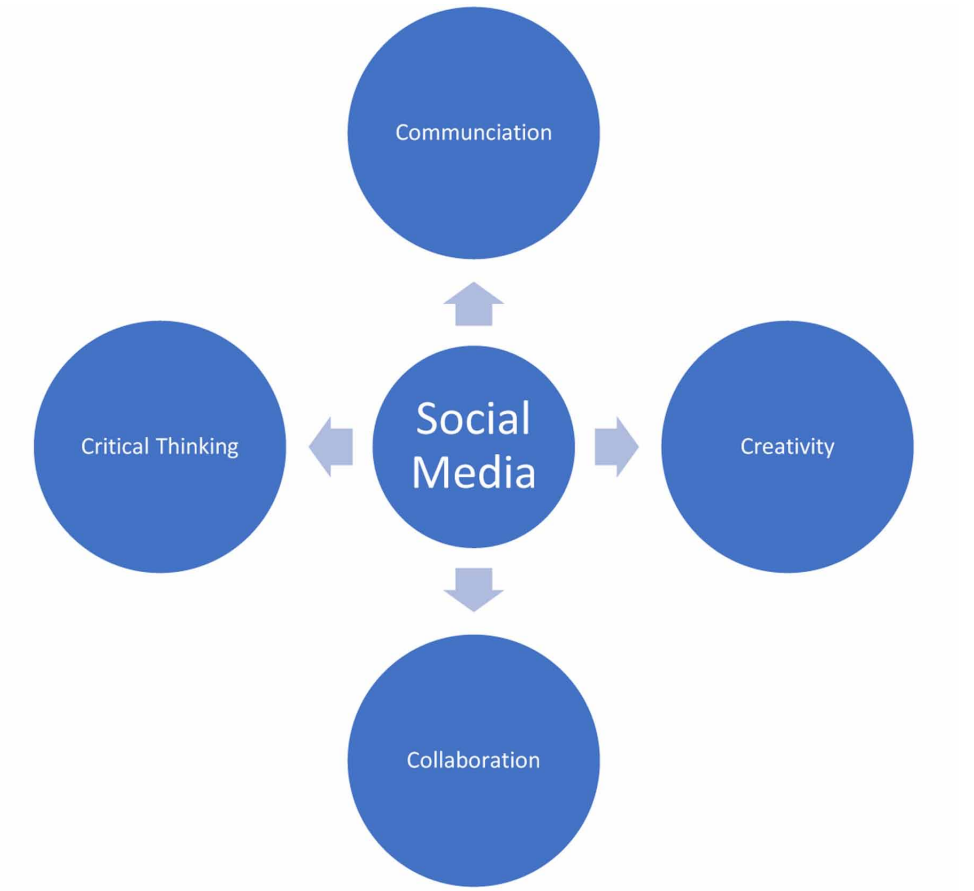
Closed cultures do not grow learning rather they perpetuate ineffective practices. In order to build capacity and develop a shared understanding of effective classroom practices, we need to get into classrooms or see them through social media outlets. Too often, instructional practices are based on assumptions of what good teaching practice looks like in the classroom setting or what an instructional coach has modeled in the classroom setting. Learning in silos will perpetuate this, but networking with peers will open the doors of learning for all to see and technology can enhance this process. Social media is playing a larger role in conversations among educators and often enhances professional development.

The 4Cs for 21st Century skills are often referenced in relation to the classroom setting (Alismail & McGuire, 2015). They include collaboration, critical thinking, creativity, and communication. All of these skills are timeless and highly valued not only inside the classroom, but in all professions. Designers of professional learning sessions should consider these skills when presenting to adults. Social media can enhance the ability to utilize the 4Cs for staff educational sessions. Most recently, I encountered a veteran teacher that just attended professional learning sessions during her district opening days prior to the start of school. She looked exhausted and school had not even begun yet. She exclaimed, "After all these years, they still think they need to tell me how to teach." Our best efforts to educate all levels of our teachers could be strengthened through the use of technology platforms that allow some flexibility in teacher learning, while considering the 4Cs. This would place value on teacher autonomy as they evaluate their own goals for the school year and determine their professional learning needs based on their classrooms. This type of learning could be enhanced through social media as teachers work through areas introduced via the 4C's including: communication, collaboration, critical thinking, and creativity (Figure 4).

## Collaboration

Through collaborative efforts, teams work together to solve complex problems with rich and productive conversations. It is often the case that peers work to achieve a common interest, however it is not uncommon for people with unlike agendas to gather together. This emphasis on collaboration can be widened through a community of learners. During the school year, as teachers

*Figure 4. The 4Cs and social media*




plan for their classes and grade papers, they have little interest in attending professional development. However, if they are able to take advantage of different learning opportunities that allowed them to stay informed of best practices and emerging trends in education, they could still grow as educators. This could happen through the use of social media venues and technology learning platforms. Collaboration could transpire at home through professional development venues while remaining in pajamas. However, despite the plethora of professional resources, finding the most valuable outlets that will satisfy current classroom needs becomes the hardest task. By leveraging social media, educators can form relationships and find the right tools to grow professionally. Becoming connected with educators around the globe can keep educators fresh, while increasing awareness.

In an article on teacher learning through social media, Lynmarie Hilt (2015), talked about Twitter for professional learning purposes. Through Twitter, isolation is solved among collaborations with large groups of educators from around the globe. Teachers and administrators find value in this educational platform as it causes them to reflect on their own practices, gain resources for themselves and others, and serves as a collaborative tool that alleviates the feeling of isolation. An administrator can feel as isolated as a teacher at times. Elementary principals are left in their buildings to supervise large groups of teachers, and therefore it is beneficial for them to converse with colleagues that perform similar job responsibilities.

Twitter, a microblogging tool (Rosell-Aguilar, 2018), is one method found on social media that can enhance educators' pedagogy. It is becoming the virtual faculty lounge as teachers engage in informal learning beyond the classroom. Through Twitter, teachers can follow colleagues on a worldwide platform, all the while examining new practices to implement in the classroom setting. They can collaborate using 280 characters or less, as well as links, photos and videos, and live video streaming to capture classroom instruction and settings. Educators share what is working in their classrooms and how they have addressed important issues. Our colleagues are often our best professional development resources and our conversation can alleviate the sense of isolation that many teachers experience (Carpenter & Krutka, 2014).

Twitter can be part of a community of practice, defined by Lave & Wenger (2002), "as a group of people that share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis (p.4)." Teachers in a Twitter community of practice benefit through a common language around teaching as they share tools, websites, and apps that have improved their classroom instruction.

## Communication

Technology today has made communication instantaneous. This can be both beneficial and detrimental to professional learning. Teachers that shy away from social media as a learning platform, often say that it is overwhelming because there is so much information. Without direction, they are unsure where to begin. Those that utilize social platforms do so for the benefits gained by sharing thoughts, ideas, and solutions related to classroom instruction. Technology has provided us with convenient ways to communicate and share ideas in a nonthreatening environment. Teachers that may not like to share

during professional learning opportunities may be willing to share through a social media channel.

Traditional professional development often includes short workshops or seminars that attempt to meet the needs of teachers. Although such professional learning can introduce teachers to new skills, it can often lack the depth necessary to make an impact on the classroom setting. The attempt to meet with teachers outside their classroom settings and then expect teachers to enact what they have learned inside their classrooms often results in disconnect from what they actually need. If we learn how to support teachers in informal settings, such as online spaces, we support peer-to-peer learning with participants who engage in various ways according to their interests, skills, expertise, and needs.

Learning Communities such as Google hangout used during after school or before school training sessions, can become *Personal Learning Networks* where fellow educators share resources, lesson plans, teaching strategies, and student work. It is great method of refection for colleagues wishing to improve their pedagogy. Teachers can share across grade levels and departments, extending their network beyond their buildings to a global environment. Hangouts allow up to ten participants to engage in a videoconference, and have the option of sharing screens to look at the same visuals. Networking leads to varied perspectives on issues or ways to teach or deal with problems. Some teachers note that they experience culture shock as they learn from people all around the globe, allowing them to transform their teaching pedagogy (Trust et.al., 2016).

Podcasts are another way to communicate and share with others. Podcasts have grown in popularity over the past four years with about 12% of the adult population listening to a podcast in an average week (MIDA, 2018). Podcasts retain their listeners' attention as they commute or exercise. As a Podcaster, creators can share their expertise with others. As a listener, professional development can happen anywhere you have access to a particular podcast. Education podcasts host thought leaders that educators would not have access to unless they attended a conference. This becomes pricey, especially as districts limit the amount of conferences teachers can attend. Thought leaders share their knowledge and expertise on the air and give listeners the benefit of exposure to global education issues.

## Creativity

Creativity in education is evident when you enter a classroom and see bulletin boards that look like masterpieces. However, creativity in classroom settings

is especially praised when bulletin boards engage a student beyond the decoration and into educational activity. I have had the benefit of entering many classrooms as an administrator and seeing amazing bulletin boards that wow the eye and involve students in solving complex puzzles such as large Sudoku or crossword gameboards.

Creativity according to the 4Cs is trying new approaches to getting things done. It is often linked to the education buzz words of innovation and invention. Technology in classrooms takes creativity to new levels as students utilize computers to wow audiences with interactive presentations or create posters not on paper, but with animations through the computer. New doors are open because of this ability to creatively think outside the four walls of a classroom. Students can visit the Great Wall of China through augmented reality googles or learn about the vascular structures in the heart because of new innovative inventions. Student engagement is at an all-time high because of these new instructional methods. However, it is especially important that teachers are educated on the proper use of such equipment, including the best time to utilize these opportunities in the classroom setting. Job-embedded learning is instrumental in supporting teachers in their classroom in order to shift practice. This may be in the form of a mentor or instructional coach that demonstrates a practice learned in a workshop or the immediate application of a technique learned through social media outlets such as Instagram.

Instagram is a social networking service built around sharing photos and videos. It launched in 2010 and allows users to post content to share with others. This can include live videos in real-time for your followers. Teachers can demonstrate a new instructional method and gather feedback from peers. They can also post student work that resulted from an amazing lesson. Instagram provides many ideas and resources for teachers of specific grade levels and content specialists. It is a great outlet for sharing and gaining creative inspiration, especially for visual learners.

## Critical Thinking

Critical thinking is often at the forefront of professional development sessions. The ability to encourage some form of reflection after attending a workshop is a goal of those preparing professional development sessions for teachers. Teachers embody the essential elements of critical thinking as they plan and reflect on classroom lessons. The ability to analyze classroom practices is a necessary component of innovation. Applying new and novel instructional

approaches, requires educators to look beyond what has always worked in the past. This takes time and a critical eye to better understand what impacts student learning.

Looking at problems in a new way and linking learning across subjects and disciplines is an essential ingredient of reflective practice. Adding new tools to the classroom setting will not make teachers better at their craft; however, creating and sharing with colleagues will be the impetus that causes change in practice. Learning communities that evolve from Podcasts have the ability to inspire learning and cause teachers to critically think about their classroom practices. There are many educational organizations or simply teacher leaders wanting to share their experiences with others. For example, Jennifer Gonzalez (Cult of Pedagogy) provides her listeners with strategies that she has found to effective in the classroom.

Listening to a Podcast prior to a workshop session can provide teachers with a common language for learning. Designers of learning sessions can post several Podcasts on a learning platform for teachers to listen to prior to a day of professional development. After choosing and then listening to the Podcast, teachers can discuss powerful take-aways that can be applied to their classrooms. Time provided for application after a podcast should be a component of the learning process. Finally, administrators or instructional coaches can then support the adoption of new ideas in the classroom- learning environment.

Being an educator means that you have to be committed to life-long learning. The power of learning whenever we connect with others and share our creations and experiences, serves to amplify the potential for learning. Professional development today can look different than it has in the past. Through social media and collaborative environments, learning platforms are larger than ever. However, creators of professional learning sessions have to proceed with caution. While trends have emerged to "flip workshops" so that teachers can choose from a plethora of learning opportunities during a "conference- based" workshop, we have to ensure that it is applicable to practice. Providing teachers with a lot of content, will not translate into improved classroom practices. There needs to be an element of classroom application after attending workshop sessions. Although conferences and workshops can be motivating because we learn so many ideas among colleagues that share a common interest, it is necessary to take learning a step future so that there is an impact on students. As a former administrator in a public school setting, I was privy to this type of format. We offered numerous choices for teachers, but this did not translate into anything practical to improve

classroom practice. Days later as I talked to teachers, listened to them in the hallway, and observed them in their classrooms, I heard and saw the same things that I had witnessed prior to the professional learning opportunities because teachers did not have time to apply what they learned. If we shape workshops so that teachers can learn and study their own practice or new instructional methods and then add an element of immediate application, our school culture will dramatically improve.

## Learning in Adulthood with Social Media

Moving beyond the traditional and most comfortable is difficult in any process. As teachers grapple with changes in classroom instruction necessary to engage today's learner, developers of professional learning sessions need to respond to this by creating sessions that model new technology methodologies, while connecting to classroom practice. This may mean changing from a traditional staff development session to one that allows space for teachers to engage in the learning process. The emergence of increased technology necessitates the need for practical staff develop sessions and platforms that support teacher discussion of these new initiatives. Rooting work in the learning community where teachers feel most comfortable will support learning. For this to be possible, it may mean that staff development specialists enter the classroom more frequently to test the waters. They can test or model new instructional methodologies prior to staff development sessions.

Successful professional development should be closely aligned with district goals and complement what is taking place in the classroom setting. Viewing professional development as part of the system for teaching and learning requires a close examination of the classroom setting. We must ask, "What must adults learn to help students achieve at high levels?" Unfocused and fragmented professional development that is not aligned to school or building improvement is ineffective. When professional development is only offered outside school or through training lectures, it lacks the ability to make a lasting impact on classroom instruction. Aligning professional development to the needs of the school or district requires clear vision and planning for professional development, as well as communication of this plan to stakeholders.

When designing professional development sessions, five areas should be utilized in order to support teacher learning and transfer. First, there needs to be *analysis* of what method of professional learning will best support teacher

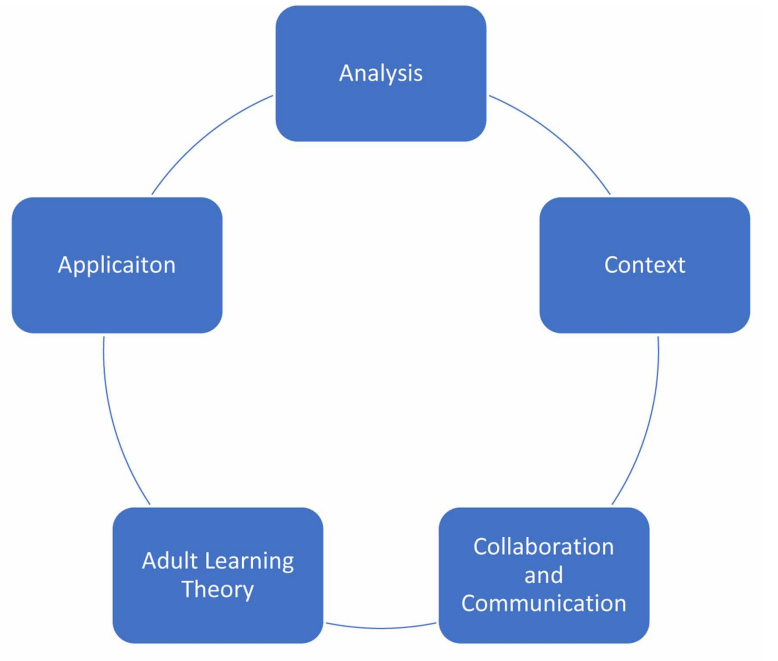
growth. This may come from teacher surveys or conversations among a select group of teachers that have a keen awareness of building needs and culture. The topic for learning will also come from this analysis of building and district needs. Surveys can help to determine areas of strength and opportunities for improvement. Second, *context* for learning should be evaluated. Where should the session take place to best support learning needs and transfer? Is job-embedded learning a possibility? Technology and teacher comfort level should be considered. Are there ways to design learning episodes to capture experiences? Designers of staff development sessions should recognize that specific contexts shape an individual's experience in different ways (Fenwick, 2003). Additionally, *collaboration* should be part of the learning process. One of the most powerful components of staff development is the time spent reflecting individually and then with peers about our learning. This encourages risk-taking, professional growth, and collegiality. Learning with others in a community, is how some people make sense of their experiences. In order for people to interpret experiences positively and to learn effectively, they need to have confidence in their abilities, support and trust in others. For this reason, *communication* is an integral part of the collaborative process. Communication supports the follow through of the vision. It may come from leaders designing the session or peers taking part in the learning. This dialogue is enhanced through the establishment of collegial team norms, and a productive, improvement -oriented culture, that gives and receives feedback. The most important piece of communication, is that it has to connect to the goals of the learning session. Providing time to dialogue leads to the final area found in effective professional learning sessions: *application*. Through communication and collaboration within peer groups and among professional learning groups, teacher application of newly learned material to the classroom setting is achieved. Teachers need time to consider how to take what has been learned and then apply it to the setting where students will reap the rewards. This may be in the form of lesson planning, lesson analysis, video demonstration, or peer coaching.

Adult learning theory needs to be considered when developing the session and the learning environment. Adult learning environments should recognize that teachers need time to consider their own personal growth and to dialogue among collegial peer groups in order to foster their learning journey. Eduard Lindeman (1885-1953) still influences adult education today. According to Lindeman, we should place value among adult learning groups and consider four principles when creating learning sessions (Brookfield, 1995). When designing learning sessions for teachers, three should influence our design process:

1. Education is a life-long process.
2. Adult education should emphasize situations not subjects. Adults need time to adjust to new situations or initiatives.
3. Adult education should place primary emphasis on the learner's experiences. "Experience is the adult learner's living textbook" (Lindeman, 1926, p.7)

Figure 5 will help the reader visualize the essential ingredients of any professional learning session.

*Figure 5. Five learning domains of professional learning*




## CHAPTER 8 REFLECTION QUESTIONS

1. What form of social media do you use to support your own professional learning? How has this impacted your classroom practice?
2. How could your district goals be applied to teacher learning while creating an atmosphere that meets teachers where they are at in their classroom setting?

3. How does your district utilize the 4Cs for professional development?
4. Teachers may go through stages of learning depending on their comfort levels, years of teaching, or content being learned. How does your district use this information to design professional learning sessions for teachers?
5. What key take-aways from Adult Learning are applied to the development of your professional learning sessions for teachers?
6. How can the *Cycle of Continuous Improvement* be used to support teacher learning in your building or in your district?

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# Chapter 9
# Social Media and Professional Learning Networks


## ABSTRACT

*This chapter examines social media as a form of professional development. It sheds light on social media platforms that support collaboration and reflection among educators. The International Society for Teachers in Education (ISTE) continues to stress the importance of teachers possessing skills and behaviors of digital age professionals. This is necessary as educators become co-learners with their students and colleagues around the world. Social networks, such as Twitter and Google+ communities, provide opportunities to move up the Substitution Augmentation Modification Redefinition Model developed by Dr. Ruben Puentedura, or offer a method of seeing how computer technology might impact teaching and learning, as well as professional learning for teachers.*


## INTRODUCTION

*If learning and knowing are to be based on cognitive practices of humans, then they have to be located in authentic activity.*

-Author Wilson

Social media has immersed itself into our daily lives. Whether it be for work or play, we are socially connected, with about 72% of adults in 2003 on a least one social network (Pick, 2013). Today 72% of American use social media platforms. Young adults were the earliest social media users and continue

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to utilize social media outlets, but there is an increase of older adult usage in recent years (Pew Research Center, 2019). Facebook remains one of the most widely used social media sites among adults in the U.S. with about 69% using the platform. 68% of adults ages 50-64, use Facebook in some format. Instagram is especially popular among 18- to- 24 -year-olds with about 62% using this tool. The majority of Instagram users visit the site daily and some several times a day, with 76% of users ages 18-29 (Pew Research Center, 2019). Around half of college graduates and those that live in high-income households use LinkedIn as a search tool (Pew Research Center, 2019).

Perhaps it provides an adult playground where we are able to share our ideas and engage socially with individuals that share similar beliefs. Whatever the reason for social media usage, the use of tools to connect users and ideas around the world has revolutionized the way people communicate. Furthermore, it has transformed the way teachers and other educators engage in professional learning (Mangan, 2012). Teachers are able to reflect and improve on their practices as a result of their involvement in social media platforms. Lynmarie Hilt (2015), calls these educators "connected educators" because they use social media to openly share their learning on platforms such as bogs, Facebook, and Twitter. Connected educators, according to Hilt (2015) make it their "mission to collaborate with other passionate educators to learn, create, read, write, and share in the name of professional learning (p. 289).

## ADULT LEARNING THEORY

Several learning theories help to explain why teachers value collaboration and learning among peers. They also help us understand why some teachers feel comfortable utilizing social media for professional learning. Learners, when connected to a learning community, grow as professionals. They take initiative and make learning a priority in order to benefit their students and school.

The social constructivist view posits that knowledge is constructed when "individuals engage socially in talk and activity about shared problems or tasks. Making meaning is thus a dialogic process involving persons-in-conversation, and learning is seen as a process by which individuals are introduced to a culture by more skilled members (Merriam et. al., 2007, p.

291-292)." Vygotsky (1978) developed the beginning foundations for this approach to social learning, as he proposed that learning is socially mediated through interaction with others. All forms of constructivism understand learning as an active process. Hence, learning occurs through dialogue and collaborative learning. As learners engage with each other, they explore the views of others, and new interpretations are discovered through interaction with one another.

Vygotsky's work is also fundamental to situated cognition, which combines the individual and the social to help us understand an activity such as learning. Situated cognition views learning as a process that occurs through participation in the social environment. Learning and knowing are recursively structured by people interacting with each other in tool-dependent setting to learning and evolve together as they solve problems in the everyday world (Lave & Wenger, 1991). Learning occurs as practitioners engage in the activity of their profession. The situated view notes that cognition exists in the relationships among people acting in culturally organized settings. If learning and knowing are to be based on cognitive practices of humans, then they have to be located in authentic activity (Wilson, 1993). If practitioners are to learn, they must become embedded in the culture in which the knowing and learning have meaning. This is where they will pick up relevant jargon, adopt behaviors and belief systems, and imitate behaviors found in settings where they will work. For example, pre-service teachers complete their training by becoming embedded in the classroom with a mentor teacher. This meaningful partnership allows pre-service learners to acquire the jargon and learn situated within the classroom setting, where they are able to absorb cultural knowledge to build their repertoire for future teaching.

Situated learning theory posits that knowing is intertwined with doing. Learning is rooted in the situation in which a person participates. Participating in a community is an aspect of situated cognition. Lave and Wenger (1991, p.8) refer to these communities of practice, or a "set of relationships among persons, activity, and world over time". Communities of Practice (CoP) are the shared cultures that develop in specific settings, within and through which professional identities are created and nurtured. The process by which individuals become part of this community is through legitimate peripheral participation (Lave & Wenger, 1991). In other words, pre-service teachers, enter the community of a classroom as a newcomer; they observe the happenings being on the fringe of discovery. It is being on the exterior of the classroom setting that they are able to learn about knowledge, skills, beliefs, and behaviors valued by the educational community members. As pre-service

teachers gradually adopt such knowledge, skills, and beliefs valued by the community members as their own, they begin to move from the periphery, or sideline, to more full participation within that community.

Online learning experiences can be explained with the help of constructivist viewpoints and components that help to create successful social media experiences (Rosell & Aguilar, 2018). Steven Downes (2012) suggests three areas that help create successful online practices:

1. **Interaction**- communicating with others around the same topic engages educators and encourages sharing and collaboration.
2. **Usability**- Tools should be simple to ensure consistent use.
3. **Relevance-** Platforms should connect to classroom practices.

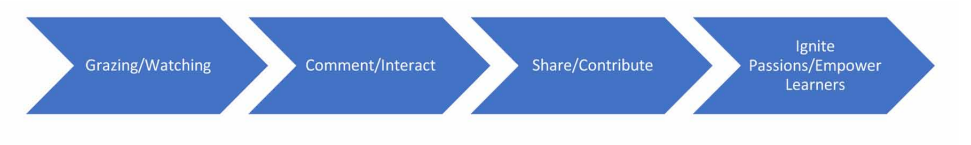
Teachers that network with each other have access to a plethora of fresh ideas. Learning communities contain sources of information, support, and feedback that nurture classroom environments.

Social media encourages professional development, as learning is acquired through curation and contribution to learning spaces (Devaney, 2017; Swanson, 2013). As a participant, you have to actively search, evaluate, and share experiences. Just as a pre-service teacher has to learn the environment from the periphery, teachers new to social media have to situate themselves among online learning communities (Couros, 2010). Online communities have norms of behavior established by users. Twitter, for example, has a learned expectation that you include the username of a tweeter when you re-share or re-tweet his or her content (Carpenter & Krutka, 2014). The first step in participation, for many users, is to "graze" or "watch" other users. This could be considered a form of "legitimate peripheral participation" (Lave & Wenger, 1991). As a newcomer to any social media platform, it may be essential to "graze" while learning the unwritten rule and functions of the community. This may include how members interact with each other, and how ideas are shared. As new members start to share, they assist in improving the learning platform. Adults often feel empowered as they become valuable members of a community, but they need to recognize that it takes times to understand the values placed in a learning community.

Similar to JLS, learning through social media platforms supports collaboration and reflection among educators. Additionally, it recognizes teacher apprehension for sharing of classroom practices. Teachers that use forms of social media may at first "graze" over materials from members of a community until they feel comfortable sharing. This eventually leads to a

support system where educators provide feedback and support as they grow as learners. Figure 1 explains the process for entering and interacting among

*Figure 1. Social media process of entry*




social networks.

## Andragogy and Social Media

Social media can support the art and science of adult learning. Andragogy operates under the assumption that adults are self-directed and display an inherent readiness to learn (Grow, 1994). Adult learning, according to the constructivist view of learning, emphasizes active inquiry, independence, and individuality in a learning task (Merriam et. al., 2015). It would make sense then, that designers of adult learning allow the learner to be actively involved in the planning and implementation of learning. Adult learners, according to Hilt (2015), "should be encouraged to make mistakes and apply their own knowledge to new experiences and information learned. Learning opportunities for adults should be relevant, timely, problem-based, practical, and tied to actionable goals." (p.293). Carol Dweck (2006), talks about the importance of learning through a process that supports mistake making. Encouraging the right mindset through social media will help teachers that feel uncomfortable asking an instructional coach or peer for feedback. Instead, they can reach out to their social media community for advice and sharing opportunities.

Through social media, adults can exercise their need for collaboration. With technology, adults can communicate readily with educators from around the world. Individualized learning can be at the forefront of educational trainings as adults choose from materials that support their unique learning goals. Additionally, they have control over the learning communities that they access on social media. This makes choice a priority of adult learning. Social media platforms also support reflection as part of the learning process. Teachers are able to engage with social support networks that encourage sharing, reflection, and feedback. Finally, social media exists in real time allowing

educators to ask for immediate feedback; they will often receive feedback instantaneously. Teachers can often connect with like- minded individuals that specifically address their needs in particular content areas. Thus, making the learning relevant to their own classroom practices.

## Participation in Social Media Practices

Social media provides a variety of ways that users can interact. It connects educators, while allowing them to learn new practices to implement in their classroom. As a form of professional development, it allows teachers to be active participants in learning connected to their practice, while following educators on a worldwide level. Exposed to a full buffet of options, such as instructional methods, content, or educational technology, teachers choose what will impact their pedagogy. Many participants are surprised by the wide variety of offerings while searching and often stumble across new, motivating ideas. This process of seeking and eventually sharing, leads to a sense of empowerment as new passions are developed and applied to the classroom setting for the benefit of students.

There are benefits of this process beyond the students. When educators make the choice to use social media as a method of professional development, they become visible learners. For example, educators can use social media to tweet, post links, share ideas, post videos, or publish in open spaces, while others view their perspectives and offer feedback. This sharing opens the door to not only constructive critique, but criticism as well. Further supporting this method of professional learning, the use of social media and technology allow for a diversified and differentiated learning experience. Educators can learn during times that are most beneficial to their schedules, with learning happening at all hours to compensate for busy schedules. This humanistic orientation to learning emphasizes motivation and choice in learning. Adult learning theory, especially the concept of andragogy and models of self-directed learning, are grounded in humanistic assumptions (Merriam, et. al. 2007; Grow, 1994).

Educational activities should meet the needs of adult learners in order to make improvements to their practice. While designing learning sessions, presenters should consider individual needs and interests of staff members. This becomes hard when sessions are directed at a group of learners, but if they are designed with intentional choice in mind, educators can choose sessions that pertain to their needs. Maslow (1970) considered the founder of

humanistic psychology, supports this motivation to learn based on a hierarchy of needs. His famous triangle hierarchy includes a level of self-actualization or a person's desire to become all that she or he is capable of becoming. Based on his theory of human motivation, learning is intrinsic and emanates from the learner.

When teachers engage in professional learning among other educators in social networks, they exercise their need to learn. Podcasts offer educators an opportunity to listen to select speakers while driving or sitting on a couch in their pajamas. They can take this information and apply it to their own situations. Podcasts often have locations to access the script after listening to it, so you can review what you have learned and reread what you have heard through audio.

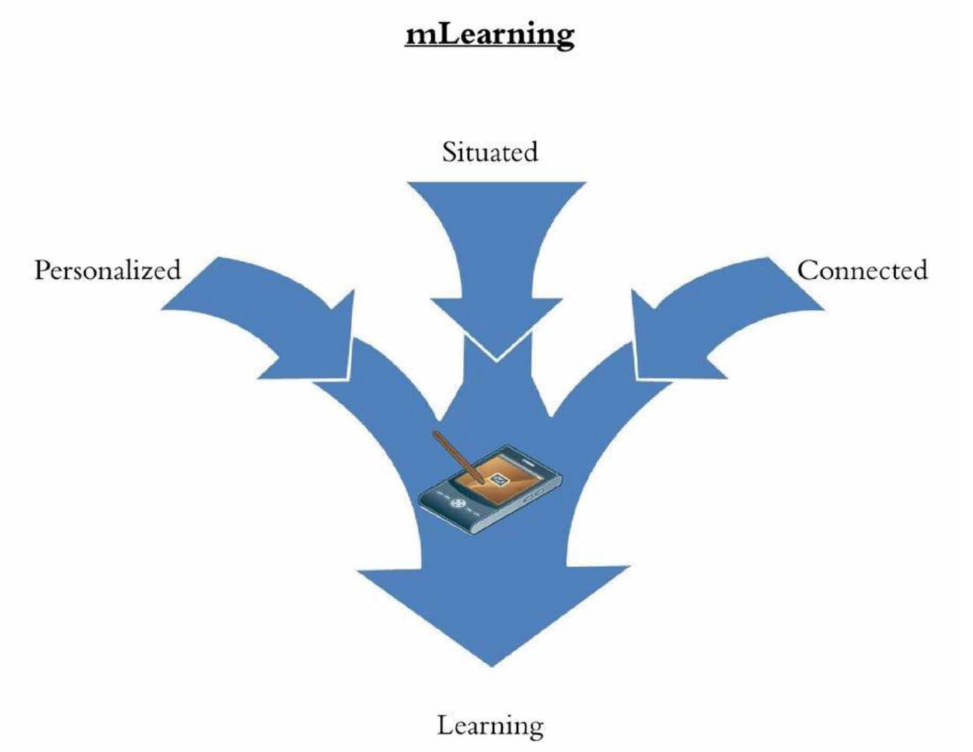
Twitter provides teachers, who often learn in isolation, opportunities to get ideas from others regarding classroom instruction. Google+ communities connect educators on a local, regional or global scale. Google Hangouts can be found happening after school as a means for collaborating and reflecting with colleagues on improving pedagogy. Periscope, launched by Twitter in 2015, allows educators to live stream discussions, presentations, or classroom demonstration. This boasts opportunities for situated learning, as it stresses the importance of learning in an authentic context in order to share knowledge (Orgill, 2007). According to situated learning theory, learning cannot be looked at separately from the context in which it occurs (Bell, et. al., 2013). This presents an opportunity to share a new method of pedagogy for critique, or it allows a teacher, learning to implement technology in her classroom, to search for live sharing through communities found on Periscope.

Social networks, such as Twitter and Google+ communities, provide opportunities to move up the SAMR Model. The SAMR Model or **S**ubstitution **A**ugmentation **M**odification **R**edefinition developed by Dr. Ruben Puentedura, offers a method of seeing how computer technology might impact teaching and learning. The SAMR model consists of four classifications of technology use for learning activities (Puentedura, 2006).

1. **Substitution:** The technology provides a substitute for learning activities without functional change.
2. **Augmentation:** The technology provides a substitute for other learning activities but with functional improvements.
3. **Modification:** The technology allows the learning activity to be redesigned.
4. **Redefinition:** The technology allows for the creation of tasks that could not have been done without the use of technology.

When looking at the SAMR model, designers of teacher learning sessions need to consider their topic and how social media can be utilized to make learning personal and applicable for teachers and needs found in their classroom setting. The personalized, situated, and connected forms of learning found through mobile learning provide instructional designers of staff development sessions with new instructional strategies to consider. Mobile learning or mLearning is defined by Romrell et al. (2014), as learning that is personalized, and connected through the use of a mobile devise. It is further explained through Figure 2.

*Figure 2. Mobile Learning (mLearning) is learning that is personalized, situated, and connected through the use of a mobile device (Romrell et. al., 2014, p. 2)*




Learning through devices enables educators to consume knowledge instantly and anywhere, all the while, allowing educators to personalize their search for new instructional methods (Traxler, 2010). Traditional professional development, typically requiring some type of formal sit and get session, can

be replaced with mLearning. This style of learning provides an opportunity to create a bridge between formal and informal learning in order to support learning connected to classroom and teacher needs. This type of learning is more personalized as it moves through the SAMR ladder. However, for learning to be meaningful, it needs to be applied to classroom practice. For this to happen, I propose that designers of professional learning sessions consider ways to support application of newly learned information.

## Applying the SAMR Model to Professional Development

### Substitution

Substitution, the simplest form of mLearning, includes learning that could have happened without the use of a device. This learning may include listening to a podcast, an activity that could also happen through the use of a book. This learning through the use of a mobile device is especially helpful for those wanting to search for more information on a particular topic. This learning is not directly applied to classroom practice, but rather for filling the mind with more knowledge. Although, listening to podcasts may be more engaging because the listener also hears the opinions and input of others more knowledgeable about particular content areas.

### Augmentation

Examples of professional learning in the augmentation stage go beyond a search for material to application of newly learned content. Although application is involved it is not shared with others. This lack of sharing happens in many classrooms because teachers are not ready to share with others for fear that their lesson is not worthy of application in other settings. It is important to note that teachers at this stage are learning new ideas and trying them in their own classrooms. Student learning is impacted by a variety of new engaging techniques. The teacher may gather student input and thus transform their practice based on student feedback.

### Modification

It is during the modification stage that teacher learning has transformational impacts on the classroom setting and for other learners in the social network

community. Professional learning at this stage centers around the application of newly learned material acquired through social networks. Learning is goal oriented and specific to classroom needs. Essential to this stage, is the feedback acquired after trying a new strategy in the classroom setting. Sharing through social learning networks and acquiring feedback takes learning to new levels and opens doors to learning not possible in an isolated classroom setting.

### Redefinition

This type of professional learning redefines classroom practice through a community of practice found online in a social media platform. A specific learning practice, situated in the classroom setting, is shared among a community of learners. The teacher leading this professional learning session shares her techniques, seeks feedback from others, and then further adapts her classroom practice. Thus, redefining her classroom environment through specific, goal oriented professional learning. This level of learning not only requires that the teacher sharing be knowledge in the area of sharing, but willing to accept feedback from others. Figure 3 will explain this process linked to the SAMR model.

It is powerful for adults to model and share with others as a form of professional growth. Using social media for learning can help teachers achieve their goals in the classroom setting. Teachers, that often prefer to learn in isolation, may feel more comfortable sharing through social media platforms. Research shows us that professional learning directly connects to student achievement when it is applied to classroom practice.

## Applying Learning to Practice

It is necessary to not become overtaken by the numerous choices of social media platforms. Encouraging educators to find the social media platform that works best for them will assist them in applying learning to practice. This may necessitate a learning session that exposes educators to the array of opportunities that are present in social networks. Although just learning about the social meeting stops is not enough, educators need to share how they are taking newly acquired information and applying it to their own practice. In reference to this approach, the classroom space is the perfect context for leading a session of inquiry. Teacher collaboration leads to better understanding of practices, especially when they are

*Figure 3. SAMR Model and professional learning*

| **Classification** | **Activity** | **Application** |
|---|---|---|
| Substitution | Teachers search social media for classroom strategies. | Although teachers have learned new information, it is not applied to the classroom setting. This is an exploratory stage. |
| Augmentation | Teachers search social media for classroom strategies and discover a new instructional method. | The teacher attempts to use the new instructional method in her classroom setting, but does not seek feedback. Although new learning has surfaced, learning is done in a silo. |
| Modification | Teachers search social media for specific instructional ideas and select on strategy to apply to their classroom setting. | The teacher applies this new instructional idea to the classroom setting and then seeks feedback from a community of practitioners. This application of an activity to the classroom changes classroom practice though discovery and feedback. |
| Redefinition | Social media is used to not only search for new, specific, instructional methods, but as a way to share learning among a global community. | Classroom instructional methods are transformed because of learning communities found through social media networks. Professional learning continues to happen with learning taking place in the classroom setting, directed by the teacher, among students and then shared with other educators through social media platforms. |

demonstrated in the classroom setting. Each classroom has a different context, necessitating the consideration of various classroom settings, when developing professional development sessions. Teacher and district leaders should consider this aspect of learning when designing learning sessions that are anchored to classroom practice. Several items to consider include, infrastructure to support learning, vision, and support for teachers to meet the vision such as time and resources.

## Infrastructure

School systems need to consider schedules when developing their mission for teacher learning pathways. Teacher schedules are often not conducive to collaboration and sharing of ideas related to best practices. Creating schedules that allow teachers to visit other classroom settings and assist one another in the learning process will support life-long learning habits. Learning through experiences, rather than isolation, allows teachers to share ideas and respect the process of learning. This creates a culture that places value on learning, rather than teaching in isolation. Collaboration not only leads to an atmosphere of team -oriented support and learning, but accountability as well. It is through a team approach that we hold each other to high standards. Using this approach to learning will support attempts to take new pedagogical ideas from social media searchers to discussions among peers and then application then classroom practice. However, despite the best infrastructure to support teaching learning efforts, if a clear vision is not cast, learning will take too many unconnected pathways.

## Vision

A vision sets the tone for learning. It is easy to become excited and overwhelmed while grazing social media pages. However, if teachers have established learning goals, it helps them anchor their searches to specific content or pedagogy. A unified district mission is essential and is most effective when it is tied to teacher needs. Listening to teacher feedback will help anchor professional learning design. It is essential to ask for teacher feedback and then apply it to future learning opportunities (Hattie, 2012). This may be in the form of surveys or informal conversations among teams of teachers. It is essential to converse with a diverse collection of teachers to get realistic feedback and experience impactful outcomes. The job of a teacher includes a wide array of instructional matters to consider, but having a specific vision helps direct instructional goals. This direction will also focus teacher searches on social media and add to the content they are exposed to in order to allow teachers to take more agencies in the learning process.

## Support

In order to meet the vision established by district leaders, teachers need support. This can be in the form of resources to support technology initiatives in the classroom setting. It can also mean putting personnel in place to facilitate teacher learning in the classroom setting. As previously mentioned, feedback provided in a variety of formats, can inform instruction. This may include instructional and technology coaches that assist in the classroom setting. Preferably, it will include colleagues that are able to experience new ideas and offer suggestions through peer observation and feedback. Our colleagues are often the most valued because collectively they relate to similar experiences and thus establish an element of trust. Developing a culture that includes feedback loops among teachers can create an atmosphere where teachers are developed, rather than intimidated. Supported and sustained professional learning creates a community that values learning and this is especially necessary today in order to alleviate teacher burnout (Aguilar, 2018).

Teachers need to understand the meaning behind feedback, so there should be an emphasis on why professional learning is essential. The why, or purpose, cause of belief, should be communicated in organizations in order to drive the purpose for learning (Sinek, 2009). The "Why" is offered to provide reasoning for the vision. Without a why, we lack a purpose for learning that is intentional. Teams often come together without a clear purpose and work for themselves, rather than the whole group. Casting a vision that includes support in the classroom setting will ensure that groups have something to work towards. Many goals established today include technology and/or social media platforms. Teachers that are not comfortable in these areas will need support in authentic contexts as they instruct students.

# CONCLUSION

The International Society for Teachers in Education (ISTE) continues to stress the importance of teachers possessing skills and behaviors of digital age professionals. This is necessary, as educators become co-learners with their students and colleagues around the world. ISTE has identified a number of skills and competencies that today's teacher should acquire in order to meet the needs of learners. The ISTE standards are used for evaluating the skills

and knowledge educators need to teach, work and learn in today's global and digital society (ISTE, 2013).

Two ISTE standards specifically relate to the necessity of life-long learning among teachers. First, "Promote and model digital citizenship and responsibility" and secondly, "Engage in in professional growth and leadership," are applicable to teacher learning goals and training. Performance indicators such as:

- Promote and model digital etiquette and responsible social interactions related to the use of technology and information.
- Develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital age communication and collaboration tools; and
- Participate in local and global learning communities to explore creative application of technology to improve student learning (ISTE, 2008, paras. 4-5).

As educators consider their comfort levels with digital technologies, support systems and focused leadership are of optimal importance. A shared vision is imperative to the success of professional development initiatives of any kind, but also essential when utilizing technology for learning (Cole & Sauers, 2018). The success of technology implementation is related to leadership and vison casting (Cohen, 2017). The focus of the vision should go beyond traditional content and standard professional learning practices, and instead recognize 21st century global technology skills such as critical thinking, communication, collaboration, and creativity (World Education Forum, 2015).

Using social media can assist teachers as they work to make an impact on their students. Collaborating with other educators, globally, can assist teachers as they delve deeper into learning with communities about certain pedagogies. Connections among education communities allow educators to explore methods that embed pedagogical practices that address critical thinking, communication, collaboration, and creativity. These practices if applied, allow educators to take students beyond standard learning, but instead prepare students to problem solve in any career. Connected educators benefit from the shared wisdom of experts from around the world. Not only is this energizing, but interactions construct support environments that remedy teacher burnout (Swanson, 2013).

George Couros in *The Innovator's Mindset* (2015) says it so well, "one of the challenges with the large group workshop model is that, no matter how hard we try to differentiate, not everyone will get out of the day what you (or they) might hope"(p.39). What can we do as leaders to avoid this and make learning happen on a daily or weekly basis for teachers? With continuously evolving technology, Podcast, Twitter, Instagram, and global friendships, we can change the way professional learning happens for teachers today.

## CHAPTER 9 QUESTIONS

1. Andragogy operates under the assumption that adults are self-directed and display an inherent readiness to learn. How does your professional development design allow for self-directed learning?
2. How do you educate your staff on the ISTE standards? Are they utilized to impact teacher learning?
3. Do you survey your staff on professional learning preferences and comfort levels regarding social media?
4. Do you educate teachers on the social media process of entry?

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# About the Author

**Crystal Loose** has spent 24 years in the field of education. Her previous positions include teaching at various grade levels within elementary levels, reading specialist at k-12 levels, literacy coach and instructional facilitator at k-12 levels, and administrative positions that allowed her to deepen her understanding of teacher professional learning. Having served in positions that required her to create staff development sessions for teachers, she realized how disjointed these learning sessions were for teachers. The content, although interesting, did not always connect to what was taking place in their classroom setting. This led to her doctoral work in Japanese Lesson Study as a method of professional learning. She is still passionate about educating teachers. She now works among future teachers at West Chester University, where she can nurture future educators. Her research interests still remain in the area of teacher professional development. She also works with families, as she researches early transition practices within school districts and collective community impact.

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